



Project 530740- TEMPUS-1-2012-1-DK-TEMPUS-SMGR

Enhancing the University Autonomy in Moldova
(EUniAM)

www.euniam.aau.dk

Comparative Analysis on University Academic Autonomy in Lithuania, Scotland, Sweden, Denmark and Romania

Prepared by: Prof. **Petru Todos**
Technical University of Moldova
EUniAM Task Force Mission Team

"This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein."

Chisinau, 2015

TABLE OF CONTENTS

1. INTRODUCTION	1
2. METHODOLOGY	1
3. ANALYSIS OF ACADEMIC AUTONOMY BY COUNTRY	3
3.1. ACADEMIC AUTONOMY IN LITHUANIA.....	3
3.1.1. Establishment and termination of study programs.....	4
3.1.2. Admission to studies	7
3.1.3. Recognition of studies.....	9
3.1.4. Accreditation of study programs.....	9
3.1.5. The National Qualifications Framework (NQF).....	11
3.1.6. The content and implementation of the study program (organization of studies)	13
3.1.7. Employability.....	16
3.1.8. Teachers' workload.....	17
3.1.9. University scientific research.....	19
3.1.10. The doctorate	21
3.2. ACADEMIC AUTONOMY IN SCOTLAND	25
3.2.1. Establishment and termination of study programs.....	26
3.2.2. Admission to studies	29
3.2.3. Recognition of studies.....	32
3.2.4. Accreditation of study programs.....	33
3.2.5. The National Qualifications Framework (NQF).....	36
3.2.6. The content and implementation of the study program (organization of studies)	39
3.2.7. Employability.....	41
3.2.8. Teachers' workload.....	43
3.2.9. University scientific research.....	43
3.2.10. The doctorate	44
3.3. ACADEMIC AUTONOMY IN SWEDEN.....	48

3.3.1. Establishment and termination of study programs.....	48
3.3.2. Admission to studies	53
3.3.3. Recognition of studies.....	58
3.3.4. Accreditation of study programs.....	60
3.3.5. The National Qualifications Framework (NQF).....	65
3.3.6. The content and implementation of the study program (organization of studies)	67
3.3.7. Employability.....	71
3.3.8. Teachers' workload.....	74
3.3.9. University scientific research.....	75
3.3.10. The doctorate	79
3.4. ACADEMIC AUTONOMY IN DENMARK	85
3.4.1. Establishment and termination of study programs.....	85
3.4.2. Admission to studies	88
3.4.3. Recognition of studies.....	91
3.4.4. Accreditation of study programs.....	92
3.4.5. The National Qualifications Framework (NQF).....	95
3.4.6. The content and implementation of the study program (organization of studies)	98
3.4.7. Employability.....	101
3.4.8. Teachers' workload.....	102
3.4.9. University scientific research.....	104
3.4.10. The doctorate	106
3.5. ACADEMIC AUTONOMY IN ROMANIA	108
3.5.1. Establishment and termination of study programs.....	108
3.5.2. Admission to studies	112
3.5.3. Recognition of studies.....	114
3.5.4. Accreditation of study programs.....	114
3.5.5. The National Qualifications Framework (NQF).....	116

3.5.6. The content and implementation of the study program (organization of studies)	118
3.5.7. Employability.....	120
3.5.8. Teachers' workload.....	121
3.5.9. University scientific research.....	123
3.5.10. The doctorate	124
4. COMPARATIVE ANALYSIS ON ACADEMIC AUTONOMY IN 5 EUROPEAN COUNTRIES	126
4.1. DATABASE ON CRITERIA OF ACADEMIC AUTONOMY FOR 5 EUROPEAN COUNTRIES	126
4.2. COMPARATIVE ANALYSIS ON ACADEMIC AUTONOMY IN 5 COUNTRIES, CARRIED ON CRITERIA AND SUB-CRITERIA	147
5. BIBLIOGRAPHIC REFERENCES BY COUNTRY	162
ANNEXES	177

1. INTRODUCTION

The most relevant definition of academic autonomy can be considered the one presented by Estermann Thomas and Terhi Nokkala in the study presented in 2009 “*University Autonomy in Europe I*” (European University Association. www.eua.be): Academic autonomy relates to the university's ability to make decisions on vision, mission and academic profile on the introduction or withdrawal of educational programs, their structure and content, and issues such as the admission of students and ways to ensure the quality of programs and awards. The ability to decide on the areas, scope, aims and methods of research are important subcomponents of academic autonomy.

In the second study on university autonomy (Estermann Thomas, Terhi Nokkala and Monica Steinel (2011): *University Autonomy in Europe II Tableau de Bord*, European University Association. www.eua.be), is found that academic autonomy can be assessed with seven quantifiable indicators namely, the ability of the institution to decide on: the total number of students; selection students; to form study cycles; to choose the language of study; to select quality assurance mechanisms and the provider of such services; to design study programs' content.

Based on these definitions, and multiple problems that are put into discussion in recent years in the education system in the Republic of Moldova, there were set the spectrum of criteria and sub-criteria for the analysis of academic autonomy in five European Union countries, partners in the project. The classification of criteria and sub-criteria is presented in Chapter 2 of the Report (Table 1).

In Chapter 3, there are presented the results of the analysis of academic autonomy in Lithuania, Scotland, Sweden, Denmark and Romania in the light of 10 criteria and 37 sub-criteria set out in Chapter 2.

In Chapter 4, there are presented the results of the comparative analysis carried out for 5 EU countries. The nominated criteria and sub-criteria are at the basis of this analysis.

Chapter 5 contains some general conclusions on the academic autonomy in the EU countries examined.

The list of references (total 244 sources) is presented separately by country, for working convenience. The list includes: basic laws that relate to the higher education system in the country; normative acts issued by ministries and agencies pertaining to academic autonomy; internal normative acts issued by the university.

Eight annexes contain intermediate results of data collection process on academic autonomy in the reference countries and universities.

2. METHODOLOGY

The aim of this report was to conduct a comparative analysis of academic autonomy in the EU partner countries, namely Denmark, Lithuania, Romania, Scotland and Sweden. Data

were collected on the basis of preset templates (see Tables 1 and 2 of the Consolidated Report).

Before each mission in a target country, the author collected and analyzed available information on academic autonomy in the respective target country and identified problems and questions related to various aspects of academic autonomy, which could not be clarified when consulting these sources of data available. At the same time, the author proposed possible data sources. Identified problems and questions for each task are presented in Annexes 1-4.

Within one week after each mission, the author continued the analysis using data gathered in Annexes 1-4 and the data that were collected during each mission, from new sources, detected during visits and further explanation. Consolidated data collected on academic autonomy in the target countries are presented in Annexes 5-8.

Based on data analysis, a set of criteria and sub-criteria appeared for academic autonomy benchmarking (Table 1).

Case analysis on countries focuses on the emerging criteria and is presented in Chapter 3. The discussion of each criteria and sub-criteria in question is oriented particularly towards their definitions, concepts, separation between government and university, possible links and relationships between academic autonomy criteria and other types of autonomy and the positioning (where possible) of the occurred criteria in the interfaces of university autonomy.

Table 1. The criteria and sub-criteria appeared as a result of comparative analysis

Criteria	Sub-criteria
1. Establishment and termination of study programs	1.1 Levels in higher education 1.2 Introduction of study programs at cycle I 1.3 Introduction of study programs at cycle II 1.4 Introduction of study programs at cycle III 1.5 Language of instruction
2. Admission to studies	2.1 Procedures for admission to Cycle I 2.2 Procedures for admission to Cycle II and III 2.4 Admission of foreign students 2.5 Formation of contingent
3. Recognition of studies	3.1 Recognition of study periods undertaken abroad 3.2 Recognition of documents of studies done abroad
4. Accreditation of study programs	4.1 Internal quality assurance structures 4.2 Methodology, evaluation criteria, procedures 4.3 Freedom in the choice of external quality assessment body 4.4 Relations of cooperation of the accreditation body with the Ministry of Education in the accreditation process

5. The National Qualifications Framework (NQF)	5.1 The body responsible for NQF in the country 5.2 Participation of universities in the development of new qualifications 5.3 How are NQF requirements reflected in the study programs (compulsory provisions, internal control procedures, external evaluation)? 5.4 Educational standards 5.5 Credit system
6. The content and implementation of the study program (organization of studies)	6.1 Designing the content of study programs 6.2 Allocation of tasks among academic structures 6.3 Internships 6.4 Final evaluation on cycles
7. Employability	7.1 The occupational framework (ISCEO). The link between the level of studies - qualification 7.2 Place of MA and PhD in the occupational network 7.3 Career guidance structures (state level, institution level)
8. Teachers' workload	8.1 Planning the didactic workload 8.2 Distribution of the didactic workload 8.3 The accounting of performing teaching and research workload
9. University scientific research	9.1 University structures involved in the organization of scientific research 9.2 Students' involvement in the process of scientific research (incentive mechanisms) 9.3 Scientific research of the didactic staff 9.4 Integrated research, education and business centers
10. The doctorate	10.1 The right to offer doctoral studies 10.2 Doctoral Schools 10.3 Completion of studies, conferring of degrees 10.4 Postdoctorate, habilitate

The comparative analysis is presented in Chapter 4. The criteria and subcriteria identified (Table 1) were the basis for comparative analysis. A comparative analysis template has been developed for this purpose (see Table 3 in the Consolidated Report). Data analysis of the comparative study is presented in Table 2 (Chapter 4).

3. ANALYSIS OF ACADEMIC AUTONOMY BY COUNTRY

3.1. Academic autonomy in Lithuania

According to the Law on Education and Research [1] a higher education institution *shall enjoy the autonomy which covers academic, administrative, economic and financial management activities, and is based on the principle of self-government and academic*

freedom. Pursuant to the procedure laid down by the Constitution and other laws the autonomy of a higher education institution shall be harmonized with the accountability to the public, founders and members of the legal person.

A higher education institution shall have the right to: choose study fields and forms and the development of a person, research, social and cultural development, cultural and scientific knowledge communication; define a procedure of studies; fix a tuition fee in accordance with the procedure laid down by Law of; prepare and approve study programmes which meet the requirements laid down by legal acts; provide other educational, qualification improvement, expert services; publish study, scientific and other literature; establish its own structure, internal working arrangements, staff number, their rights, duties and conditions of payment for work, position requirements, procedure of organization of competitions to fill positions and of performance evaluation of employees, adhering to laws and other legal acts; admit and exclude students in accordance with the procedure laid down by its statute; award students scholarships from its own or sponsors' funds; set forms of cooperation with natural and legal persons of the Republic of Lithuania and foreign countries; manage, use and dispose of assets in the manner prescribed by this Law and other legal acts; exercise other rights laid down by legal acts.

A higher education institution must: ensure academic freedom of members of the academic community; inform the founders, members of a legal person and the public about quality assurance measures in studies and research activities, and in case of state higher education institutions – also about their financial, economic and research activities and the use of funds; the results of external quality evaluation and accreditation of their study programmes; furnish in due time official information to institutions authorised by the Government (statistical data and subject-specific information) which is necessary for the management and monitoring of the higher education and research system; provide career consultations to students; perform other obligations established by legal acts.

In the following, we analyze how academic autonomy is achieved by legislative delineation of functional / operational rights and obligations of the higher education institutions from those of central state authorities.

3.1.1. Establishment and termination of study programs

3.1.1.1. Levels in higher education

Two types of higher education institutions (HEIs) are provided by the Law of Higher Education: university colleges [1.1, Art. 6] and institutions offering higher education services and developing high level applied research [Article 9, p. 8], [Article 35, 36]. The right to provide higher education services is granted to state institutions by Authorization, and to private institutions – by License. It set up a state registry that lists institutions offering educational services [art. 38, 12], and it is made public.

A state university shall be established, restructured or liquidated by the Seim on the recommendation of the Government. *A higher education institution may be established if*

there is a material base and other conditions indicated in this Law which are necessary to ensure the quality of planned study programmes, research and/or artistic activities, and to meet the requirements of presented higher education qualifications. The state college shall be established, reorganized or liquidated by Government Decision. The order of organization of state institutions and licensing of private ones is described in [3].

Articles 7 and 8 of the Law on Education [1] give a clear answer to the question - what is different between the objectives of the two types of institutions?

The university [1.art.8] shall carry out university studies, conduct research, experimental (social, cultural) development and/or develop high-level professional art. The name of a higher education institution must contain a word "university" or "academy", or "seminary". More than half of the teaching staff of a university must be scientists and/or established artists. Objectives of the university: to carry out studies which provide university higher education based on research and corresponding to the modern level of knowledge and technologies, a higher education qualification, develop a thoroughly educated, ethically responsible, creative and entrepreneurial person; to harmoniously develop scientific cognition of various fields, to conduct high-level research and experimental (social, cultural) development, to train scientists, to cooperate with national and foreign partners in the field of sciences and humanities; when cooperating with public and economic partners, to promote the development of regions and the whole country through research, educational, artistic and other cultural activities; to develop society receptive to education, sciences, arts and culture, which is able to effectively make use of science and compete in the market of high technologies, products and services.

The college [1. Art. 9] shall carry out college studies, develop applied research and/or professional art. The name of a higher education institution which carries out such activities must contain a word "college" or "higher education institution". Objectives of the college: to carry out studies which provide to a person the college higher education and a higher education qualification and which satisfy the needs of the State, society and economy of Lithuania, and conform to the level of science and latest technologies; to develop applied research necessary for the region, to provide consultation to local government and economic entities; to create conditions for persons to improve their acquired knowledge and skills; to develop society receptive to education and culture, which is able to work under the conditions of rapid technology change.

More than a half of the teaching staff of a college must have at least three-year practical work experience in the sphere of a subject they teach. The qualification in the sphere of a taught subject must be improved in accordance with the procedure laid down by the college. Subjects which must be taught at colleges by the teaching staff members with a scientific degree shall be determined by descriptions of a study field, a set of study fields or a study area.

3.1.1.2. Introduction of study programs at cycle I

Requirements for the first cycle programs, in general form, are determined by the Law on Education [1, 48 and 1.4]. By Ministry of Education' order [1.8] shall be approved general and specific requirements for study programs at the college level, cycle I and integrated studies. At cycle I double specialties programs are also accepted [1, article 48 (7)], which can be implemented by two universities in the country or abroad.

New programs should correspond to specialties designated in the list / nomenclature approved by the Minister of Education [1.20]. For some fields of study, such as Law, the Ministry of Education also approves specific requirements to those programs of study [6].

3.1.1.3. Introduction of study programs at cycle II

Article 48 (2) of the Law on Education states that institutions with research in the field can organize master programmes. The Ministry approves the general and special requirements for fields of study of second cycle Master's degree. New programs are developed by program committees, they are discussed in the institute / department, and they are approved by the Senate and proposed for approval to the Council of Higher Education of the Ministry of Education and Research. If the program meets the requirements defined in [9], it is approved having permission to proceed.

In [2.39] are mentioned procedures of formation of program committees, their composition, their rights and obligations and rules to develop new programs in the University of Mykolas Romeris in Vilnius.

3.1.1.4. Introduction of study programs at cycle III

The Ministry of Education decides which institutions may organize doctoral studies. The decision shall be based on the evaluation (according to the Regulation on Doctoral Studies approved by the Government on the recommendation of the Committee of Science) of scientific research led by the institution. Doctoral studies can be organized in consortia with other research institutes or universities in the country or abroad.

Doctoral studies are organized in the field of natural sciences, humanities and arts [1.1, Article 48 (4.5)]. The degree offered is Doctor of Science or Doctor of Arts. The degree of Doctor Habilitate is not stipulated by law [1, article 48 (6)].

3.1.1.5. Language of instruction

Article 11 of the Lithuanian Law on state language [2] states: *The State shall guarantee the residents of the Republic of Lithuania the right to acquire general, vocational, higher post-school and university education in the state language.*

So, the teaching language in higher education institutions is Lithuanian. The legislation [1, article 49] provides that studies may be in other languages only at programs where studies are not provided in the national language.

Conclusions

1. Two types of higher education institutions: colleges offering professionalized programs and universities that offer programs for three levels - Bachelor, Master (in some specialties of integrated study) and Doctorate. A new institution is established by decision of the Seim. It is established a Register of institutions entitled to offer educational services, which is made public.
2. The Ministry of Education determines / approves the general requirements for college study programs, study programs at cycle I, integrated studies and master. New college and Bachelor programs should correspond to the List / Nomenclature approved by the Ministry of Education. Institutions develop programs in accordance with those requirements.
3. The Ministry of Education provides entitlement to master and doctoral programs to institutions conducting scientific research in the field (based on assessment results). The name and content is determined by the institution based on the general requirements.
4. Studies are in the national language in all programs. In parallel, other languages may be used at the discretion of the institution.

3.1.2. Admission to studies

3.1.2.1. Procedures for admission to Cycle I - Bachelor. Commitment of the Government concerning the admission

According to Article 52 of the Law on Education [1] persons having at least the secondary education shall be admitted by way of competition to a study programme of the first cycle and an integrated study programme in a higher education institution, taking account of learning results, entrance examinations or other criteria laid down by a higher education institution. A list of competitive subjects according to study fields and principles of composition of a competitive grade, a lowest passing entrance grade and other criteria shall, upon the evaluation by a students' representation, be set by higher education institutions and announced by them not later than two years prior to the beginning of an appropriate academic year.

A general number of student places shall be fixed by a higher education institution, taking into consideration the possibilities of quality assurance in studies.

Admission is organized centrally for all colleges and universities. It is created a common association.

The Ministry determines the admission plan (budgetary places, vouchers for specialties). Based on the contest of candidates, the grades in secondary education diploma, applicants can obtain or not the claimed voucher. The application is submitted for a particular specialty and at a specific institution. The student comes to university with the state paid voucher. Those who did not receive vouchers come to study places with tuition fees, the number of study places is defined by the capacity of the institution. The groups are formed for programs if there are 15 students or more (option of the institution).

3.1.2.2. Procedures for admission to Cycle II and III

Persons having a higher education qualification shall be admitted to a study programme of the second cycle in accordance with the procedure laid down by the higher education institution [1, art. 52 (2)]. Persons having a Professional Bachelor's qualification shall have the right to enter study programmes of the second cycle, if they meet the minimum requirements approved by the Ministry of Education and Science.

The following procedures are established for admission to Masters: the contest is done based on the Bachelor degree in related programs; college graduates are admitted after one compensatory year (see Rules). There are several provisions regulating the conduct of master studies depending on the type of previous studies (prerequisites and difference credits).

Admission to PhD is based on the Regulation developed by the Research Committee. The Master's degree or the integrated studies diploma in the respective field of studies serves as the basis for admission (more details, see criterion 10).

3.1.2.3. Admission of foreign students

Admission of foreign students is only on tuition fee basis, which is different from that for national students. Their number is not limited. The equivalent level of education of 12 years (high school) is required for admission. In this respect universities have broad autonomy.

3.1.2.4. Formation of contingent

Mechanism of student contingent formation – student orientation: various measures are undertaken at university, faculty, and program level. These measures have become central for all universities due to the reducing number of students, the freedom to choose the university, having won the voucher.

Conclusions

1. The government determines the quota / number of vouchers (state scholarships) that can be allocated, universities will get places (students with vouchers) through competition (according to the prestige of the institution in the vision of candidates). For admission to the master the same methodology is used. It was created, with the consent of universities, a centralized body for online admission to cycle I, which is coordinated by the Ministry of Education and Research. This mechanism provides a large freedom to students and objective competition between institutions.
2. For admission to Masters, the contest is done based on the Bachelor degree in related programs; college graduates are admitted after one compensatory year.
3. Admission to PhD is based on the Regulation developed by the Research Committee. The Master's degree or the integrated studies diploma in the respective field of studies serves as the basis for admission.

4. The admission of foreign students is carried out by university admission committees. No admission quotas are imposed.

5. Universities are autonomous in the use of different methods of vocational guidance, various measures are taken at university, faculty, and program level.

3.1.3. Recognition of studies

3.1.3.1. Recognition of study periods undertaken abroad

Article 50 of the Law on Education [1] states that the results of studies partially achieved and certified in another country, in a local institution or another program of the same institution must be recognized. General recognition procedures are established by the Government under which each institution develops its own rules. As an example, you can examine the Regulation of the University Mykolas Romeris in Vilnius “Procedure for recognition of academic credits” [2.17]. The document states that *the recognition of academic credits of the undergraduate (bachelor's) studies and graduate (master's) studies at Mykolas Romeris University shall be the responsibility of faculty deans, and the recognition of academic credits of post-graduate (doctor's) studies - the Doctoral Commission of a respective discipline.*

3.1.3.2. Recognition of documents of studies done abroad

Diplomas and qualifications acquired in EU and other countries are assessed and recognized under the rules set by the Government [14]. *Ministry of Social Security and Labour to issue relevant documents for the nationals of the European Union, European Economic Area or Swiss Confederation moving in the European Union, European Economic Area or Swiss Confederation for the purpose of taking up or pursuing a regulated profession or regulated professional activity, as indicated in Directive 1999/42/EC of the European Parliament and of the Council of 7 June 1999 establishing a mechanism for the recognition of qualifications in respect of the professional activities covered by the Directives on liberalisation and transitional measures and supplementing the general systems for the recognition of qualifications. The Lithuanian Centre for Quality Assessment in Higher Education to act as an information centre.*

Conclusions

1. In Lithuania, at the level of Government, there are determined general rules for the recognition of periods of study and academic credits obtained abroad or in another local institution. Each institution sets independently (by internal rules) procedures for recognition and transfer between programs.

2. A state authority is appointed for the recognition of diplomas, which operates under the rules and requirements set by the Government.

3.1.4. Accreditation of study programs

3.1.4.1. Internal quality assurance structures

The Law on Education [1.1, article 41] defines that internal quality assurance is the responsibility of educational and/or research institutions which establish internal quality management structures. The institution shall inform stakeholders about the quality of education and research, organize systematic self-assessment.

Universities determine independently: the policy, quality management strategy, and system structure. Responsible of quality assurance are: head of the QMS department, dean of the Faculty, head of the program [2.42]. An important role is given to students' participation in quality assurance process [2.38]: members of the evaluation committees, courses and teaching quality assessment (questionnaires).

3.1.4.2. Methodology, evaluation criteria, procedures

Article 42 of the Law on Education defines that the external evaluation and accreditation of study programs is mandatory. Higher education institutions have the right to provide education only at externally assessed and accredited programs [1, article 42]. External evaluation is carried out by the Centre for Quality Assessment in Higher Education (Central Evaluation body) or another agency, indicated by MES, appearing in the EAQAHE Register. Accredited programs are included in the Register of accredited programs accessible to all stakeholders.

The Ministry of Education and Research initiates every six years the external evaluation and accreditation of higher education and research institutions [1, article 43]. Evaluation is done on all fields indicated in the Statute of the institution and based on compliance criteria. The methodology and assessment criteria descriptors are approved by the Government.

External evaluation results are used for accreditation. If the results are negative, the institution is given two years to fix the situation, followed by further external evaluation. If repeated evaluation's results are not satisfactory, the Ministry of Education initiates proceedings to revoke the authorization or license of organization of studies.

External evaluation of research institutions is carried out by the Research Committee of Lithuania. The respective descriptors are approved by the Government. Negative results of the evaluation lead to the closure or restructuring of the institution by Government Decision. The methodology, criteria and procedures for external evaluation are presented in [13], which are approved by MES's order. The methodology for the selection of experts for external evaluation committees is presented as a separate document.

In Lithuania subsidiaries of foreign institutions operating in the country are also subject to evaluation and accreditation.

3.1.4.3. Freedom in the choice of external quality assessment body

External evaluation is carried out by the Centre for Quality Assessment or another agency, indicated by MES, appearing in the EAQAHE Register.

3.1.4.4. Relations of cooperation of the accreditation body with the Ministry of Education in the accreditation process

The Centre for Quality Assessment in Higher Education is a budgetary organization created by MES, and the Regulation of the Centre is approved by MES. The basic objective of the Center is to encourage quality. The agency has a committee of 11 members appointed by the Seim on the recommendation of the Council of Higher Education of the Ministry of Education, Science and Culture Committee, Government, etc. The Director is the sole manager and is elected by the Council for a term of 5 years [1.1, Article 17].

The accreditation of study programs, Institutions of Higher Education and Research is based on the findings of the external evaluation.

New institutions are subject to accreditation no later than two years after their foundation. An additional external evaluation by the Centre will be submitted. The accreditation is followed by the recall of the functioning authorization (MES decides) or license revocation (non-state institutions).

The accreditation process procedures are approved by the Government. Accredited study programs and institutions are listed in the Register which is made public [1, Article 44, 37].

Conclusions

1. Internal quality assurance is the responsibility of educational and/or research institutions which establish internal quality management structures, they determine independently the policy, and quality management strategy. Responsible of quality assurance are: head of the QMS department, dean of the Faculty, head of the program, and students are involved. The institution shall inform stakeholders about the quality of education and research.

2. Higher education institutions have the right to provide education only at externally assessed and accredited programs. The Ministry of Education and Research initiates every six years the external evaluation and accreditation of higher education and research institutions. Evaluation is done on all fields indicated in the Statute of the institution and based on compliance criteria. The methodology and assessment criteria descriptors are approved by the Government. In Lithuania subsidiaries of foreign institutions operating in the country are also subject to evaluation and accreditation.

3. External evaluation is carried out by the Centre for Quality Assessment or another agency, indicated by MES, appearing in the EAQAHE Register.

4. External evaluation methodology and criteria are developed by the Accreditation Council but are approved by the Government on the recommendation of the Ministry of Education. Accreditation of study programs and educational institutions by ME is based on the results of external assessments coming from the committee.

3.1.5. The National Qualifications Framework (NQF)

3.1.5.1. The body responsible for NQF in the country

In Lithuania the General Qualifications Framework is designed with 8 levels of qualifications, similar to the EQF, approved by GD in which there are determined criteria for each qualification level [5]. When comparing the descriptors of the national system with the EQF one, there has not been observed something very essential. NQFLIT determines / sets four levels that correspond broadly to the degrees / qualifications in higher education: 5 – corresponds to the professional Bachelor, offered by colleges, 6 - university Bachelor degree 7 – Master's degree 8 - PhD degree. Descriptors for higher education levels are defined in detail in the three orders of the Ministry of Education: Order 2212-2011 [7] sets higher education study cycles in Lithuania; Order 501 of 2010 [8] establishes general criteria for the first cycle and integrated studies; Order 826 of 2010 [9] defines the specific descriptors for the second cycle, Master.

3.1.5.2. Participation of universities in the development of new qualifications

The general competences being established in [7, 8, 9], the initiative to create new study programmes most often comes from the departments / institutes or program committees, which are formed freely. The Ministry and the Quality Assurance Centre engage at the stage of external evaluation and approval of operation of these programs.

3.1.5.3. How are NQF requirements reflected in the study programs (compulsory provisions, internal control procedures, external evaluation)?

Universities have to develop (design) study programs and the process of implementation so that competences determined by the descriptors of the respective levels of education to be achieved by the student. The requirements specified above will serve as criteria and indicators (reference standards) at the final evaluation of studies, preparation of self-assessment reports and external evaluation for the accreditation of programs.

3.1.5.4 Educational standards

Educational standards on fields are developed as an exception, such as specific requirements determined for the field of Law [6].

Conclusions

1. In Lithuania, it is approved the General Qualifications Framework with 8 levels of qualifications, with qualification levels descriptors similar to those recommended by the EQF. Four higher levels of the Framework correspond to qualifications offered by college, Bachelor, Master and PhD study programs.

2. The general competences being established by state institutions (MES, Government), the initiative to develop new study programs comes from departments / institutes and program committees, which are formed freely. The Ministry and the Quality Assurance Centre engage at the phase of external evaluation and approval of operation of these programs.

3. In order to be implemented, new study programs are evaluated if they meet the requirements defined by descriptors for the respective levels of education. The same descriptors serve to define criteria and indicators for the final evaluation of studies, for the preparation of self-assessment and external evaluation reports for the accreditation of study programs.

4. Educational standards on fields are developed as an exception, such as specific requirements determined for the field of Law.

3.1.6. The content and implementation of the study program (organization of studies)

3.1.6.1. Designing the content of study programs

Program content is developed by a program team (committee) formed usually at the initiative of teachers. Designing the content is based on transversal and professional competences, which must be achieved by the graduate during his/her studies.

General requirements for program structure, distribution of credits between groups of university disciplines, specialized and practical training are specified in [8, 9], document similar to the Framework Plan implemented in RM.

A special role in the guidance process of the program, from design to implementation, is assigned to the Programme Committee [2.39].

Requirements on the organization of studies, assessment of students, organization of internships, organization and realization of the final assessment are the responsibility of each institution and are defined by the internal normative acts [2.29, 2.31, 2.33, 2.34, 2.36, 2.37, 2.39].

Among the specific requirements there are mentioned:

Studies shall be done by modules which – shall mean a part of the study programme comprised of several content-related subjects, having a defined objective and oriented towards certain abilities of the student; the least possible scope of the module – 10 credits credits. The number of subjects in a studied programme may not exceed 7. Studies of each subject or module shall be completed with the examination or assessment of independent work (project) carried out by the student. If a system of accumulative assessment is used, intermediary assessments may make part of the grade of the examination.

Aims and curriculum of studied subjects, methods of studies, requirements for the entrants must be based on the aims of the study program. The volume of the study program, qualification of pedagogical and scientific staff, material base of studies must be sufficient to achieve the aims of the study program.

The study programme must be periodically updated. Over the programme's accreditation period, a higher education institution, on the decision of the senate (academic council), may change study subjects of the major field declared in the programme description so that their total scope does not exceed 20 per cent of the scope of all subjects of the major field in the

study programme. Changes must be communicated using a web site of the higher education institution.

At Bachelor – not less than half of the subjects of the study field must be delivered by scientists or established artists (subjects of art). In the case of college programmes – not less than 10 per cent of the amount of the subjects of the study field must be delivered by scholars or established artists (subjects of art). At Master's – not less than 80 per cent (or 60 per cent when study programs are centered to practical activity) of university teachers of all study subjects must hold a scientific degree, of them there must be not less than 60 per cent (or 40 per cent when study programs are centered to practical activity) of subject teachers whose field of scientific activity must match the subjects taught by them.

3.1.6.2. Allocation of tasks among academic structures

A study program is provided by the program team, working within a department. As necessary, some modules are provided by teachers from other specialized or general departments. Due to significant competition between departments, the share of the task provided from outside definitely reduces.

The Department and the Dean of the faculty have task of organizing the process of studies (student records, schedules, accommodation, etc.), the program committee is responsible for ensuring teaching, quality assurance and popularization of the respective specialty, work with alumni.

3.1.6.3. Internships

In the regulations [8] and [9], adopted by the Ministry of Education, among general requirements related to study programs there can be found specific requirements on the practical training of future specialists. In [8, Art. 10] is defined:

Practice is a separate subject of studies included in the number of 7 subjects, when it is not connected to any of the studied subjects or, if it is connected to it, it must be reasonably stated by the executors of the study program as separate from the study subject. Practice is not a separate subject of studies if it is an integral part of the studied subject, such practices may not be in the list of studied subjects. At the Bachelor level (undergraduate studies) the volume of practices should be no less than 15 credits.

In the case of Bachelor studies in colleges (professional orientation programs) practices and other practical training must comprise not less than one third of the volume of the study program. The volume of practices (practices of training, knowledge, occupational activity and others) must be not less than 30 credits [8, art. 28].

Master programmes [9, art. 17.3] should provide: not more than 30 (until 1 September 2011 – 20) study credits may be made of university-prescribed and student-elected subjects intended, depending on the character of the study programme, to prepare for doctoral studies (research work (creation of art)), practical activity (practice of professional activity) or for subjects of another field, when a study programme subject to the aims related with cross

studies is implemented, also for general university study subjects and subjects that are freely selected by a student and necessary to achieve the aims of the study programme.

3.1.6.4. Final evaluation on cycles

According to [8, art. 18], a Bachelor programme, is completed by the evaluation of the graduate's competency during the defense of the final work (project) and by final examinations (if provided for by regulatory legal acts) giving to them not less than 12 credits. If a double bachelor's degree is conferred, final works (projects) of the main field (branch) and minor field (branch), as well as final examinations (if provided for by regulatory legal acts) must be foreseen giving to them in total not less than 15 credits.

College programmes [8, art. 26] are also completed by the evaluation of the graduate's competency during the defense of the final work (project) and by final examinations (if provided for by regulatory legal acts) giving to them not less than 9 credits. If, upon completing the program, a double bachelor's degree is conferred, final works (projects) of the main field (branch) and of the minor field (branch), as well as final examinations (if provided for by regulatory legal acts) must be foreseen in it by giving to them in total not less than 12 credits.

Not less than 10 per cent of the amount of the subjects of the study field must be delivered by scholars or established artists (subjects of art). More than half of the university teachers of the study program must have not less than 3 years' experience of practical work in the area of the taught subject.

In Master programmes [9, art. 17.3, 20, 22] not less than 30 (by September 1, 2011– 20) study credits are allocated for the preparation and defense of the final work of for the final work or final examination (final examinations if they are prescribed by the legal acts of the Republic of Lithuania or international legal acts). The final work must be substantiated by independent scientific or applied research, application of knowledge or it must be prepared as a project revealing abilities conforming to the aims of the program. Postgraduate's work (project) must demonstrate his level of knowledge and understanding, ability to analyze the selected topic, assess the works of respective field (branch) previously carried out by other persons, independently study and carry out research in that field (branch), describe his research work, clearly and reasonably formulate findings of the research following the requirements approved by the university. The graduation project of the postgraduate of art study fields must reveal his level of creativity, capability to apply independently latest practical knowledge and technologies in creative work.

The commission assessing the final work (project) and its defense must be comprised of specialists competent in the study field (branch) – scientists (artists), practitioners-professionals and representatives of social partners. At least one member of the commission (best – chairman of the commission) must come from the other institution of science and studies than that in which master's studies took place. Composition of the final examination commission must be the same where such an examination is set in the study program [2.39, art. 147-157].

Conclusions

1. General requirements for program structure, distribution of credits between groups of university disciplines, specialized and practical training are determined by the Ministry of Education. Program content is developed by a program team (committee) formed usually at the initiative of teachers. Designing the content is based on transversal and professional competences, which must be achieved by the graduate during his/her studies, which are described in the Qualifications Framework. A special role in the guidance process of the program, from design to implementation, is assigned to the Programme Committee. Requirements on the organization of studies, assessment of students, organization of internships, organization and realization of the final assessment are the responsibility of each institution and are defined by the internal normative acts.
2. A study program is provided by the program team, working within a department. As necessary, some modules are provided by teachers from other specialized or general departments. Due to significant competition between departments, the share of the task provided from outside definitely reduces.
3. In the regulations adopted by the Ministry of Education, among general requirements related to study programs there can be found specific requirements on the duration (expressed in credits) of the practical training, which depends on the type of programme. Institutional normative acts establish the organization, reporting and evaluation of internships.
4. The final evaluation is an act of appreciation of competences obtained by the student in relation to the outcomes prescribed by the program and is carried out through public defence of a project / thesis in front of the evaluation committee, consisting of specialists (researchers) in the field. Institutional normative documents define requirements for the graduation paper, procedures for the organization and conduct of the final evaluation.

3.1.7. Employability

3.1.7.1. The occupational framework (ISCEO). The link between the level of studies - qualification

In Lithuania, it is currently used the standard International Classifier of Occupations ISCO-88 (COM), recommended by the EC. For higher education, requirements on general and professional competences are expressed in the descriptors of levels 5, 6, 7 and 8 of the National Qualifications Framework and legislative documents [5, 8, 9] on the study programs for professional Bachelor level, (university) Bachelor, Master's and Doctoral studies.

Regarding employment, Lithuania faces the same problems as RM. Regulations and methodical materials have not been developed in Lithuania. Each team determines how to work with its alumni.

Employment is free; the employer determines what type of specialist he needs and what skill level should the employee have. There are a few areas which are clearly delineated, positions that can be occupied by holders of bachelor's and master's degrees [16].

In the university the responsibility for working with graduates is attributed to the program team. A register of graduates is made (MEC Commission), out of which it will be possible retrieve data on the employment of graduates, their jobs and salaries. Data taken from the database of the tax inspectorate are used, and the wage levels of graduates are estimated on the basis of the declared income.

3.1.7.2. Place of MA and PhD in the occupational network

From discussions held with project partners from UMR we found that it would be good to determine positions that can be occupied by individuals with a level not lower than master. In Lithuania this fact is stipulated such as the Law on the jurisprudence [1.6].

In ISCO - 88 - are listed only the general requirements of specialties. The employer is free to choose between - college, Bachelor or Master graduates. There should be emphasized only areas with specific requirements, e.g. those related to human safety, environmental security, etc. The right of becoming a specialist in construction design, for example, is granted only to those who have a master qualification plus special requirements.

3.1.7.3. Career guidance structures (state level, institution level)

At UMP special structures responsible for vocational guidance of students are not created. Responsibility and core activities related to guidance of students, support of students in the process of looking for a job and their employment and career tracking is in the responsibility of departments and program committees.

Conclusions

1. In Lithuania, it is currently used the standard International Classifier of Occupations ISCO-88 (COM), recommended by the EC. For higher education, requirements on general and professional competences are expressed in the descriptors of levels 5, 6, 7 and 8 of the National Qualifications Framework and legislative documents [5, 8, 9] on the study programs for professional Bachelor level, (university) Bachelor, Master's and Doctoral studies.

2. In ISCO - 88 - are listed only the general requirements of specialties. The employer is free to choose between - college, Bachelor or Master graduates. There should be emphasized only areas with specific requirements, e.g. those related to human safety, environmental security, etc. The right of becoming a specialist in construction design, for example, is granted only to those who have a master qualification plus special requirements.

3. At UMP special structures responsible for vocational guidance of students are not created. Responsibility and core activities related to guidance of students, support of students in the process of looking for a job and their employment and career tracking is in the responsibility of departments and program committees.

3.1.8. Teachers' didactic workload

3.1.8.1. Planning the didactic workload

Lithuanian Labor Code [2] establishes the working week of 36 hours and the annual workload of 1600 hours for teachers in higher education. Lithuanian law does not establish specific rules and regulations on the didactic workload of teachers and institutions, by themselves, develop internal regulations for calculating and allocating the workload. Other categories work under the general rules contained in the Labor Code and other legal acts.

3.1.8.2. Distribution of the didactic workload among chairs, teachers

The annual workload of a teacher consists of 1,000 hours of didactic activities, 400 hours of research activities and 200 hours for other activities. Contact hours are the most important part of the teaching load and are determined after a certain scale, approved by the University Senate. At the University of Mykolas Romeris, for example, there were approved the following workloads: university professor - 180 hours, associate professor – 280 hours, university lecturer – 380 hours. It is accept internal part-time job of up to 1.5 time norms.

3.1.8.3. The accounting of performing teaching and research workload

Program teams deal with the distribution and accounting of teaching workload achievement. Accounting of research results is based on published reports and papers. If research results are lower than planned, the teacher in question will have an increased teaching load in the following year. Research results also influence salary.

The study voucher has two components: learning and research. The salary that the teacher receives includes these two components. It is considered that for the teaching load, whose evidence is strict, the teacher receives a fixed part of the salary (the minimum salary set by law). Depending on performance it is determined the size of the variable part of the salary for the teacher. At UMR the constant part is 55%. Among the basic criteria for assessing performance are the results of scientific research (number and importance of publications, participation in developing new programs, participation in teams managing educational programs etc.

The payment for research projects is a separate article (budget line), and the money is divided among the team members. In this case there is a very large autonomy. Project funding is made by the Scientific Research Committee of Lithuania.

Conclusions

1. Lithuanian Labor Code [2] establishes the working week and the annual workload for teachers in higher education. Institutions, by themselves, develop internal regulations for calculating and allocating the workload.
2. The annual workload of a teacher at UMR consists of 1,000 hours of didactic activities, 400 hours of research activities and 200 hours for other activities. Contact hours are the most important part of the teaching load and are determined after a certain scale, approved by the University Senate. It is accept internal part-time job of up to 1.5 time norms.

3. The accounting of hours of teaching load is done at the department level, while accounting for the hours devoted to scientific research, is a problem.

3.1.9. University scientific research

3.1.9.1. University structures involved in the organization of scientific research

Research institutes are state and non-state [1, Article 10]. State institutions conduct long term research of social and economic development important to the state. The non-state institutions conduct research in an area that is defined by the founder. Objective - developing research relevant to the continuity and development of the national economy, culture, health and society.

Education and scientific research policy is defined and implemented (within the competence) by the Ministry of Education, other ministries, Research Council, the Lithuanian Studies Foundation and *the Centre for Quality Assessment in Higher Education*. The participation of Lithuanian institutions in international research projects is coordinated by *the Agency for International Science and Technology Development Programmes*.

Articles 11 and 12 of [1] establish the rights and duties of research institutions. State research institutions are autonomous to: *in compliance with laws and other legal acts, to determine its own structure, internal working arrangements, staff number, their rights and duties, and conditions of payment for work, the procedure for organising competitions to fill a position and the performance evaluation procedure; when fulfilling its mission, to cooperate with natural and legal persons of the Republic of Lithuania and foreign countries; to publish scientific and other literature, to choose ways to announce results of its research and experimental (social, cultural) development; in conjunction with universities and in accordance with the procedure laid down by this Law, to train scientists, to help in training specialists; to promote the use of the results of research and experimental (social, cultural) development in the fields of economy, social and cultural life; to carry out expert examinations, to provide scientific consultations and other services in the spheres of its research; to manage, use and dispose of assets in accordance with the procedure laid down by legal acts.*

A research institute must: ensure academic freedom of members of the academic community; inform the founder (members of a legal person) and the public about the quality assurance measures in research activity, and in case of a state research institute – also inform about its financial, economic activities and the use of funds; furnish in due time official information to institutions authorised by the Government (statistical data and subject-specific information) which is necessary for the management and monitoring of the higher education and research system; perform other obligations established by legal acts.

The foundation of research institutions and their liquidation is done by GD [1.1, Art. 34].

The Research Council of Lithuania [1, art.15] shall be an advisor to the Seimas and the Government on the issues pertaining to research and preparation of researchers. The Research Council of Lithuania shall participate in the implementation of research,

experimental (social, cultural) development and other programmes, competition-based programme funding of research, experimental (social, cultural) development works and shall organise evaluation of research activities carried out in Lithuania.

The Research Council of Lithuania shall consist of the Board of the Research Council of Lithuania, the Research Foundation and two expert Committees: the Committee of Humanities and Social Sciences and the Committee of Natural and Technical Sciences. These Committees shall be set up in accordance with the procedure laid down in the regulations of the Research Council of Lithuania.

In [1. Articles 15, 16] it is specified that higher education institutions can organize technology transfer parks and integrated research, education and business centers. The technology transfer park includes people who have the primary function to stimulate the communication of scientific knowledge and technological dissemination, creation of conditions for commercialization of research results. Integrated research, education and business centers are established by Government Decision [1. Article 16], the development of its program will be coordinated by a supervisory counselor approved by the institution.

3.1.9.2. Students' involvement in the process of scientific research (incentive mechanisms)

In Lithuania there is the scientific master of 90 -120 ECTS, which is a starting point for doctoral studies. Master students are integrated into applied research so as, when at cycle three, they could develop valuable scientific research autonomously.

3.1.9.3. Scientific research of the didactic staff

Annual workload of teachers includes 400 hours of research per year. Two publications in the country or one publication in international journals are mandatory. Other tasks, performed based on grants, are paid in addition to the basic salary. Performance in research is supported by increasing the variable part of the basic salary. Money for basic research is included in the voucher obtained by each budgetary student or in fees.

Conclusions

1. Education and scientific research policy is defined and implemented (within the competence) by the Ministry of Education, other ministries, Research Council, the Lithuanian Studies Foundation and *the Centre for Quality Assessment in Higher Education*. The participation of Lithuanian institutions in international research projects is coordinated by *the Agency for International Science and Technology Development Programmes*. The Law on Education and Research establishes the rights and duties of research institutions. Higher education institutions can organize technology transfer parks and integrated research, education and business centers. The technology transfer park includes people who have the primary function to stimulate the communication of scientific knowledge and technological dissemination, creation of conditions for commercialization of research results. Integrated research, education and business centers are established by Government Decision.

2. In Lithuania there is the scientific master of 90-120 ECTS, which is a starting point for doctoral studies. Master students are integrated into applied research so as, when at cycle three, they could develop valuable scientific research autonomously.

3. Annual workload of teachers includes 400 hours of research per year. Two publications in the country or one publication in international journals are mandatory. Other tasks, performed based on grants, are paid in addition to the basic salary.

3.1.10. The doctorate

3.1.10.1. The right to offer doctoral studies

The third cycle of higher education in Lithuania is doctorate [1, article 48], which is held in the fields of natural sciences, humanitarian sciences and arts.

The purpose of doctoral studies in science and humanitarian sciences – shall be to prepare scientists who would be able to independently conduct research and experimental (social, cultural) development work, and to solve scientific problems. The Ministry of Education and Science shall grant the right of doctoral studies to universities and universities together with research institutes conducting high-level research in conformity with a field of sciences and humanities, or universities together with foreign higher education and research institutions. The right shall be granted on the basis of the evaluation, performed in accordance with the Regulations of Doctoral Studies, of a level of research in an appropriate field of sciences and humanities conducted by the institutes which apply for doctoral studies in the field of sciences and humanities. The Regulations of Doctoral Studies shall be approved by the Government on the recommendation of the Research Council of Lithuania. Persons who have defended their dissertation shall be awarded a Doctor of Science degree.

In the field of arts, the purpose and organization of doctoral studies are specific, and differ substantially from other areas [1, Art. 48 (6)].

3.1.10.2. Doctoral Schools, admission

In general, the organization of doctoral studies is determined by Doctoral Studies Regulation [RSDLIT] and some specific elements are detailed in the regulations of each university, depending on their scientific field (see the example of medical universities [RSDHELS] and a technological university [RSDKAUNAS]).

Doctorship right is granted to University or University together with other Lithuanian or foreign academic institutions by Lithuanian Ministry of Education and Science, basing upon the recommendation of Lithuanian Research Council.

University provides regular and extended doctoral studies. All PhD students, admitted into regular state funded doctoral programme, are awarded with scholarships.

Regular and extended doctoral studies might be financed from other sources as well. In such case the contract between the University and financing institution is signed.

Universities organizes doctoral schools which are functional entities with the purpose of implementation of doctoral studies. The school includes discipline and interdisciplinary doctoral committees, dissertation supervisors, PhD students and administrative staff.

University activities in doctoral studies are controlled by Vice-rector for research [RSDHELS] sau According to the needs, a board might be formed for doctoral committees activity and doctoral dissertations quality evaluation.

Doctoral school is considered to be the organizational and administrative formation, which provides with the conditions/facilities to conduct doctoral studies. Doctoral school may be instituted by one university, or few (Lithuanian and foreign) universities, or universities and institutes of research (also Lithuanian and foreign) on the thematical or institutional basis (veži, de exemplu, [RSDHELS]).

Oral examination of doctoral dissertation and conferral of doctoral degree is performed by academic discipline board (Further – board), that is being formed for each dissertation separately after the submittal of dissertation and positive dissertation review. The members and chairman of the board are appointed by doctoral committee and confirmed by University vicerector.

Admission to doctoral studies is based on the grades in the master degree/diploma, scientific papers published, recommendations from scientists and the appreciation mark of the argumentation letter submitted by the applicant. Each Applicant, along with other admission documents, submit an argumentation of his intention – written reasoning for the required doctoral place, precisely indicating the potential high competence scientist who would be responsible for dissertation project supervision , also substantial research place for planned doctoral research, additional financial means that might be used, a tabulation of the activities and experience relevant to the intended dissertation project.

University doctoral candidate admission board evaluates applications and foresees the number of available doctoral programme positions, considering the upcoming needs for University research staff, scientific competence of intended supervisors and scientific value of presented doctoral project. Doctorship school informs the Ministry of Education and Science about the decisions, mentioned above. After receiving the confirmation about the number of positions to be financed, doctorship council determines which departments can participate in the open contest.

More details on the development, approval and supervision of the fulfillment of the program of study and research in the doctoral school are defined in institutional regulations, for example, in [RSDHELS Chapter V]. Regulation [RSDLIT] provides that the doctoral student must obtain not less than 30 credits in 4 general courses defined by the doctoral school.

Rather considerable role in both acts is given to the supervisor of the doctoral student [RLIT, sec. 4, 13]. Dissertation supervisors are generally university professors, actively participating in research. The dissertation supervisor is permanently obligated to supervise the dissertation project and the supervision may not be delegated.

3.1.10.3. Completion of studies, conferring of degrees

The form of doctoral dissertation was rather specifically regulated; the student was allowed to defend it only after all the exams of the subject-studies were passed, if two articles, representing the results of his research during the preparation of dissertation, were published (one publication should be in the journal with the impact factor, one publication can be accepted for printing), and if the special institution inside the academic institution (the commission of the doctoral studies of the corresponding field) approved that the dissertation is prepared properly (the sections 19, 20, 22 of [RSDLIT]).

The dissertation was defended in the public session, before the Council, consisting of five members / scholars (at least four must be present), and at least two opponents from different academic institutions (according to the sec. 4 and 26 of [RSDLIT]), the dissertation is defended in the public session, the Council of Defence shall consist of not less than 3 scholars, there are no opponents at all, the session is legitimate if at least half of the members of the Council of Defence are present (including those, who participate in the format of the teleconference); if the Council consists of only three members – all must be present). After successful completion of doctoral studies the person is awarded the degree of the *Doctor of Sciences*.

After the application for the defending of the doctoral dissertation is received and the dissertation manuscript itself, Doctoral committee formally evaluates if the dissertation meets the formal requirements. The chair of the Doctoral Committee appoints one or more committee members to review the manuscript of the dissertation by the given date of the committee meeting.

The PhD student can make necessary corrections in the manuscript according the reviewers comments. If the dissertations manuscript is evaluated positively and follows all necessary regulations the research council for the defending of the dissertation (research council) is formed. One of the council members is appointed to chair the council. Research council is a group of 5 scientists, who evaluate the dissertation, its quality, scientific competence of the PhD student and after that decide about the awarding the student doctoral degree. No conflicts of interest can appear between the research board members and the PhD student, the supervisor and the PhD student, the person, defending dissertation extramurally and the scientific consultant. At least one research board member has to represent a foresight research and study institution. If the research has the multidisciplinary features of different scientific fields, 3 research council members can represent other different research fields. Lithuanian Ministry of education and Science regulates qualifications for the board members till 2013.

The dissertation is defended at a public session of the Defence Council. Main work results and conclusions are reintroduced by the PhD candidate. He gives feedback on his contribution to rovided publications. Members of the Defence Council evaluate a scientific level of dissertation, recentness and originality of results, reliability and validity of conclusions, give feedback on work lack and inaccuracy, scientific competence of the PhD

candidate – on defence of the dissertation. The PhD candidate answers questions and commentates on stated remarks.

Members of Defence Council vote openly and decide whether a degree of Doctor is granted to a PhD candidate. A vote protocol is signed by all members of Defence Council. A signed protocol has be returned to Doctoral School. Doctoral School notifies a Research Council of Lithuania not latter than ten working days after dissertation defence.

Doctoral school when receives voting protocol-decision if Defence council decides that a scientific degree is granted to a PhD candidate, draws doctoral diploma on the base of Lithuanian Republic law. Doctoral diploma s signed by a Rector of the University and are granted to a PhD student at open doctoral session.

3.1.10.4. Postdoctorate, habilitate

In Lithuania there is no other higher degree than the Doctor of Science or Arts.

Empowerment with the right to supervise PhD students belongs to the University / Department. *Scientific supervisor of doctoral candidate must meet the requirements, defined in the decree of Lithuanian Ministry of Education and Science (dated April 12th, 2010, No.V-503). Appointment of dissertation supervisors by doctoral committee is validated by the decree of Rector.*

Conclusions

1. The third cycle of higher education in Lithuania is doctorate [1, article 48], which is held in the fields of natural sciences, humanitarian sciences and arts. *The Ministry of Education and Science shall grant the right of doctoral studies to universities and universities together with research institutes conducting high-level research in conformity with a field of sciences and humanities, or universities together with foreign higher education and research institutions. The right shall be granted on the basis of the evaluation.*

2. Doctoral studies are organized in doctoral schools whose statute and organization is determined by Doctoral Studies Regulation [RSDLIT] and some specific elements are detailed in the regulations of each university. The institution is autonomous in selecting candidates for its study and research programs.

3. Doctoral Studies Regulation [RSDLIT] determines only the general requirements related to doctoral dissertation and procedures for its public defence. The institution conducting PhD defines specific requirements, procedures for completion and defence, conferring the degree of Doctor of Science or Arts. These procedures are greatly simplified without many elements of bureaucracy and formalism. The PhD Diploma shall be signed by the rector of the institution.

4. In Lithuania there is no other higher degree than the Doctor of Science or Arts. Particular attention is given to the selection of doctoral supervisors. Empowerment with the right to supervise PhD students is carried out by the institution based on criteria established

by the Decree of the Ministry of Education and Science (scientific activity history and list of bibliography).

3.2. Academic autonomy in Scotland

Introduction. Universities treat their activity through „responsible autonomy” concomitantly covering university autonomy and their accountability for public money spent. In the following we present the vision of the Council of rectors of universities in Scotland on university autonomy, a considerable part of which is academic autonomy [1, 2].

Universities that enjoy autonomy are free to:

- *determine their own mission and strategy, and set their own goals and priorities;*
- *establish their own research and teaching programs in accordance with academic freedom;*
- *manage their own staff;*
- *admit students based on academic achievement, real or potential, consistent with the their mission and strategy and their commitment to promote the common good;*
- *manage their own budgets and assets;*
- *engage in innovative and entrepreneurial activities.*

Responsibility: Universities are an important part of the collective effort to promote the economic welfare, social and cultural development and the promotion of these benefits is intrinsic to their missions. They have a moral responsibility to multiple stakeholders, including students, staff, business and the wider community and their political representatives and universities’ governance should take into account these multiple responsibilities (as it is recognized in the new Scottish code for the governance of higher education).

Universities are partners with government in promoting the common good, and each can contribute to realizing the social, economic and cultural goals of the other. In many cases the ambitions of universities and government will be highly complementary. However, universities must not be understood as being primarily responsible to government for the exercise of their missions, including the promotion of the common good. Responsibility for discharge of the university’s mission rests with the governing body. Universities also discharge their mission with regard to the interest of multiple stakeholders referred to above, among whom government is important. The distinct and long-term perspective which universities may take on issues, and the values of autonomy and academic freedom, mean that universities must have the liberty to decide how best to define and implement their commitment to the common good.

Universities should be formally accountable for the efficient and effective use of public money in discharging their core purposes in a way which is consistent with the common good and public funders may define expectations and set conditions which help to ensure this (e.g. through the Outcome Agreements framework). Conditions of public funding and accountability must be proportionate and consistent with responsible autonomy.

As autonomous institutions, universities also receive funding from a range of nongovernmental organisations, both public and private. Universities' accountability to government and its agencies needs to be established in a way which is proportionate and consistent with universities' accountability to these other funders.

Responsible autonomy needs to be an evolving frameworks, supporting universities to adapt to new challenges and opportunities to discharge their core purposes in a way which is consistent with the common good, and adapting the mechanisms of accountability with en this is necessary to support the successful outcome of public benefits. Universities will continue to evolve their practice and understanding of responsible autonomy in close partnership with the multiple stakeholders to whom they have responsibilities and to the funders and regulators to whom they have formal accountabilities.

3.2.1. Establishment and termination of study programs

3.2.1.1. Levels in higher education

In Scotland and other parts of the UK there are three types of institutions in Higher Education: colleges, institutes and universities. Colleges offer bachelor degrees or certificates, universities offer bachelor and master programs and integrated programs [45]. Specific for the UK is that the student can get a document of partial studies at intermediate stages: Higher Education Certificate (credits equivalent to one year of full time study), HE Diploma (credits equivalent to two years of full time study) and Bachelor certificate (three years of study). Bachelor's and master's degrees are offered having achieved a fixed number of credits and defended the graduation paper / thesis. These university programs are continuous, moving from a cycle of study to another.

Higher education is provided by three main types of institutions: universities, colleges and institutions of higher education and art and music colleges. All universities are autonomous institutions, particularly in matters relating to courses [1]. They are empowered by a Royal Charter or an Act of Parliament. As a result of the Further and Higher Education Act of 1992, the binary line separating universities and polytechnics was abolished and polytechnics were given university status (i.e., the right to award their own degrees) and took university titles. Most universities are divided into faculties which may be subdivided into departments. Universities UK examines matters of concern to all universities. Many colleges and institutions of higher education are the result of mergers of teacher training colleges and other colleges. The Department for Education and Skills is responsible for all universities. Non-university higher education institutions also provide degree courses, various non-degree courses and postgraduate qualifications. Some may offer Higher Degrees and other qualifications offered by most non-university higher education institutions are validated by

external bodies such as a local university or the Open University. An institution can also apply for the authority to award its own degrees but it must be able to demonstrate a good record of running degree courses validated by other universities. Institutions can apply for university status but must satisfy a number of criteria, including the power to award its own first and higher degrees. Some higher education is also provided in further education institutions. This provision is funded by the Higher Education Funding Councils and the Department of Education Northern Ireland. The Further and Higher Education Act 1992 allows for the transfer of further education institutions to the higher education sector, if 'the full-time enrolment number of the institution concerned...for courses of higher education exceeds 55% of its total full-time equivalent enrolment number (Further and Higher Education Act Year: 1992)).

3.2.1.2. Introduction of study programs at cycle I

University level first stage[1]: This stage lasts for three or four years and leads to the award of a Bachelor's Degree in Arts, Science or other fields (Technology, Law, Engineering, etc.). In some Scottish universities the first degree is a Master's Degree (studii integrate). The Bachelor's Degree is conferred as a Pass Degree or an Honours Degree where studies are more specialized. The Bachelor's Honours Degree is classified as a First Class Honours, a Second Class Honours or a Third Class Honours. In some universities and colleges of higher education, a two-year course leads to a Diploma in Higher Education (DipHE). This is a recognized qualification in its own right. Some universities have adopted the credit-unit or modular system of assessment. In some universities students must follow a foundation course before embarking on the course leading to the Bachelor's Degree. Students of foreign languages are sometimes required to study or work for an additional year in the country of the target language. Sandwich courses generally involve an additional year's work experience. Some institutions have introduced accelerated two-year degrees which require students to study during the normal vacation period. It is now rare for the class of degree to depend entirely on student performance in final examinations. Most institutions base a component of the degree class on examinations taken during the period of study, especially those taken at the end of the second year, and many also use some form of continuous assessment. The majority of degree courses also involve the research and writing of an extensive thesis or dissertation, normally making up around 50% of the final year assessment.

The initiator of a new Bachelor program is the department in which they form a program committee, which discusses and then develops the program curricula. The program is discussed within the Department and then at the Academic Committee of the Faculty. A special role is assigned to professional associations, their opinion is required. [45]. In the Regulatory documents of each university are reflected general and specific rules for drafting and approving study programs. In [3] it is presented an very suggestive algorithm of approval of all new university study programs or their amendment applied by the quality assurance department in the University of Northumbria in Newcastle.

Bachelor programs in colleges have a technical orientation and are usually completed with the passing of qualification examinations. Graduates get a degree diploma.

3.2.1.3. Introduction of study programs at cycle II

Study at master's level is at the forefront of an academic or professional discipline. Students must show originality in their application of knowledge and advancement of knowledge. The normal entry requirement for a Master's degree is a good Bachelor's degree. A Master's degree is normally studied over one year. Some Master's programmes, including the M.Eng, are integrated in undergraduate programmes and result in a postgraduate qualification, not an undergraduate one and that is after four years of study. Online Master's degrees are also achievable, such as Masters in Secondary education, Nursing, Business Intelligence and Health Care to name a few. At an university, after two years of additional study and the successful presentation of a thesis, students obtain the Master of Philosophy (M.Phil) degree [1].

College graduates with Bachelor certificates complete their studies up to a Bachelor degree during one year.

3.2.1.4. Introduction of study programs at cycle III

After usually three years' further study beyond the Master's Degree, the candidate may present a thesis for the Doctorate of Philosophy (D.Phil. or Ph.D.). A further stage leads to Higher Doctorates which may be awarded by a university in Law, Humanities, Science, Medical Sciences, Music and Theology after a candidate, usually a senior university teacher, has submitted a number of learned, usually published, works [1].

New doctoral programs usually occur as development of research programs. Doctoral programs are accessible to people with Master's degree in the field.

3.2.1.5. Language of instruction

Studies are held in English. Just some college programs are organized in the national language of the Gauls (in Scotland there is a minority). Admission for non UK students requires a good knowledge of English. Universities make efforts for linguistic preparation before the admission of foreigners (courses in the UK, but also in schools organized by embassies, representations, etc.).

Conclusions

1. In Scotland and other parts of the UK there are three types of institutions in Higher Education: colleges, institutes and universities. Colleges offer bachelor degrees or certificates, universities offer bachelor and master programs and integrated programs. Specific for the UK is that the student can get a document of partial studies at intermediate stages: Higher Education Certificate (credits equivalent to one year of full time study), HE Diploma (credits equivalent to two years of full time study) and Bachelor certificate (three years of study). All universities are autonomous institutions, particularly in matters relating to courses.

2. University level first stag: This stage lasts for three or four years and leads to the award of a Bachelor's Degree in Arts, Science or other fields (Technology, Law, Engineering, etc.). In some Scottish universities the first degree is a Master's Degree (studii integrate). The Bachelor's Degree is conferred as a Pass Degree or an Honours Degree where studies are more specialized.

The initiator of a new Bachelor program is the department in which they form a program committee, which dicusses and then develops the program curricula. The program is discussed within the Department and then at the Academic Committee of the Faculty an dis approved by the academic council of the institution.

3. Study at master's level is at the forefront of an academic or professional discipline. Students must show originality in their application of knowledge and advancement of knowledge. The normal entry requirement for a Master's degree is a good Bachelor's degree. College graduates with Bachelor certificates complete their studies up to a Bachelor degree during one year.

4. New doctoral programs usually occur as development of research programs. Doctoral programs are accessible to people with Master's degree in the field. After usually three years' further study beyond the Master's Degree, the candidate may present a thesis for the Doctorate of Philosophy (D.Phil. or Ph.D.).

5. Studies are held only in English.

3.2.2. Admission to studies

3.2.2.1. Procedures for admission to Cycle I - Bachelor. Commitment of the Government concerning the admission

In Scotland there are established rules and limitations that apply to admission to higher education at the level of Parliament. The Funding Council sets the share of admissions for each university and study program that can then be exceeded by no more than 10%. The admission to cycles differs substantially.

3.2.2.2. Procedures for admission to Cycle I, II and III

For admission to universities and colleges in the UK to studies at cycle I is done centrally by a specialized body UCAS (Universities and Colleges Admissions Service) [1]. The Funding Council, subject to the Government, establishes the capacity of universities and universities determine admission requirements for candidate students (the level of grades at certain school subjects, work experience), specific admission requirements (tests, aptitude tests, etc.). The candidate shall also submit a letter of motivation / rationale, bringing valuable arguments in support of admission application. The candidate may indicate in the application up to 4 universities. A special committee examines the dossiers and test results, which are passed within committees created by USCA, and determines which specialty and universities meet the conditions. The candidate decides which institution to enroll.

UCAS receives and passes A-level examination results to HEIs in mid-August. Offers to students are confirmed where grades have been met, or are passed back to departments where decisions need to be reconsidered. Students may then log into the UCAS system to see if they have achieved a place on the course of their choice.

*Entry requirements are a guideline of the recommended academic ability the course provider expects you to have. Each course has different requirements – usually a mix of **qualifications**, **subjects** or **exam grades** they recommend you should have or be working towards. Make sure you check when searching for courses [9].*

A typical example of policies in the admission of students at an institution of higher education in Scotland is found in the notmative documents of SUG [6, 7, 8]. [6] contains a detailed description of the procedures for admission to SUG (analogue with other universities in Scotland) and the cooperation of the University Admission Committee with the UCAS team.

The university Commission organizes the admission for all categories of programs except for cycle I. For undergraduate programs the information is submitted to UCAS unique center and from there the information comes to the university committee that determines whether the applicant meets the requirements defined for the program or is rejected, indicating the cause of rejection. UCAS decides on the admission of students with state scholarship. In rest, the university is autonomous and responsible for admission. This regulation can be entirely used to achieve ME's intention to centralize admission. This document can help ME avoid some serious mistakes. Universities must remain autonomous and accountable (responsible autonomy).

In the UK studies cycle I are charged. Candidates who have passed the competition can ask for information concerning the non-promotion. Students from low-income families can apply for exemption from tax after the first year of they have good results in studies. All students may apply for loans (shcolarships). The loan is given at the beginning of the next school year if the year is passed. Borrowed money is returned after employment and the achievement of the net salary of £ 2,000, but not more than 15 years. Professional orientation of students is done by institutions and UCAS in the form of open day fairs.

In Scotland local (Scottish) students can get places paid from the state (local) budget at cycle I. Budgetary places are given to universities by performance criteria. Students from other parts of the UK pay the fee established at country level.

Every year in the spring the SFC receives a 'Letter of Guidance' from the responsible Government Minister which outlines the money it will be given in the following academic year along with a list of strategic priorities. The SFC then distributes this between institutions along with specific targets.

The number of study places at specialties related to the public sector (teaching, law, medicine, dentistry, etc.) is strictly limited. For other areas there are held negotiations, the basic criteria being the capacity of the university, the support for good quality.

3.2.2.3. Admission of foreign students

Matriculation in higher education of students from EU and other countries is based on a document of studies [20]. Particular attention is paid to the institution graduated and level of knowledge of English. Institutions organize recruitment companies in countries with potential candidates (Anglophone countries), special language courses (China, South Korea, Indonesia, Malaysia). Non EU students pay fees by 60% higher than UK citizens. At the UK level there are set general rules for immigration [19].

3.2.2.4. Formation of contingent

Mechanisms for contingent formation - student guidance: in the UK universities there are undertaken various measures at the level of institution, faculty, program. These measures have become central for all universities under the existing conditions of reducing number of students. *Universities and Colleges Admissions Service* has an important role in accurate and objective indormation of students.

The Universities and Colleges Admissions Service (UCAS) is the organisation responsible for centrally managing applications to UK higher education courses. The Service processes more than 2 million applications for full-time undergraduate courses every year, and helps students to find the right course for them. The organisation's main purpose is to make the application process run as smoothly as possible by providing all the information applicants should need to make their application and tracking their offers both online and in other forms.

UCAS organises conferences, education fairs and conventions across the UK and produces wide range of publications. Staff at all universities are also involved in visiting schools to explain and describe the programmes and courses available at their establishment. This is all aimed at helping potential students to make informed decisions about higher education and to guide them, their parents and advisers through the application process.

Conclusions

1. Admission to studies in Scottish universities in the UK is regulated by the state by determining the capacity of the university to provide quality education.
2. For admission to universities and colleges in the UK to studies at cycle I is done centrally by a specialized body UCAS (Universities and Colleges Admissions Service). The Funding Council, subject to the Government, establishes the capacity of universities and universities determine admission requirements for candidate students (the level of grades at certain school subjects, work experience), specific admission requirements (tests, aptitude tests, etc.). The candidate may indicate in the application up to 4 universities. A special committee examines the dossiers and test results, which are passed within committees created by USCA, and determines which specialty and universities meet the conditions. The candidate decides which institution to enroll.

3. Matriculation in higher education of students from EU and other countries is based on a document of studies. Particular attention is paid to the institution graduated and level of knowledge of English. Non EU students pay fees by 60% higher than UK citizens. At the UK level there are set general rules for immigration.

4. In the UK universities there are undertaken various measures at the level of institution, faculty, program. These measures have become central for all universities under the existing conditions of reducing number of students. *Universities and Colleges Admissions Service* has an important role in accurate and objective indormation of students.

3.2.3. Recognition of studies

3.2.3.1. Recognition of study periods undertaken abroad

Studies done in mobility programs are recognized under trilateral agreements between student, University of origin and the host University. In [2 art.] there are mentioned rules of migration from one program to another and from one form of study to another in the university. USG Quality Code [1, B6] establishes that:

Higher education providers operate equitable, valid and reliable processes of assessment, including for the recognition of prior learning, which enable every student to demonstrate the extent to which they have achieved the intended learning outcomes for the credit or qualification being sought.

Quality Code also defines legal documents the HEI must have for the external evaluation process. For example, the USG in its annual calendar [1, subchapter 11.1.4] shows credit transfer and recognition of prior learning.

The relevant Board of Study (or nominee(s)) may admit an applicant and/or approve exemption from part of a course by credit transfer and/or Recognition of Prior Learning (RPL) provided this is done in accordance with University procedures and against criteria defined on a course by course basis.

Credit granted for credit transfer and/or RPL may only be used once and, when used to gain exemption, will normally relate to achievements within 5 years of registration on a University of Strathclyde course. Exemption granted on the basis of credit transfer and/or RPL will be allowed primarily where an applicant can demonstrate that the relevant specific learning outcomes have been achieved (i.e. primarily for specific rather than general credit). The extent of any allowed exemption shall preferably not exceed 25% and shall normally not exceed 50% of the credits appropriate to the course. Exceptionally, by formal resolution, the Senate may approve up to 75% exemption in special circumstances.

Where any such exemption is granted, the Board of Study will award the appropriate number of credits and may reduce the minimum and maximum periods of study appropriately.

3.2.3.2. Recognition of documents of studies done abroad

Recognition of educational documents obtained outside the UK is made by the National Recognition Center (NARIC) [3]. Services provided: recognition of diplomas for access to studies and professions; recognition and equivalence of information. Inside universities the Education Committee is dealing with these problems.

The NARIC network is an initiative of the European Commission. The network aims at improving academic recognition of diplomas and periods of study in the participating countries of the Erasmus+ Programme. The NARIC network covers the EU Member States, the EFTA/EEA and the EU acceding countries and candidate countries. All NARIC member countries have designated national centres, the purpose of which is to assist in promoting the mobility of students, teachers and researchers by providing advice and information concerning the academic recognition of diplomas and periods of study undertaken in other States. The main users of this service are higher education institutions, students and their advisers, parents, teachers and prospective employers.

Conclusions

1. Studies done in mobility programs are recognized under trilateral agreements between student, University of origin and the host University. In normative documents of each institution there are mentioned rules of migration from one program to another and from one form of study to another in the university.

2. Recognition of educational documents obtained outside the UK is made by the National Recognition Center (NARIC). Services provided: recognition of diplomas for access to studies and professions; recognition and equivalence of information. Inside universities the Education Committee is dealing with these problems.

3.2.4. Accreditation of study programs

3.2.4.1. Internal quality assurance structures

Responsible for quality assurance in the university is the Quality Assurance Committee [2, Art. 1.3.12]. The Committee is composed of persons responsible for education (vice-rector, four vice-deans, three personnel / auxiliary staff, two students, faculty managers, head of department, responsible for the strategy of studies and quality improvement). At faculties / schools responsibility for quality assurance lies with the faculty council, heads of departments and program directors.

Quality Assurance Committee is responsible for:

- (a) monitoring and reporting on student progress and retention;
- (b) monitoring External Examiner's reports and Department Answers to ensure that appropriate measures are taken and to inform policy development;
- (c) monitoring and reporting on the Faculty Annual Reports on Quality;

- (d) monitoring reviews / analyses of departments regarding learning, teaching and assessment and the experience of students and dissemination of results to competent committees and individuals;
- (e) consideration of issues arising in the course's approval and review;
- (f) monitoring and reporting on general issues arising from student discipline, appeals and complaints;
- (g) advising on business processes and templates that support annual and cyclical quality assurance procedures of the University;
- (h) reporting regularly to the Committee of Education Strategy, in order to inform the development of policies and strategies for appropriate learning, teaching and assessment of the University.

Institutions shall have their own quality assurance code [3].

The UK Quality Code [1] is a point of reference for all higher education providers in the UK. It defines clearly what higher education providers are obliged to do, what they can expect from others, and what the general public should expect from them. The Quality Code is valid throughout the entire UK and providers from the UK operating abroad. Each chapter of the Code refers to a single expectation / purpose that expresses the key principle that the community in higher education identified as essential for ensuring academic standards and quality.

3.2.4.2. Methodology, evaluation criteria, procedures

External evaluation methodology, procedures and evaluation criteria are described very explicitly in the Quality Code [1]. Each quality criterion contains detailed and explicit instructions on regulatory documentation that the institution must have and which it should present to evaluators. The Code is an integrated document that meets the basic requirements for all stages of a life cycle of the university training process.

The Code contains three parts: A, B and C: Part A defines the qualifications framework; Part B – learning outcomes, criteria for quality assurance and enhancement (11 subchapters in each of which a key aspect of the educational process is reflected); part C contains information about the prospects of higher education.

The outcomes in each chapter are accompanied by a series of indicators that reflect profoundly the practice that each higher education provider will be able to demonstrate with regards to meeting relevant outcomes. Indicators are defined not to be used as a checklist, they have been identified to help providers to develop their own regulations, procedures and practices to demonstrate that the prescriptions of the Quality Code are satisfied / met. Each indicator is accompanied by an explanatory note with more information about it, as well as examples of how the indicator can be interpreted and applied in practice.

Each chapter of the Code was developed by the QAA following an extensive process of consultations with higher education providers, their governing bodies, national associations of students, professional associations, statutory and regulatory bodies, and other stakeholders.

Higher education providers are also responsible for performing other legislative and regulatory requirements, for example, those determined by the funding body. The Code does not interpret the law nor incorporates any statutory or regulatory requirements.

3.2.4.3. Freedom in the choice of external quality assessment body

External evaluation is the responsibility of the UK's QAA [1,3]. The Quality Code is valid throughout the UK and the UK suppliers operating abroad. It protects the interests of all students who study full-time and part-time at the undergraduate or postgraduate cycle.

The control of higher education providers is conducted by the Quality Assurance Agency for Higher Education (QAA) which is a unique agency in the UK which requires to satisfy all the expectations of partners. The Review / Evaluation Commission of QAA controls whether these expectations/outcomes are met.

The results of external evaluations are made public, and are submitted to the Board of Financing.

Conclusions

1. Responsible for quality assurance in the university is the Quality Assurance Committee, composed of persons responsible for education. At faculties / schools responsibility for quality assurance lies with the faculty council, heads of departments and program directors.

2. External evaluation methodology, procedures and evaluation criteria are described very explicitly in the Quality Code. Each quality criterion contains detailed and explicit instructions on regulatory documentation that the institution must have and which it should present to evaluators. The Code is an integrated document that meets the basic requirements for all stages of a life cycle of the university training process.

3. External evaluation is the responsibility of the UK's QAA. The Quality Code is valid throughout the UK and the UK suppliers operating abroad. It protects the interests of all students who study full-time and part-time at the undergraduate or postgraduate cycle.

3.2.5. The National Qualifications Framework (NQF)

3.2.5.1. The body responsible for NQF in the country

In [1] is presented the general structure of the UK Qualifications Framework, which is distinct for Scotland and other parts of the UK.

The Scottish Credit and Qualifications Framework (SCQF) [1, Section 2] was developed by the Scottish Qualifications Authority (SQA) jointly with the Council of Rectors (Universities)

in Scotland, Quality Assurance Agency for Higher Education (QAA), by his Scottish office, Executive Scottish Enterprise and the Department of Lifelong Learning (SEELLD) and the Scottish Executive Education Department (SEED). SQA is a statutory accreditation and awarding body in Scotland for the qualifications delivered in schools, colleges, training centers, and workplaces in Scotland. SQA provides qualifications at most levels in the SCQF. These include national units, courses, and certificates from levels 1-7, HNC and HND at levels 7 and 8, and SVQ at levels 4-11 [31]. Although it is self-funded, SQA is accountable to the Government and people of Scotland for the credibility, reliability and value of its qualifications. Its key functions are to maintain the quality of set qualifications and develop new ones where needed. It does this in partnership with people in education, industry, commerce and government to develop qualifications relevant to the needs of individuals, society and the economy.

The Scottish Credit and Qualifications Framework (SCQF) was created by bringing together all the main Scottish qualifications in a unified framework: qualifications of SQA higher education institutions and SVQ vocational institutions [16]. There are 12 levels - from Access 1 (National Qualifications) at SCQF level 1 up to Doctorate at SCQF level 12 [31]. Higher education with a degree of Bachelor, Bachelor with Honours degree, master's degree and doctorate (with respective degrees) correspond to levels 9, 10, 11, 12 (equivalent to 6, 7, 8 of the EQF). The Scottish Framework was extended to 12 levels to reflect lower qualifications obtained in the early stages of higher education: levels 7, 8 correspond respectively to higher education certificates (equivalent to a full year of study), higher education diploma (equivalent to two years of studies), and bachelor studies (with certificate). Qualification levels are described in terms of learning outcomes (as discriptori) and also in terms of Scottish credits (SCOTCAT points). In Table 2 of [3] is presented the description of the credits and options for obtaining them. The descriptors of qualifications on levels are presented in Annex 3 and largely correspond to those of the EQF, specific being only those for qualifications SCQF 7, 8 and 10.

Scottish credits (SCOTCAT points) are determined based on the amount of time an „average” student at a specified level might expect to have to obtain results. A SCQF credit represents the learning outcomes achieved during 10 notional hours of learning time.

SCQF also provides awarding qualifications based on practical experience gained at the workplace on the basis of continuing training courses of the respective level.

In the UK the qualification level 4 corresponds to HE Diploma (2 years), level 5 – Bachelor with 3 years of studies, level – Bachelor with Honours (four years), level 7 – Master's, level 8 – Doctor of Science [3. Section 1.1].

3.2.5.2. Participation of universities in the development of new qualifications

When drafting a new study program it is based on the general requirements of the qualifications framework [16]. When approving its deployment (financing), the external evaluation and accreditation of programs checks whether the learning outcomes of this program meet the educational standards prescribed by the Quality Code. A special role in this

process lies with professional organizations. Particular emphasis is given to the flexibility of qualifications' system [3, Section 2.1]: *the framework must be able to accommodate new qualifications as the need for them arises. In general, it must also recognise and facilitate diversity and innovation, and promote a wider understanding of qualifications internationally. It should be regarded as a framework, not as a straitjacket. QAA will work with the higher education institutions in Scotland to ensure that any new higher education qualifications and other relevant developments are properly accommodated and described. In conjunction with Universities Scotland, we have established a new role for the Scottish Advisory Committee on Credit and Access (SACCA) as the body to advise QAA on the future development of the higher education section of the SCQF. In terms of the SCQF as a whole, a partnership of Universities Scotland, QAA, the Scottish Executive and the Scottish Qualifications Authority (SQA) has established a Joint Advisory Committee (JAC) as the vehicle for implementing and further developing the SCQF in line with the needs of the key stakeholders in education and training in Scotland.*

3.2.5.3. How are NQF requirements reflected in the study programs (compulsory provisions, internal control procedures, external evaluation)?

Study programs are developed based on the learning outcomes, which must correspond to general requirements reflected in the descriptors of the respective levels of qualification. The descriptors in question are also used as standard requirements / indicators used in external evaluation of programs [16]. In [3, Section 2.1, p Levels, credits and programs design] is stated:

The qualifications framework has been designed to bring consistency and a common language within which institutions will describe the particular features and purposes of their individual programmes and qualifications. The framework also provides a tool for assisting programme design.

There is no expectation, however, that other than the minimum set out in table 2, any programme has to follow a set pattern of a specified number of credits at each level. It is for the institution and programme designers to determine the most appropriate structure and progression towards the final outcomes and the award of the qualification. In particular, there is no expectation that, for example, level 1 credits are always required to be taken in, and only in, year one. Many programmes offer learners some choice of levels within each year of study. In general, it is important to emphasise that it is not the purpose of the framework to prescribe the internal organisation of academic programmes.

In the same context, in section 2.2 of the Quality Code [3] it is said: *Institutions should be able to demonstrate that each of their qualifications is allocated to the appropriate level of the framework. In considering the appropriate level for a qualification, institutions should consider:*

- *the relationship between the intended outcomes of the programme and the expectations set out in qualification descriptors*

- *whether there is a sufficient volume of assessed study that will demonstrate that the learning outcomes have been achieved*
- *whether the design of the curriculum and assessments is such that all students following the programme have the opportunity to achieve and demonstrate the intended outcomes.*

3.2.5.4. Educational standards

Educational standards are developed by each institution on the basis of criteria and indicators outlined in the Quality Code.

3.2.5.5. Credit system

A full year of full-time education usually consists of approximately 1,200 hours of learning activity. The results obtained are therefore valued / marked with 120 SCOTCAT points. Higher National and Higher Education Certificates, for example, correspond to the learning outcomes rated with 120 points, which are usually obtained in one year of full-time studies. No rigid time connection is involved in this system. This is very important for the development of part-time and distance education.

The SCQF is designed to support lifelong learning by enabling, where appropriate, the transfer of credit between programmes and between institutions. There is no intention, however, that the framework should do other than facilitate this process. It is not a mandatory process, and individual institutions remain solely responsible for all matters of credit recognition towards their awards.

In Scotland, as elsewhere in the UK, academic review processes will focus on the qualification descriptors (as opposed to credit definitions). Within the minimum credit definitions, institutions will continue to structure programmes in whatever ways are appropriate to the achievement of the aims of the qualifications, the teaching and learning strategy, and the characteristics of the associated learner groups.

Conclusions

1. Scottish Qualifications Authority (SQA) is the Scottish statutory body for the award and accreditation of qualifications delivered by schools, colleges, training centers and work places. SQA provides SCQF qualifications recorded with various certificates for levels 1-7 for secondary education, HNC certificates and HND diplomas for levels 7, 8 of short higher education cycle and specific qualifications for three levels of SVQ vocational higher education – levels 9, 10, 11 and 12 (corresponding to the degrees – Bachelors, Bachelors Honours, Master and Doctor).

SCQF qualification levels for higher education are described together in terms of learning outcomes (as discriptori) and in terms of Scottish credits (SCOTCAT points).

2. When drafting a new study program it is based on the general requirements of the qualifications framework. When approving its deployment (financing), the external

evaluation and accreditation of programs checks whether the learning outcomes of this program meet the educational standards prescribed by the Quality Code.

3. Study programs are developed based on the learning outcomes, which must correspond to general requirements reflected in the descriptors of the respective levels of qualification. The descriptors, in form of quality indicators (standard requirements) are also used in external evaluation of study programs.

4. Educational standards are developed by each institution on the basis of criteria and indicators outlined in the Quality Code.

5. Higher education institutions in Scotland use a specific system of credits (SCOTCAT points). A full year of full-time education usually consists of approximately 1,200 hours of learning activity. The results obtained are valued / marked with 120 SCOTCAT points. No rigid time connection is involved in this system. This is very important for the development of part-time and distance education.

3.2.6. Planning and deployment of study programs

3.2.6.1. Designing the content of study programs

The design, approval and implementation of programs is carried out in accordance with the rules set on the Quality Code [1, Ch. B1]. The program team draws up the program within the department and, as a rule, relies on the results acquired in scientific research.

Chapters B2-B7 of the Code treat various aspects of program's deployment. Chapter B8 examines the mechanisms that higher education service provider relies on to enhance the quality of the implemented program. Also, here are examined mechanisms of closing / liquidation of a program. These rules shall apply concurrently with the general rules „Setting and Maintaining Academic Standards”, set out in Part A of the Code.

UK higher education is based on the principle of the autonomy and responsibility of the degree-awarding body for the academic standards and quality of learning opportunities of the programmes it offers and the qualifications and credit it awards.

There is no national curriculum for higher education, and higher education providers decide what programmes to offer within the context of their organisational mission and other strategic factors. These may include government policy to stimulate economic growth and to support strategically important and vulnerable subjects, an assessment of student demand for existing and new programmes, and advice from external bodies such as employers and industry about workforce needs. This independence is a strength of UK higher education as it enables higher education providers to offer a variety of programmes reflecting the needs of an increasingly diverse range of students.

The processes of programme design, development and approval are an essential part of higher education providers' internal quality assurance and enhancement. They ensure that appropriate academic standards are set and maintained and the programmes offered to

students make available learning opportunities which enable the intended learning outcomes to be achieved. Ultimate responsibility for the approval of programmes rests with degree-awarding bodies. Programme design, development and approval depend on reflection and critical self-assessment by individuals, groups and higher education providers. Designing a programme is a creative activity, which leads to an iterative process of development, depending on feedback from a range of sources, which may include other staff, students, employers and professional, statutory and regulatory bodies. Programme approval involves a number of steps, but there is clarity for all parties involved about the point at which the degree-awarding body definitively approves a programme for delivery. The programmes are continually evaluated and revised to improve the learning experience for students and to maintain the currency of the curriculum.

Programme design is followed by a process of development which leads to the creation of a programme. Through this process, the content, modes of delivery, structure and components of the programme, including assessment methods and the means by which students will be engaged with the curriculum, are considered. The development process may also be used to enhance an existing programme, for example in response to the outcomes of programme monitoring and review (see [1, Chapter B8: Programme monitoring and review]).

The Quality Code [1, Chapter B1] sets out the following Expectation about programme design and approval, which higher education providers are required to meet: Higher education providers, in discharging their responsibilities for setting and maintaining academic standards and assuring and enhancing the quality of learning opportunities, operate effective processes for the design, development and approval of programmes.

The following seven indicators of good practice are recommended to be considered when designing and redesigning a program:

- *Higher education providers maintain strategic oversight of the processes for, and outcomes of, programme design, development and approval, to ensure processes are applied systematically and operated consistently.*
- *Higher education providers make clear the criteria against which programme proposals are assessed in the programme approval process.*
- *Higher education providers define processes, roles and responsibilities for programme design, development and approval and communicate them to those involved.*
- *Higher education providers evaluate their processes for programme design, development and approval and take action to improve them where necessary.*
- *Higher education providers make use of reference points and expertise from outside the programme in programme design and in their processes for programme development and approval.*
- *Higher education providers involve students in programme design and in processes for programme development and approval.*

- *Higher education providers enable staff and other participants to contribute effectively to programme design, development and approval by putting in place appropriate arrangements for their support and development.*

3.2.6.2. Allocation of tasks among academic structures

The program team usually includes people from several departments and outside the institution.

Programme design, development and approval may involve many different organisational and operational departments within the higher education provider, such as academic departments, professional services, and central registry, strategic planning or quality assurance functions. Design-ul programului: The balance of responsibilities is clearly defined and understood, and all those involved are made aware of the outcomes of decisions.

3.2.6.3. Internships

It is part of the study program, provides practical skills training, *Quality Code [1, Chapter B1]*.

3.2.6.4. Final evaluation on cycles

Programs are completed differently [18]. The gradual ones end with the public defence of a work/thesis. If non-gradual programs, certificate or diploma is issued based on credits earned under the rules set by the program.

Conclusions

1. The design, approval and implementation of programs is carried out in accordance with the rules set on the Quality Code for higher education in the UK. The Quality Code contains a number of indicators of good practice on program's deployment, mechanisms that higher education service provider relies on to enhance the quality of the implemented program. Also, here are examined mechanisms of closing / liquidation of a program. These rules shall apply concurrently with the general rules "Setting and Maintaining Academic Standards", set out in Part A of the Code.

2. The program team draws up the program within the department and, as a rule, relies on the results acquired in scientific research. The program team usually includes people from several departments and outside the institution.

3. It is indispensable part of the study program.

4. Programs are completed differently. The gradual ones end with the public defence of a work/thesis. If non-gradual programs, certificate or diploma is issued based on credits earned under the rules set by the program.

3.2.7. Employability

3.2.7.1. *The occupational framework (ISCEO). The link between the level of studies - qualification*

Graduate competencies are defined by qualification level descriptors. Special requirements relating to employment are separately formulated to jobs and public services (education, police, judges etc).

3.2.7.2. *Place of MA and Ph.D. in the occupational network*

Everything depends on the the employer. Prescriptions are made only for positions / specialties / public servants (medicine, law, other public servants).

3.2.7.3. *Career guidance structures (state level, institution level)*

In the UK particular attention is given to the work with graduates. At universities (particularly at SUG) there are created special structures for these activities, the Office for Development of Relationships with Graduates (alumni). The main aim of the Office is to develop long-term relationships with individuals and organizations where graduates work, relationships that have the purpose of fundraising, information about university of graduates and operation with databases of graduates. The office is organized centrally by the management of the University. At the college level there are individuals who coordinate the activity with the graduates of the faculty concerned.

Fundraising activities are directed through the *Alumni Fund* to priority areas: Teaching and Learning - refers to the development of the library, improving the experience of students - extra curricular and social events, offering scholarships.

Office activity is divided into groups of alumni which are organized in cities in the UK and other countries. The groups are structured by goals: fundraising events - concerts, commemorative dates with fundraising; recruitment events - organizing meetings of pupils with alumni who have successhistories, joint alumni events, etc.; entrepreneurial events - support through the Alumni network for young entrepreneurs - graduate already affirmed in business helps the beginner graduate.

Conclusions

1. Graduate competencies are defined by qualification level descriptors. Special requirements relating to employment are separately formulated to jobs and public services (education, police, judges etc).
2. For non-regulated specialties, everything depends on the the employer. Prescriptions for positions that may be filled by graduates of cycle 1 and 2 are made only for public specialties (medicine, law, other public servants).
3. In the UK particular attention is given to the work with graduates. At universities (particularly at SUG) there are created special structures for these activities, the *Office for Development of Relationships with Graduates* (alumni). The main aim of the Office is to develop long-term relationships with individuals and organizations where graduates work,

relationships that have the purpose of fundraising, information about university of graduates and operation with databases of graduates. The office is organized centrally by the management of the University. At the college level there are individuals who coordinate the activity with the graduates of the faculty concerned.

3.2.8. Teachers' workload

3.2.8.1. Planning the didactic workload

The teaching load and workload of teachers: 110 of direct contact hours with students and 560 hours for consulting. They constitute 40% of the annual volume of work. The remaining 60% are devoted to research - 40% and 20% for activities in the interest of the community. Total workload is 35 hours per week.

3.2.8.2. Distribution of the didactic workload

The head of the department, the dean and other teachers holding a leading position have reduced teaching load, the salary remains intact. Each member of the department has certain public responsibilities within the department, faculty or university.

3.2.8.3. The accounting of performing teaching and research workload

The accounting of the academic task is based on the schedule. Scientific research is assessed primarily on the basis of publications of textbooks, monographs, articles in journals with impact-factor. The university establishes rules for different categories of teachers. Publications are rated with points depending on the category of the journal.

Conclusions

1. The teaching load and workload of teachers: 110 of direct contact hours with students and 560 hours for consulting. They constitute 40% of the annual volume of work. The remaining 60% are devoted to research – 40% and 20% for activities in the interest of the community. Total workload is 35 hours per week.
2. The head of the department, the dean and other teachers holding a leading position have reduced teaching load, the salary remains intact. Each member of the department has certain public responsibilities within the department, faculty or university.
3. The accounting of the academic task is based on the schedule. Scientific research is assessed primarily on the basis of publications of textbooks, monographs, articles in journals with impact-factor. The university establishes rules for different categories of teachers. Publications are rated with points depending on the category of the journal.

3.2.9. University scientific research

3.2.9.1. University structures involved in the organization of scientific research

The research activity in the universities of Scotland (and the UK) is carried out by Universities Research Council (URC with 7 subcommittees on branches) [1, B11]. Similar

structures are found vertically: at college / school and department with identical roles. The management activity of committees is recognized in account of those 20% of tasks - for the benefit of society. The main tasks of the RC, see [51, 52, 53, 54, 55].

3.2.9.2. Students' involvement in the process of scientific research (incentive mechanisms)

The organization of scientific research, commercialization of its results, protection of intellectual property rights, knowledge transfer are described in detail in the presentations made during the visit in June 2013 at SUG.

3.2.9.3. Scientific research of the didactic staff

From the annual charge of the teacher, 40% constitutes scientific research that is well accounted for in the research group. There are special software to follow the progress and appreciate the work of teams. Funding science from Scotland and UK funds is based on these results.

3.2.9.4. Integrated research, education and business centers

All master's programs have research elements. Other types of MAs in Scotland are not used [1, Part A].

Universities are classified into three groups: historical, legalized in 1965, and those formed under the act of 1992. The funding mechanism for each group is different. UK's Research Committee divides finances based on the criterion "results achieved (Excellence criterion)".

Programele de masterat sunt toate cu elemente de cercetare. Alte tipuri de masterate în Scotland nu se utilizează [1, Part A].

Conclusions

1. The research activity in the universities of Scotland (and the UK) is carried out by Universities Research Council (URC with 7 subcommittees on branches). Similar structures are found vertically: at college / school and department with identical roles.

The organization of scientific research, commercialization of its results, protection of intellectual property rights, knowledge transfer are described in detail in the presentations made during the visit in June 2013 at SUG.

2. All master's programs have research elements. Other types of MAs in Scotland are not used.

3. From the annual charge of the teacher, 40% constitutes scientific research that is well accounted for in the research group. Funding science from Scotland and UK funds is based on these results.

3.2.10. The doctorate

3.2.10.1. The right to offer doctoral studies

In the UK the basic form of doctorate is integrated doctorate or doctorate in philosophy (PhD). The name can also contain the scientific area (medicine, psychology, engineering). The doctorate is regarded as research based studies. The minimum duration of the studies is usually equivalent to 3 years of full time studies, in engineering – 4 years [5]. The studies may be organized remotely.

The state grants a certain number of budget places, but institutions may admit PhD students on tuition fee basis. As compensation to the fee can serve the employment of the doctoral student in teaching position. The PhD student is assigned a scholarship from the budget [6, 11, 21].

Doctoral studies are completed with the defending of the doctoral thesis - written work based on research results. As autonomous structures, higher education institutions themselves make decisions on qualifications and form of certificate.

After 1990, the UK introduced a new type doctorate called professional and practice-based (or practitioner) doctorates (eg PhD in engineering - EngD), which is intended for specialists trained in a particular branch of the economy who develop applied research for the company which shall bear the expenses related to studies and research, USG example [11].

Comprehensive information about doctoral programs in the UK, goals, structure, content, titles and assessment methods can be found in [1, 5, 6].

3.2.10.2. Doctoral Schools

Doctoral students' training takes place in doctoral schools organized by universities or doctoral centers [5, 6, 11].

Graduate schools were introduced to provide coherent research skills training and support for postgraduates; some combine taught and research postgraduates, others are solely for research candidates. The structure and coherence of the graduate school structure, whether single-subject, at faculty or school level, or as an institutional phenomenon (single institution or as part of a collaboration), also helps to encourage timely progress and completion and to provide postgraduates with a peer group network.

Graduate school structure, whether single-subject, at faculty or school level, or as an institutional phenomenon (single institution or as part of a collaboration), also helps to encourage timely progress and completion and to provide postgraduates with a peer group network. Graduate schools may have a geographical location or may be virtual, with postgraduates from multiple institutions sometimes being part of a collaborative and possibly interdisciplinary graduate school.

During the twenty-first century another feature of doctoral education has been introduced, primarily initiated by the UK research councils, who have begun to focus their support through various forms of partnerships for doctoral training. Most are commonly known as doctoral training centre (DTCs). Most DTCs are organized in a similar way to graduate schools and although established initially for the benefit of research council funded doctoral

candidates, are often extended to all research postgraduates studying in the relevant subject area, as long as resources permit. DTCs are often multi or interdisciplinary and reflect some of the major research themes supported by their respective research councils. They are seen by many as a model of effective practice in providing research methods and skills training for early career researchers. Universities are still in the process of integrating the DTC model with their existing governance and structures, and in many cases reporting lines and management, together with the DTCs' relationship with any existing graduates school(s) are still to be decided upon.

A residual concern for some is the potential creation of a 'two-tier' system for postgraduate training, with some doctoral candidates being part of a DTC and others not. Further information about doctoral training centres can be found on the individual research councils' websites, accessed from the Research Councils UK home pages.

3.1.10.3. Completion of studies, conferring of degrees

Each institution organizing doctoral programs develops its own regulations based on quality criteria shown in [1], for example see USG regulations [11,12].

Ph.D. degree is offered by the University, which issues the diploma without any approval from any higher authority. Thesis defending procedure is quite simple and is based on the authority and responsibility of the supervisor, faculty research council (2 persons) and two experts who review the thesis. Supervisors are not present at thesis defending. The degree is confirmed at the Academic Board. There follows an extract from the USG Regulation describing the organization of the final examination of doctoral studies [11, section 20.1].

The candidate shall be examined by a thesis, any necessary coursework and by oral examination.

The examination of a candidate shall be undertaken by an Examining Committee nominated by the relevant Head of Department, endorsed by the relevant Board of Study and appointed by the Senate. The Examining Committee shall include at least one External Examiner and one Internal Examiner. The Head of Department will identify a member of University staff, who is not one of the Internal Examiners or supervisors, to convene the Committee and must attend the oral examination. After consultation with the candidate and the Examiners, the Convener may invite one supervisor to attend the oral examination in a non-examining capacity. Only in exceptional circumstances shall the student's supervisor be appointed an Internal Examiner and in such cases a second Internal Examiner shall be appointed.

The Examining Committee shall: assess the thesis submitted by the candidate; act as the Board of Examiners for the award of the credits for the taught classes or research training undertaken under the provisions of Regulation 20.2.8; subject the candidate to the oral examination.

In all cases the examiners may subject the candidate to such additional examination, written or oral, as they deem necessary, and shall report to the appropriate Board of Study, which shall make recommendation to the Senate.

The Examining Committee may make the following recommendations to the relevant Board of Study and to the Senate: the candidate be awarded of the appropriate professional doctorate degree; subject to minor corrections to the thesis being carried out satisfactorily, the degree be awarded; re-submission of the thesis within a specified time limit when the Examining Committee will be reconvened to re-assess the thesis; the candidate be transferred to a Master's degree provided they satisfy the appropriate progress and curricular requirements; the candidate be awarded the degree of MSc or the Postgraduate Diploma in the relevant area; the award be withheld and the candidate be required to withdraw.

In the case of (ii) above, the candidate shall not normally be allowed to graduate until the amendments have been carried out to the satisfaction of the Internal Examiners.

Many institutions award the PhD/DPhil 'by publication' or 'by published work' which may then be reflected in the title (PhD by Publication, or by Published Work). Institutions have different eligibility requirements for this degree, which is awarded infrequently [5].

3.2.10.4. Postdoctorate, habilitate

In the the UK and Scotland [5] a higher Ph.D. degree is set (*Higher Doctorate*), which follows after the PhD or another similar degree, is offered to individuals for valuable research or publications. The title is given to persons in education, based on published works, who don't have a distinct position in the qualifications and is considered honorific title. *Individual institutions' regulations specify a limited range of titles for higher doctorates, which can be awarded either for a substantial body of published original research of distinction over a significant period or as an 'honorary' degree, to recognise an individual's contribution to a particular field of knowledge.*

Post-doctorate is defined as an in depth research program for young researchers, to continue doctoral researches. There are admitted people who held a doctorate, but not later than 5 years after graduation. Studies are completed with the public defence of a report and the awarding of a certificate.

Conclusions

1. In the UK the basic form of doctorate is integrated doctorate or doctorate in philosophy (PhD). The doctorate is regarded as research based studies, organized within universities, the minimum duration of the studies is usually equivalent to 3 years of full time studies, in engineering – 4 years. The studies may be organized remotely. After 1990, the UK introduced a new type doctorate called professional and practice-based (or practitioner) doctorates (eg PhD in engineering – EngD), which is intended for specialists trained in a particular branch of the economy. They develop applied research for the company which shall bear the expenses related to studies and research.

2. Doctoral students' training takes place in doctoral schools organized by universities or doctoral centers.

3. Each institution organizing doctoral programs develops its own regulations based on quality criteria shown in the Quality Code (for example see USG regulations). Ph.D. degree is offered by the University, which issues the diploma without any approval from any higher authority. Thesis defending procedure is quite simple and is based on the authority and responsibility of the supervisor, faculty research council (2 persons) and two experts who review the thesis. Supervisors are not present at thesis defending. The degree is confirmed at the Academic Board of the University (Senate).

4. In the the UK and Scotland a higher Ph.D. degree is set (*Higher Doctorate*), which follows after the PhD or another similar degree, is offered to individuals for valuable research or publications. The title is given to persons in education, based on published works, who don't have a distinct position in the qualifications and is considered honorific title. Post-doctorate is an in depth research program that can follow immediately after the defence of the PhD thesis. It finishes with the awarding of a certificate, no distinct degree is awarded.

3.3. Academic autonomy in Sweden

3.3.1. Establishment of specializations / study programs

3.3.1.1. Levels in higher education

In Sweden, overall responsibility for higher education and research rests with the Riksdag (Swedish Parliament) and the government. They decide on the regulations that are applied in the higher-education area. They also determine objectives, guidelines and the allocation of resources for the area. All higher education is offered by public-sector higher education institutions or by independent education providers that have been granted degree-awarding powers by the government.

The Swedish Parliament decides which public-sector HEIs are to exist. The government can decide whether an HEI may use the title of university. (ref. National Qualifications Framework, Published by the Swedish National Agency for Higher Education 2011).

Higher education institution shall refer to universities and university colleges, for which the accountable authority is the Government, a municipality or a county council (ref. The Swedish Higher Education Act, 17 December 1992, Ch. 1, Sec. 1; The Higher Education Ordinance, 4 February 1993, Ch. 1, Sec. 2).

Thus, in Sweden there are 24 public HEIs (accountable to the government) and 3 independent HEIs entitled to offer degrees for cycle I, II and III and there are 10 public HEIs (accountable to the government) and 10 independent HEIs entitled to offer degrees for cycle I and II. (ref. Higher Education in Sweden, 2013 Status Report, by Swedish Higher Education Authority)

Higher education institutions provide: *courses and study programmes* based on scholarship or artistic practice and on proven experience, and research and artistic research and

development as well as other forms of development activities (ref. The Swedish Higher Education Act, 17 December 1992, Ch. 1, Sec. 2).

Courses and study programmes shall be provided at:

- first cycle
- second cycle, and
- third cycle. (ref. The Swedish Higher Education Act, 17 December 1992, Ch. 1, Sec. 7).

Municipalities and county councils may establish higher education institutions only with the consent of the Government. This consent may be restricted to first-cycle courses and study programmes. (ref. The Swedish Higher Education Act, 17 December 1992, Ch. 1, Sec. 10).

The Swedish National Agency for Higher Education (now Swedish Higher Education Authority) decides on permission to award qualifications:

- in the third cycle at higher education institutions that are not universities, and
- in the first and second cycle at universities and higher education institutions.

The Government issues regulations on the qualifications that may be awarded at Swedish University of Agricultural Sciences and Swedish National Defence College. (ref. The Swedish Higher Education Act, 17 December 1992, Ch. 1, Sec. 12).

3.3.1.2. Introduction of study programs at cycle I

The central regulations that govern the way in which HEIs operate are contained in the Higher Education Ordinance, which is laid down by the government.

Within the framework of the regulations and parameters determined by the Swedish Parliament and the government, HEIs enjoy great freedom to decide how to organise their operations, use their resources and conduct their courses and programmes. (ref. National Qualifications Framework, Published by the Swedish National Agency for Higher Education 2011; ref. Higher Education in Sweden, 2013 Status Report, by Swedish Higher Education Authority).

The system is based on the principle of management by objectives. (ref. Higher Education in Sweden, 2013 Status Report, by Swedish Higher Education Authority).

The State / Government does not decide on the initiation of new programmes of study. This is done at the university level. At the Government level trends are only discussed (based on statistical data), they are made public and are presented to the community and at the university level these trends are discussed and it is decided on the initiation of new programmes of study.

The schools and/or professional organizations are usually the initiators of new study programmes, sometimes it is upon the presidents suggestion. Subject areas are not directly mapped to KTH organization, there are overlaps between schools and there are existing programmes where more than one school provides courses. Same procedure as for all programmes, application is discussed in the educational committee, approved (or not) by the faculty board and final decision is made by the president.

According to the Swedish Higher Education Ordinance (1993:100) Chapter 6, Sec. 14-15, there must be a course syllabus for first and second cycle courses. First cycle courses are established by the Head of School following consultation with other schools concerned. A decision on the establishment of a course is made at the school the course is to be held. The continuing education courses offered are decided by the Vice-Dean of faculty following preparation by the Head of School and in the university administration. The director of undergraduate and master studies is responsible for the preparatory measures on the establishment of courses. A special form must be completed in order for a course to be formally set up. (ref. Establishment of courses at first- and second cycle at KTH, Internal instruction no. 27/05, Applicable from 01-07-2007, Changed from 01-01-2008)

All first and second-cycle study programmes shall be offered in the form of courses. Courses may be combined to create study programmes. A course shall have a course syllabus.

The course syllabus shall indicate the following: the cycle in which the course is given, the number of credits, objectives, specific entry requirements, how student performance is assessed and any other regulations required. A study programme shall have a programme syllabus. The programme syllabus shall indicate the following: the courses that the study programme comprises, specific entry requirements and other regulations required. (ref. The Higher Education Ordinance, 4 February 1993, Ch. 6, Sec. 13-17)

At KTH – Application and running of programmes:

- Schools apply for new programmes
- The President may give out assignment to a school to develop a new programme
- The application is handled by the Education Committee and thereafter by the Faculty Council
- The President decides to establish programme (or not)
- Dean of school determines the study-plan for the programme
- The President decides number of students to be admitted to each programme.

Establishment of courses:

- Departments/units apply for new courses

- The application is handled within the school(s)
- Decision to establish a course is made by the Dean of school.

Dean of school also:

- determines the syllabus
- appoints examiner.

No accreditation process is required when launching a new study program. As a university KTH can make its own decisions in establishing programmes on second level due to the fact that KTH is granted examinations rights for the third level.

University colleges must apply when introducing programmes on second cycle in subject areas where they previously haven't been granted examination rights for third-cycle education. Swedish Higher Education Authority will scrutinize the application looking for teaching capacity, teacher's qualifications, research in the subject area and so on.

3.3.1.3. Introduction of study programs at cycle II

Given that in Sweden cycle I and cycle II form a whole process and are offered as integrated studies (*undergraduate studies*), the same rules apply when it comes to initiating or liquidation of study programmes.

3.3.1.4. Introduction of study programs at cycle III

A university or higher education institution entitled to award third-cycle qualifications shall determine the subjects in which third-cycle courses and programmes may be offered. For each subject in which third-cycle courses or study programmes are offered a general study syllabus is required. A general study syllabus shall indicate the following: the main content of the study programme, specific entry requirements and any other regulations required. (ref. The Higher Education Ordinance, 4 February 1993, Ch. 6, Sec. 25-27).

Third-cycle qualifications (ref. Higher Education in Sweden, 2013 Status Report, by Swedish Higher Education Authority; <http://www.doktorandhandboken.nu>):

- Completion of doctoral studies leads to the award of a doctoral degree – the most advanced degree awarded in Sweden.

Third-cycle programmes can lead to the award of the following degrees:

General qualifications:

- A licentiate degree, 120 higher education credits
- A doctoral degree, 240 higher education credits.

Qualifications in fine, applied and performing arts:

- A Degree of Licentiate of Fine Arts, 120 higher education credits
- A Degree of Doctor of Fine Arts, 240 higher education credits.

It is possible, therefore, to be admitted to a third-cycle programme even if this is intended to lead only to the award of a licentiate degree.

3.3.1.5. *Language of instruction*

The medium of instruction for the undergraduate and graduate level courses is Swedish. However, the master's degree programs and the PhD level programs usually use English as a medium of instruction.

A growing number of bachelor's courses have been made available in English in order to make them more accessible, but for the most part, programmes require a very good command of written and spoken Swedish. Most courses at the bachelor's level offered in English are intended for exchange students. If free movers are admitted, they must meet all the normal requirements with regard to previous university studies and knowledge of English. Universities will normally require verification of language proficiency in the form of an international proficiency test certificate. (ref. www.studyinsweden.se)

Conclusions

1. Swedish Parliament and Government is responsible for higher education and research, establishing regulations, objectives, guidelines and resource allocation per areas.
2. The government decides on the establishment or liquidation of a HEI.
3. HEIs are divided into two categories: universities and university colleges.
4. Swedish Higher Education Authority is the body that decides on the permission of awarding qualifications by the HEI.
5. HEIs offer programs and courses in cycle I, II and III.
6. HEIs are free to make decisions and act on the introduction or liquidation of study programmes at all levels of education.
7. Study programmes in cycle I and II have a programme syllabus and are offered in the form of courses, which are also accompanied by a course syllabus.
8. Accreditation is not required to initiate a new study programme if HEI was entitled with the examination of the third cycle. In the case of HEIs which were not given that right, in order to launch a new programme of studies it is necessary that they apply for its approval at the Swedish Higher Education Authority.
9. HEIs entitled to offer qualifications in Cycle III have the right to decide independently on the programmes and courses which they want to offer and their initiation or liquidation.

10. The language of instruction at cycle I is usually Swedish and at cycle II and III most of the programs are offered in English. The HEI has the right to decide on the language of instruction.

3.3.2. Admission to studies

National admission regulations to first, second and third-cycle courses and programmes are laid down in the Higher Education Act, the Higher Education Ordinance and the regulations issued by the Swedish Higher Education Authority. (ref. National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011).

3.3.2.1. Procedures for admission to Cycle I - Bachelor. Commitment of the Government concerning the admission

Specific prior knowledge is required for admission to higher education. Those who have the required knowledge qualify for entry. Entry requirements can be either general or specific. The general entry requirements apply to all courses and programmes in higher education; specific (additional) entry requirements can be found on the website of each higher education institution (<http://www.studyinsweden.se/Universities/>). All first-cycle courses and programmes, apart from those that lead to the award of a qualification in the fine, applied and performing arts, use more or less the same selection criteria. These are based mainly on school-leaving grades or results from the Swedish Scholastic Aptitude Test. (ref. The Higher Education Ordinance, 4 February 1993).

The Government has decided that the Swedish Council for Higher Education is to issue further regulations regarding admission, for example concerning applicants with foreign grades. The vast majority of admissions are pooled. The Swedish Council for Higher Education is responsible for pooled admissions on behalf of the HEIs (which means that students can apply for courses and programmes at all universities on the same application) (ref. www.universityadmissions.se), but the individual HEIs decide on the admission of students. An appeal may be made to the Higher Education Appeals Board against a HEI's admission decision regarding eligibility but not regarding selection. (Higher Education in Sweden, 2013 Status Report; The Higher Education Ordinance, 4 February 1993, Ch. 7).

Tuition fees

For a long time Sweden was one of the few countries in Europe in which higher education was completely free of charge for both Swedish students and those from other countries. In June 2010 the Riksdag (Swedish Parliament) enacted a provision in the Higher Education Act that means that higher education is free for Swedish citizens and for citizens of the EU/EEA countries and Switzerland. Citizens of other countries, "third country students", have to pay an application fee and tuition fees for first and second-cycle higher education courses and programmes starting from the autumn semester of 2011. The HEIs are required to charge tuition fees that cover their costs in full for these students. (Higher Education in Sweden, 2013 Status Report)

3.3.2.2. Procedures for admission to Cycle II and III

According to The Higher Education Ordinance, 4 February 1993, *admission to the second cycle* is based on general and specific admission requirements.

A person meets the general entry requirements for courses or study programmes that lead to the award of a second-cycle qualification if he or she:

- possesses a first-cycle qualification comprising at least 180 credits or a corresponding qualification from abroad, or
- by virtue of courses and study programmes in Sweden or abroad, practical experience or some other circumstance has the aptitude to benefit from the course or study programme.

The specific entry requirements laid down shall be essential for students to be able to benefit from the course or study programme. These requirements may comprise:

- knowledge from one or more higher education courses, and
- other conditions determined by the course or study programme or of significance for the professional or vocational area for which students are to be prepared.

The higher education institution may decide which of the selection criteria are to be applied and how places are to be allocated. (ref. The Higher Education Ordinance, 4 February 1993)

To be admitted to *doctoral studies*, you need to have completed courses for at least 240 credits, of which at least 60 credits must be for Master's level studies. In most cases, students will hold a Bachelor's degree and a Master's degree, with a major in the same subject as the intended postgraduate study.

PhD studies are organised at the faculty level and the process for applying for PhD positions is specific to each faculty. There is no set application period for PhD positions. Some departments advertise their positions in spring, while others advertise on an ongoing basis, as and when positions arise. Admission to PhD positions is restricted and competition for advertised positions is usually tough. (ref. <http://www.doktorandhandboken.nu/english>).

The number of doctoral students admitted to third-cycle courses and study programmes may not exceed the number that can be offered supervision. A higher education institution may only admit applicants to third-cycle courses and study programmes who have been appointed to doctoral studentships or awarded doctoral grants.

Decisions relating to admissions are made by the higher education institution. A person who wishes to be admitted to a third-cycle course or study programme shall apply within the time prescribed and in compliance with the procedures laid down by the higher education institution.

When a higher education institution intends to admit one or several third-cycle students, information shall be provided by the higher education institution through advertising or some equivalent method.

A higher education institution that has been entitled to award third-cycle qualifications within a field may permit a third-cycle student who has been admitted to some other university or some other higher education institution to transfer without a new admission process to the higher education institution and to continue his or her courses and study programmes and receive his or her qualification there.

A person meets the general entry requirements for third-cycle courses and study programmes if he or she:

- has been awarded a second-cycle qualification
- has satisfied the requirements for courses comprising at least 240 credits of which at least 60 credits were awarded in the second-cycle, or
- has acquired substantially equivalent knowledge in some other way in Sweden or abroad. (ref. The Higher Education Ordinance, 4 February 1993)

3.3.2.3. Admission of foreign students

The Bachelor's programmes are open to all students who have completed their upper secondary level schooling and who meet the specific admission requirements of the programme. (ref. www.universityadmissions.se)

Bachelor's studies

Most undergraduate (bachelor's level) students come to Sweden as exchange students; their home university has an exchange agreement with a Swedish institution, either as part of an EU exchange program or through a bilateral scheme.

Opportunities for students to come to Sweden to study at the bachelor's level as degree students, or free movers – students who apply on an individual basis – are limited.

The largest exchange scheme is the Erasmus programme.

There are a certain number of places and grants available at each host university. These are awarded after a selection process organised by the student's home university.

It is necessary to have your grades translated into English or – at some universities – another major European language. Most universities and university colleges will accept translations by an authorised translator. The student should contact the institutions directly for their exact requirements.

The general requirements are:

- Completion of an upper-secondary school (high school) programme conferring eligibility for university studies in the same country and corresponding in level to the equivalent programme in Sweden.
- Language proficiency in English and/or Swedish, depending on the language of study.

Entrance requirements for a particular course or programme are established independently at each academic institution. These requirements vary and you will need to contact the institution directly for exact information.

Admission to all bachelor's level education is limited. All study programmes and courses have a fixed number of places, which are usually exceeded by the number of applicants. Every university and university college has its own procedure for selecting among eligible applicants. The criteria applied include: grades obtained, results from previous courses, assessment of work samples, interview results, special admission tests and work experience. These criteria vary from university to university.

Language requirements

If you plan to study in **English**, you need to show that you have attained a level of written and oral proficiency equivalent to that acquired on completion of Swedish upper-secondary (high school) education. You will need to support your application with an international proficiency test certificate. The required score is decided by the individual university and may therefore vary.

To apply for a bachelor's degree program or an individual course, you should use the online application system at [Universityadmissions.se](http://www.studyinsweden.se), which processes your application. (ref. <http://www.studyinsweden.se>)

Master's degree programmes

Some 600 master's degree programmes at Swedish universities are taught entirely in English.

General requirements

Before applying, the candidate should have completed a course of study leading to a degree or diploma equivalent to 180 ECTS (three years of full-time bachelor's level studies). In most cases a bachelor's degree will be regarded as fulfilling this requirement.

Language requirements

For English-language programmes, it is necessary to have documented proficiency in English, for example in the form of TOEFL or IELTS test results.

Universityadmissions.se is a central application service where the candidate can apply for up to four different master's programmes at different universities around Sweden with just one application. (ref. <http://www.studyinsweden.se>)

Admission of foreign students to doctoral studies

Foreign students enrolled as PhD students at their home universities can register for postgraduate courses and seminars in Sweden for a limited period, provided there is an exchange agreement or some other link between the Swedish institution and its foreign counterpart.

Otherwise, admission to doctoral studies is restricted and universities and university colleges may only admit students who have funding for the entire study period. Many departments have no formal admission requirements with regard to Swedish language skills. However, it may be helpful to take some classes in Swedish.

To be admitted to a postgraduate research position, a student must hold a university degree equivalent to a bachelor's degree or higher, with a major in the same subject as the intended field of study. In most cases a master's degree is required. The major must have included a degree thesis presenting the results of independent research.

Foreign students wishing to study for a PhD in Sweden are advised to prepare with a master's degree in Sweden first, if a relevant programme is available in English. A Swedish master's degree is likely to improve a student's chances of being admitted to a PhD programme.

Specific requirements are set for each subject. For information about these, you should contact the department you are interested in. An assessment will also be made of the applicant's suitability and his or her ability to complete doctoral studies. Students must also have a good command of English.

In some cases, students will be advised to attend Swedish language courses parallel to their doctoral studies. (ref. <http://www.doktorandhandboken.nu/english>)

3.3.2.4. *Formation of contingent*

Students shall be provided with study and career guidance. Higher education institutions shall ensure that those intending to begin a course or study programme have access to the information about it that is required.

Higher education institutions shall also ensure that the admission regulations are available. The admission regulations comprise the regulations that apply at the higher education institution to applications, entry requirements, selection, and admission, as well as how decisions are made and how appeal can be made against them. (ref. The Higher Education Ordinance, 4 February 1993)

Conclusions

1. Requirements for candidates for admission at cycle I and cycle II, may be general (apply to all courses and programmes in higher education) or specific (for each HEI in part) and are governed by three basic documents: Swedish Higher Education Act, Higher Education Ordinance and regulations issued by the Swedish Higher Education Authority.
2. Admission is centralized and the Swedish Higher Education Council is responsible for the centralized admission on behalf of higher education institutions. However, HEIs themselves decide on the admission of students.
3. According to the Higher Education Act, education is free for Swedish citizens and citizens of EU / EEA and Switzerland. Citizens of other countries must pay an application fee

and tuition fees for courses and study programmes in higher education, cycle I and II. The tuition fee should cover the full costs for studies.

4. Admission to the third cycle, doctoral studies, is based on undergraduate and graduate degrees, integrated studies at cycle I and II where there have been accumulated 240 credits, of which at least 60 credits must be for Masters Degrees in the same area of specialization with the doctoral degree applied to.

5. HEI makes decisions on admission to the third cycle, sets deadlines and procedures for admission and makes them public through various means (advertisements, information on its website, etc.). Doctoral studies are organized at faculty level and the application process for PhD positions is specific to each faculty.

6. Only those who have obtained a PhD scholarship or doctoral grants can be admitted to doctoral studies.

7. The number of places for doctoral studies is restricted and cannot exceed the number of doctoral supervisors the HEI can provide.

8. Persons admitted to doctoral studies can transfer from one HEI to another without going through a new process of admission and follow their courses and programmes of study and obtain their qualification at that institution.

9. Admission of foreign students to cycle I and II is mainly through mobility programs, exchange of students and the number of study places for students applying individually is limited and based on a tuition fee.

10. Admission requirements to cycle I and II for foreign students are basically the same as for local students, with some exceptions, e.g. knowledge of English or Swedish. Admission requirements are set independently by each HEI and vary from one institution to another.

11. Admission of foreign students to doctoral studies is restricted and HEIs can only admit students who have funding for the entire period of study. On the other hand, foreign students who are already doctoral students at a university in their home country may enroll to courses and seminars in Sweden for a limited period, if there is mobility / exchange agreement or another type of cooperation between the Swedish institution and its foreign counterpart.

12. Formal admission requirements for foreign students to cycle III are the same as for local students.

13. According to the law, HEIs in Sweden provide study and career guidance, work with school graduates and students, make public regulations, admission requirements, decision making process about admission and the procedure for contesting it, the entire activity is very transparent.

3.3.3. Recognition of studies

3.3.3.1. Recognition of study periods undertaken abroad

Recognition is a term that is often used in relation to the evaluation of qualifications so that they can be used in Sweden. There are two types of recognition:

- professional recognition for use in the labour market
- academic recognition to enable accreditation for the award of qualifications or admission to further studies and the transfer of credits from earlier studies – responsibility for the assessment of courses and programmes to enable credits to be transferred for the award of a qualification or for admission to further studies rests with the HEI offering the programme. (ref. National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011)

The Swedish Council for Higher Education (former Swedish National Agency for Higher Education) acts as an expert body for the academic recognition of qualifications from higher education outside Sweden. (ref. <http://www.uhr.se/en> (The Swedish Council for Higher Education))

The Swedish Council for Higher Education evaluates most foreign higher education programmes. The Swedish Council for Higher Education compares undergraduate and postgraduate programmes from other countries with those provided in Sweden. The comparison is expressed in terms of Swedish degree levels. The evaluation does not involve any award of a Swedish degree. The evaluation is intended to serve as a recommendation for an employer. It can also serve as guidance for Swedish universities and higher educational institutions. All decisions regarding admissions and transfer of credits from prior learning abroad are made by the universities and higher educational institutions themselves. This is the case with both completed and uncompleted education programmes. Information is provided by study counselors at universities and higher education institutions. (ref. Recognition of Higher Education Qualifications from Abroad, by the Swedish National Agency for Higher Education (<http://www.hsv.se>))

3.3.3.2. Recognition of documents of studies done abroad

There is no special recognition procedure for foreign students who want to study in Sweden. Their education and eligibility are assessed by the university or university college they apply to on the basis of the information given in their application and the attached documents. Their grades are translated, using set formulas, into the Swedish grading scale.

If their academic transcripts are in any language other than a Scandinavian language, English, French or German, they will need to submit a copy of their transcript in the original language PLUS provide an authorised translation. The authorised translation can be in English, Swedish, French or German.

Recognition of foreign degrees for purposes other than studies

Recognition of general academic degrees is undertaken by the Swedish Higher Education Authority. The Authority is also the first point of contact for general EU directives on recognition of professional qualifications in the EU.

If the person is living in Sweden and looking for work, a formal recognition of his/her foreign diplomas or degrees may be helpful. Recognition of foreign upper-secondary diplomas is done by the Swedish Council Higher Education. (ref. <http://www.studyinsweden.se>)

Conclusions

1. Recognition / evaluation of study periods undertaken abroad and diplomas for academic purposes is made by the Swedish Higher Education Council, which serves as a *recommendation or guidance* for HEIs admitting foreign students to study.
2. Studies, study documents and their eligibility are assessed properly by the HEI to which candidates apply, based on information provided in the application and the attached documents. Grades are converted, using the formulas established in the Swedish grading scale. Responsible for this activity are the study councils of HEIs and HEIs themselves. Recognition / evaluation of courses and programs is done in order to allow the transfer of credits for the award of a qualification or admission to studies.
3. It should be noted that the recognition / evaluation of study documents obtained abroad does not lead to the issuance of an equivalent Swedish study document.
4. Recognition of study documents for employment purposes is made by the Swedish Higher Education Authority in accordance with the general EU Directives on recognition of professional qualifications.

3.3.4. Accreditation of study programs

3.3.4.1. Internal quality assurance structures

Quality assurance procedures are the shared concern of staff and students at higher education institutions. (ref. The Swedish Higher Education Act, 17 December 1992).

The Swedish quality-assurance system is based on the quality procedures of the universities and university colleges themselves. Within the framework of the regulations laid down by the Swedish Parliament and the government, they have a relatively large amount of freedom to organise their own quality assurance. However, each institution must determine targets that can be monitored, and then report to the government about the quality-assurance measures to which it assigns priority and how these measures contribute to raising standards. (ref. National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011)

The Government's proposals and considerations on quality in higher education are based on a policy directed towards increased autonomy for the higher education institutions. This has been developed in greater detail in the bill *An academy for today* (bill 2009/10:149). An

important point of departure is that the higher education institutions shall themselves assume responsibility for the development of their operations.

KTH example:

QA Strategy:

The quality process at KTH is to be based on the principle of continuous improvement

Quality policy 2011-2015

- Education
- Research
- Interaction with the wider community
- Staff recruitment and professional development

Action plan to the quality policy

- Sets out priorities and activities for each year

Annual quality report

- Gives an overview of activities and results

QA – roles and responsibilities:

Responsibility for quality is to be carried by the individual student, teacher and employee in their daily actions

Formal organisation

- Faculty Council: academic responsibility for quality
- Dean, Vice Dean
- President, University Board
- University Administration
- Department of Strategic Planning and Resource Allocation: quality assurance support
- KTH Schools
- Director of Undergraduate and Masters' studies
- Director of Doctoral studies
- Programme Director

External Advisory Group

Networks

The Faculty Council represents the entire faculty and acts as an advisory body to the President. The Council has overall responsibility for issues relating to the quality of education, research and community interaction. Within the university administration's there is a quality coordinator who coordinates efforts made before / during / after external (and internal) evaluation is carried out.

The President has decided that course analyzes should be done for all courses at KTH (no exceptions are made). The course analysis is done by the course director. It should be based on an evaluation, discussion with students, talk with involved teachers and examiners, as well as own reflections. There are recommendations that course assessment should be completed within one month after the course and that the analysis is uploaded on the course web page. A summary of recent course analysis should be included in the course description. In addition, the course director at the first lecture of the course should outline the changes made to the course since the last time and what it was that caused them.

In all courses, the students will get the chance to do a course evaluation. Most often this is done in the form of a student questionnaire filled out anonymously. The questionnaire can be designed by student representatives, or by the course instructor or preferably in consultation between them. It is the course director's responsibility that a course evaluation is carried out.

The questions on the survey shall apply to all parts of the course (objectives, prerequisites, textbook, course content, teaching, examination). It is important that questions are asked on parts of the course that has not worked as well or as students may have specific comments on. It should be possible for the students to give general comments about the course at the end of the survey. A summary of results is included in the course analysis.

Internal evaluation was carried out in 2012 (Education Assessment Exercise-EAE). Courses are internally analyzed every year.

3.3.4.2. Methodology, evaluation criteria, procedures

National responsibility for evaluating and monitoring higher education in Sweden rests with the Swedish Higher Education Authority (SHEA). The overall aim of the Authority's evaluation procedures is to ensure the fundamental quality of courses and programmes. (ref. National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011)

In general, authorization to provide a programme leading to a degree-level award in the first and second cycles ('degree-awarding powers') is granted by the SHEA (former Swedish National Agency for Higher Education) (with the authority of the Ministry) in the case of the public HEIs, and by the Ministry on the basis of the SHEA's advice in the case of independent HEIs. Degree-awarding powers in respect of the Swedish University of Agricultural Sciences and the National Defence College are in the gift of the Ministry direct.

Authority's primary responsibilities for quality assurance in HEIs relate to the recognition of new programmes, and the periodic evaluation of recognised programmes. Both these activities are the responsibility of the Department of Quality Assurance in SHEA. (ref. Swedish National Agency for Higher Education: Review of ENQA Membership, April 2012)

The system for the quality assurance of higher education comprises two components:

Programme evaluation – The SHEA evaluates all first and second-cycle programmes. Evaluation of third-cycle programmes will start later. Courses and programmes have to be evaluated on the basis of how well they fulfil the requirements laid down in the Higher Education Act and the qualification descriptors in the statutes linked to the Act. In other words, the SHEA assesses to what extent the learning outcomes achieved by the students correspond to the intended learning outcomes.

Appraisal of degree-awarding powers – Before a higher education programme can be started, entitlement to award a qualification is required. The SHEA awards degree-awarding powers to public-sector higher education institutions but can also revoke them if there are shortcomings in their courses and programmes. (ref. National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011)

The SHEA's evaluations are made by panels of external experts which include subject experts, students and representatives of the labour market. The panel has to propose an evaluation of each programme it assesses using a three-level scale:

- Very high quality
- High quality
- Inadequate quality

The report from the assessment panel provides the basis on which the SHEA then decides on the overall evaluation to be awarded for each course or programme. Those that are assessed as having "inadequate quality" will be reviewed within one year. After that the SHEA decides whether or not to revoke its entitlement to award a qualification. (ref. <http://www.uk-ambetet.se>) The material on which the experts base their assessments are independent projects (degree projects) produced by students, the higher education institutions' own self-evaluations, questionnaires sent to alumni and the students' own perceptions of the outcomes of their programmes of study in relation to the targets in the qualification descriptors. The self-evaluation is important for the Authority's evaluations but should also offer an important tool for the work of the institutions themselves on the quality assurance of their courses and programmes. (ref. General Guidelines for Self-Evaluation in the Swedish National Agency for Higher Education's Quality Evaluation System. 2011-2014, Published by the Swedish National Agency for Higher Education 2011)

The self-evaluation procedure is described in detail in ref. General Guidelines for Self-Evaluation in the Swedish National Agency for Higher Education's Quality Evaluation System. 2011–2014, Published by the Swedish National Agency for Higher Education 2011.

Today resources are allocated to the higher education institutions on the basis of student performance as indicated by the number of higher education credits awarded for first and second-cycle courses and programmes. In June 2010 the Riksdag (Swedish Parliament) decided that the results of the quality evaluations should also affect allocation of resources at these levels. Higher education institutions whose courses and programmes are considered to attain “very high quality” will receive the incentive of an extra funding increment. This quality-based allocation of funding applies for courses and programmes offered by public-sector higher education institutions. The same thing is stipulated in the Appropriations for Undergraduate Education, December 20, 1993, developed and approved by the Swedish Ministry of Education and Science, under the paragraph “Quality Premium”.

More information about the system of quality assessment, ie assessment methods and assessment process can be found in “The Swedish National Agency for Higher Education’s quality evaluation system 2011-2014”, published by the Swedish National Agency for Higher Education in 2011.

3.3.4.3. Freedom in the choice of external quality assessment body

External evaluation is carried out by the Swedish Higher Education Authority based on qualification descriptor for each qualification awarded by the higher education institutions laid down by the Government; The Swedish Higher Education Act, 17 December 1992; Qualifications ordinance, Annex 2 to the Higher Education Ordinance, 4 February 1993; National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011.

3.3.4.4. Relations of cooperation of the accreditation body with the Ministry of Education in the accreditation process

The Swedish Higher Education Authority is to report its assessments to the Government Offices (Ministry of Education and Research). (ref. Task of evaluating the quality of first and second-cycle programmes in higher education, Swedish Government Decision based on the Government Bill *Fokus på kunskap – kvalitet i den högre utbildningen* [Focus on knowledge – quality in higher education (bill. 2009/10:139), which has been enacted by the Swedish Riksdag (bet. 2009/10:UbU20, rskr. 2009/10:320)

Conclusions

1. Swedish HEIs do not have separate organizational structures (e.g., departments, offices) for quality assurance, but all the actors / institutional entities are involved in this process (e.g., schools, departments, president, deans, teachers, students, etc.). However, in HEIs the overall responsibility for issues related to the quality of education, research and interaction with society rests on the Faculty Council. Also, within the administration there is a person appointed as quality coordinator whose function is to coordinate activities related to quality assurance occurring before, during and after the external and internal evaluation.
2. HEIs are free to organize their own quality assurance processes and how to organize / conduct this process and must take responsibility for their good development.

3. Although they have a wide autonomy in this regard, all HEIs should establish quality objectives so that they can be monitored and then to report to the government priority quality assurance measures and explain how these measures can help improve educational and research standards of the institution.

4. The evaluation process (discussions with stakeholders - teachers, examiners, students, questionnaires, etc.) and the course analysis at KTH are of particular interest, especially post-analysis activities such as publishing the analysis, reporting any changes made and the reasons behind them etc.

5. At national level, the Swedish Higher Education Authority is responsible for assessing and monitoring the quality of higher education, recognition of new programmes of study, and periodic evaluation of the programmes recognized (the latter two activities are the responsibility of the Quality Assurance Department of the SHEA). Based on the evaluation of HEIs by this entity and its opinion, the institution receives or is withdrawn the right to offer qualifications at cycle I or II, and in the case of independent higher education institutions by the Ministry on the basis of recommendations of SHEA.

6. Actual external evaluation of study programmes offered by a HEI is done by the SHEA which is appointing a committee of external experts for this purpose. This committee evaluates and assesses the program according to a three-level grading scales. All evaluations and their results are presented by SHEA to the Ministry of Education. If, as a result of the evaluation, the HEI receives the highest rating (very high quality) for the courses and programs it offers, it will receive a quality bonus when allocating funding by the government.

3.3.5. The National Qualifications Framework (NQF)

3.3.5.1. The body responsible for NQF in the country

National Qualifications Framework was Revised in May 2011 and published by the Swedish National Agency for Higher Education in 2011 under the Reg.nr 12-5202-10. The Swedish qualifications ordinance (ref. Qualifications Ordinance, Annex 2 to The Higher Education Ordinance, 4 February 1993) with its qualification descriptors, could be described as forming the backbone of a national framework for qualifications in Sweden. The Swedish NQF was elaborated on the bases of the:

- Swedish Higher Education Act, 17 December 1992
- Higher Education Ordinance, 4 February 1993
- European Qualifications Framework (QF-EHEA)

There are provided the entry requirements and cycle descriptors for each cycle: first, second and third.

There are three categories of qualifications:

1. general qualifications

2. qualifications in the fine, applied and performing arts
3. professional qualifications

The Qualifications Ordinance provides:

- the qualifications that may be awarded in the first, second and third cycles, and
- the requirements to be fulfilled for the award of each qualification (qualification descriptors). (ref. National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011)

The targets in the qualification descriptors are grouped under three headings, or forms of knowledge, that apply for all courses and programmes:

- Knowledge and understanding
- Competence and skills
- Judgement and approach (ref. <http://english.uk-ambetet.se>)

Independent projects are required for all first- and second-cycle qualifications. For licentiates and doctorates, a scholarly thesis or a research thesis is required. Special regulations apply for doctorates in the fine, applied and performing arts.

The Swedish Higher Education Authority issues regulations and general advice on the translation of Swedish qualification titles to English. (ref. National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011)

Levels that correspond broadly to degrees / qualifications in higher education: 5 – high school certificate, 6 – bachelor degree 7 – Master's degree, and 8 – doctoral degree.

3.3.5.2. Participation of universities in the development of new qualifications

The qualifications are set by the Government, based on previous discussion held with stakeholders (HEI, business, students and the society at large).

3.3.5.3. How are NQF requirements reflected in the study programs (compulsory provisions, internal control procedures, external evaluation)?

Universities have to develop (design) study programs and their implementation process so that competences determined by the descriptors to be achieved by the student. Requirements defined will serve as criteria and indicators for the final evaluation of studies for the preparation of self-evaluation reports and external evaluation for the accreditation of the program.

A course shall have a course syllabus. The course syllabus shall indicate the following: the cycle in which the course is given, the number of credits, objectives, specific entry requirements, how student performance is assessed and any other regulations required. A

study programme shall have a programme syllabus. The programme syllabus shall indicate the following: the courses that the study programme comprises, specific entry requirements and other regulations required. (ref. The Higher Education Ordinance, 4 February 1993; National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011)

Courses and programmes have to be evaluated on the basis of how well they fulfil the requirements laid down in the Higher Education Act and the qualification descriptors in the statutes linked to the Act. In other words, the Swedish Higher Education Authority assesses to what extent the learning outcomes achieved by the students correspond to the intended learning outcomes. The courses and programmes that have to be evaluated are those that can lead to the award of a **first-cycle** or **second-cycle** qualification. (ref. <http://english.uk-ambetet.se>)

3.3.5.4. Educational standards

Branch educational standards are not developed.

Conclusions

1. The national responsibility for the Swedish National Qualifications Framework lies on the Government. In establishing, developing and modifying the NQF many stakeholders are involved: HEI, Ministry of Education and Research, Swedish National Agency for Higher Education, students, society, etc.
2. Study programmes for cycle I, II and III are developed in accordance with the NQF and Qualifications Ordinance which provides a detailed description of the qualifications and requirements for obtaining them. Internal and external evaluation of study programmes offered by the HEI is also based on compliance with the qualifications described in these two basic documents.

3.3.6. Planning and deployment of study programs

3.3.6.1. Designing the content of study programs

Universities in Sweden have general degree awarding powers at:

- first cycle (Higher Education diplomas – 120 ECTS and Bachelors' degrees – 180 ECTS)
- second cycle (one-year – 60 ECTS and two-year – 120 ECTS Masters' degrees) and
- third cycle (licentiate – 120 ECTS and doctoral – 240 ECTS degrees) (ref. Higher Education in Sweden, 2013 Status Report, by Swedish Higher Education Authority)

The content of study programmes and courses is developed by the initiator(s) of the programme.

All first and second-cycle study programmes shall be offered in the form of courses. Courses may be combined to create study programmes. (ref. The Higher Education Ordinance, 4 February 1993)

At KTH, for instance, content is controlled by the program learning objectives and competences the student should achieve during his/her studies, described in the Qualifications Ordinance, Annex 2 to the Higher Education Ordinance, 4 February 1993. Programme management can receive development support in writing learning objectives from the Department of Learning at the School of Education and Communication in Engineering Science.

Requirements on organization of studies, student assessment, organization and deployment of the final assessment is made the responsibility of each institution and are defined by The Swedish Higher Education Act, 17 December 1992; The Higher Education Ordinance, 4 February 1993, but also through internal arrangements.

A university or higher education institution entitled to award third-cycle qualifications shall determine the subjects in which third-cycle courses and programmes may be offered. For each subject in which third-cycle courses or study programmes are offered a general study syllabus is required. (ref. The Higher Education Ordinance, 4 February 1993)

3.3.6.2. Allocation of tasks among academic structures

In Higher Education Ordinance, 4 February 1993 is set the structure of the academic year: one academic year comprises 40 weeks of full-time study which corresponds to 60 credits.

The number of HE credits awarded for each course is determined by the amount of study normally required to attain its objectives. The HE credits awarded in higher education in Sweden can be compared to European Credit Transfer and Accumulation System (ECTS) credits. (ref. Higher Education in Sweden, 2013 Status Report)

The university establishes the beginning and the end of semesters, and vacations. It is determined the credit structure of cycle I (120 or 180 ECTS), II (60 or 120 ECTS) and III (120 or 240 ECTS) depending on qualifications to be obtained upon completion of the study program (ref. Higher Education in Sweden, 2013 Status Report). Teachers from several schools specializing in a particular field participate in the deployment of a program.

The Academic Cycle at KTH:

- Starts in early September ends in June
- 40 weeks divided into four study periods
- Examination period after each study period

3.3.6.3. Internships

Normative documents do not provide the organization of internships in HEIs. At KTH internships are not organized. This was confirmed by the Head of Administration of KTH. However, practical activities are conducted when carrying out year projects, graduation projects / theses by students, providing solving specific problems derived from the economic environment.

3.3.6.4. *Final evaluation on cycles*

Unless otherwise provided by the higher education institution, a grade shall be awarded on completion of a course. The higher education institution may determine which grading system is to be used.

The grade shall be determined by a teacher specifically nominated by the higher education institution (the examiner).

The number of sessions laid down shall be at least five.

Upon request, a student who has successfully completed a course shall receive a course certificate from the higher education institution. If the course certificate is awarded for studies at more than one higher education institution, the certificate shall be issued by the institution at which the student completed the course. This does not apply, however, if the higher education institutions concerned have specifically agreed otherwise. A certificate shall be accompanied by a diploma supplement that describes the study programme and its place in the educational system (ref. The Higher Education Ordinance, 4 February 1993).

At KTH, the degree project area (the course) is established by the school committee. Proposal to the degree project is given within the school. The degree project must have a course plan according to regulations in the Higher Education Ordinance. The degree project is a course consisting of 15/30 credits, which means that the degree projects must correspond to 10/20 weeks of full-time studies. The degree project may not include other courses (courses with established course numbers). The degree project can include elements such as seminars, information searching, student teaching, or other elements which the examiner or supervisor deems suitable. The degree project can be performed at KTH or externally. The degree project can also be performed abroad. The degree project are carried out individually or together with another student. If the project is done by more than one student, it is the responsibility of the examiner to ensure that every student's work corresponds to the requirements for an individual degree project.

If the degree project is performed at another university and if it equals the degree project at KTH, then credit transfer should be made. The supervisor is appointed by the examiner. More than one supervisor can be appointed. If the degree project is done, for example, at a company, a supervisor should be appointed at the company as well. The examiner should be attentive of the responsibility distribution between the examiner and the supervisors. The degree projects should be reviewed in a seminar. The degree project report should be registered within the school. Much care should be taken to how the report is formed, especially with consideration to language usage. The degree project can be written and

presented in Swedish or English. A summarization should exist in both languages. The degree project report must be checked for plagiarism. The degree project must be given a grade on the scale A-F based on those KTH common evaluation criteria. The school committee decides, based on these evaluation criteria, about rules and guidelines for the degree projects area, including methods for grading.

All degree projects should be evaluated based on three KTH-common evaluation criteria; engineering-related and scientific contents, process, and presentation. The president decides about further evaluation criteria after proposal from the school. (ref. Comprehensive rules and guidelines for degree project work 15 credits, regarding Master (60 credits), 2007-07-01; Comprehensive rules and guidelines for degree project work 30 credits, regarding Master (120 credits), 2007-07-01)

Doctoral studies consist of seminars, reading and methodology courses, individual literature surveys and independent research. The thesis must describe and account for organization and results of research, be published and be publicly defended. (ref. <http://www.euroeducation.net/prof/swedco.htm>)

At KTH the grading scale A-F is used starting with 1 July 2007 (mandate 708/06). (ref. Comprehensive rules and guidelines for degree project work 15 credits, regarding Master (60 credits), 2007-07-01).

Detailed information on the final evaluation at KTH are included in the internal regulatory acts of the institution:

- Regulations for written examinations at KTH, including instructions for invigilators (proctors), Internal regulation number 6/02, Applies from 2002-06-19, Amended from 2010-10-01
- Examiners at KTH, Internal regulation no. 4/2006, Valid from 01/02/2006, Amended from 18/10/2007
- The right for students to request an extra examination, Internal instruction no. 5/03, Applies from 01/02/2003, Revised from 08/04/2005
- Regulations for schools, examiners and invigilators regarding written examinations, Appendix 1 to Decision UF-2010-0416, 30-06-2010
- Regulations for students regarding written examinations, Appendix 2 to Decision UF-2010-0416, 30-06-2010
- Handling of plagiarism in education at KTH, Internal regulations 8/2011

Conclusions

1. HEIs are responsible for organizing the whole process of study, independent design of study programmes and courses, current and final evaluation procedure. It should be noted that the entire content of study programmes must comply with the learning objectives and

outcomes and competencies set out in Annex 2 to the Higher Education Ordinance on qualifications, which the student must possess at the end of studies.

2. From organizational point of view, an academic year consists of 40 weeks (full-time study) and corresponds to 60 ECTS. The HEI establishes itself the beginning and the end of the academic year, of semesters, and the period and duration of holidays.

3. Teachers belonging to different schools participate in the design and implementation of a programme of study.

4. Regarding internships, their realization and obligatoriness is not provided by any regulatory act. However, practical activities are incorporated in the realization of year projects by students.

5. Each course ends with an examination accompanied by a grade. The HEI appoints a teacher (examiner) who determines and decides on the final grade. Also, the HEI organizes at least five examination sessions. Under the legislation, the student has the right to request a certificate attesting the completion of the course, but this is not practical in HEIs.

6. Studies end with the development and public defense of a diploma project, for which 10/15 ECTS credits are provided, depending on the study programme followed by the student (full-time study), which corresponds to 10/20 weeks provided for this activity. The diploma project can be done at the host institution, at a different institution or abroad, by a single student or group of students. Students defend the diploma project individually or in groups, and each student receives a grade. The defense takes place within the school that offers the programme to which the student is enrolled. The language the diploma project is written and defended is Swedish or English.

Also important is that each paper / diploma project is checked against plagiarism.

Diploma project evaluation is based on criteria established by each school committee separately.

7. There is no strict grading system at the country level and each HEI is entitled to establish its own system. For example, at KTH, since 2001, grading is done on a scale from **A** to **F** for cycle I and II and for the cycle III, doctorate – *pass / fail*.

3.3.7. Employability

3.3.7.1. The occupational framework (ISCEO). The link between the level of studies - qualification

In Sweden the demand for graduates has been rising for a long time and statistics also show that higher education increases the possibilities of becoming established in the labour market. The total number of graduates from higher education entering the labour market in Sweden is considerably larger than the number of graduates who retire each year. In today's labour market qualifications from higher education are required for a greater number of jobs than before. The number of places offered by HEIs in Sweden must meet student demand and the

needs of the labour market. The increasing focus placed on the links between higher education and the labour market and its relevance is largely the result of the increased expectations from the labour market and the influence it exerts. (ref. Higher Education in Sweden, 2013 status report)

100% of KTH graduates find a job. This however does not happen immediately after graduation. Most graduates decide to spend a year to resolve some personal interests and only then begin to look for a job according to field of study graduated. The organizers of programmes, university departments are aware of the post-graduation activity of their former students. Based on discussions held with the Head of Administration at KTH it is a culture that university graduates announce whether they have been employed or not, where, position, etc.

3.3.7.2. Place of MA and Ph.D. in the occupational network

The Swedish Higher Education Authority assesses graduates as established if they were gainfully employed in November, earn more than a specific amount and have not been students, moved abroad or had periods of unemployment during the year or been involved in labour market policy measures. Establishment is measured 12-18 months after graduation and graduates are grouped in different categories on the basis of which sector of the labour market their qualifications relate to.

The proportion varies from discipline to discipline. The largest proportion of graduates who gained a footing in the labour market had qualifications in areas such as technology, medicine and health care. Nine out of ten graduates who qualified as physicians, dentists or had Master's degrees in engineering had established themselves within 1.5 years. (ref. Higher Education in Sweden, 2013 status report)

All students at KTH follow the "undergraduate" level which includes, in the form of integrated study: cycle I – Bachelor and cycle II – Master (financed from the state budget by 95%). Although, theoretically and according to Swedish law, it is possible to graduate only from cycle I, and that graduates can be employed in the labor market, this is not practical. All graduates may receive upon completion of studies, the level of "undergraduate", a certificate /diploma (to which the Diploma Supplement is attached describing the study programme and its place in the educational system). Certificate about successful completion of the study at respective cycle is not issued automatically – each graduate shall formally request the Certificate. (ref. The Higher Education Ordinance, 4 February 1993).

Regarding the employment of graduates with the title of PhD (doctor), the employment rate is also 100%. The more advanced the educational qualifications acquired, the greater the chance of establishment in the labour market. The largest proportion of PhDs to establish themselves in the labour market were those with degrees in medical subjects and also in the technological sciences. The smallest proportion were those graduating in the humanities and religious studies. (ref. Higher Education in Sweden, 2013 status report)

According to the Higher Education Ordinance, 4 February 1993, HEIs can create / establish specific full-time positions (1 unit) within the institution for students from cycle III, who obtained a doctoral studentship, to help and enable them to finish their studies and are paid for their work (about 30 000 SEK). They must dedicate themselves to their studies first, but, however, they can also carry out, to a lesser extent, educational, research, creative development and administrative tasks as well. Also, if the student in the third cycle asks, he can be employed in the higher education institution at a part-time position. In addition, if necessary for example for the company / enterprise, it can finance its employees to undertake the doctoral studies required.

More detailed information on the employment of graduates from higher education institutions in Sweden is offered in “Higher Education in Sweden, 2013 status report”, pp. 41-45.

Postdoctoral positions in Sweden

In 2005 the Swedish Research Council also established national post-doc appointments.

This programme applies to those with doctorates awarded in Sweden and abroad. The universities can therefore choose either to recruit researchers with foreign PhD's or Swedish researchers from another faculty or university. Funding from the Swedish Research Council is paid to the higher education institution that establishes a position for a fixed term of two years.

In Sweden, it is increasingly common for higher education institutions to advertise post-doc appointments themselves.

In 2008, the Swedish Agency for Government Employers and union representatives reached a new agreement on fixed-term employment as a post-doc. This agreement also allows for the employment of a postdoctoral researcher until further notice, but for no more than two years, with the opportunity for an extension if there are special circumstances. (ref. <http://www.doktorandhandboken.nu/english>)

3.3.7.3. Career guidance structures

- Higher education institutions
- Swedish Research Council
- Swedish Agency for Government Employers

Conclusions

1. The employment rate of people with higher education varies from one area to another and is virtually 100% due to the increase in the number of jobs that require highly qualified specialists.

2. The number of study places in HEIs must meet both student demand and labor market needs.
3. To meet the expectations of the labor market that are constantly growing, a pretty big focus is on the connection and cooperation between HEIs and businesses.
4. At institutional level, each HEI collects, and there is even a certain culture that HEI graduates provide data on their employment. At national level, these data are collected by the Swedish Higher Education Authority each November, once in 12 to 18 months after graduation, and then it makes public a report on the data collected and the employment rate of graduates in different fields.
5. Employment is not recorded when finishing cycle I – Bachelor, although this is permitted by law.
6. The employment rate of graduates with the title of PhD (doctor) is 100%. Being a PhD student, such a person, by law, can handle a full-time (1 unit) or part-time (part-time) job in a HEI and the HEI, in turn, is bound to create such posts. Also, companies can finance their employees to undertake the doctorate.
7. At national level, the Swedish Research Council finances post-doctoral positions, funding given to HEI establishing such posts with a fixed term of two years, where people with doctorates awarded in Sweden and abroad can apply. Also, a postdoctoral researcher can be employed in the labor market by a company for a period of two years with the possibility to extend the contract.
8. At the state level, career guidance of graduates from HEIs is done by the Swedish Research Council and the Swedish Agency for Government Employers and, at institutional level, studies and career guidance is carried out by HEIs themselves.

3.3.8. Teachers' workload

3.3.8.1. Planning the didactic workload

Swedish legislation does not lay down specific rules on the workload of teachers. The law only stipulates that a teacher employed at a HEI should combine research with teaching. Institutions develop internal rules regarding the allocating of tasks, remuneration rules.

3.3.8.2. Distribution of the didactic workload

Since 2005 Statistics Sweden has conducted a questionnaire survey every other year covering a selected population of employees (with research and teaching duties) at the HEIs. The employees, including those appointed to doctoral studentships, are asked, for instance, how they divided their total number of working hours between different tasks.

The findings of the latest survey, which covers 2011, show that 41 per cent of the total number of working hours is allocated to research and development (R&D), 22 per cent to

teaching in first and second-cycle courses and programmes, 3 per cent to teaching in third-cycle programmes and the remaining 35 per cent to other tasks.

Teaching in first and second-cycle courses and programmes is mainly undertaken by lecturers and senior lecturers. The lecturers state that they devote 60 per cent of their working hours to this teaching, the senior lecturers 42 per cent. At the same time these two categories devote fewest hours to R&D. Those who spend most of their time on R&D are researchers and post-doctoral research fellows (who are included in the group of other research and teaching staff), 70 per cent of their working hours. The professors devote 17 per cent of their time to teaching on first and second-cycle courses and programmes, 10 per cent to teaching on third-cycle programmes and 42 per cent to R&D. (Ref. Higher Education in Sweden, 2013 status report).

3.3.8.3. The accounting of performing teaching and research workload

At KTH the salary is usually negotiated.

Total workload = 1700 astronomical hours / year.

1 astronomical hour = 4 academic hours.

Respectively, 1700 astronomical hours / year = 425 academic hours / year, of which 30% teaching and 70% research.

A full-time lecturer = 600 academic hours / year, which includes: lectures, laboratories, examination.

At KTH: 200 academic hours / year.

Didactic workload varies from one university to another. There are teachers who only do research, others - teaching and research.

Conclusions

1. Planning and didactic workload distribution is done at the school / HEI level.
2. A teacher should combine research and teaching, but the exact percentage, the exact hours for such balance is not established. Much of this depends on the position held by the teacher. According to statistics, on average, teachers devote about 40% for research, 25% for teaching and 35% for other tasks.
3. The distribution of the didactic workload varies from one university to another and the teacher has the right to decide whether to do only research or to combine research and teaching.
4. Teachers' salaries are negotiated at institutional level.

3.3.9. University scientific research

3.3.9.1. University structures involved in the organization of scientific research

Almost two thirds of publicly funded research in Sweden is conducted at universities and other higher education institutions. Other publicly funded actors conducting research include industrial research institutes, certain sectoral agencies as well as municipalities and county councils.

Universities and other higher education institutions

In Sweden there are 34 state higher education institutions. Research and postgraduate studies are also carried out at three private education providers. The large higher education institutions conduct teaching and research in many subjects and fields, unlike smaller higher education institutions which often have established profiles in specific areas, sometimes by concentrating on subject areas of relevance to the local business sector, or in a specific scientific field.

All state higher education institutions have their own research resources and conduct research.

Industrial research institutes

Some publicly funded research is also conducted at industrial research institutes. Central government ownership is channelled via IRECO Holding AB. IRECO has completed a restructuring process and the previously 16 institutes are now combined into 3-4 larger groups of institutes.

The business sector

The business sector in Sweden invests a lot in research compared to other countries. In comparison with the other Nordic countries, Sweden has industries that are varied and high-tech. Several different sectors allocate large amounts of money to research. Particular emphasis is placed on the automotive and pharmaceutical industries, as well as on the IT and telecommunications industries.

Innovations resulting from research are playing an increasingly important role. This is reflected in a clearer mandate for the higher education institutions to work in this direction. Collaboration with the business sector plays a major role in this. (ref. <http://www.government.se/sb/d/6949/a/88166>)

In Sweden, research and third-cycle courses and programmes receive finance from:

1. Direct government funding
2. Government agencies
3. Other public funding and EU funding
4. Private funding in Sweden
5. Sources outside Sweden excluding EU

6. Financial revenues

Less than half the funding for research and third-cycle courses and programmes (47 per cent) takes the form of direct government allocations and the state channels a considerable proportion of the funding (26 per cent) through research councils (ref. Swedish Research Council – <http://www.vr.se/inenglish.4.12fff4451215cbd83e4800015152.html>) and other government agencies. Other significant sources of funding for research are private foundations and non-profit organisations. (ref. Higher Education in Sweden, 2013 Status Report, by Swedish Higher Education Authority)

Research efforts at KTH are financed via two main sources. One is government appropriation for research, the “research grant”, which includes both research and postgraduate education. The other is “external funding”.

About one-third of KTH’s activities are financed by means of appropriations or grants. The rest are met by various sources of external funding, which are applied for on a competitive basis. After being accepted by the allocating financier, external funds are allocated directly to the proper unit or body. So far, the faculty appropriation has been distributed directly to the various units. A small percentage of it has been reserved for support of special purposes. Supportive activities common to the entire KTH are mainly financed by a “college fee”, which is set by the KTH University Board.

The internal allocation of resources was subject to investigation during 2006. A new model for this, based on the KTH President requesting specific efforts from each School, is being employed from 2007 onwards. One of its aims is to improve control of our activities, both strategically and financially. This applies not least to our research, as the demands for co-financing of these from outside financiers have increased considerably. Hence the distribution of the faculty appropriation has assumed increasing importance. (ref. <http://www.kth.se/en/forskning/finansiering>)

3.3.9.2. Students’ involvement in the process of scientific research

In Sweden only the Master with a duration of 60 -120 ECTS is practiced, where students are involved in applied research and finishing this level serves as a starting point for doctoral studies. At doctoral level, PhD students are 70-80% involved in research.

3.3.9.3. Scientific research of the didactic staff

The duties assigned to teaching staff may comprise educational responsibilities, research or artistic research and development, and also administrative tasks.

Higher education institutions shall employ professors and senior lecturers to undertake teaching and research. (ref. The Swedish Higher Education Act, 17 December 1992)

More than 2,200 people are engaged in research at KTH. Some 1,500 of these are postgraduate / doctoral students, about 460 are researchers or research engineers (i.e. with a doctoral or licentiate degree) and some 235 are Professors.

A researcher at KTH is associated with one of KTH's Schools. Normally, each Professor is heading a research team of doctoral students and/or other scholars, and his/her team is involved in one or more research projects, running for a number of years. (ref. <http://www.kth.se/en/forskning/forska>)

A person who has demonstrated both research and teaching expertise shall be qualified for employment as a *professor*.

Those qualified for appointment as a *senior lecturer* are a person who has demonstrated teaching expertise and been awarded a PhD or has the corresponding research competence or some other professional expertise.

Assistants' and *teaching assistants'* duties shall comprise educational tasks, administration or participation in research. (ref. The Higher Education Ordinance, 4 February 1993)

3.3.9.4. Integrated research, education and business centers

KTH Royal Institute of Technology is a research intensive university where more than 60% of the total income is research related. This funding is acquired by KTH in competition with other universities and parties. In total, approximately 25% of research income is related to international funding and national funding, where collaboration with industrial or other parties is a prerequisite. Industrial collaboration is hence an important aspect of research at KTH. (ref. <http://www.kth.se/en/forskning/research-office>)

Research at KTH's is to a large extent conducted in co-operation with companies and various societal bodies. The co-operations are often organized as competence centres, connected to a certain KTH Department, but still conducting research on its own. Most of the centres have a board, with representatives from trade, business and society. (ref. <http://www.kth.se/en/forskning/sarskilda-forskningssatsningar>), others are autonomous units directly subordinate to the KTH President. The majority of centres are maintaining close connections with industry. Some of them are also acting as liaison offices between KTH and other universities. (ref. <http://www.kth.se/en/forskning/sarskilda-forskningssatsningar/centrumbildningar-1.11756>)

Conclusions

1. The Swedish government allocates approximately two thirds of public funds to HEI research activities and other sources come from government agencies, other public funding and EU funding, private funding, sources outside Sweden, except EU, and financial revenues. Other public funds intended for research are directed by the government to industrial research institutes, some sector agencies as well as municipalities and county councils.
2. In HEIs, funding of research, doctoral courses and programs comes from: 47% direct government allocations and 26% through research councils and other government agencies.
3. HEI themselves decide on the internal allocation of financial resources for research and doctoral programs.

4. In order to carry out research a crucial role is played by the collaboration of HEIs with business for technology transfer and innovation purposes.
5. Students are actively involved in applied research activities and at doctoral level they allocate 70-80% of their time to research.
6. Teachers in HEI carrying out research activities are usually associated with a school, each teacher leads a research team comprised of PhD students and / or other scientists and the whole team works on long term research projects.
7. The collaboration of HEIs with the business environment is an important aspect of research and is an essential condition for HEIs. This collaboration is often organized as competence centers associated with the departments of HEIs, which are autonomous units led by a board whose members are representatives of the field of trade, business and society, and they report to the President of HEIs. Another role of these competence centers is to facilitate collaboration, connection between HEIs.

3.3.10. The doctorate

3.3.10.1. The right to offer doctoral studies

Courses and programs in cycle III are offered by universities (in all subject areas) and university colleges which were granted the right to award / offer qualifications for the third cycle.

Decision on granting the right to offer third cycle qualifications is done by the Swedish National Agency for Higher Education under the new rules applied from 2010.

As the accountable authority, the Government shall establish higher education institutions for the provision of:

- courses and study programmes, and
- research and artistic research and development as well as other forms of development activities.

The operations of higher education institutions shall be organised to ensure that there are close links between research, and courses and study programmes.

The following general principles shall apply to research:

- research issues may be freely selected
- research methodologies may be freely developed, and
- research results may be freely published.

3.3.10.2. Doctoral Schools

Research at KTH is organised in five Research Platforms, designed to break down traditional barriers between academic disciplines. The goal is to deliver practical results that can help solve overarching global challenges. KTH's five Research Platforms are organised to deliver focussed, results-oriented study that meets the needs of governments and industries grappling with unprecedented threats – as well as promising new opportunities. (ref. <http://www.kth.se/en/forskning/forskningsplattformar>)

3.3.10.3. Completion of studies, conferring of degrees

Supervision

At least two supervisors shall be appointed for each doctoral student. One of them shall be nominated as the principal supervisor. Doctoral students are entitled to supervision during their studies unless the vice-chancellor has decided otherwise. A doctoral student who so requests shall be allowed to change supervisor.

Individual study plans

An individual study plan shall be drawn up for each doctoral student. This plan shall contain the undertakings made by the doctoral student and the higher education institution and a timetable for the doctoral student's study programme. The plan shall be adopted after consultation with the doctoral student and his or her supervisors.

The individual study plan shall be reviewed regularly and amended by the higher education institution to the extent required after consultation with the doctoral student and his or her supervisors. The period of study may only be extended if there are special grounds for doing so. Such grounds may comprise leave of absence because of illness, leave of absence for service in the defence forces or an elected position in a trade union or student organisation, or parental leave.

Entitlement to supervision and other resources

If a doctoral student substantially neglects his or her undertakings in the individual study plan, the vice-chancellor shall decide that the doctoral student is no longer entitled to supervision and other study resources. Before such a decision is made, the doctoral student and the supervisors shall be given an opportunity to make representations. The case shall be considered on the basis of their reports and any other records available. The assessment shall take into account whether the higher education institution has fulfilled its own undertakings in the individual study plan. A written record of the decision shall be made, which is to include reasons for the decision.

Resources may not be withdrawn for any period in which the third-cycle student has been appointed to a doctoral studentship or is receiving a doctoral grant.

If study resources have been withdrawn pursuant to Section 30, the doctoral student may, on application to the vice-chancellor, recover his or her entitlement to supervision and other resources. The doctoral student must then demonstrate convincingly, by presenting

prospective study results of considerable quality and scope or in some other way, that he or she can fulfill his or her remaining undertakings in the individual study plan.

Examination grades

Examinations that form part of third-cycle courses and study programmes shall be assessed in accordance with the grading system prescribed by the higher education institution.

The grade shall be determined by a teacher specially nominated by the higher education institution (the examiner).

Public defences and grading doctoral theses

The doctoral thesis shall be presented and defended orally in public. A faculty examiner (*opponent*) shall be appointed for this presentation.

At least one of those participating in the grading of a doctoral thesis shall be someone who does not have a post at the higher education institution awarding the degree.

A higher education institution may issue regulations on the grading system to be used and on public defences and grading in other respects. (ref. The Higher Education Ordinance, 4 February 1993).

The **actual period of study** stipulated for third-cycle programmes (the time devoted to third-cycle study) is four years for a PhD and two years for a licentiate degree.

The average length of time spent on these studies is, however, just under 4½ years for a PhD and just over 2½ years for a licentiate degree.

Licentiate examination or the public defence of a doctoral thesis

For a Licentiate or PhD, students are required to have passed the tests that are a part of the postgraduate programme and have written an academic thesis or thesis that has been accepted.

To be awarded a PhD, students must pass the courses that are included in the doctoral programme and have written a thesis corresponding to at least 120 higher education credits that has been given a pass grade.

Requirements prior to the public defence

1. Printing the thesis
2. **Posting of the thesis**
3. **Press release**

Public defence of a doctoral thesis

Supervisors should ensure that the thesis is good enough to be approved before the student is recommended to defend it.

The defence of the thesis is oral and public.

One opponent

According to The Higher Education Ordinance a faculty examiner (*opponent*) shall be appointed for this presentation.

The opponent should have good command of the thesis topic and study the thesis in detail. If the opponent comes from another country and is not certain about the Swedish educational system, it is the duty of the chairman to inform him or her about what requirements and expectations are entailed.

The opponent and/or in some cases the student gives a general overview of the topic with a description of how the thesis can contribute to knowledge in the field and a presentation of its contents.

Then there is a discussion, with the opponent offering questions and views on the scientific relevance, methods and results and the student then orally defending his or her thesis in relation to the questions raised by the opponent.

Question session

The members of the examination board then have the opportunity to ask the student questions. The floor is then opened up to the audience, with the public having the right to ask the student questions in the order determined by the chairman. Students always have the right to express themselves in Swedish or English.

After the public defence or examination

The examination board

The examining board consists of three or five members, who have to be professors or qualified for appointment as professors, although not necessarily active in the same field as the doctoral student. The board decides whether to award the doctoral thesis a pass grade or not.

The examining board is appointed by the faculty on the recommendations of subject representatives at the higher education institution. Normally the majority of the members of an examining board are recruited from other higher education institutions. At least one must come from another higher education institution. The members should not have unduly close relationships to the student submitting the thesis or the student's supervisors. The student's supervisor may not be a member of the board, unless there are exceptional grounds for this.

The faculty examiner and the supervisor are entitled to attend the meetings of the board. They may take part in discussions but not in decisions.

Normally, theses are awarded either a pass or fail.

Degree certificate

Students awarded a PhD or Licentiate degree will be given a degree certificate from their higher education institution upon request.

The Licentiate degree

A Licentiate degree of 120 higher education credits with an academic essay or thesis corresponding to 60 higher education credits may be a degree in its own right or a stage in the programme leading to award of a PhD.

Writing a Licentiate thesis naturally takes extra time, but many people find that in return the time is used more effectively after getting the Licentiate; taking notes becomes more systematic, and students have the training to write and an understanding of how much time it requires.

For students who do not complete their doctoral studies for some reason, the Licentiate degree is valuable proof of what they have achieved. The Licentiate degree is also recognised in the private sector.

Licentiate seminar

The Ordinance does not stipulate how the academic essay is to be examined, but it is customary that students seeking a Licentiate degree hold a seminar and discuss their work. Listeners can present their views and any criticism – it is like a mini-defence.

There must be an examiner who studies the essay, but in many instances there is an opponent as well as a more or less official examination board.

3.3.10.4. Postdoctorate / habilitate

Postdoctoral research, as a post-doc, offers newly qualified PhD's the chance to acquire further research experience. The most usual thing is to find a post-doc position at a university or research institute abroad.

After obtaining a PhD, it is possible to undertake a postdoctoral period to acquire further experience and qualifications. However, there is a lot of competition for postdoctoral financing and most post-docs finance their studies through grants, which is the form of financing that has the poorest social safety net.

The majority of postdoctoral positions are financed through stipends.

Most post-doc stipends are awarded by the Swedish Research Council. The Swedish Research Council finances post-doc stipends in the areas of the Humanities and Social

Sciences, Medicine, Natural Sciences and the Technological Sciences and Educational Sciences.

The stipends are valid for at least six months but no more than two years, and are announced twice per year. They are tax-free and are calculated on the basis of the general cost of living in the relevant country.

There are also a large number of other stipend donors, both large and small, private and public. The Bank of Sweden Tercentenary Foundation, for example, only provides support at post-doc level and above. Another major post-doc stipend donor is the Wenner-Gren Foundations.

Conclusions

1. HEIs are established with the consent of the Government and their main purpose is to provide educational programs and organize research activities for all levels of education.
2. All universities and university colleges may offer programs and courses at third cycle – doctorate, only if this right was granted by the Swedish National Agency for Higher Education. Swedish HEIs with the status of universaity have power to award 3rd level degrees in all subject areas. In order to be able to award doctoral degrees, university colleges have to apply to the SHEA. The application is submitted in a specific subject area.
3. Aspects related to doctoral studies (designing programs, choosing problems to be investigated, research methodology, publishing research results, etc.) are the choice of HEIs.
4. PhD programmes are established at the School level. Doctoral studies and research are organized within research platforms in order to provide studies focused on outcomes and to meet the needs of governments and industries. Research paltforms established at KTH are aimed at creating opportunities for multidisciplinary in research and research education.
5. Each PhD student: must have at least two supervisors (one main supervisor); is entitled to change the supervisor; shall draw up a work plan to guide upon and to follow it the entire period of his doctoral studies; is entitled to all the resources of the HEI needed to achieve the research targets. The supervisor is appointed by the HEI. In some cases, the Vice-Rector of the HEI decides whether the PhD student is entitled to supervision.
6. Courses and study programmes in cycle III end with the exam and the HEI decides on the grading system to be used (e.g. at KTH - pass / fail). The grade is determined by the examiner (a special teacher appointed by the HEI) appointed by the faculty / school.
7. Defending of the PhD thesis is done orally and in public. The HEI decides on the evaluation, grading and defence procedure.
8. For the defence, the faculty / school appoints an opponent, a person with knowledge in the respective field, and a committee for the examination of the thesis and defence.

9. The examination committee of the thesis includes 3-5 members, professors, although not necessarily in the same field as the PhD student. Typically, they are recruited from other HEIs or at least one must be from another HEI. The supervisor and the opponent cannot be part of this committee, although they can participate in committee meetings, and cannot make decisions. Only the committee makes decisions regarding thesis' evaluation / grading and awarding of the doctoral degree.

8. There are two types of general qualifications that are awarded at Cycle III: Licentiate (120 credits) and Doctor of Philosophy (240 credits). Students who were awarded the title of PhD or Licentiate will be issued a certificate / diploma by the HEI upon submission of an official request to the home university.

9. Persons who have already obtained a PhD degree can continue their post-doctoral studies to gain experience and further qualifications. Studies and postdoctoral positions are funded through grants / scholarships by the Swedish Research Council, which are provided for at least six months but not more than two years, and are announced twice a year. Postdoctoral studies are usually done abroad.

3.4. Academic autonomy in Denmark

3.4.1. Establishment and termination of study programs

3.4.1.1. Levels in higher education

In Denmark there are four types of institutions providing higher education programs, and each has its own specific profile and level [2, part. 2, 7, p. 8]:

- Academies – provide higher professional education such as business, technology, IT. Programs are 90 and 120 ECTS. Academies are highly specialized [22, tab. 1 and tab. 2]
- University colleges and specialized colleges - provide professional Bachelor programs of 180-240 ECTS. Programs are focused on practical activities and include more long-term internships in companies.
- Universities – provide higher education programs based on research: Bachelor's degree programmes comprising 180 ECTS credits, Master's (candidatus) degree programmes comprising 120 ECTS credits, PhD degree programmes comprising 180 ECTS credits [7, p. 4]. One year of full-time study corresponds to 60 ECTS points. Universities are accountable to the Ministry of Research, Technology and Innovation.
- Institutes of university level – they are within the Ministry of Culture, provide studies in the respective field of the first, second and third level.

According to [3, p.3 a. (1)] in collaboration with one or more foreign universities, the university may offer degree programmes abroad, in whole or in part. The individual components of the degree programmes are to be completed at the university and at one or

more of the foreign partner universities. The components completed at the foreign universities may be elective or mandatory. If the entire degree programme is completed abroad, the university may allow the foreign university to offer the programme, if this takes place in collaboration with the Danish university.

According to [3, p. 5] the university may offer the following research-based educational activities as part-time programmes of study, Part-time Master's degree programmes (Masteruddannelse), Other further and continuing education programmes, Supplementary studies undertaken in order to meet the admissions requirements for a Master's (candidatus) degree programme. The part-time study programmes offered by a university may also include all the degree programmes it is authorised to offer on a full-time basis, single subjects from these and courses in specific fields of study.

The minister lays down general rules governing education, including forms of assessment, examinations and external examination; titles awarded in connection with degree programmes; and on admission to and enrolment into degree programmes. The minister lays down specific rules regarding appeals of decisions connected with tests and examinations, including rules to the effect that reexamination and reassessment may result in a lower grade.

3.4.1.2. Introduction of study programs at cycle I

The initiative to create a new program usually comes from a teacher or a group of teachers forming the program team. At the faculty there is a person with legal experience in the field of legal educational regulations who helps the team to create the package of documents. The dean signs the package after rigorous judicial scrutiny. The program is approved by the dean, and then it is subject to evaluation at the Academic Council level.

3.4.1.3. Introduction of study programs at cycle II

Drafting and approval of the Master programs lies totally on university's competences [8].

3.4.1.4. Introduction of study programs at cycle III

According to [9, art.1-4]: the PhD programme is a research programme aiming to train PhD students at an international level to undertake research, development and teaching assignments in the private and public sectors, for which a broad knowledge of research is required. The PhD programme mainly comprises active research training under supervision. The ministerial order [9] applies to PhD programmes at the universities and at the higher artistic educational institutions under the Ministry of Science, Innovation and Higher Education.

The institutions may award the PhD degree within fields within which they carry out research and within which they have set up a PhD school, either independently or in cooperation with other institutions covered by the ministerial order. The PhD degree is awarded to students who have successfully completed the PhD programme and successfully defended their PhD thesis. The PhD programme is equivalent to 180 ECTS points and normally takes the form of full-time studies; however, the institutions may lay down rules providing for part-time studies.

The university may collaborate with foreign universities in order to offer degree programmes in the context of Erasmus Mundus EU study programmes whereby the individual components of the degree programme are completed at the university and at one or more of the participating foreign universities subject to agreement between the universities in question (Erasmus Mundus Master's degree programmes).

3.4.1.5. Language of instruction

The language of instruction in higher education institutions is Danish. Some programs are taught in English but they are paid. These programs are intended primarily for foreign students in mobility [35].

Danish legislation provides for offering a wide range of programs offered abroad by Danish universities with and without cooperation agreements with universities in these countries, joint programs, Erasmus-Mundus programs and programs within off-site institutions [3].

3.4.1.6. Programs offered abroad

According to the University Act [3, art. 8] universities in Denmark have the right to provide research-based educational programs for all three levels outside the country as well. Programs can be complete or partial. These programs are offered in consortium with other local universities or independently. University's responsibilities, rules of organization of extensions and quality assurance are specified in details in the order of the Minister [5, 6].

Conclusions

1. Four types of higher education institutions: professional academies; colleges that offer professional undergraduate programs; universities that offer programs at three levels – bachelor, scientific master and PhD; university institutes specialized in arts. Universities can provide full-time and part-time programs, can form foreign subsidiaries jointly or independently. A new state institution is established by Government decision.
2. The ministry lays down general rules governing education, including forms of assessment, examinations and external examination; titles awarded in connection with degree programmes; and on admission to and enrolment into degree programmes. The initiative to create a new program usually comes from a teacher or a group of teachers forming the program team. At the faculty there is a person with legal experience in the field of legal educational regulations who helps the team to create the package of documents. The dean signs the package after rigorous judicial scrutiny. The program is approved by the dean, and then it is subject to evaluation at the Academic Council level.
3. Drafting and approval of the Master programs lies totally on university's competences.
4. The PhD programme is a research programme aiming to train PhD students at an international level to undertake research, development and teaching assignments in the private and public sectors, for which a broad knowledge of research is required. The

institutions may award the PhD degree within fields within which they carry out research and within which they have set up a PhD school, either independently or in cooperation with other institutions covered by the ministerial order.

5. At all programs, studies are in national language. In parallel, programs can be established with the use of English, especially at the Master's and Doctorate level at the institution's decision.

6. Universities in Denmark have the right to provide research-based educational programs for all three levels outside the country as well.

3.4.2. Admission to studies

In accordance with the University Act of Denmark [3, art. 8a] for degree programmes offered by the universities, the minister may lay down rules requiring that communication between the university and enrolled students, including PhD students, as well as applicants to the university's degree programmes must take place digitally, in full or in part. The minister may also lay down rules prescribing obligatory use of a specific digital system and secure identification. The minister may lay down rules requiring that students' evaluations of the instruction they receive must be published on the university's website.

3.4.2.1. Procedures for admission to Cycle I - Bachelor. Commitment of the Government concerning the admission

Access to higher education programs at the first cycle, Bachelor, have graduates of upper secondary school (usually after 12 years of study). Access also depends on specific requirements: such as, the particular combination of subjects taken at school or the level of grades / marks. At some programs there may be provided entrance exams / aptitude tests [3].

Admission capacity: According to the rules on free education, it is the responsibility of the university to decide how many students it wants to admit at each Bachelor program, except when the Ministry of Science sets an annual limit for admission (see art. section 4 of the Act of University). For study programs with free contribution, the university establishes the admission capacity, based on the possibility to provide quality teaching based on adequate research using qualified teachers and sufficient research base. In this context, the university should also consider that the number of admitted students must be in accordance with the needs of society. Applicants with a master's degree (Candidatus) may be admitted at an undergraduate program only if there are vacant places.

Admission to an undergraduate program requires: prior completion of upper secondary education, compliance with specific requirements for admission regarding the grades (level grades: A, B, C), and compliance with all requirements of the degree. In addition, admission may require the applicant to pass an entrance examination in accordance with rules established by the university [7, art. 2, 4].

Specific admission requirements are set by the Ministry of Research / Ministry of Education on the recommendation of the university. Any new specific requirements regarding admission are notified, made public at least two years before the entry into force.

Conditions for admission to universities in Denmark are quite flexible [7, art. 5, 6, 7] and have the purpose to be enrolled to study all those who are able to complete an undergraduate program. At places where there are more applicants a competition is organized on quotas - three categories of candidates. Quotas are set by the university.

Organization of admission - Application and registration procedures are established by the Ministry of Research in accordance with the requirements determined by the university [7, art. 23]. Application is online. Some institutions may make the registration by themselves, but under the control of the Ministry.

Applications for admission through basic quotas shall be submitted electronically via the admissions portal www.optagelse.dk, unless the university has accepted that applications may be submitted in other ways, cf. the ministerial order on digital communication in connection with applications for admission to higher education programmes [7, art. 14].

Applications for admission may be made to up to eight of the admission areas appearing from the admissions portal www.optagelse.dk.

The applicant shall submit the application form and enclose documentation for the basis for admission to the educational institution(s) to which the applicant wishes to apply in order of priority. Where the applicant has not received a certificate etc., documentation for the basis for admission shall be enclosed with the application at the admissions portal www.optagelse.dk prior to the expiry of the deadline for application or by a later deadline fixed by the university at the latest.

Applications for admission through special quota (candidates with problems) shall be made in accordance with rules laid down by the university and published on the university's website.

A student, during his/her studies, may require switching to another undergraduate program at the same or another university. Transfer documents from the same undergraduate program to another university shall apply for admission under the rules outlined in [7, art. 28]. The same conditions apply to applicants who have previously been enrolled in a program without completing it and wishing to be admitted to the same program or another undergraduate program at the same university or another university.

3.4.2.2. Procedures for admission to Cycle II and III

The ministerial order [8] shall apply to admission requirements, admission, enrolment and leave concerning master's (candidatus) programmes (*kandidatuddannelser*).

The university may enroll students in a Master's degree programme and a PhD degree programme concurrently.

Admission to a master's (candidatus) programme shall require a relevant bachelor degree or other relevant Danish or foreign qualifications at the same level. The admission requirements for the individual master's (candidatus) programme shall appear from the curriculum for the programme. Any introduction of stricter admission requirements shall be subject to a minimum notice of one year before coming into effect.

Under special circumstances the university may register students who are admitted to and enrolled on a bachelor programme for subjects, subject elements and tests totalling up to 30 ECTS credits on a master's (candidatus) programme where the university deems that the student has the academic competencies to complete and pass the bachelor programme and, at the same time, take subjects or subject elements on the master's (candidatus) programme.

The admission requirements for the individual master's (candidatus) programme shall be laid down by the university. Further, the university shall decide on the application and admission procedure, including deadlines, and publish relevant information on its website.

If a study program or many parts of it are offered in English, the applicant must document English language skills with at least a B level before starting the program [8, art. 6].

For study programs with free contribution, the university establishes its admission capacity, taking into account the possibility to provide appropriate research-based teaching using skilled teachers and respective capabilities. In this context, the university must also take into account that the number of admitted students must be in accordance with society's need for education in the relevant subject. The Ministry sets quotas only for specialties related to medicine, dentistry, veterinary medicine [8, art. 8, 9, 10]. Organization of admission to Masters is all about university's power.

Admission to the PhD programme is based on a Master's degree or equivalent [9]. The university may decide to let the PhD programme start in connection with a Master's programme; however, it must be ensured that the entire study programme has the scope and level described. The university lays down rules thereon. The institution decides who is to be admitted as PhD students. The institution's rules must stipulate the criteria on which admission is based. The PhD student is enrolled administratively on the PhD programme.

3.4.2.3. *Admission of foreign students*

Admission of foreign applicants is done based on national studies documents nostrified by the Danish Agency for Evaluation of foreign qualifications (Lov om af vurdering udenlandske uddannelseskvalifikationer [7, art. 3, 21]). Admission rules for foreigners are more complicated: there shall be assessed their knowledge of the Danish / English language and professional skills [7, art. 8].

3.4.2.4. *Formation of contingent*

Formation of the contingent of students is entirely the responsibility of the internal structures of the university. Professional orientation activities, recruitment of local and foreign students is one of the duties of each department.

Conclusions

1. The Government approves quota for admission to study programs depending on the capacity of university structures to ensure quality education based on research.
2. Admission to an undergraduate program is done based on general requirements (completion of upper secondary education with a certain level of grades and specific requirements formulated by the university and approved by the ministry (the average grade or level of grades in certain subjects, passing an admission examination or aptitude test). Any new specific requirements regarding admission are notified, made public at least two years before the entry into force. Application is online. The purpose of the admission is to enroll to study all those who are able to complete an undergraduate program. There are prescribed general rules of transition from one program to another, switching to another university, return to studies.
3. The specific conditions for admission to the MA and PhD are determined by university at the level of study program. Organization and admission procedures are the responsibility of the university.
4. Admission of foreign students is carried out by universities' admissions committees. Not quotas are imposed on admission. Specific requirements for foreign applicants refer to the knowledge on the Danish / English and specialized skills.

3.4.3. Recognition of studies and qualifications

Danish legislation on assessment and recognition academic and professional recognition of foreign qualifications in Denmark is governed by various regulations [16-18].

Assessment of foreign qualifications: Consolidated Act No. 371 of 13 April 2007. On the basis of the Act, the following ministerial orders have been made. Order No. 602 of 25 June 2003.

The Assessment of Foreign Qualifications Order has been amended by: Qualifications Board Order no. 447 of May 2007.

Professional recognition: Consolidated Act No. 189 of 12 February 2010.

On the basis of the Act, the following ministerial order implements parts of the European Directive 2005/36/EC on the recognition of professional qualifications: Order No. 575 of 1 June 2011 on the recognition of professional qualifications etc.

The coordinating function for the implementation of the European Directive is handled by the Danish Agency for universities and Internationalization (hereafter the Agency). As the coordinating authority, the Agency is responsible for coordinating the competent public authorities' activities and for ensuring that the Directives are implemented in a uniform manner in the vocational areas and professions in question.

3.4.3.1. Recognition of study periods undertaken abroad

The rules for the recognition of study periods done abroad and obtained ECTS credits are included in the curriculum of the study program [33, art. 5.2, 34, art. 5.2, 35, art. 17.1].

3.4.3.2. Recognition of documents of studies done abroad

The procedures for recognition of foreign qualifications are regulated by and founded on the Assessment of Foreign Qualifications Act, adopted by the Danish Parliament in 2007. The objective of the Act is: “to secure access to have foreign qualifications assessed with a view to easing access to the Danish labour market and the Danish education system and to improve the possibility of obtaining credit and foreign qualifications within a Danish programme of education” (Part One of the Consolidation Act).

It is up to the individual employers to decide whether they can use the educational qualifications and the occupational experience achieved outside Denmark. In addition, the assessment of foreign qualifications can serve the purpose of obtaining admission to vocational training, upper secondary education and to higher education. It is the general rule that the individual educational institution decides on the admission of applicants with foreign qualifications. The educational institution must, however, use any assessment of foreign qualifications by the Agency as a basis, when deciding whether the foreign qualification satisfies the general entry requirements.

Conclusions

1. The rules for recognition of credits and periods of studies done in another university in the country or abroad shall be determined by the university and are component parts of the respective curricula of study programs.
2. The procedures for recognition of foreign qualifications are regulated by the Assessment of Foreign Qualifications Act. The objective of the Act is: “to secure access to have foreign qualifications assessed with a view to easing access to the Danish labour market and the Danish education system”. It is up to the individual employers to decide whether they can use the educational qualifications and the occupational experience achieved outside Denmark.

3.4.4. Accreditation of study programs

The University Act [3, art. 3] provides: the university is free to decide which research-based degree programmes it wishes to offer in Denmark within its academic scope. The programmes offered must be accredited by the Accreditation Council (see the Act on the Accreditation Agency for Higher Education [16]). Special cases in which some components of a degree programme are offered at a foreign university (off-site instruction) are also considered courses offered in Denmark under the first sentence above. The Minister of Science, Technology and Innovation (MSTI) stipulates the exact rules regarding off-site instruction.

If an existing degree programme at a university is not accredited or loses its accreditation (see [16, section 10] of the Act on the Accreditation Agency for Higher Education), the university

in question may not admit students to the degree programme. In such cases, the Minister is responsible for determining a plan to allow students already enrolled in degree programmes referred to in the first sentence above to complete their studies. In this context, the Minister may direct other universities to admit these students or take over the responsibility for their studies at the university in question.

At present, after the first external evaluation and accreditation of study programs, it is examined the issue of transition to evaluation of program clusters and universities as a whole (it is a general trend for EU countries). Separate assessment of study programs will probably be entrusted to university as internal accountability.

3.4.4.1. Internal quality assurance structures

The structure and functions of the continuous quality assurance system are predetermined by criteria set out in The University Act [3, Article 3], and Ministerial Order “Criteria for the Relevance and Quality of University Study Programmes and on Procedures for Approval of University Study Programmes” [17, chap. 5] (Continuous internal quality assurance of the study programme). The institution providing study programs must demonstrate that it has:

- ✓ Policy and procedures for quality assurance.
- ✓ Approval, monitoring and periodic review of programmes and awards (cf. the University Act [3]).
- ✓ Assessment of students (cf. the Examination Order [6a], the Grading Scale Order [6b]).
- ✓ Quality assurance of teaching staff (cf. the Order on Admission and Enrolment [9]).
- ✓ Learning resources and student support (cf. the Order on Admission and Enrolment [6]).
- ✓ Information systems.
- ✓ Public information (cf. the Act on Transparency and Openness in Education).

As an example can be examined the quality assurance structure of Aalborg University [30].

3.4.4.2. Methodology, evaluation criteria, procedures

For external evaluation and accreditation of study programs (existing and new ones) there was created in 2007 the Accreditation Agency for Higher Education (AAHE) [16, article 1]. The agency was created by the Ministry MSTI as independent public body and consists of the Accreditation Council (AC), the Council Secretariat and the Academic Secretariat with evaluation functions.

For an existing program, the Academic Secretariat (AS) forms an Accreditation Panel of relevant experts including foreign guests. Based on the results presented by the Panel, AS drafts the assessment report. The validity period of accreditation is determined by the AC, usually 4-5 years.

For new programs, AS drafts an evaluation report based on the documents submitted by the institution. In some cases the Council may decide to form an evaluation panel.

Accreditation is mandatory for all programs. State institutions' accreditation is the basic criterion for funding from the budget [9, art. 3 (1)].

Program's external evaluation procedures and quality and relevance criteria are approved by order of MSTI [16, Appendix 1]. Evaluation is based on five fundamental criteria:

1. Demand for the study programme in the labour market;
2. The study programme must be based on research and connected with an active research environment of high quality;
3. Academic profile of the study programme and learning outcome targets;
4. Structure and organisation of the study programme;
5. Continuous internal quality assurance of the study programme.

A detailed description of the performance criteria and the stages of external evaluation and accreditation procedures of existing and new programs, can be found in "Guidelines on application for accreditation and approval of existing university study programmes" [4c] and "Guidelines on application for accreditation and approval of new university study programmes" [4d].

The Accreditation Council makes decisions concerning accreditation, conventional accreditation or non-accreditation. The Council consists of the Chairman, appointed by the Minister and eight members appointed at the proposal of MSTI (3 pers.), MEd (3 pers.), MCult (1 pers.), Students Association (1 pers.). Eligibility period - four years, the student - one year.

The Council developed criteria for relevance and quality of study programs, which were approved by order of MSTI [3]. Based on these criteria, from 1 January 2010, all higher education programs offered by the ministries mentioned above are evaluated.

The Council makes decisions based on the report prepared by the operators appointed by the Council for programs provided by institutions subordinated to MSTI or by the experts of the Danish Institute for Evaluation (EVA).

In Denmark the process of accreditation of institutions started. Repeated evaluation and accreditation of programs will entrust universities. Only new programs shall be subject to the accreditation procedure.

3.4.4.3. Freedom in the choice of external quality assessment body

Regarding higher education programmes under the Ministry of Science, Technology and Innovation: ACE Denmark prepares the accreditation report, and the Accreditation Council makes the accreditation decision. Due to academic considerations or in order to test the

competitiveness of ACE Denmark, the Accreditation Council *may decide to use an internationally recognised institution other than ACE Denmark for the preparation of accreditation reports*. On its own initiative or following a request from a university, the Council may furthermore base its accreditation decision fully or partly on an accreditation report from another internationally recognised institution, to the extent that the report is prepared in accordance with the criteria for quality and relevance laid down by the Ministry.

3.4.4.4. Relations of cooperation of the accreditation body with the Ministry of Education in the accreditation process

The Ministry appoints the Director of the Accreditation Agency, approves the criteria for relevance and external evaluation procedures of the study programs. The Accreditation Council organizes the external evaluation, makes decisions concerning accreditation. The Ministry decides on the continuation or termination of funding of nonaccredited programs of state universities or termination of the activity of nonstate institutions.

Conclusions

1. The structure and functions of the continuous quality assurance system are predetermined by criteria set out in The University Act, and Ministerial Order “Criteria for the Relevance and Quality of University Study Programmes and on Procedures for Approval of University Study Programmes”.

2. For external evaluation and accreditation of study programs (existing and new ones) there was created the Accreditation Agency for Higher Education by the Ministry MSTI as independent public bod. Program’s external evaluation procedures and quality and relevance criteria are approved by order of MSTI. Evaluation is based on several fundamental criteria: demand for the study programme in the labour market; the study programme must be based on research and connected with an active research environment of high quality; continuous internal quality assurance of the study programme.

3. On its own initiative or following a request from a university, the Council may furthermore base its accreditation decision fully or partly on an accreditation report from another internationally recognised institution, to the extent that the report is prepared in accordance with the criteria for quality and relevance laid down by the Ministry.

4. The Ministry appoints the Director of the Accreditation Agency, approves the criteria for relevance and external evaluation procedures of the study programs. The Accreditation Council organizes the external evaluation, makes proposals, and the Ministry decides on the continuation or termination of funding of state nonaccredited programs or termination of the activity of nonstate ones.

3.4.5. The National Qualifications Framework (NQF)

3.4.5.1. The body responsible for NQF in the country

A qualifications framework for higher education has been implemented in Danish accreditation legislation. Denmark has had a national Qualifications Framework for Higher Education since 2003. The framework has been widely implemented and used by institutions of higher education.

The qualifications framework has been revised on the basis of evaluations of the knowledge and practical experience gained by the higher education institutions having implemented the framework. Approved by the Minister of Education and the Minister for Science, Technology and Innovation, the present qualifications framework [22] came into force on 1 July 2008. The qualifications framework has been certified and found compatible and in alignment with the overarching framework of qualifications for the European Higher Education Area, the Bologna Framework. This means that, from 2010, Danish institutions can refer to a level in the Bologna Framework in the Diploma Supplement.

The qualification framework is part of the Danish framework for lifelong learning, which is a comprehensive, systematic overview of officially approved degrees and certificates that can be taken in the Danish education system. Degrees and certificates are graded at the 8 levels on the basis of the knowledge, skills and competences achieved on the education programme. For example, vocational degrees, diploma degrees and master degrees are graded at levels 5-7. Certificates are awarded in the rest of the education system. Certificates are graded at levels 1-5.

The Danish qualification framework is comparable with EQE. This makes it easier to understand, compare and recognise qualifications across Europe.

National Qualifications Framework of Denmark [22] includes 8 levels of qualifications, four of them relate to higher education: Academy Profession level (5), Bachelor's level (6), Master's level (7), PhD level (8). These levels are presented in terms of descriptors: Knowledge and understanding, Skills, Competences. In the second part of the Qualifications Framework are presented descriptors / general requirements: Knowledge field, Understanding and reflection level, Type of skills, Evaluation and decision-making, Communication, Action space, Collaboration and responsibility and Learning for ordinary degrees of the Danish higher education. There are also defined the limits for the period of education expressed in ECTS, admission requirements, the prospects for further education, type of institution offering these degrees.

In [23, Chapter 4] is presented the Danish system of adult education and qualifications that can be achieved at all levels of education. The purpose of these programs is to complete studies of adults or training specialists in narrow fields required by the labor market.

NQF [5b tab. 3] defines the generic descriptors for three types of degrees offered by the higher education system for adults (Academy Profession Degree, Diploma Degree, Master Degree).

The Coordination Point for the EQF was set up under the auspices of the Danish Agency for International Education. The Danish Coordination Point is responsible for ensuring

transparency between the NQF and the EQF and ensuring access to information about Danish qualifications and their referencing in relation to the EQF.

The national guidance portal (www.uddannelsesguiden.dk) contains a database with information about all publicly validated education programmes and qualifications in Denmark, including type, duration, credit points, providers, admission requirements, detailed information about programme aims, content, structure and examinations, further education possibilities and typical job or employment possibilities.

3.4.5.2. Participation of universities in the development of new qualifications

The inclusion of certificates and degrees into the NQF is based on an assessment of the learning outcomes that the individual degree/certificate documents in relation to the level descriptors of the framework [23, p. 5.4.2].

The assessment of new qualifications is to be based on one of the two principles: **best fit** – is used when referencing qualifications at levels 1-5 in the NQF. This applies to both certificates for qualifications and certificates for supplementary qualifications; **full fit** – is used when referencing qualifications at levels 6-8 in the NQF. The learning outcome of a qualification must correspond to the level descriptor, in terms of knowledge, skills and competences, for the level to which the qualification is referenced. All public recognised qualifications at level 6-8 has by law to be accredited as higher education degrees and thereby included in NQF-HE and the NQF on the basis of full-fit, which are the basis for the accreditation.

Inclusion of a qualification into the NQF-HE takes place when a programme leading to the qualification is accredited. An accreditation is an assessment of whether an education programme leading to a given qualification meets external, predefined criteria for quality, relevance and academic level.

The general competences being determined, the initiative of introducing new qualifications often comes from departments / institutes and program committees, which are formed freely. The Ministry and the QA Centre engage in the external evaluation and approval of operation.

3.4.5.3. How are NQF requirements reflected in the study programs (compulsory provisions, internal control procedures, external evaluation)?

Universities have to develop (design) study programs and the implementation process so that competences determined by descriptors be achieved by the student. Requirements defined above will serve as the final assessment criteria and indicators of studies for drawing up the self assessment and external evaluation reports for the accreditation of the program.

3.4.5.4. Educational standards

Descriptors for higher education qualifications (degrees), presented in Table 2 of the NQF [22], are used as reference quality standards / criteria both at the development and the evaluation and accreditation of study programs.

In [16, Article 3 (3)] it is stated: the descriptions of bachelor programmes, master's programmes (candidatus) and master's programmes (type descriptions) in the Qualifications Framework for Danish Higher Education (Kvalifikationsrammen for videregående uddannelser) shall be applied in connection with the assessment of the learning outcome targets of the study programmes.

Conclusions

1. The Danish qualifications framework has been certified and is compatible and in alignment with the overarching framework of qualifications for the European Higher Education Area, the Bologna Framework. The Danish qualifications framework is comparable to EQF. National Qualifications Framework of Denmark includes 8 levels of qualifications, four of them relate to higher education: Academy Profession level (5), Bachelor's level (6), Master's level (7), PhD level (8). The Coordination Point for the EQF was set up under the auspices of the Danish Agency for International Education.
2. The inclusion of certificates and degrees into the NQF is based on an assessment of the learning outcomes that the individual degree/certificate documents in relation to the level descriptors of the NQF.
3. Universities have to develop (design) study programs and the implementation process so that competences determined by descriptors be achieved by the student. These requirements serve as the final assessment criteria and indicators of studies for drawing up the self assessment and external evaluation reports for the accreditation of the program.
4. Descriptors for higher education qualifications (degrees), presented in Table 2 of the NQF, are used as reference quality standards / criteria both at the development and the evaluation and accreditation of study programs.

3.4.6. The content and implementation of the study program (organization of studies)

3.4.6.1. Designing the content of study programs

University study programs in Denmark are usually designed at the initiative of the research groups with high results, based on human and material potential already obtained from research.

Each program is subordinated to a program team subordinated to a department (school) in the faculty. The basic document for a study program is curriculum that includes the following sections: legal basis (orders or ministerial acts, faculty and board of studies to be affiliated at); Admission requirements, Degree offered, temporary duration and profile competencies (knowledge, abilities, professional skills); Structure on semesters and modules; Description of the modules (prerequisites, objectives, activities, forms of examination, evaluation criteria); Rules regarding written work, including Bachelor thesis; Rules on transfer of credits, including the possibility to choose the modules component parts of another program at a university in Denmark or abroad, Rules that refer to the progress of Bachelor / Master programs, realization of the projects, examination rules.

The curriculum is developed following the provisions of legal acts issued by the Ministry: The Universities Act [3] Examination Order, Ministerial Order regarding study programs, the order of admission [7, 8], the order of the Minister regarding grading scale [23] and normative acts at institution and faculty level.

Bachelor and Master programs are structured in modules and are organized on the principle of problem-based learning and projects [37], principle that deserves attention. In Engineering study programs, realization of projects are core activities and represents a fundamental structure.

3.4.6.2. Allocation of tasks among academic structures

A study program is provided by the program team within a department, but for some modules use is made of other departments such as for teaching mathematics modules. It is clear that the majority of modules are provided by the program team that conducts research and designed program content. For some modules / component elements there are invited foreign scientifically renowned professors [Visiting Professor]. An important stake is on the participation of representatives of economic and state structures as providers of problems and projects for the organization of research based studies.

3.4.6.3. Internships

We did not find documents that refer to internships of students in cycle I and II, but as a result of the analysis of several curricula of programs provided by vocational Academies, colleges, Bachelor and Masters degree we can conclude: programs offered by vocational Academies provide a deep professional training (internships have a total substantial duration), at undergraduate (Bachelor and Master) programs in colleges professional orientation is also evident (one semester, 15-20 %), while at the research bachelor and master programs in universities internships in enterprises are missing or are much more modest.

3.4.6.4. Final evaluation

In the Danish system of higher education, the examination is specific both at the final phase of the study programs and at the evaluation of semester modules. One semester of study usually contains 4-5 modules with 5, 10 or 15 ECTS. Of these, at least one (10 or 15 credits) will have external examination, other modules are subject to internal examination.

Internal examinations are assessed by one or more teachers (internal examiners) appointed by the university from among the teachers at the university. External examinations are assessed by one or more internal examiners and by one or more external examiners appointed by the Danish Agency for Universities and Internationalisation.

Ministerial Order [23, Section 20 (4)] provides: External examinations must cover the important parts of the programmes, including the bachelor project, master's (candidatus) thesis and master's project. At least one-third of a programme's total ECTS points must be obtained at external examinations. The teacher of the course in question assesses the student's course participation.

The university may conduct examinations at a Danish representation or at other locations abroad, provided the reason for doing so is that the student is unable to participate in the university's examinations in Denmark for practical or financial reasons and if the student and the exam location reach an appropriate agreement.

The assessment consists of a grade based on the 7-point grading scale or the assessment Pass / Fail or Approved / Not approved. Bachelor projects, master's (candidatus) theses and master's projects are assessed according to the 7-point grading scale.

The Bachelor project, appreciated with 15 credits, is carried out in groups of up to 4 students. The project at the specialization *Mechatronics*, for example [23], takes its starting point in the design of a mechatronic product to address a given problem. The student may choose the type of system / component, e.g. an electric fan to control air flow or temperature of critical areas of a solar-heated room, an electric shutter to control light in offices, or the like. The content may also be "Reverse Engineering" of a successful mechatronic design.

A problem must be analysed and different solution concepts, generated, and assessed in terms of dynamic performance, complexity, expected costs, etc. Based on the analysis, the most promising concept will be selected and designed in detail. During the design phase, models of the system will be constructed and used in the design process for dimensioning of actuators, controllers, etc. It is important that the system be designed as a unified whole, where the interaction between the different technologies is actively exploited. Special emphasis is placed on the controller design (analog / digital), and implementation of the controller should be an embedded part of the system design and not an "after-thought add-on".

The product will be manufactured in the laboratory and the operation and performance subsequently verified by experiment.

Scientific theory must be included as part of the project, e.g. by making an assessment of the scientific theories and methods that are used throughout the project.

Master thesis, worth 30 credits (lasting one semester), is examined externally, and performed individually or in groups of 2-3 people (see the example of the Faculty of Engineering and Science of AAU [31]). The final project may study new subjects or be an extension of the project work from previous semesters. The subject matter will remain in the area of Bachelor specialization, for example, mechatronic control engineering. The project may be of theoretical or experimental nature, and will often be in collaboration with an industrial company or other research institution performing research in the area of mechatronic control engineering, for example. Exam format: Individual oral examination with external adjudicator, in accordance with procedures established by the faculty.

Conclusions

1. University study programs in Denmark are usually designed at the initiative of the research groups with high results. The curriculum is developed following the provisions of legal acts issued by the Ministry. Programs are structured in modules and are organized on

the principle of problem-based learning. In Engineering study programs, realization of projects are core activities and represents a fundamental structure.

2. A study program is provided by the program team within a department, but for some modules use is made of other departments such as for teaching mathematics modules. An important stake is on the participation of representatives of economic and state structures as providers of problems and projects for the organization of research based studies.

3. Programs offered by vocational Academies provide a deep professional training (internships have a total substantial duration), at undergraduate (Bachelor and Master) programs in colleges professional orientation is also evident (one semester, 15-20 %), while at the research bachelor and master programs in universities internships in enterprises are missing or are much more modest.

4. In the Danish system of higher education, the examination is specific both at the final phase of the study programs and at the evaluation of semester modules. One semester of study usually contains 4-5 modules with 5, 10 or 15 ECTS. Of these, at least one (10 or 15 credits) will have external examination, other modules are subject to internal examination. The Bachelor project, appreciated with 15 credits, is carried out in groups of up to 4 students. Master thesis, worth 30 credits (lasting one semester), is examined externally, and performed individually or in groups of 2-3 people.

3.4.7. Employability

3.4.7.1. Occupational framework (ISCEO). The link between the level of studies - qualification

The existing links between the education level and qualification levels is explicitly set by the Danish qualifications framework [3, art. 9].

3.4.7.2. Locul masteratului și doctoratului în rețeaua ocupațională

Master's is oriented towards research and continuing doctoral studies.

3.1.7.3. Structuri de ghidare in carieră (nivel de stat, nivel instituție)

According to [3, art. 9] the university must offer students guidance on the degree programme in which they are enrolled and on post-graduation job opportunities. The university is obligated to give students who have been delayed, compared with the prescribed duration of a study programme, special guidance to assist them in continuing their education.

The Minister may lay down rules on guidance. In addition, the Minister is responsible for laying down rules specifying when the university must offer guidance and the extent thereof.

Conclusions

1. The existing links between the education level and qualification levels is explicitly set by the Danish qualifications framework.

2. Master's is oriented towards research and continuing doctoral studies.
3. The university must offer students guidance on the degree programme in which they are enrolled and on post-graduation job opportunities. The Minister may lay down rules on guidance.

3.4.8. Teachers' workload

3.4.8.1. Planning the didactic workload

Employment Act [24] provides workplaces possible in higher education of Denmark and the rules of appointment to these positions (assistant professor / researcher / postdoc, associate professor/senior researcher, professor with special responsibilities, and professor). The principal positions constitute coherent career progression. In the memorandum "Job Structure for Academic Staff at Universities 2007" [24] it is stipulated the structure of post tasks of teachers and scientific researchers in higher education.

The universities' core activities consist of conducting research and providing research-based teaching up to the highest international level. Therefore, the principal positions involve both research – including the duty to publish and disseminate academic material – and research-based teaching. The university may, furthermore, provide research-based Public Sector Consultancy, including guidance, public authority tasks, development work, communication and operational duties.

Teaching load of teachers is calculated starting from 37 hours per week. It consists of 490 hours of teaching per semester, which constitutes 60%, and 200 hours for scientific research (40%). For administrative work, a part of the academic load is reduced.

The Council of Studies calculates the number of units needed, announces the Employment Council dealing with searching and implementation of employment and enrollment procedures in accordance with the Employment Act [24] and the internal rules of the institution, developed under this Act. In [30] are given, as examples, employment rules at Aalborg University.

3.4.8.2. Distribution of the didactic workload

The didactic workload calculation and its distribution among team members of a program of study and research is an internal matter dealt by the team leader, see Aalborg University status [30, Section 15].

The revision of the job structure has taken place within the framework of the University Act [3, art. 2 (2)]. The job structure must, therefore, be implemented in accordance with the provisions of the Act, including among other things the provisions regarding researchers' freedom of expression and freedom of research.

Thus, it appears from section 2 (2) of the University Act that the university has freedom of research and shall safeguard this freedom and ensure the ethics of science.

The Head of Department may allocate specific jobs to specific employees. Members of the academic staff are free to conduct research within the strategic framework laid down by the university for its research activities to the extent that they have not been allocated such jobs.

It appears, furthermore, from the explanatory notes that the individual researcher enjoys freedom of research within the academic field of his/her employment, although bound by the obligations arising out of the employment. This means that the individual researcher can freely choose methodology, approach and subject within the research strategies of the university as laid down in the performance contract. By virtue of his/her powers to issue instructions, the Head of Department can instruct a researcher to address a particular task. To the extent that a researcher is not instructed to address any such tasks, a researcher is free to conduct research within the research strategies of the university.

As an example you can see what states / load structure of a lecturer [26, art.3.1]: the associate professorship consists mainly of research (including publication/academic dissemination duties) and research-based teaching (with associated examination duties). In addition to research and research-based teaching, the post may also include a duty to share knowledge with the rest of society – including participation in public debate. Furthermore, associate professors may be asked to manage research, provide guidance and supervision of assistant professors and researchers as well as take part in academic assessments. The university determines the exact ratio between the different responsibilities. The ratio may vary over time.

3.4.8.3. The accounting of performing teaching and research workload

There are no official documents describing the methodology of the calculation the workload related research. The number of publications shall be reported, as a rule. The Head of the department is the person who must ensure the quality of research in close connection with academic work. In section 15 (2) of the Statute of AAU [30] is stated: The Head of Department shall ensure quality and coherence in the research and teaching activities of the Department, ensure that the department can supply research based teaching for relevant study programmes, and shall, in cooperation with study board and Head of School, follow up on the evaluation of study programmes and teaching within the areas in which the department is supplying teaching.

Conclusions

1. Employment Act provides workplaces, the structure of position tasks of teachers and researchers in higher education. The universities' core activities consist of conducting research and providing research-based teaching up to the highest international level. It consists of 490 hours of teaching per semester, which constitutes 60%, and 200 hours for scientific research (40%). For administrative work, a part of the academic load is reduced.
2. The didactic workload calculation and its distribution among team members of a program of study and research is an internal matter dealt by the team leader.
3. There are no official documents describing the methodology of the calculation the workload related research. The number of publications shall be reported, as a rule. The Head

of the department is the person who must ensure the quality of research in close connection with academic work, in cooperation with study board and Head of School, follow up on the evaluation of study programmes and teaching within the areas in which the department is supplying teaching.

3.4.9. University scientific research

3.4.9.1. University structures involved in the organization of scientific research

The integration of research sector in universities is determined by the University Act [3] Employment Act [24] and the Memorandum [8b] which stipulate: Positions at sector research institutes that are integrated into universities must in future be filled according to the universities' job structure. Sector research posts such as researcher, project researcher, senior researcher, project senior researcher and research professor have, in this connection, been integrated into the university positions of assistant professor, associate professor and professor. At the same time, the post of postdoc has been integrated into the assistant professor position.

The new broad positions of assistant professor / researcher / postdoc and associate professor / senior researcher may be implemented in the job varieties described in the job structure. Positions at the level of associate professor will include associate professor and senior researcher. Positions at the level of assistant professor will include assistant professor, researcher and postdoc. The job title of the employee depends on the variety of the general position in which the person concerned is employed.

Transfer from one job variety to another may take place as a consequence of a change of tasks as these are allocated by the Head of the unit in question. It is recommended that changes to the composition of an employee's tasks should be discussed between the employee and his or her Head of unit. Similarly, in connection with transfer from one job variety to another, it should be taken into consideration that the employee should be ensured a composition of tasks enabling continued academic development. Transfer from one job variety to another requires no job advertisement. Pursuant to the Fixed-term Employment Act, job varieties are regarded as one general position.

3.4.9.2. Students' involvement in the process of scientific research (incentive mechanisms)

The very principle of organization of study programs at all levels in Denmark requires a harmonious link between education and research - research based learning. The importance of this point is particularly strategic for programs of universities. For example, in [31, Article 9] it is stated: Secure the nursing of exceptional research talents through a high intake of PhD-students, strengthen the university's doctoral schools and strengthen cooperation between these and similar schools, in order to secure the recruitment basis for academic staff, among other things, and to contribute with research capacity to the business world.

3.4.9.3. Scientific research of the didactic staff

Danish universities are required by law [3, Article 2 (2)] to ensure the freedom of research of the university and of individual researchers and ensure high standards of scientific ethics, and shall also disseminate knowledge of scientific methods and results and encourage university employees to participate in the public debate.

AAU Statute [30] in section 15 (2) sets: academic staff shall be subject to freedom of research within their own academic field of employment and may consequently carry out free research activity within the research strategic framework of the university during the time when they are not instructed to undertake other work. Academic staff must not be instructed, during an extended period of time, to undertake tasks for the entire duration of their working hours, so that in reality they are prevented from exercising their freedom of research.

Results of research in universities in Denmark are impressive. Aalborg University, which is the size of Technical University of Moldova, recorded in 2011: 3714 scientific publications, 47 inventions, 12 patents, conducted research funded in the amount of 1146 million Crone (154 million Euro), 716/439 budget funding / external funds; 960 doctoral students, 135 PhD theses defended. AAU experience in international scientific collaboration is of particular interest (see [32]).

3.4.9.4. Integrated research, education and business centers

In Denmark a part of university scientific research is conducted in specialized research institutes - component parts of universities. As an example, can be presented the Danish Research Institute in Constructions SBI, operating within Aalborg University ([www.http://aau.dk/en/organisations](http://aau.dk/en/organisations)). The institute deals with all subjects within constructions and buildings and develops research-based knowledge to improve buildings and the built environment. SBI identifies subjects that are important for professionals and decision-makers involved in building and built environment. And subsequently we communicate our knowledge to these groups. SBI has approximately 120 employees and an annual turnover of about 75 million DKK. Governing bodies of the Institute are appointed by the rector of the university in consultation with the deans and heads of departments [30, section 12, 13 and 24 (2)].

Conclusions

1. Scientific research is an indispensable part of the process of training specialists with higher education. The study programs can be formed only in the presence of adequate scientific potential (academic researchers and the appropriate material resources for research). The research is focused on the Department's thematic and is financed from the state and projects, non-budgetary research grants. Funds from non-budgetary grants together with grants from international collaboration are comparable in size to budgetary one.
2. Involving students in research is a fundamental principle of the Danish higher education. The special attention paid to PhD students, young researchers is a strategic direction of universities – which provides a good basis for recruitment of academic staff and increase research capacity of the institution.

3. Importance is given to results. Research conducted by a teacher must correspond to the strategic plan of research within the department and be appropriate to the field of study representative for the department.

4. In Denmark, the organization of Research Institutes (specializing in the field of a faculty or school) is practiced, which combines research with the academic process (transfer of knowledge acquired by the students).

3.4.10. The doctorate

3.4.10.1. The right to offer doctoral studies

In [9] are described requirements concerning: admission to doctoral studies, the structure of the study program, doctoral program content, program completion, doctoral thesis, the evaluation, correction of the thesis, PhD thesis defense procedure and conferring the degree of doctor. Article 25 of this document includes institutional rules regarding: admission to the doctoral program; the organization of the doctoral program; appointment of the main supervisor as well as any other supervisors, PhD students supervision rules, rules for writing, presentation and defense of the thesis. The University also sets rules on access to the PhD program. Rules should contain a provision to the extent that the institution may grant exemptions from the rules established by the institution. Institution rules and amendments thereto shall be made public on the institution's website.

The right to organize doctoral programs is attributed only to universities [9]. Granting the right to supervise PhD students – is the responsibility of the department in the university [9, art. 8].

3.4.10.2. Doctoral Schools

Doctoral studies shall be organized in doctoral schools at faculty or department level (see AAU Statute, sections 18 and 29 [30]). A PhD program comprises 180 ECTS credits. Performing the didactic activity by the PhD student is mandatory.

In Denmark industrial doctorate is practiced. In this case the costs are covered by a company and the theme of the doctoral thesis includes the research of important issue for the company.

The Content of the PhD programme [2, art.7] is set up in accordance with rules laid down by the institution. During the programme, the student is required to:

- ✓ Carry out independent research work under supervision (the PhD project),
- ✓ Complete PhD courses or similar study elements totalling approx. 30 ECTS points,
- ✓ Participate in active research environments, including stays at other, mainly foreign, research institutions, private research enterprises etc,
- ✓ Gain experience of teaching activities or other form of knowledge dissemination which is related to the student's PhD project,

- ✓ Complete a PhD thesis on the basis of the PhD project.

For each PhD student, the institution designates a principal supervisor who is responsible for the overall PhD programme. The principal supervisor must be a recognised researcher within the relevant field, be employed by the institution and affiliated with the PhD school.

On its own initiative or following an application from the PhD student:

- ✓ The institution offers the PhD student a teaching course and teaching guidance.
- ✓ The institution ensures that the required resources are available for the PhD student to complete the PhD programme as laid down in the student's PhD plan.
- ✓ The institution lays down rules for the supervision provided to the PhD student.

At regular points in time during the PhD programme, the institution must assess whether the PhD student is following the PhD plan and, if necessary, adjust the plan. This assessment is based on an opinion from the principal supervisor, who, after having consulted the PhD student, confirms that the PhD programme is progressing in accordance with the PhD plan or justifies, in writing, why adjustments are required.

3.4.10.3. Completion of studies, conferring of degrees

According to the University Act [3, Article 5] universities are entitled to offer doctoral degrees (PhD) in the respective fields of study and research.

The PhD thesis must document the PhD student's or the author's ability to apply relevant scientific methods and to carry out research work meeting the international standards for PhD degrees within the field in question. The institution lays down rules on the writing and submission of the PhD thesis [9, art. 11].

Upon the submission of the PhD thesis at the latest, the institution appoints an expert assessment committee composed of three members. The institution appoints a chairman from among the committee members. The members of the assessment committee must be recognised researchers within the relevant field. Two of the members must be external researchers, of whom at least one member must be from outside of Denmark, unless this is not practicable considering the subject in question. The PhD student's supervisors must not be members of the assessment committee; however, the principal supervisor assists the assessment committee without voting rights.

The PhD thesis must be defended publicly in accordance with rules laid down by the institution. At the defence, the PhD student or the author must be given the opportunity to explain his or her work and defend the PhD thesis before the members of the assessment committee. The institution must ensure that the PhD thesis is made available to the public in due time before the defence. The PhD degree may be awarded if the assessment committee submits a recommendation to that effect.

Offering the degree of Doctor (PhD) and “higher doctor” is one of the responsibilities of the Academic Council of the faculty (see section 24 of AAU Statute [30]).

3.4.10.4. Postdoctorate, habilitate

Higher doctor degree (doktorgraden) is similar to the degree of doctor habilitate, but the requirements in this case are much simpler.

The Minister lays down the rules concerning the acquisition of the higher doctoral degree (doktorgraden) [3].

Conclusions

1. The right to organize doctoral programs is attributed only to universities. Granting the right to supervise PhD students - is the responsibility of the department in the university.

The institution shall establish, based on The University Act, the rules regarding: admission to the doctoral program; the organization of the doctoral program; appointment of the main supervisor as well as any other supervisors, PhD students supervision rules, rules for writing, presentation and defense of the thesis. The University also sets rules on access to the PhD program.

2. Doctoral studies shall be organized in doctoral schools at faculty or department level. A PhD program comprises 180 ECTS credits. Performing the didactic activity by the PhD student is mandatory. In Denmark industrial doctorate is practiced. In this case the costs are covered by a company and the theme of the doctoral thesis includes the research of important issue for the company.

3. Offering the degree of Doctor (PhD) and “higher doctor” is one of the responsibilities of the Academic Council of the faculty.

4. Higher doctor degree (doktorgraden) is offered in Denmark which is similar to the degree of doctor habilitate, but the requirements in this case are much simpler than in RM.

3.5. Academic autonomy in Romania

3.5.1. Establishment and termination of study programs

3.5.1.1. Levels in higher education

Romanian National Education Act (LEN) [1] provides the following levels of higher education: bachelor, master and doctorate. There are also provided two forms of postgraduate studies: advanced research postdoctoral programs and postgraduate programs of training and continuing professional development.

Undergraduate studies correspond to a number between minimum 180 and maximum 240 ECTS, and is completed by level 6 of EQF / CEC of EQF / CEC. In full-time education, the

specific duration of undergraduate studies shall be, where appropriate, of 3-4 years and corresponds to a minimum of 60 ECTS for a school year. Duration of Bachelor programs for higher education in the fields of engineering sciences, legal sciences and pastoral theology is 4 years.

Master's degree programs are cycle II of university studies and end with the level 7 of EQF / EQF and of the National Qualifications Framework. They have a normal duration of 1-2 years and correspond to the minimum number of transferable study credits between 60 and 120. For professions regulated by rules, guidelines or best European practices, cycle I and cycle II of university studies can be offered merged with a duration of between 5 and 6 years in full-time education. Degrees obtained are equivalent to the master's degree.

Graduation or Bachelor Diploma of higher education graduates from the period before the implementation of the three Bologna cycles is equivalent to master's degree.

Master's degree programs are: a) professional master, oriented towards professional skills training; b) research master, oriented towards scientific research skills training. Learning conducted under the research master can be equated with the first year of study at the doctoral study programs. Research master is only in the form of full time education and can be organized within doctoral schools; c) didactic master, organized exclusively as full-time education.

Doctoral studies are the third cycle of university education and allow the acquisition of qualifications of the level 8 of the National Qualifications Framework. They follow a code of doctoral studies, approved by Government Decision.

The doctoral study program takes place in doctoral schools in the institutions organizing doctoral studies, IOSUD, recognized by MECTS (universities of category C according to the classifier).

Doctoral programs are of two types: a) scientific doctorate, which is to produce original scientific knowledge based on scientific methods, organized only in the form of full-time education. The scientific doctorate is a prerequisite for professional careers in higher education and research; b) professional doctorate in art or sport.

Postdoctoral programs of advanced research, see section 3.5.10.3.

Postgraduate training and continuing professional development programs. Such programs can be organized by those higher education institutions that have accredited at least their Bachelor's degree programs in the respective scientific field. The programs shall follow own rules of organization and development, approved by the university senate. Upon completion of the program, the organizing institution issues a certificate authenticating the professional competence specific to the program.

Public and private higher education institutions are established by law, in compliance with the legal provisions on accreditation and quality assurance in education. The initiative of setting up the higher education institution lies with the Government and the private and

religious institution – belongs to a foundation, association or a religious denomination recognized as such according to the law, called the founder.

3.5.1.2. Introduction of study programs at cycle I

The National Education Act ([1], atr. 150) defines: the accreditation of a Bachelor degree program and the establishment of the maximum number of students that can be enrolled in the program and which may be granted a certificate of completion is achieved by decision of the Government, following the external evaluation.

Requirements for the first cycle programs are determined by the National Qualifications Framework.

Eligible programs are listed in the National Register of Qualifications in Higher Education (NRQHE), which is updated annually and made public.

The degree conferred after promoting a Bachelor degree program is called bachelor's diploma, engineering diploma or, where appropriate, urbanist diploma and is accompanied by a diploma supplement in Romanian language and in a international language.

3.5.1.3. Introduction of study programs at cycle II

Higher education degree programs in one area can be organized by those higher education institutions that are accredited or provisionally approved for this purpose.

Accreditation for a university of a master's degree area with setting the maximum number of students that can be enrolled and who may be granted a certificate of completion is performed by Government decision, following the external evaluation performed by ARACIS or by another quality assurance agency.

Within the accredited or provisionally accredited area for master degree studies, the educational programs promoted are set annually by the university senate and communicated to MECTS to be published centrally.

Higher education institutions can establish partnerships with businesses, professional associations and/or public institutions to develop master's degree programs that meet labor market needs.

3.5.1.4. Introduction of study programs at cycle III

Doctoral study programs are organized in doctoral schools accredited or provisionally approved. Doctoral schools can be organized by a university or a university consortium or by consortia or partnerships that are legally established in a university or a university consortium and research and development units. Universities and partnerships or consortia organizing one or more doctoral schools accredited or provisionally approved are an institution organizing doctoral studies, IOSUD, recognized as such by MECTS on provisional authorization, accreditation and periodic evaluation.

Each doctoral school is evaluated individually for each domain, for accreditation. The evaluation of the doctoral school is based on the doctoral school's performance and the institutional capacity of IOSUD that the doctoral school is part of. The evaluation of doctoral schools is done by ARACIS or by another quality assurance agency based on CNCS reports on the quality of research and CNATDCU reports on the quality of human resources. The criteria system and the evaluation methodology are established by order of MECTS based on joint proposals of ARACIS, CNCS and CNATDCU. Each doctoral school is regularly evaluated once in five years [1, Article 158, paragraph 4].

Article 159, par. 6 of the NEA specifies: the training curriculum and the research program are determined by the doctoral supervisor and the doctoral school.

Doctoral studies can be organized in co-supervision, where the PhD student is working simultaneously under the guidance of a doctoral supervisor from Romania and a doctoral supervisor from another country or under simultaneous supervision of two PhD supervisors from different institutions in Romania, based on a written agreement between the organizing institutions involved.

3.5.1.5. Language of instruction

In Romania, education is a public service being conducted in Romanian language and in minority languages and foreign languages. In the national education system, official school and university documents, nominated by order of MECTS, are written only in Romanian. The other school and university documents can be written in the language of instruction [1, Article 10].

Conclusions

1. There are 3 levels of higher education: bachelor, master and doctorate. There are also provided two forms of postgraduate studies: advanced research postdoctoral programs and postgraduate programs of training and continuing professional development.
2. Requirements for the first cycle programs are determined by the National Qualifications Framework.

Programs become eligible when they are listed in the National Register of Qualifications in Higher Education (NRQHE), which is updated annually and made public.

3. Master degree programs in one area can be organized by those higher education institutions that are accredited or provisionally approved for this purpose. The educational programs promoted are set annually by the university senate and communicated to MECTS to be published centrally.
4. Doctoral study programs are organized in doctoral schools accredited or provisionally approved. Doctoral schools can be organized by a university or a university consortium or by consortia or partnerships that are legally established in a university or a university consortium and research and development units. Doctoral studies can be also organized in co-supervision.

5. Education is a public service being conducted in Romanian language and in minority languages and foreign languages.

3.5.2. Admission to studies

3.5.2.1. Procedures for admission to Cycle I - Bachelor. Commitment of the Government concerning the admission

Admission to degree programs ([1], art. 142):

MECTS develops annually a framework methodology for organizing admission to public and private higher education institutions from Romania. Each higher education institution develops and applies its rules to organize admission in degree programs offered under the framework methodology. The conditions of admission, including enrollment quotas must be made public each year by the university, with at least 6 months before entrance examination.

High school graduates with a baccalaureate diploma or an equivalent diploma can participate in admission to higher education, cycle I. Within their own methodology, higher education institutions may establish facilities for admission of students who have received awards during high school in school competitions and / or other national or international competitions.

Bachelor studies in the form of full-time education may be organized under funding from the state budget or a fee. MECTS allocates for bachelor studies in the form of full time education a number of grants financed from the budget for state universities (art. 15, al.5 [1]). A person may receive funding from the budget for a single bachelor program, one master program and one doctoral program.

3.5.2.2. Procedures for admission to Cycle II and III

MECTS allocates for master degree studies in the form of full time education a number of grants financed from the budget for state universities.

Graduates with a bachelor diploma or an equivalent diploma can participate in admission to higher education, cycle II.

The diploma conferred after promoting a master's program and successful defending of the dissertation thesis is called master's diploma and includes all the necessary information to describe the graduated study program, including the form of education. This is accompanied by the Diploma Supplement that is issued free of charge, in Romanian and an international language.

Doctoral studies are organized with funding from the state budget, for a fee or from other legal sources. MECTS allocates annually, by the Government decision, a number of multiannual doctoral grants for a period of at least 3 years. The doctoral grant includes the amount of the individual scholarship and the costs for the advanced education program and research program. These grants are adjusted by appropriate coefficients on disciplinary and professional areas of the doctorate. Grants are awarded through a national competition of

scientific projects among doctoral schools or national competition of scientific projects among doctoral supervisors, members of doctoral schools. Competitions are organized in coordination with CNCS.

The annual number of doctoral grants allocated to the two types of competitions and the methodology of the competition is determined by the order of MECTS.

Only graduates with master's diploma or equivalent have the right to participate in the competition for admission to doctoral studies.

3.5.2.3. Admission of foreign students

For admission to public and private higher education, for each cycle and study program, citizens of Member States of the European Union, Member States of the European Economic Area and the Swiss Confederation can candidate under the same conditions provided by law for Romanian citizens, including tuition fees.

The Romanian state grants annually, by Government decision, a number of scholarships for foreign students. These scholarships are awarded only to those universities and study programs that meet the highest quality standards, whether they are public or private (art. 206, [1]).

3.5.2.4. Formation of contingent

Mechanisms of formation of the contingent – pupils' orientation: various measures are undertaken at faculty, department level. These measures have become central to all universities given the reduction of the number of students.

Conclusions

1. MECTS develops annually a framework methodology and each higher education institution develops and applies its rules to organize admission in degree programs offered. Bachelor studies in the form of full-time education may be organized under funding from the state budget or a fee. MECTS allocates a number of grants financed from the budget for state universities.
2. MECTS allocates for master degree studies in the form of full time education a number of grants financed from the budget for state universities. Own admission methodologies are used.
3. Doctoral studies are organized with funding from the state budget, for a fee or from other legal sources. MECTS allocates annually, by the Government decision, a number of multiannual doctoral grants which include the amount of the individual scholarship and the costs for education and research.
4. For admission to public and private higher education, for each cycle and study program, citizens of Member States of the European Union can candidate under the same

conditions provided by law for Romanian citizens. Citizens of other countries are enrolled based on tuition fees.

3.5.3. Recognition of studies and qualifications

3.5.3.1. Recognition of study periods undertaken abroad

Article 149 of the Education Act establishes: the number of transferable study credits are the reference element that universities can use to recognize legal studies or study periods previously made in the same fundamental field for the purpose of equivalence and transfer of transferable study credits and possible continuation of studies in a study program.

For equivalence, continuation or completion of studies and recognition abroad of diplomas issued before the introduction of transferable credits system, using existing information in their own registry book, accredited higher education institutions may issue, upon request, documents in which they award a number of transferable study credits to the courses followed by the graduate. For this operation, higher education institutions may charge fees in the amount approved by the university senate.

It also specifies (Article 159, para. 4 [1]) that a doctoral school can recognize, according to its own rules of organization and deployment of doctoral studies and in accordance with this law, the completion of some previous doctoral internships and/or some scientific research internships, carried out at home or abroad, in universities or prestigious research centers and the recognition of some courses taken in the research master programs.

3.5.3.2. Recognition of documents of studies done abroad

MECTS organizes the recognition and equivalence of diplomas and certificates according to internal rules and in accordance with European standards; develops the methodology by which it can automatically recognize degrees and certificates obtained at universities in EU Member States as well as prestigious universities in other countries, based on a list approved and updated by MECTS; organizes the automatic recognition of university teaching positions and the quality of doctoral supervisor, according to its own methodology (art. 216, [1]).

Conclusions

1. The Education Act establishes that the number of transferable study credits are the reference element that universities can use to recognize legal studies or study periods previously made in the same fundamental field.
2. MECTS organizes the recognition and equivalence of diplomas and certificates according to internal rules and in accordance with European standards.

3.5.4. Accreditation of study programs

3.5.4.1. Internal quality assurance structures

The Education Act stipulates that quality assurance in higher education and university research is an obligation of the institution. Each university develops its own quality assurance system, defines responsibilities by levels: top management, faculty, department, teacher (see also OUG84 / 2005). The presence of the system and its functionality is one of the criteria for external evaluation of the institution (see also Annex to the MEd order no. 3928 / 21.04.2005 The quality assurance system at the level of higher education institution). In these legislative acts it is emphasized the importance of student participation in quality assurance of education and research [23-29].

3.5.4.2. Methodology, evaluation criteria, procedures

The external evaluation of study programs and universities, provided by art. 193 of the Education Ac, is performed for: a) temporary authorization and accreditation; b) ranking of study programs and classification of universities.

The evaluation for temporary authorization and accreditation is carried out by ARACIS or other agency registered in EQAR. The methodology and evaluation criteria are developed by ARACIS and meet international standards in the field [24].

The evaluation for ranking of study programs and classification of universities is based on an evaluation methodology proposed by MECTS and approved by Government Decision. The application of this methodology falls under the responsibility of the Ministry. The evaluation is performed periodically.

Universities are classified based on the evaluation referred to in paragraph (3) into 3 categories: a) universities centered on education; b) education and scientific research universities or education and artistic creation universities; c) advanced research and education university.

The evaluation for ranking is made by a consortium composed of: ARACIS, including student representatives, CNCS, CNATDCU and an international body, qualified in the field of classification and ranking of educational institutions, selected on a competitive basis.

For Bachelor and Master programs, the funding of state higher education institutions from public sources is differentiated by category of universities and depends on the position in the hierarchy of study programs, according to the ranking, based on a methodology developed by MECTS and approved by minister order. The state can fund programs of excellence in research and education from any category of universities.

The evaluation of study programs and higher education institutions is done periodically at MECTS initiative. The evaluation results are public to inform beneficiaries of education and for institutional transparency (art. 194, [1]).

Each university has an obligation to carry out, at intervals not exceeding five years, the internal evaluation and classification of departments on 5 levels of performance in research, according to a framework methodology developed by CNCS and approved by minister order. The evaluation and classification results are public. The University Senate, at Rector's

proposal, based on internal evaluation, may decide on the reorganization or dissolution of inefficient departments or institutes, without prejudice to the students.

The temporary authorization and accreditation of study programs is made separately for each form of education, each language of teaching and each geographic location in which it is conducted.

3.5.4.3. Freedom in the choice of external quality assessment body

For the external evaluation of study programs the institution may opt for services of the national agency for quality assurance, ARACIS, or another agency in the country or abroad, registered in the European Quality Assurance Register for Higher Education (EQAR) (art. 150, al. 1 [1]).

3.5.4.4. Relations of cooperation of the accreditation body with the Ministry of Education in the accreditation process

Quality assurance of higher education and university research is an obligation of the higher education institution and a fundamental task of MECTS (art.192, LEN). In performing this task, the Ministry collaborates with ARACIS, with other agencies listed in EQAR and with CNCS, CNATDCU, the Board of Ethics and University Management (CEMU) and other bodies with relevant expertise as required by law.

Annually, it is established by Government Decision and promoted by MECTS the Nomenclature of areas and study programs, areas and study programs temporarily accredited or authorized to function, the geographical locations of deployment, the number of transferable study credits for each study program, form of education or language of instruction, and the maximum number of students that can be enrolled, proposed by quality evaluation agencies that evaluated each program.

Conclusions

1. Quality assurance of education and scientific research is an obligation of the higher education institution. Each university develops its own quality assurance system whose presence is mandatory.
2. The evaluation for temporary authorization and accreditation is carried out by ARACIS based on the methodology and evaluation criteria developed by it according to international standards in the field.
3. For the external evaluation of study programs the institution may opt for services of the national agency for quality assurance, ARACIS, or another agency registered in EQAR.
4. The Ministry of Education collaborates with ARACIS, with other agencies listed in EQAR and with CNCS, CNATDCU, the Board of Ethics and University Management (CEMU) and other bodies with relevant expertise in quality assurance.

3.5.5. The National Qualifications Framework (NQF)

3.5.5.1. The body responsible for NQF in the country

National Qualifications Framework (NQF), approved by GD 918/2013 [30], establishes 8 levels of qualifications that can be acquired through formal education system and professional training in Romania and through recognition of learning outcomes acquired through non-formal and informal learning, from the perspective of lifelong learning. NQF also establishes the correspondence between levels, study documents that are issued, the type of education and training programs in Romania by which can be acquired the qualification levels and reference levels of the EQF. National Qualifications Framework for Higher Education (NQFHE) is developed based on the NQF.

Level 5, discussed repeatedly in RM, is of interest to us. Learning outcomes corresponding to level 5 are – comprehensive and specialized factual and theoretical knowledge in a field of work or study and the awareness of the limits of that knowledge – a broad range of cognitive and practical skills required to develop creative solutions to abstract problems - management and supervision of work or study situations where there is unpredictable change; self and others review and development of performance. This qualification is certified by a Graduation / Qualification Diploma and the Supplement of this certificate issued by a higher education institution alone or in partnership with training providers accredited for this purpose. Level 5 is obtained by short-term higher education graduates who passed the certification exam.

The National Council of Qualifications and Vocational Training of Adults, CNCFPA, subordinated to MECTS, is the National Qualifications Authority (NQA). The executive unit of this Council, UECNCFPA, established by GD 885/2010, provides legal, technical, economic, financial and logistical conditions for the operation of the Council. One of the tasks of UECNCFPA is administering the **National Register of Qualifications in Higher Education (NRQHE)**.

NRQHE is a software application developed as a national database, which includes all qualifications awarded by higher education institutions in Romania.

3.5.5.2. Participation of universities in the development of new qualifications

Universities can develop new qualifications which must comply with the NQF, be legally subject to external evaluation. According to art. 4, paragraph 3, of the Ministerial Order no. 5703 / 18.10. 2011 [31], "higher education institutions are required to record information regarding the qualifications they develop through their offer of study ...".

MO 5703 stipulates that NRQHE is developed in close connection with the NQFHE and is a tool for identification, registration, permanent consultation and updating of qualifications, namely degrees and certificates issued by higher education institutions. NRQHE is a common structure, involving NQA, higher education institutions, employers, professional associations, etc.

3.5.5.3. How are NQF requirements reflected in the study programs (compulsory provisions, internal control procedures, external evaluation)?

Education Act (Article 137 [1]) establishes: the curriculum of the university study program is consistent with the qualification profile defined in the National Qualifications Framework. The curriculum of a university study program is established so as to maximize the chances of obtaining the desired qualifications and is approved by the university senate. The concordance between curriculum and qualifications provided by the university study program is a mandatory criterion for assessing quality assurance.

3.5.5.4. Educational standards

Educational standards approved by MECTS are part of the Guide of external evaluation of study programs used by ARACIS.

Conclusions

1. The National Council of Qualifications and Vocational Training of Adults, CNCFPA, subordinated to MECTS, is the National Qualifications Authority (NQA). An executive unit provides legal, technical, economic, financial and logistical conditions for the operation of the Council and the administration of the National Register of Qualifications in Higher Education (NRQHE).
2. Universities can develop new qualifications which must comply with the NQF. Higher education institutions are required to record information regarding the qualifications they develop through their offer of study.
3. Education Act establishes that the curriculum of the university study program is consistent with the qualification profile defined in the National Qualifications Framework. The concordance is a mandatory criterion for assessing quality assurance.
4. Educational standards approved by MECTS are part of the Guide of external evaluation of study programs used by ARACIS.

3.5.6. The content and implementation of the study program (organization of studies)

3.5.6.1. Designing the content of study programs

The organization of study programs is the responsibility of higher education institutions, in compliance with legislation. For each cycle of study organized, the university senate approves its own organization and operation regulation, in accordance with general and specific national and international quality standards (art. 138, [1]).

The curriculum of the study program is initiated by one or more departments of the institution, and is developed in strict accordance with the qualification profile defined in the National Qualifications Framework and is approved by the university senate. The curriculum of a study program is established so as to maximize the chances of obtaining the desired qualification. Concordance between curriculum and qualifications provided by the study program is a mandatory criterion for assessing quality assurance.

A study program is legal if provisionally authorized or accredited and operates under the Act for authorization or accreditation. The organization and deployment of study programs that are not conducted legally shall be sanctioned with non-recognition of education for beneficiaries and a fine for the organizers, according to criminal law, and the immediate withdrawal by MECTS of the temporary functioning authorization or accreditation for the institution concerned.

3.5.6.2. Allocation of tasks among academic structures

A department specialized in the field is responsible for a study program or group of related programs but other departments may be also involved, as appropriate, in didactic activities.

3.5.6.3. Internships

Internships are mandatory in bachelor programs. Universities are required to provide a minimum of 30% of the required internship places, of which at least 50% outside universities ([1], art. 150, para. 4).

3.5.6.4. Final evaluation

According to art. 143 of the Education Act, the graduation examinations in higher education are: a) bachelor graduation exam for bachelor cycle or diploma exam for education in engineering sciences; b) dissertation exam for master cycle; c) examination of public defence of the thesis; d) certification exam for postgraduate programs of specialization type. Exams are organized and carried out only by accredited higher education institutions on the basis of their own regulation approved by the senate and complying with the Framework methodology approved by order of MECTS. Graduates of the study programs of higher education institutions authorized provisionally complete their studies through examination within the higher education institutions that have similar profile study programs, accredited, and designated by MECTS.

Tutors of bachelor, diploma and doctoral dissertation works are responsible, together with their author, for the originality of their content.

Educational diplomas and certificates awarded by higher education institutions, under the law, for the same study programs, regardless of the graduated form of education, are equivalent. The methodology for the organization of examinations, verified skills and knowledge, the correlation between learning outcomes and grades, diplomas and certificates awarded must be identical for any form of education corresponding to a particular study program in a higher education institution (art. 140 [1]).

Conclusions

1. The organization of study programs is the responsibility of higher education institutions. The curriculum of the study program is developed in strict accordance with the qualification profile defined in the National Qualifications Framework and is approved by the senate.

2. A department specialized in the field is responsible for a study program or group of related programs but other departments may be also involved, as appropriate, in didactic activities.
3. Internships are mandatory in bachelor programs. Universities are required to provide students with internship places.
4. The graduation examinations in higher education are: a) bachelor graduation exam for bachelor cycle or diploma exam for education in engineering sciences; b) dissertation exam for master cycle; c) examination of public defence of the PhD thesis and are conducted on the basis of a regulation approved by the senate.

3.5.7. Employability

3.5.7.1. Occupational framework (ISCEO). The link between the level of studies - qualification

The Occupational Code of Romania, similar to that of Moldova, lists and classifies occupations without reference to the level of education or competences required to exercise it.

In Annex. 2 of the Romanian National Qualifications Framework it is defined the correspondence between levels of qualifications of the Framework, study documents that are issued, the type of education and training programs in Romania by which may be acquired the qualification levels and the reference levels of the Common European Qualifications Framework (EQF).

The Education Act clearly defines what level of education is compulsory for teaching positions and auxiliary teaching positions at all levels of pre-university and university education system. Thus each ministry specifies (in the job description) the skills needed for the job.

3.5.7.2. Place of MA and Ph.D. in the occupational network

For education area, the place of the master student is well defined - the secondary school. The same was done in jurisprudence. In the Register of limited specialties at EU level there are also mentioned restrictions on educational level. For the rest, the employer decides what level of education, general and vocational competences are necessary for the performance of the planned function.

3.5.7.3. Career guidance structures (state level, institution level)

By law, universities are required to have in their composition structures responsible for career guiding of students and of support for graduates on their insertion in the labor market (see details OMECTS nr. 6012 of 21.11.2008 [39]).

Article 130, para. 2 of the Education Act stipulates that the Rector's annual report will necessarily include a separate compartment on the situation regarding the employability of graduates from previous promotions.

Conclusions

1. The Romanian National Qualifications Framework clearly defines the correspondence between levels of qualifications of the Framework, study documents that are issued, the type of education and training programs in Romania by which may be acquired the qualification levels and the reference levels of the Common European Qualifications Framework (EQF).
2. For education, jurisprudence, and other public areas of activity the place of the master student is well defined. In the Register of limited specialties at EU level there are also mentioned restrictions on educational level. For the rest, the employer decides what level of education, general and vocational competences are necessary for the performance of the planned function.
3. By law, universities are required to have in their composition structures responsible for career guiding of students and of support for graduates on their insertion in the labor market.

3.5.8. Teachers' workload

3.5.8.1. Planning the didactic workload

The personal establishments of teaching and research staff are prepared annually by setting common university rules and can not be changed during the academic year. The teaching functions and the number of posts shall be established taking into account: a) curricula; b) study formations; c) academic standards.

In the personal establishments are entered teaching and research positions, occupied or vacant, specifying appropriate teaching and research functions and weekly number of conventional hours spread over teaching, seminars, practical or laboratory works, project guidance, students and Ph.D. students supervision, professional practice, research and equivalent activities, the subjects in the curriculum.

Personal establishments are drawn at the level of departments or doctoral schools as a result of specifying the teaching and research tasks by the faculty council. At departments with courses / subjects at several faculties, the personal establishments are completed based on order notes, approved by the board of the higher education institution.

The personal establishments of the teaching and research staff shall be endorsed by the faculty council or, where appropriate, the doctoral school board and approved by the university senate.

The general Nomenclature of auxiliary teaching and research functions in higher education and the level of education required for these positions are developed by MECTS together with the Ministry of Labour, Family and Social Protection.

3.5.8.2. *Distribution of the didactic workload*

The university workload comprises: a) teaching workload; b) research workload.

The teaching workload may include: teaching activities; seminars, practical and laboratory works, guidance of year projects; guidance in the development of the bachelor, master and doctoral theses; other didactic, practical and research activities included in curricula; evaluation activities; tutoring, consultations, mentoring student scientific circles, students in the credit transfer system; participation in councils and commissions in the interest of education.

Weekly teaching workload in higher education is quantified in conventional hours. In bachelor education, an hour of teaching activities represents two conventional hours, at Masters and PhD – 2.5. The average weekly teaching workload can not exceed 16 conventional hours per week and can not be less than 7 conventional hours of teaching for a professor, 8 hours for an associate professor, and 11 hours of seminars for an assistant.

The teaching workload of teachers who do not conduct research or equivalent activities is higher than the minimum one, without exceeding the maximum limit as determined by the Faculty Council, on a proposal from the department director or doctoral school board's decision.

3.5.8.3. *The accounting of performing teaching and research workload*

The achievement of the teaching workload is rigorously supervised, while for the research workload there is a more formal procedure.

The teaching workload of teachers who do not conduct research or equivalent activities is higher than the minimum one, without exceeding the maximum limit as determined by the Faculty Council, on a proposal from the department director or doctoral school board's decision.

As an exception, if the teaching workload can not be made as provided above, the differences up to a minimum teaching workload shall be supplemented by scientific research activities, with the consent of the faculty council at the proposal of the Director of the department and with the consent of the doctoral school board.

Conclusions

1. The personal establishments of teaching and research staff are prepared annually by setting common university rules. The teaching functions and the number of posts shall be established taking into account: curricula; study formations; academic standards. Personal establishments are drawn at the level of departments or doctoral schools, are endorsed by the faculty council / doctoral school board and approved by the university senate.

2. The university workload comprises: a) teaching workload (teaching activities; seminars, practical and laboratory works, guidance of year projects; guidance in the development of the bachelor, master and doctoral theses; consultations); b) research

workload. The average weekly teaching workload can not exceed 16 conventional hours and can not be less than 7 conventional hours.

3. The achievement of the teaching workload is rigorously supervised, while for the research workload there is a more formal procedure (there are no legal documents relating to the accounting of research workload achievement).

3.5.9. University scientific research

3.5.9.1. University structures involved in the organization of scientific research

In accordance with Article 219 of the Education Act, a National University Research Council (CNCS) is established within MECS that: a) establishes quality standards, criteria and indicators for scientific research approved by minister order; b) periodically audits, at the request of the Ministry or on its own initiative, the university scientific research or in the research and development units; c) manages research programs and processes to evaluate research projects that are proposed for competitive funding; d) submits an annual report on the state of scientific research in universities to the Ministry.

The university is autonomous in establishing its own of structures for the organization and deployment of scientific research (art. 131, [1]): centers or laboratories, design units, consulting centers, university clinics, small production and services units, experimental stations, or other entities for production activities and transfer of knowledge and technology. There can be set up short-term and project-research units distinct in terms of revenue and expenditure, which are also autonomous and have their own statutes approved by the university senate.

3.5.9.2. Students' involvement in the process of scientific research (incentive mechanisms)

In Romania, the 90-120 ECTS scientific MA is in place, which serves as a starting point for doctoral studies (some credits may be considered). MA students are integrated into applied research. PhD students are an important part of university research structures.

3.5.9.3. Scientific research of the didactic staff

Research workload of the teacher is 400 hours / year, and there are required publications in the country or international journals. Other tasks based on grants are paid separately.

The state encourages excellence in higher education institutions through specific financial incentives: additional funding based on quality criteria and standards, distinct funds for institutional development, study or research grants from other universities in the country or abroad, awarded on a competitive basis.

3.5.9.4. Integrated research, education and business centers

In accordance with Article 129 of the Education Act, higher education institutions may establish, alone or in association, businesses, foundations or associations, with the approval of the university senate. The condition for them to be set up is that they contribute to

increasing the performance of the institution and do not adversely affect, in any way, educational, research and consultancy activities. They can be set up consortia with research and development units, based on a partnership agreement, as required by law.

Conclusions

1. The university is autonomous in establishing its own structures for the organization and deployment of scientific research: centers or laboratories, design units, consulting centers, university clinics, small production units, experimental stations, or other production and knowledge and technology transfer entities. There can be set up distinct temporary research units which are also autonomous and have their own statutes approved by the university senate.
2. In Romania, the scientific MA is in place, which serves as a starting point for doctoral studies. MA students are integrated into applied research. PhD students are an important part of university research structures.
3. Research workload of the teacher is 400 hours / year, and there are required publications in the country or international journals. The state encourages research excellence of teachers through specific financial incentives: additional funding for institutional development, research grants from other universities in the country or abroad.
4. Higher education institutions may establish, with the approval of the university senate, may establish consortia with research and development units, based on a partnership agreement, as required by law.

3.5.10. The doctorate

3.5.10.1. The right to offer doctoral studies

Doctoral study programs shall be organized in doctoral schools accredited or provisionally approved [46-53].

The quality of doctoral supervisor is given by order of the Minister of Education, Research, Youth and Sports, on the proposal of CNATDCU for granting habilitation certificate in accordance with the standards and procedures developed by MECTS. These standards are established on the basis of the relevant assessment criteria proposed by CNATDCU and approved by order of MECTS.

To supervise doctorates, didactic and research staff who have acquired this right must conclude an employment contract with an IOSUD or a member institution of a IOSUD and be members of a doctoral school. A doctoral supervisor can not simultaneously supervise Ph.D. students than in one IOSUD, except for doctorates conducted in co-supervision. The number of Ph.D. students who can be supervised simultaneously by a doctoral supervisor is determined by the university senate.

PhD supervisors are evaluated every 5 years. Evaluation procedures are established by MECTS, on a proposal from CNATDCU.

3.5.10.2. Doctoral Schools

Doctoral schools can be organized by a university or a university consortium or by consortia or partnerships that are legally established between a university or a university consortium and research and development units. Universities or partnerships or consortia organizing one or more doctoral schools accredited or provisionally approved, constitute an institution organizing doctoral studies, IOSUD, recognized as such by MECTS based on provisional authorization, accreditation or periodic evaluation.

3.5.10.3. Completion of studies, conferring of degrees

The PhD thesis is developed as required by IOSUD through the Rules of organization and development of doctoral study programs and in accordance with the regulations set out in the code of doctoral studies.

The Commission of public defence of the PhD thesis is proposed by the doctoral supervisor and approved by the management of IOSUD. The doctoral committee consists of at least 5 members: the president, as representative of IOSUD, the doctoral supervisor, and at least 3 official reviewers from the country or abroad, specialists in the field in which the PhD thesis was developed and of which at least two of them are outside IOSUD. The members of the doctoral committee have a PhD title and have at least the teaching position of associate professor or scientific researcher of II degree or are doctoral supervisors in the country or abroad.

The PhD thesis is defended in a public hearing in front of the doctoral committee, after evaluation by all reviewers. The public presentation includes a session of questions from members of the doctoral committee and the public.

Based on the public presentation of the PhD thesis and the reports of official reviewers, the doctoral committee evaluates and deliberates over the qualification to be attributed to the thesis: “Excellent”, “Very good”, “Good”, “Satisfactory” and “Unsatisfactory”.

If the PhD student has met all the requirements of the scientific research program and the PhD thesis assessments allows the assignment of the mark “Excellent”, “Very good”, “Good” or “Satisfactory”, the doctoral committee proposes to award the title of doctor, proposal that is submitted to CNATDCU for validation. CNATDCU, after evaluating the dossier, suggests MECTS granting or not granting the title of doctor. The PhD title is awarded by order of MECTS. The PhD thesis is a public document.

Following the completion of scientific doctoral studies, IOSUD issues the PhD diploma and title of Doctor in science.

3.5.10.4. Postdoctorate, habilitate

The Education Act (Article 172 [1].) provides for setting up advanced research postdoctoral programs *for people who have obtained a PhD degree not more than five years before*

admission to the postdoctoral program and which ensures the institutional framework for the development of research after completion of doctoral studies.

Postdoctoral programs have a duration of minimum one year, are financed by public institutions or by economic operators and are conducted in a doctoral school on the basis of a research plan proposed by the postdoctoral researcher and approved by the doctoral school.

Within higher education institutions, postdoctoral programs can be organized only in doctoral schools accredited for the organization of doctoral programs. Postdoctoral programs can be organized within research and development units.

Admission to postdoctoral programs is made based on the methodology developed by the host institution in accordance with the law. Upon completion of the postdoctoral program, IOSUD or the host institution awards a certificate of postdoctoral studies.

Conclusions

1. Doctoral study programs shall be organized in doctoral schools accredited or provisionally approved. The quality of doctoral supervisor is given by order of MECTS, on the proposal of CNATDCU for granting habilitation certificate.
2. Doctoral schools can be organized by a university or a university consortium or by consortia or partnerships that are legally established between a university or a university consortium and research and development units.
3. The PhD thesis is developed as required by the institution organizing the doctorate through the Rules of organization and development of doctoral study programs and in accordance with the regulations set out in the code of doctoral studies.

The PhD thesis is defended in a public hearing in front of the doctoral committee, after its evaluation by all three reviewers. The PhD title is awarded by order of MECTS after the validation of the dossier by the National Council for the Attestation of Titles.

4. The Education Act provides for setting up advanced research postdoctoral programs with a duration of minimum one year for young people who have obtained a PhD degree which finishes with the awarding of a certificate of postdoctoral studies.

4. COMPARATIVE ANALYSIS ON ACADEMIC AUTONOMY IN 5 EUROPEAN COUNTRIES

4.1. Database on criteria of academic autonomy for five European countries

The comparative analysis (cross-case analysis) will be based on 10 criteria and 37 sub-criteria outlined in Chapter 1 (Table 1) and the data accumulated as a result of examination of the documentation available for each country (Lithuania, Denmark, Scotland, Sweden and Romania), of the internal regulations and discussions with managers and teachers held during

working visits conducted in 5 representative universities in these countries (Mykolas Romeris University in Lithuania, University of Strathclyde and Caledonia University, Glasgow, Scotland, KTH in Sweden and Aalborg University in Denmark). The data collected are shown in Table 2. The following is a brief description of the criteria for the analysis of academic autonomy.

Criterion 1 “Establishment and termination of study programs” aims at the freedom of higher education institutions to initiate and terminate study programs at three levels – Bachelor, Master and Doctorate – universities analyzed featuring a wide autonomy in this respect without interference from some government bodies and the right to provide study programs at all levels in the national language or foreign language (eg. English).

In the light of criterion 2 “Admission to studies”, it is considered the freedom of universities to organize independently the admission process at all levels of education, to establish specific requirements and admission procedures for students both local and international. Another important aspect analyzed under this criterion are procedures or arrangements and structures for education and career guidance present in the educational institution.

Criterion 3 “Recognition of studies” provides the analysis of procedures and methods for the recognition of periods of study undertaken abroad and study documents obtained and bodies responsible for recognition, which, as evidenced by the study, are some special structures (eg. National Recognition Centre (NARIC) in the UK, Swedish Higher Education Authority and the Ministry of Education in other countries).

Under criterion 4 “Accreditation of study programs” are analyzed and specified institutional arrangements for quality assurance and quality assurance agencies that are autonomous entities, having established their own procedures, methodologies, criteria for internal and external evaluation of the quality of studies and which are consistent with the recommendations of the “Standards and Guidelines for quality Assurance in the EHEA”, and the procedures for evaluation and accreditation of study programs and higher education institutions. Another aspect relates to the freedom of institutions to choose the quality evaluation body. No less important in this respect is the analysis of quality assurance bodies’ relations with governmental structures, such as the Ministry of Education, the study revealing that regardless of autonomy enjoyed by the Agency, the Ministry is the one that ultimately makes final decisions.

Criterion 5 “National Qualifications Framework” provides for the establishment of the body responsible for NQF, degree of participation of universities in setting up / initiation of new qualifications, the way to reflect the NQF requirements of the study programs offered, the existence of educational standards and credit system applied in the country. NQF in the countries surveyed provides 8 levels of qualifications, with descriptors on qualification levels similar to those recommended by the European Qualifications Framework. When establishing new qualifications all stakeholders are involved (universities, ministries, businesses, etc.). ECTS credit system is used, except Scotland, which has its own system of credits expressed in SCOTCAT points, and is fully compatible with ECTS.

Criterion 6 “The content and implementation of the study program” examines in detail how to organize the educational process in the European higher education institutions, with special emphasis on the freedom of institutions to design study programs content, their approval and implementation, but also who are usually the initiators of study programs. Another aspect covered under this criterion is the involvement of business in education, achievement of students internships and how to organize the final evaluation at all three study cycles.

Criterion 7 “Employability” is aimed at the existence of the occupational framework and employment of graduates with different qualification levels. It also examines the place occupied by the master and doctorate in the occupational network, the study revealing that the rate of employment and the opportunity to easily find a job is significantly higher for those with master's and PhD qualifications in a particular field. In the study, under this criterion, there are also highlighted internal (at institution level) and external (state level) structures of career guidance, their role and functions. It was found that universities are responsible for advice and career guidance, whether there is a separate guidance structure or not.

Criterion 8 “Teachers’ workload” provides an analysis of the planning and distribution of the teaching workload with the establishment of teaching workload and the workload that is usually divided into teaching activities and scientific work, but also the accounting of the teaching workload. The result of the study found that 40% of the total work is assigned to research activities and universities set their own methodology for calculating the salary of teachers.

Criterion 9 “University scientific research” emphasizes academic structures involved in the organization of scientific research, the participation of universities in national and international research projects, the mechanisms used by institutions to encourage the active participation of students and teachers in the process of research. Thus, students are involved in research starting with cycle II – Master and there are several mechanisms to encourage teachers, offered at both state and institutional level, such as additional funding, research grants, etc.

Criterion 10 “The doctorate” analyzes the right of higher education institutions to offer doctoral programs, types and duration of doctoral studies, authorization bodies, empowerment with the right to be a doctoral supervisor, rules for writing, presentation and defending of the thesis, the existence and organization of doctoral schools, right to offer doctor and doctor habilitate degrees. The study showed that universities that are authorized and have the right to offer doctoral studies are autonomous in organizing the whole process of education and have the right to confer the degrees in question.

Table 2. Comparative analysis on criteria

Country	Criterion, Subcriterion
Criterion 1. Establishment and termination of study programs	
	Subcriterion 1.1. Levels in higher education

Lithuania	Two types of higher education institutions: colleges offering professionalized programs and universities that offer programs for three levels - Bachelor, Master (in some specialties of integrated study) and Doctorate. A new institution is established by decision of the Seim. It is established a Register of institutions entitled to offer educational services, which is made public.
Scotland	In Scotland / UK there are three types of institutions in Higher Education: colleges, institutes and universities. Colleges offer bachelor degrees or certificates, universities offer bachelor and master programs and integrated programs. The student can get a document of partial studies at intermediate stages: Higher Education Certificate (60 credits), HE Diploma (120 credits) and Bachelor certificate (three years of study). All universities are autonomous institutions, particularly in matters relating to courses.
Sweden	The government decides on the establishment or liquidation of a HEI. HEIs are divided into two categories: universities and university colleges. Swedish Higher Education Authority is the body that decides on the permission of awarding qualifications by the HEI.
Denmark	Four types of higher education institutions: professional academies; colleges that offer professional undergraduate programs; universities that offer programs at three levels – bachelor, scientific master and PhD; university institutes specialized in arts. Universities can provide full-time and part-time programs, can form foreign subsidiaries jointly or independently. A new state institution is established by Government decision.
Romania	There are 3 levels of higher education: bachelor, master and doctorate. There are also provided two forms of postgraduate studies: advanced research postdoctoral programs and postgraduate programs of training and continuing professional development.
	Subcriterion 1.2. Introduction of study programs at cycle I
Lithuania	The Ministry of Education determines / approves the general requirements for college study programs, study programs at cycle I, integrated studies and master. New college and Bachelor programs should correspond to the List / Nomenclature approved by the Ministry of Education. Institutions develop programs in accordance with those requirements.
Scotland	The first stage / cycle lasts for three or four years and leads to the award of a Bachelor's Degree in Arts, Science or other fields (Technology, Law, Engineering, etc.). The initiator of a new Bachelor program is the department in which they form a program committee, which discusses and then develops the program curricula. The program is discussed within the Department and then at the Academic Committee of the Faculty and is approved by the academic council of the institution. Institutions are free to decide on the introduction or liquidation of study programs at all levels of education.
Sweden	Study programmes in cycle I and II have a programme syllabus offered in the form of courses, which are also accompanied by a course syllabus. Accreditation is not required to initiate a new study programme if HIS was entitled with the examination of the third cycle. In the case of HEIs which were not given that right, in order to launch a new programme of studies it is necessary that they apply for its approval at the Swedish Higher Education Authority.
Denmark	The ministry lays down general rules governing education, including forms of assessment, examinations and external examination; titles awarded in connection with degree programmes; and on admission to and enrolment into degree programmes.
Romania	Requirements for the first cycle programs are determined by the National Qualifications

	Framework. Programs become eligible when they are listed in the National Register of Qualifications in Higher Education (NRQHE), which is updated annually and made public.
	Subcriterion 1.3. Introduction of study programs at cycle II
Lithuania	The Ministry of Education provides entitlement to master and doctoral programs to institutions conducting scientific research in the field. The name and content is determined by the institution based on the general requirements.
Scotland	Studies at master's level are at the forefront of an academic or professional discipline. New master programs must show originality in their application of knowledge and advancement of knowledge. College graduates with Bachelor certificates complete their studies up to a Bachelor degree during one year. The programs are proposed and developed by universities in accordance with the general requirements.
Sweden	Is is similar to cycle I programs.
Denmark	Drafting and approval of the Master programs lies totally on university's competences.
Romania	Master degree programs in one area can be organized by those higher education institutions that are accredited or provisionally approved for this purpose. The educational programs promoted are set annually by the university senate and communicated to MECTS to be published centrally.
	Subcriterion 1.4. Introduction of study programs at cycle III
Lithuania	The Ministry of Education provides entitlement to master and doctoral programs to institutions conducting scientific research in the field (based on assessment results). The name and content is determined by the institution based on the general requirements.
Scotland	New doctoral programs usually occur as development of research programs. Doctoral programs are accessible to people with Master's degree in the field. <i>Usually, after usually three years' further study beyond the Master's Degree, the candidate may present a thesis for the Doctorate of Philosophy (D.Phil. or Ph.D.).</i>
Sweden	Accreditation is not required to initiate a new study programme if HIS was entitled with the examination of the third cycle. In the case of HEIs which were not given that right, it is necessary that they apply for its approval at the Swedish Higher Education Authority for approval. HEIs entitled to offer qualifications in Cycle III have the right to decide independently on the programmes and courses which they want to offer and their initiation or liquidation.
Denmark	The institutions may award the PhD degree within fields within which they carry out research and within which they have set up a PhD school, either independently or in cooperation with other institutions covered by the ministerial order. The title of PhD is awarded to students who have successfully completed the program and successfully defended the PhD thesis. The doctoral program is equivalent to 180 ECTS points. The name and content of programs is determined by the institution based on general requirements.
Romania	Doctoral study programs are organized in doctoral schools accredited or provisionally approved. Doctoral schools can be organized by a university or a university consortium or by consortia or partnerships that are legally established in a university or a university consortium and research and development units. Doctoral studies can be also organized in co-supervision.

	Subcriterion 1.5. Language of instruction
Lithuania	Studies are in the national language in all programs. In parallel, other languages may be used at the discretion of the institution.
Scotland	Studies are held only in English.
Sweden	The language of instruction at cycle I is usually Swedish and at cycle II and III most of the programs are offered in English. The HEI decides on the language of instruction.
Denmark	At all programs, studies are in national language. In parallel, programs can be established with the use of English, especially at the Master's and Doctorate level at the institution's decision.
Romania	Education is a public service being conducted in Romanian language and in minority languages and foreign languages.
Criterion 2. Admission to studies	
	Subcriterion 2.1. Procedures for admission to Cycle I
Lithuania	The government determines the quota / number of vouchers (state scholarships) that can be allocated, universities will get places (students with vouchers) through competition (according to the prestige of the institution in the vision of candidates). It was created, with the consent of universities, a centralized body for online admission to cycle I, which is coordinated by the Ministry of Education and Research. This mechanism provides a large freedom to students and objective competition between institutions.
Scotland	For admission to universities and colleges in the UK to studies at cycle I is done centrally by a specialized body UCAS (Universities and Colleges Admissions Service). The Funding Council establishes the capacity of universities and universities determine admission requirements for candidate students and specific admission requirements. The candidate may indicate in the application up to 4 universities. A special committee examines the dossiers and test results, which are passed within committees created by USCA, and determines which specialty and universities meet the conditions. The candidate decides which institution to enroll. Admission to studies in Scottish universities in the UK is regulated by the state by determining the capacity of the university to provide quality education.
Sweden	Requirements for candidates for admission are general (apply to all courses and programmes in higher education) or specific (for each HEI in part) and are governed by state basic documents. Swedish Higher Education Council is responsible for the centralized admission on behalf of higher education institutions. Education is free for Swedish citizens and citizens of EU. Citizens of other countries must pay tuition fees which cover the full costs for studies.
Denmark	Admission to an undergraduate program is done based on general requirements (completion of upper secondary education with a certain level of grades and specific requirements formulated by the university and approved by the ministry (the average grade or level of grades in certain subjects, passing an admission examination or aptitude test). Any new specific requirements regarding admission are notified, made public at least two years before the entry into force. Application is online. The purpose of the admission is to enroll to study all those who are able to complete an undergraduate program. There are prescribed general rules of transition from one program to another, switching to another university, return to studies. The Government approves quota for admission to study programs depending on the capacity of university structures to ensure quality

	education based on research.
Romania	MECTS develops annually a framework methodology and each higher education institution develops and applies its rules to organize admission in degree programs offered. Bachelor studies in the form of full-time education may be organized under funding from the state budget or a fee. MECTS allocates a number of grants financed from the budget for state universities.
	Subcriterion 2.2. Procedures for admission to Cycle II and III
Lithuania	For admission to Masters, the contest is done based on the Bachelor degree in related programs; college graduates are admitted after one compensatory year. Admission to PhD is based on the Regulation developed by the Research Committee. The Master's degree or the integrated studies diploma in the respective field of studies serves as the basis for admission.
Scotland	The specific requirements for admission to Masters and PhD are determined by the university. The organization and admission procedures are the responsibility of the university.
Sweden	Admission to the third cycle, doctoral studies, is based on undergraduate and graduate degrees, integrated studies with 240 credits, of which at least 60 credits must be for Masters Degrees in the same area of specialization. HEI makes decisions on admission to the third cycle, sets deadlines and procedures for admission. Doctoral studies are organized at faculty level and the application process for PhD positions is specific to each faculty. Only those who have obtained a PhD scholarship or doctoral grants can be admitted.
Denmark	The specific conditions for admission to the MA and PhD are determined by university at the level of study program. Organization and admission procedures are the responsibility of the university.
Romania	MECTS allocates for master degree studies in the form of full time education a number of grants financed from the budget for state universities. Own admission methodologies are used.
	Subcriterion 2.3. Admission of foreign students
Lithuania	The admission of foreign students is carried out by university admission committees. No admission quotas are imposed.
Scotland	Matriculation in higher education of students from EU and other countries is based on a document of studies. Particular attention is paid to the institution graduated and level of knowledge of English. Non EU students pay fees by 60% higher than UK citizens. At the UK level there are set general rules for immigration.
Sweden	Admission of foreign students to cycle I and II is mainly through mobility programs, exchange of students and the number of study places for students applying individually is limited and based on a tuition fee. Admission requirements to cycle I and II for foreign students are basically the same as for local students. It is required the knowledge of English or Swedish. Admission requirements are set independently by each HEI. Admission of foreign students to doctoral studies is restricted and HEIs can only admit students who have funding for the entire period of study.
Denmark	Admission of foreign students is carried out by universities' admissions committees. Not quotas are imposed on admission. Specific requirements for foreign applicants refer to the

	knowledge on the Danish / English and specialized skills.
Romania	Doctoral studies are organized with funding from the state budget, for a fee or from other legal sources. MECTS allocates annually, by the Government decision, a number of multiannual doctoral grants which include the amount of the individual scholarship and the costs for education and research.
	Subcriterion 2.4. Formation of contingent
Lithuania	Universities are autonomous in the use of different methods of vocational guidance, various measures are taken at university, faculty, and program level.
Scotland	In the UK universities there are undertaken various measures at the level of institution, faculty, program. These measures have become central for all universities under the existing conditions of reducing number of students. UCAS has an important role in accurate and objective indormation of students.
Sweden	According to the law, HEIs in Sweden provide study and career guidance, work with school graduates and students, make public regulations, admission requirements, decision making process about admission and the procedure for contesting it, the entire activity is very transparent.
Denmark	The formation of the students' contingent is the full responsibility of univeristy's internal structures. The activities of vocational guidance, recruitment of students from home and abroad is one of the tasks of each department.
Romania	Universities are autonomous in choosing strategies for vocational guidance.
	Criterion 3. Recognition of studies
	Subcriterion 3.1. Recognition of study periods undertaken abroad
Lithuania	The Government determines general rules for the recognition of periods of study and academic credits obtained abroad or in another local institution. Each institution sets independently (by internal rules) procedures for recognition and transfer between programs.
Scotland	Studies done in mobility programs are recognized under trilateral agreements between student, University of origin and the host University. In normative documents of each institution there are mentioned rules of migration from one program to another and from one form of study to another.
Sweden	Recognition / evaluation of study periods undertaken abroad and diplomas for academic purposes is made by the Swedish Higher Education Council, which serves as a recommendation or guidance for HEIs admitting foreign students to study. Studies, study documents and their eligibility are assessed by the HEI to which candidates apply, based on information provided in the application and the attached documents. Recognition / evaluation of courses and programs is done in order to allow the transfer of credits for the award of a qualification or admission to studies.
Denmark	The rules for recognition of credits and periods of studies done in another university in the country or abroad shall be determined by the university and are component parts of the respective curricula of study programs.
Romania	The Education Act establishes that the number of transferable study credits are the reference element that universities can use to recognize legal studies or study periods previously made in the same fundamental field.
	Subcriterion 3.2. Recognition of documents of studies done abroad

Lithuania	A state authority is appointed for the recognition of diplomas, which operates under the rules and requirements set by the Government.
Scotland	Recognition of educational documents obtained outside the UK is made by the National Recognition Center (NARIC). Services provided: recognition of diplomas for access to studies and professions; recognition and equivalence of information. Inside universities the Education Committee is dealing with these problems.
Sweden	The recognition / evaluation of study documents obtained abroad does not lead to the issuance of an equivalent Swedish study document. Recognition of study documents for employment purposes is made by the Swedish Higher Education Authority in accordance with the general EU Directives.
Denmark	The procedures for recognition of foreign qualifications are regulated by the Assessment of Foreign Qualifications Act. The objective is to secure access to have foreign qualifications assessed with a view to easing access to the Danish labour market and the Danish education system. It is up to the individual employers to decide whether they can use the educational qualifications and the occupational experience achieved outside Denmark.
Romania	MECTS organizes the recognition and equivalence of diplomas and certificates according to internal rules and in accordance with European standards.
Criterion 4. Accreditation of study programs	
	Subcriterion 4.1. Internal quality assurance structures
Lithuania	Internal quality assurance is the responsibility of educational and / or research institutions which establish internal quality management structures, they determine independently the policy, and quality management strategy. Responsible of quality assurance are: head of the QMS department, dean of the Faculty, head of the program, and students are involved. The institution shall inform stakeholders about the quality of education and research.
Scotland	Responsible for quality assurance in the university is the Quality Assurance Committee, composed of persons responsible for education. At faculties / schools responsibility for quality assurance lies with the faculty council, heads of departments and program directors.
Sweden	Swedish HEIs do not have separate organizational structures (e.g., departments, offices) for quality assurance, but all the actors / institutional entities are involved in this process. The overall responsibility for issues related to the quality of education, research and interaction with society rests on the Faculty Council. Also, within the administration there is a person appointed as quality coordinator whose function is to coordinate activities related to quality assurance occurring before, during and after the external and internal evaluation.
Denmark	The structure and functions of the continuous quality assurance system are predetermined by criteria set out in The University Act, and Ministerial Order "Criteria for the Relevance and Quality of University Study Programmes and on Procedures for Approval of University Study Programmes".
Romania	Quality assurance of education and scientific research is an obligation of the higher education institution. Each university develops its own quality assurance system whose presence is mandatory.
	Subcriterion 4.2. Methodology, evaluation criteria, procedures

Lithuania	Institutions have the right to provide education only at accredited programs. The Ministry initiates a new evaluation and accreditation of higher education and research institutions once in six years. Evaluation is done on all fields indicated in the Statute of the institution and is based on compliance criteria. The methodology and assessment criteria descriptors are approved by the Government. Subsidiaries of foreign institutions are also subject to evaluation and accreditation.
Scotland	External evaluation methodology, procedures and evaluation criteria are described very explicitly in the Quality Code. Each quality criterion contains detailed and explicit instructions on regulatory documentation that the institution must have and which it should present to evaluators. The Code is an integrated document that meets the basic requirements for all stages of a life cycle of the university training process.
Sweden	HEIs are free to organize their own quality assurance processes and how to organize / conduct this process and must take responsibility for their good development. Although they have a wide autonomy in this regard, all HEIs should establish quality objectives so that they can be monitored and then to report to the government priority quality assurance measures and explain how these measures can help improve educational and research standards of the institution. The evaluation process and the course analysis at KTH are of particular interest, especially post-analysis activities such as publishing the analysis, reporting any changes made and the reasons behind them.
Denmark	For external evaluation and accreditation of study programs there was created the Accreditation Agency for Higher Education by the Ministry MSTI as independent public bod. Program's external evaluation procedures and quality and relevance criteria are approved by order of MSTI. Evaluation is based on several fundamental criteria: demand for the study programme in the labour market; the study programme must be based on research and connected with an active research environment of high quality; continuous internal quality assurance of the study programme.
Romania	The evaluation for temporary authorization and accreditation is carried out by ARACIS based on the methodology and evaluation criteria developed by it according to international standards in the field.
	Subcriterion 4.3. Freedom in the choice of external quality assessment body
Lithuania	External evaluation is carried out by the Centre for Quality Assessment or another agency, indicated by MES, appearing in the EAQAHE Register.
Scotland	External evaluation is the responsibility of the UK's QAA. The Quality Code is valid throughout the UK and the UK suppliers operating abroad. It protects the interests of all students who study full-time and part-time at the undergraduate or postgraduate cycle.
Sweden	At national level, the Swedish Higher Education Authority is responsible for assessing and monitoring the quality of higher education, recognition of new programmes of study, and periodic evaluation of the programmes recognized (the latter two activities are the responsibility of the Quality Assurance Department of the SHEA). Based on the evaluation of HEIs by this entity and its opinion, the institution receives or is withdrawn the right to offer qualifications at cycle I or II by the Ministry.
Denmark	On its own initiative or following a request from a university, the Council may furthermore base its accreditation decision fully or partly on an accreditation report from another internationally recognised institution, to the extent that the report is prepared in accordance with the criteria for quality and relevance laid down by the Ministry.

Romania	For the external evaluation of study programs the institution may opt for services of the national agency for quality assurance, ARACIS, or another agency registered in EQAR.
	Subcriterion 4.4. Relations of cooperation of the accreditation body with the Ministry of Education in the accreditation process
Lithuania	External evaluation methodology and criteria are developed by the Accreditation Council but are approved by the Government on the recommendation of the Ministry of Education. Accreditation of study programs and educational institutions by ME is based on the results of external assessments coming from the committee.
Scotland	Final decisions are made by the Ministry.
Sweden	Actual external evaluation of study programmes offered by a HEI is done by the SHEA which is appointing a committee of external experts for this purpose. This committee evaluates and assesses the program according to a three-level grading scales. All evaluations and their results are presented by SHEA to the Ministry of Education. If, as a result of the evaluation, the HEI receives the highest rating (very high quality) for the courses and programs it offers, it will receive a quality bonus when allocating funding by the government. If it gets a negative evaluation, the Ministry makes the decision of ceasing financing.
Denmark	The Ministry appoints the Director of the Accreditation Agency, approves the criteria for relevance and external evaluation procedures of the study programs. The Accreditation Council organizes the external evaluation, makes proposals, and the Ministry decides on the continuation or termination of funding of state nonaccredited programs or termination of the activity of nonstate ones.
Romania	The Ministry of Education collaborates with ARACIS, with other agencies listed in EQAR and with CNCS, CNATDCU, the Board of Ethics and University Management (CEMU) and other bodies with relevant expertise in quality assurance.
Criterion 5. The National Qualifications Framework (NQF)	
	Subcriterion 5.1. The body responsible for NQF in the country
Lithuania	În Lithuania este aprobat Cadrul general al calificărilor cu 8 nivele de calificări, cu descriptori pe nivele de calificare similare cu cele recomandate de EQF. Patru nivele (5-8) superioare ale Cadrului corespund calificărilor oferite de programele de studii de colegiu, bachelori, master și doctorat.
Scotland	Scottish Qualifications Authority (SQA) is the Scottish statutory body for the award and accreditation of qualifications. SQA provides SCQF qualifications recorded with various certificates for levels 1-7 for secondary education, HNC certificates and HND diplomas for levels 7, 8 of short higher education cycle and specific qualifications for three levels of SVQ vocational higher education – levels 9, 10, 11 and 12 (corresponding to the degrees – Bachelors, Bachelors Honours, Master and Doctor). Qualification levels for higher education are described together in terms of learning outcomes (as descriptori) and in terms of credits.
Sweden	The national responsibility for the Swedish National Qualifications Framework lies on the Government. In establishing, developing and modifying the NQF many stakeholders are involved: HEI, Ministry of Education and Research, Swedish National Agency for Higher Education, students, society, etc.
Denmark	The Danish qualifications framework is comparable to EQF and includes 8 levels of qualifications, four of them relate to higher education: Academy Profession level (5),

	Bachelor's level (6), Master's level (7), PhD level (8). The Coordination Point for the EQF was set up under the auspices of the Danish Agency for International Education.
Romania	The National Council of Qualifications and Vocational Training of Adults, CNCFPA, subordinated to MECTS, is the National Qualifications Authority (NQA). An executive unit provides legal, technical, economic, financial and logistical conditions for the operation of the Council and the administration of the National Register of Qualifications in Higher Education (NRQHE).
	Subcriterion 5.2. Participation of universities in the development of new qualifications
Lithuania	The general competences being established by state institutions (MES, Government), the initiative to develop new study programs comes from departments / institutes and program committees, which are formed freely. The Ministry and the Quality Assurance Centre engage at the phase of external evaluation and approval of operation of these programs.
Scotland	When drafting a new study program it is based on the general requirements of the qualifications framework. When approving its deployment (financing), the external evaluation and accreditation of programs checks whether the learning outcomes of this program meet the educational standards prescribed by the Quality Code.
Sweden	In establishing, developing and modifying the NQF many stakeholders are involved: HEI, Ministry of Education and Research, Swedish National Agency for Higher Education, students, society, etc.
Denmark	The inclusion of certificates and degrees into the NQF is based on an assessment of the learning outcomes that the individual degree/certificate documents in relation to the level descriptors of the NQF.
Romania	Universities can develop new qualifications which must comply with the NQF. Higher education institutions are required to record information regarding the qualifications they develop through their offer of study.
	Subcriterion 5.3. How are NQF requirements reflected in the study programs (compulsory provisions, internal control procedures, external evaluation)?
Lithuania	In order to be implemented, new study programs are evaluated if they meet the requirements defined by NQF descriptors for the respective levels of education. The descriptors serve to define criteria and indicators for the final evaluation of studies, for the preparation of self-assessment and external evaluation reports of study programs.
Scotland	Study programs are developed based on the learning outcomes, which must correspond to general requirements reflected in the descriptors of the respective levels of qualification. The descriptors, in form of quality indicators (standard requirements) are also used in external evaluation of study programs.
Sweden	Study programmes for cycle I, II and III are developed in accordance with the NQF and Qualifications Ordinance which provides a detailed description of the qualifications and requirements for obtaining them. Internal and external evaluation of study programmes offered by the HEI is also based on compliance with the qualifications described in these two basic documents.
Denmark	Universities have to develop (design) study programs and the implementation process so that competences determined by descriptors be achieved by the student. These requirements serve as the final assessment criteria and indicators of studies for drawing up

	the self assessment and external evaluation reports for the accreditation of the program.
Romania	Education Act establishes that the curriculum of the university study program is consistent with the qualification profile defined in the National Qualifications Framework. The concordance is a mandatory criterion for assessing quality assurance.
	Subcriterion 5.4. Educational standards
Lithuania	Educational standards on fields are developed as an exception, such as specific requirements determined for the field of Law.
Scotland	Educational standards are developed by each institution on the basis of criteria and indicators outlined in the Quality Code.
Sweden	Educational standards on branches are not developed.
Denmark	Descriptors for higher education qualifications (degrees), presented in the NQF, are used as reference quality standards / criteria both at the development and the evaluation and accreditation of study programs.
Romania	Educational standards approved by MECTS are part of the Guide of external evaluation of study programs used by ARACIS.
	Subcriterion 5.5. Credit system
Lithuania	It is used the European Credit Transfer System ECTS.
Scotland	Higher education institutions in Scotland use a specific system of credits (SCOTCAT points). A full year of full-time education usually consists of approximately 1,200 hours of learning activity. The results obtained are valued / marked with 120 SCOTCAT points. No rigid time connection is involved in this system. This is very important for the development of part-time and distance education.
Sweden	It is used the European Credit Transfer System ECTS.
Denmark	It is used the European Credit Transfer System ECTS.
Romania	It is used the European Credit Transfer System ECTS.
Criterion 6. The content and implementation of the study program (organization of studies)	
	Subcriterion 6.1. Designing the content of study programs
Lithuania	General requirements for program structure, distribution of credits between groups of university disciplines, specialized and practical training are determined by the Ministry of Education. Program content is developed by a program committee. Designing the content is based on transversal and professional competences, learning outcomes which are described in the Qualifications Framework. The organization of studies, assessment of students, organization of internships, final assessment are the responsibility of each institution and are defined by the internal normative acts.
Scotland	The design, approval and implementation of programs is carried out in accordance with the rules set on the Quality Code which contains a number of indicators of good practice on program's deployment, mechanisms that higher education service provider relies on to enhance the quality of the implemented program. Also, here are examined mechanisms of closing / liquidation of a program. These rules shall apply concurrently with the general rules set out in Part A of the Code.
Sweden	HEIs are responsible for organizing the whole process of study, independent design of study programmes and courses, current and final evaluation procedure. The entire content of study programmes must comply with the learning objectives and outcomes and

	competencies set out in Annex 2 to the Higher Education Ordinance on qualifications, which the student must possess at the end of studies.
Denmark	University study programs are usually designed at the initiative of the research groups with high results. The curriculum is developed following the provisions of legal acts issued by the Ministry. Programs are structured in modules and are organized on the principle of problem-based learning. In Engineering study programs, realization of projects are core activities and represents a fundamental structure.
Romania	The organization of study programs is the responsibility of higher education institutions. The curriculum of the study program is developed in strict accordance with the qualification profile defined in the National Qualifications Framework and is approved by the senate.
	Subcriterion 6.2 Allocation of tasks among academic structures
Lithuania	A study program is provided by the program team, working within a department. Some modules are provided by teachers from other specialized or general departments.
Scotland	The program team draws up the program within the department and, as a rule, relies on the results acquired in scientific research. The program team usually includes people from several departments and outside the institution.
Sweden	From organizational point of view, an academic year consists of 40 weeks (full-time study) and corresponds to 60 ECTS. The HEI establishes itself the beginning and the end of the academic year, of semesters, and the period and duration of holidays. Teachers belonging to different schools participate in the design and implementation of a programme of study.
Denmark	A study program is provided by the program team within a department, but for some modules use is made of other departments such as for teaching mathematics modules. An important stake is on the participation of representatives of economic and state structures as providers of problems and projects for the organization of research based studies.
Romania	A department specialized in the field is responsible for a study program or group of related programs but other departments may be also involved, as appropriate, in didactic activities.
	Subcriterion 6.3. Internships
Lithuania	Among general requirements of the Ministry of Education related to study programs there can be found specific requirements on the duration (expressed in credits) of internships, which depends on the type of programme. Institutional normative acts establish the organization, reporting and evaluation of internships.
Scotland	Internships are indispensable part of the study program.
Sweden	Regarding internships, their realization and obligatoriness is not provided by any regulatory act. However, practical activities are incorporated in the realization of year projects by students.
Denmark	Programs offered by vocational Academies provide a deep professional training (internships have a total substantial duration), at undergraduate (Bachelor and Master) programs in colleges professional orientation is also evident (one semester, 15-20 %), while at the research bachelor and master programs in universities internships in enterprises are missing or are much more modest.
Romania	Internships are mandatory in bachelor programs. Universities are required to provide

	students with internship places.
	Subcriterion 6.4. Final evaluation on cycles
Lithuania	The final evaluation is an act of appreciation of competences obtained by the student in relation to the outcomes prescribed by the program and is carried out through public defense of a project / thesis in front of the evaluation committee. Institutional normative documents define requirements for the graduation paper, procedures for the organization and conduct of the final evaluation.
Scotland	Programs are completed differently. The gradual ones end with the public defence of a work/thesis. If non-gradual programs, certificate or diploma is issued based on credits earned under the rules set by the program.
Sweden	Each course ends up with an examination accompanied by a grade. The HEI appoints a teacher (examiner) who determines and decides on the final grade. Also, the HEI organizes at least five examination sessions. Studies end with the development and public defense of a diploma project, for which 10/15 ECTS credits are provided. The diploma project can be done at the host institution, at a different institution or abroad, by a single student or group of students. Each paper / diploma project is checked against plagiarism.
Denmark	In the Danish system of higher education, the examination is specific both at the final phase of the study programs and at the evaluation of semester modules. One semester of study usually contains 4-5 modules with 5, 10 or 15 ECTS. Of these, at least one (10 or 15 credits) will have external examination, other modules are subject to internal examination. The Bachelor project, appreciated with 15 credits, is carried out in groups of up to 4 students. Master thesis, worth 30 credits (lasting one semester), is examined externally, and performed individually or in groups of 2-3 people.
Romania	The graduation examinations in higher education are: a) bachelor graduation exam for bachelor cycle or diploma exam for education in engineering sciences; b) dissertation exam for master cycle; c) examination of public defence of the PhD thesis and are conducted on the basis of a regulation approved by the senate.
Criterion 7. Employability	
	Subcriterion 7.1. The occupational framework (ISCEO). The link between the level of studies – qualification
Lithuania	In Lithuania, it is currently used the standard International Classifier of Occupations ISCO-88 (COM), recommended by the EC. For higher education, requirements on general and professional competences are expressed in the descriptors of levels 5, 6, 7 and 8 of the NQF.
Scotland	Graduate's competencies are defined by qualification level descriptors. Special requirements relating to employment are separately formulated to jobs and public services (education, police, judges etc).
Sweden	The employment rate of people with higher education varies from one area to another and is virtually 100% due to the increase in the number of jobs that require highly qualified specialists. To meet the expectations of the labor market that are constantly growing, a pretty big focus is on the connection and cooperation between HEIs and businesses. At institutional level, each HEI collects, and there is even a certain culture that HEI graduates provide data on their employment. At national level, these data are collected by the Swedish Higher Education Authority each November, once in 12 to 18 months after graduation, and then it makes public a report on the data collected and the employment

	rate of graduates in different fields.
Denmark	The existing links between the education level and qualification levels is explicitly set by the Danish qualifications framework.
Romania	The Romanian National Qualifications Framework clearly defines the correspondence between levels of qualifications of the Framework, study documents that are issued, the type of education and training programs in Romania by which may be acquired the qualification levels and the reference levels of the Common European Qualifications Framework (EQF).
	Subcriterion 7.2. Place of MA and PhD in the occupational network
Lithuania	In ISCO-88 – are listed only the general requirements of specialties. The employer is free to choose between – college, Bachelor or Master graduates. There should be emphasized only areas with specific requirements, e.g. those related to human safety, environmental security, etc. The right of becoming a specialist in construction design, for example, is granted only to those who have a master qualification plus special requirements.
Scotland	For non-regulated specialties, everything depends on the the employer. Prescriptions for positions that may be filled by graduates of cycle 1 and 2 are made only for public specialties (medicine, law, other public servants).
Sweden	Employment is not recorded when finishing cycle I – Bachelor, although this is permitted by law. The employment rate of graduates with the title of PhD is 100%. Being a PhD student, such a person, by law, can have a job in a HEI and the HEI, in turn, is bound to create such posts. At national level, the Swedish Research Council finances post-doctoral positions, funding given to HEI establishing such posts with a fixed term of two years, where people with doctorates awarded in Sweden and abroad can apply.
Denmark	Master's is oriented towards research and continuing doctoral studies.
Romania	For education, jurisprudence, and other public areas of activity the place of the master student is well defined. In the Register of limited specialties at EU level there are also mentioned restrictions on educational level. For the rest, the employer decides what level of education, general and vocational competences are necessary for the performance of the planned function.
	Subcriterion 7.3. Career guidance structures (state level, institution level)
Lithuania	Special structures responsible for vocational guidance of students are not created within universities. Responsibility and core activities related to guidance of students, support of students in the process of looking for a job and their employment and career tracking is in the responsibility of departments and program committees.
Scotland	In the UK particular attention is given to the work with graduates. At universities, there are created special structures for these activities, the <i>Office for Development of Relationships with Graduates</i> (alumni). The aim of the Office is to develop long-term relationships with individuals and organizations where graduates work, relationships that have the purpose of fundraising, information about university of graduates and operation with databases of graduates. The office is organized centrally by the management of the University with representatives within faculties.
Sweden	At the state level, career guidance of graduates from HEIs is done by the Swedish Research Council and the Swedish Agency for Government Employers and, at institutional level, studies and career guidance is carried out by HEIs themselves.

Denmark	The university must offer students guidance on the degree programme in which they are enrolled and on post-graduation job opportunities. The Minister may lay down rules on guidance.
Romania	By law, universities are required to have in their composition structures responsible for career guiding of students and of support for graduates on their insertion in the labor market.
Criterion 8. Teachers' workload	
	Subcriterion 8.1. Planning the didactic workload
Lithuania	Lithuanian Labor Code establishes the working week and the annual workload for teachers in higher education. Institutions, by themselves, develop internal regulations for calculating and allocating the workload.
Scotland	The teaching load and workload of teachers: 110 of direct contact hours with students and 560 hours for consulting. They constitute 40% of the annual volume of work. The remaining 60% are devoted to research – 40% and 20% for activities in the interest of the community. Total workload is 35 hours per week.
Sweden	Planning and didactic workload distribution is done at the school level. A teacher should combine research and teaching, but the exact percentage, the exact hours for such balance is not established. Much of this depends on the position held by the teacher. According to statistics, on average, teachers devote about 40% for research, 25% for teaching and 35% for other tasks.
Denmark	Employment Act provides workplaces, the structure of position tasks of teachers and researchers in higher education. The universities' core activities consist of conducting research and providing research-based teaching up to the highest international level. It consists of 490 hours of teaching per semester, which constitutes 60%, and 200 hours for scientific research (40%). For administrative work, a part of the academic load is reduced.
Romania	The personal establishments of teaching and research staff are prepared annually by setting common university rules. The teaching functions and the number of posts shall be established taking into account: curricula; study formations; academic standards. Personal establishments are drawn at the level of departments or doctoral schools, are endorsed by the faculty council / doctoral school board and approved by the university senate.
	Subcriterion 8.2. Distribution of the didactic workload
Lithuania	The annual workload of a teacher at UMR consists of 1,000 hours of didactic activities, 400 hours of research activities and 200 hours for other activities. Contact hours are the most important part of the teaching load and are determined after a certain scale, approved by the University Senate. It is accept internal part-time job of up to 1.5 time norms.
Scotland	The head of the department, the dean and other teachers holding a leading position have reduced teaching load, the salary remains intact. Each member of the department has certain public responsibilities within the department, faculty or university (20% of the load).
Sweden	The distribution of the teaching load varies from university to university and the teacher has the right to decide whether only do research or research and teaching.
Denmark	The didactic workload calculation and its distribution among team members of a program of study and research is an internal matter dealt by the team leader.
Romania	The university workload comprises: a) teaching workload (teaching activities; seminars,

	practical and laboratory works, guidance of year projects; guidance in the development of the bachelor, master and doctoral theses; consultations); b) research workload. The average weekly teaching workload can not exceed 16 conventional hours and can not be less than 7 conventional hours.
	Subcriterion 8.3. The accounting of performing teaching and research workload
Lithuania	The accounting of hours of teaching load is done at the department level, while accounting for the hours devoted to scientific research, is a problem.
Scotland	The accounting of the academic task is based on the schedule. Scientific research is assessed primarily on the basis of publications of textbooks, monographs, articles in journals with impact-factor. The university establishes rules for different categories of teachers. Publications are rated with points depending on the category of the journal.
Sweden	It is an internal affair. Teachers' salaries are negotiated at institutional level.
Denmark	There are no official documents describing the methodology of the calculation the workload related research. The number of publications shall be reported, as a rule. The Head of the department is the person who must ensure the quality of research in close connection with academic work, in cooperation with study board and Head of School, follow up on the evaluation of study programmes and teaching within the areas in which the department is supplying teaching.
Romania	The achievement of the teaching workload is rigorously supervised, while for the research workload there is a more formal procedure (there are no legal documents relating to the accounting of research workload achievement).
Criterion 9. University scientific research	
	Subcriterion 9.1. University structures involved in the organization of scientific research
Lithuania	Education and scientific research policy is defined and implemented by the Ministry of Education, the Centre for Quality Assessment in Higher Education. The participation of institutions in international research projects is coordinated by the Agency for International Science and Technology Development Programmes. Institutions can organize technology transfer parks, integrated research, education and business centers which are established by Government Decision.
Scotland	The research activity in the universities of Scotland (and the UK) is carried out by Universities Research Council (URC with 7 subcommittees on branches). Similar structures are found vertically: at college / school and department with identical roles.
Sweden	The Swedish government allocates approximately two thirds of public funds to research activities. Other sources come from government agencies, other public funding and EU funding, private funding, sources outside Sweden, except EU, and financial revenues. Other public funds intended for research are directed by the government to industrial research institutes, some sector agencies as well as municipalities and county councils. In HEIs, funding of research, doctoral courses and programs comes from: 47% direct government allocations and 26% through research councils and other government agencies. HEI themselves decide on the internal allocation of financial resources for research and doctoral programs. In order to carry out research a crucial role is played by the collaboration of HEIs with business for technology transfer and innovation purposes.
Denmark	Scientific research is an indispensable part of the process of training specialists with higher education. The study programs can be formed only in the presence of adequate

	scientific potential (academic researchers and the appropriate material resources for research). The research is focused on the Department's thematic and is financed from the state and projects, non-budgetary research grants. Funds from non-budgetary grants together with grants from international collaboration are comparable in size to budgetary one.
Romania	The university is autonomous in establishing its own of structures for the organization and deployment of scientific research: centers or laboratories, design units, consulting centers, university clinics, small production units, experimental stations, or other production and knowledge and technology transfer entities. There can be set up distinct temporary research units which are also autonomous and have their own statutes approved by the university senate.
	Subcriterion 9.2. Students' involvement in the process of scientific research (incentive mechanisms)
Lithuania	In Lithuania there is the scientific master of 90-120 ECTS, which is a starting point for doctoral studies. Master students are integrated into applied research so as, when at cycle three, they could develop valuable scientific research autonomously.
Scotland	All master's programs have research elements. Other types of MAs in Scotland are not used.
Sweden	Students are actively involved in applied research activities and at doctoral level they allocate 70-80% of their time to research.
Denmark	Involving students in research is a fundamental principle of the Danish higher education. The special attention paid to PhD students, young researchers is a strategic direction of universities - which provides a good basis for recruitment of academic staff and increase research capacity of the institution.
Romania	In Romania, the scientific MA is in place, which serves as a starting point for doctoral studies. MA students are integrated into applied research. PhD students are an important part of university research structures.
	Subcriterion 9.3. Scientific research of the didactic staff
Lithuania	Annual workload of teachers includes 400 hours of research per year. Two publications in the country or one publication in international journals are mandatory. Other tasks, performed based on grants, are paid in addition to the basic salary.
Scotland	From the annual charge of the teacher, 40% constitutes scientific research that is well accounted for in the research group. Funding science from Scotland and UK funds is based on these results.
Sweden	Teachers in HEI carrying out research activities are usually associated with a school, each teacher leads a research team comprised of PhD students and/or other scientists and the whole team works on long term research projects.
Denmark	Importance is given to results. Research conducted by a teacher must correspond to the strategic plan of research within the department and be appropriate the the field of study representative for the department.
Romania	Research workload of the teacher is 400 hours / year, and there are required publications in the country or international journals. The state encourages research excellence of teachers through specific financial incentives: additional funding for institutional development, research grants from other universities in the country or abroad.

	Subcriterion 9.4. Integrated research, education and business centers
Lithuania	No information is available.
Scotland	Most programs are created as a result of research groups / structures, form an integral part thereof.
Sweden	The collaboration of HEIs with the business environment is an important aspect of research and is an essential condition for HEIs. This collaboration is often organized as competence centers associated with the departments of HEIs, which are autonomous units led by a board whose members are representatives of the field of trade, business and society, and they report to the President of HEIs. Another role of these competence centers is to facilitate collaboration, connection between HEIs.
Denmark	The organization of Research Institutes (specializing in the field of a faculty or school) is practiced, which combines research with the academic process (transfer of knowledge acquired by the students).
Romania	Higher education institutions may establish, with the approval of the university senate, may establish consortia with research and development units, based on a partnership agreement, as required by law.
Criterion 10. The doctorate	
	Subcriterion 10.1. The right to offer doctoral studies
Lithuania	The third cycle of higher education is doctorate, which is held in the fields of natural sciences, humanitarian sciences and arts. <i>The Ministry of Education and Science shall grant the right of doctoral studies to universities and universities together with research institutes conducting high-level research in conformity with a field of sciences and humanities, or universities together with foreign higher education and research institutions. The right shall be granted on the basis of the evaluation.</i>
Scotland	In the UK the basic form of doctorate is integrated doctorate or doctorate in philosophy (PhD). The doctorate is regarded as research based studies, organized within universities, the minimum duration of the studies is usually equivalent to 3 years of full time studies, in engineering – 4 years. The studies may be organized remotely. After 1990, the UK introduced a new type doctorate called professional, which is intended for specialists trained in a particular branch of the economy. They develop applied research for the company which shall bear the expenses related to studies and research.
Sweden	HEIs are established with the consent of the Government and their main purpose is to provide educational programs and organize research activities for all levels of education. All universities and university colleges may offer programs and courses at third cycle – doctorate, only if this right was granted by the Swedish National Agency for Higher Education. Aspects related to doctoral studies (designing programs, choosing problems to be investigated, research methodology, publishing research results, etc.) are the choice of HEIs.
Denmark	The right to organize doctoral programs is attributed only to universities. Granting the right to supervise PhD students - is the responsibility of the department in the university. The institution shall establish, based on The University Act, the rules regarding: admission to the doctoral program; the organization of the doctoral program; appointment of the main supervisor as well as any other supervisors, PhD students supervision rules, rules for writing, presentation and defense of the thesis. The University also sets rules on access to the PhD program.

Romania	Doctoral study programs shall be organized in doctoral schools accredited or provisionally approved. The quality of doctoral supervisor is given by order of MECTS, on the proposal of CNATDCU for granting habilitation certificate.
	Subcriterion 10.2. Doctoral Schools
Lithuania	Doctoral studies are organized in doctoral schools whose statute and organization is determined by Doctoral Studies Regulation. Some specific elements are detailed in the regulations of each university. The institution is autonomous in selecting candidates for its study and research programs.
Scotland	Doctoral students' training takes place in doctoral schools organized by universities or doctoral centers.
Sweden	Doctoral studies and research are organized within research platforms in order to provide studies focused on outcomes and to meet the needs of industries. Each PhD student: must have at least two supervisors; is entitled to change the supervisor; shall draw up a work plan to guide upon and to follow it the entire period of his doctoral studies; is entitled to all the resources of the HEI needed to achieve the research targets. The supervisor is appointed by the HEI.
Denmark	Doctoral studies shall be organized in doctoral schools at faculty or department level. A PhD program comprises 180 ECTS credits. Performing the didactic activity by the PhD student is mandatory. In Denmark industrial doctorate is practiced. In this case the costs are covered by a company and the theme of the doctoral thesis includes the research of important issue for the company.
Romania	Doctoral schools can be organized by a university or a university consortium or by consortia or partnerships that are legally established between a university or a university consortium and research and development units.
	Subcriterion 10.3. Completion of studies, conferring of degrees
Lithuania	Doctoral Studies Regulation, developed by the Ministry, determines only the general requirements related to doctoral dissertation and procedures for its public defence. The institution conducting PhD defines specific requirements, procedures for completion and defence, conferring the degree of Doctor of Science or Arts. These procedures are greatly simplified without many elements of bureaucracy and formalism. The PhD Diploma shall be signed by the rector of the institution.
Scotland	The institution organizing doctoral programs develops its own regulations based on quality criteria shown in the Quality Code. Ph.D. degree is offered by the University, which issues the diploma without any approval from any higher authority. Thesis defending procedure is quite simple and is based on the authority and responsibility of the supervisor, faculty research council (2 persons) and 2 experts who review the thesis. The degree is confirmed at the Academic Board of the University (Senate).
Sweden	Courses and study programmes in cycle III end with the exam. Defending of the PhD thesis is done orally and in public. The HEI decides on the evaluation, grading and defence procedure. For the defence, the faculty / school appoints an opponent, a person with knowledge in the respective field, and a committee for the examination of the thesis and defence. The examination committee of the thesis includes 3-5 members, professors, where at least one must be from another HEI. Only the committee makes decisions regarding thesis' evaluation / grading and awarding of the doctoral degree. There are two types of general qualifications that are awarded at Cycle III: Licentiate

	(120 credits) and Doctor of Philosophy (240 credits). Students who were awarded the title of PhD or Licentiate will be issued a certificate / diploma by the HEI.
Denmark	Offering the degree of Doctor (PhD) and “higher doctor” is one of the responsibilities of the Academic Council of the faculty.
Romania	<p>The PhD thesis is developed as required by the institution organizing the doctorate through the Rules of organization and development of doctoral study programs and in accordance with the regulations set out in the <u>code of doctoral studies</u>.</p> <p>The PhD thesis is defended in a public hearing in front of the doctoral committee, after its evaluation by all three reviewers. The PhD title is awarded by order of MECS after the validation of the dossier by the National Council for the Attestation of Titles.</p>
	Subcriterion 10.4. Postdoctorate, habilitate
Lithuania	In Lithuania there is no other higher degree than the Doctor of Science or Arts. Particular attention is given to the selection of doctoral supervisors. Empowerment with the right to supervise PhD students is carried out by the institution based on criteria established by the Decree of the Ministry of Education. Post-doctorate is a comprehensive research program.
Scotland	In the the UK and Scotland a higher Ph.D. degree is set (<i>Higher Doctorate</i>), which follows after the PhD or another similar degree, is offered to individuals for valuable research or publications. The title is given to persons in education, based on published works, who don't have a distinct position in the qualifications and is considered honorific title.
Sweden	Persons who have already obtained a PhD degree can continue their post-doctoral studies to gain experience and further qualifications. Studies and postdoctoral positions are funded through grants / scholarships by the Swedish Research Council, which are provided for at least six months but not more than two years, and are announced twice a year. Postdoctoral studies are usually done abroad.
Denmark	Higher doctor degree (doktorgraden) os offered in Denmark which is similar to the degree of doctor habilitate, but the requirements in this case are much simpler than in RM.
Romania	The Education Act provides for setting up advanced research postdoctoral programs with a duration of minimum one year for young people who have obtained a PhD degree which finishes with the awarding of a certificate of postdoctoral studies.

4.2. Comparative analysis on academic autonomy in 5 countries, carried on criteria and sub-criteria

Criterion 1. Establishment and termination of study programs

The Parliament and the Government are the courts that decide to set up or liquidate higher education and research institutions, approving / setting regulations, objectives, guidelines and resource allocation by domains. The Ministry of Education and Research (under various names) is the authority responsible for education and research in institutions offering higher education sevice, is the body that decides on granting permission to award qualifications to these institutions.

4.2.1.1. Levels in higher education

Four types of higher education institutions can be found in 5 countries: vocational academies / colleges that offer professional degree programs (short term programs of higher education, 2-3 years); universities that offer undergraduate and graduate programs and PhD; university institutes specializing in the arts. Universities can provide full-time and part-time programs, can form in conjunction or independently branches in the country and abroad. Higher education institutions often offer post – graduate programs of continuing education and development and / or post doctoral research studies.

It established a Register of institutions with the right of providing education services under the responsibility of the Ministry of Education, which is made public.

4.2.1.2. Introduction of study programs at cycle I

Bachelor programs last for 3-4 years (180-240 credits) depending on the profile and the degree obtained at the end (eg. Scotland, Romania). The Ministry of Education determines / approves general requirements for college degree programs, study programs for cycle I, integrated studies and masters. New college and Bachelor programs must correspond to the List / Nomenclature approved by ME (Lithuania, Romania). New programs are initiated at the request of the economic environment or when new scientific directions emerge (Scotland, Denmark, Sweden). Institutions (program team) draw up the programs in accordance with the applicable requirements and approves them at the academic Council (University Senate). In most cases, the program to be funded / admitted passes a procedure more or less complicated of approval for temporary operation, until accreditation. In Sweden accreditation is not required to initiate a new program of study if the institution were granted rights to have doctoral programs.

So, institutions are free to decide on the introduction or liquidation of study programs at cycle I, if they fulfill the rules established by the Ministry.

4.2.1.3. Introduction of study programs at cycle II

It is practiced professional and research master programs lasting 60-90-120 credits, depending on the duration and type of the first cycle. A single condition exists - the total duration of the first two cycles should be not less than 300 ECTS. Other conditions are formulated by each university and are made public. It is noted that access to master's programs can have college graduates (with professional Bachelor degree) but will undertake a compensatory year. In Scotland, also simple Bachelor degree holders (180 ECTS) shall complete their Bachelor degree during one year.

The Ministry of Education provides the right (authorizes) to carry out master and doctoral programs to institutions conducting scientific research in the field. New master programs must demonstrate originality in the application and advancement of knowledge.

The name and content of programs are determined by institutions authorized under general requirements.

College graduates with Bachelor certificates complete their studies up to the university Bachelor degree during one year.

4.2.1.4. Introduction of study programs at cycle III

New doctoral programs usually occur as development of research programs. Institutions may grant the title of Doctor in areas where they conduct research and have established a doctoral school, either independently or in cooperation with other institutions covered by ministerial order. The doctoral school must be accredited or provisionally authorized as determined by the Ministry of Education.

The title of Doctor is awarded to students who have successfully completed the program and successfully defended the PhD thesis. The doctoral program is equivalent to 180 ECTS points. The name and content of programs is determined by the institution based on general requirements.

4.2.1.5. Language of instruction

In all programs, studies are usually conducted in the national language. In parallel, programs may be set up with the use of English, especially at the Master's and Doctorate at the institution's decision. In Romania, there are also accepted programs in minority languages.

Criterion 2. Admission to studies

4.2.2.1. Procedures for admission to Cycle I

Admission requirements for candidates are general (applied to all courses and programs in higher education) and specific (set by the institution) and are regulated by state normative acts.

The Ministry of Education or other state bodies (Council for Higher Education in Sweden, Universities and Colleges Admissions Service in Scotland) is responsible for centralized admission on behalf of higher education institutions. Typically, the registration is done online. The student is free to choose programs and institutions in their priority order.

Studies are free for local citizens and citizens of the EU. Citizens of other countries pay school fees, which cover the full costs for the studies.

The government approves quota for admission to degree programs depending on the capacity of university structures to ensure quality education. This capacity can be fixed in the accreditation document of the program or institution.

In Romania, the Ministry of Education develops annually a framework methodology and each higher education institution develops and applies its own rules to organize admission to degree programs offered. Bachelor studies in the form of full-time education are organized under funding from the state budget or a fee. MECTS allocates a number of study grants funded from the budget for state universities.

4.2.2.2. Procedures for admission to Cycle II and III

For admission to master studies, the contest is carried out based on bachelor's degree in related programs; university college graduates are admitted after one compensatory year.

The specific requirements for admission to Masters and PhD are determined by the university at the level of the study program. The Ministry of Education sets only general admission rules. Admission to second cycle programs is the responsibility of the university, which determines its own admission methodology.

Sweden and Romania allocate for master studies a number of study grants funded from the budget for state universities. In other countries master's programs are only paid.

PhD admission is based on the Regulation developed by the Research Committee, or a similar structure, which provides grants for PhD directly or through projects on a competitive basis.

Admission to doctoral studies is done based on master's degrees or integrated studies with 240 credits, of which at least 60 credits must be for Master's degree in the same field of specialization. The institution decides on admission to the third cycle, sets terms and admission procedures.

Studies are organized at faculty / school or doctoral school level and the application process for doctoral positions is specific to each faculty / school. Can be admitted only those who have received PhD scholarships or grants on a competitive basis.

4.2.2.3. Admission of foreign students

Admission of foreign students is carried out by admission committees of universities. No quotas on admission are imposed.

Admission of foreign students to cycle I and II is done mostly through mobility programs, student exchange.

No quotas on admission are imposed, but the number of study places for students who apply individually is limited by the capacity of the institution and shall be based on a fee. Admission requirements to cycle I and II for foreign students are the same as for local students. It requires knowledge of English or Swedish / Danish. Admission requirements are set independently by each institution. Admission of foreign students is carried out by admission committees of universities.

Foreign students who come to doctoral studies must have financing for the entire study period.

4.2.2.4. Formation of contingent

Universities are autonomous in the use of different methods of vocational guidance, various measures are taken at university, faculty, and program level.

Formation of students contingent is at the full responsibility of internal structures of the university. The activities of vocational guidance, recruitment of students from home and abroad is one of the tasks of each department / faculty for all universities in terms of reduction of the number of students in all European countries.

A special role in the fair and objective informing of students lies on the centralized admission services (ex. UCAS in the UK).

Institutions in the UK and Denmark organize recruitment campaigns in countries with potential candidates (English speaking countries), special language courses (China, South Korea, Indonesia, Malaysia).

Criterion 3. Recognition of studies

4.2.3.1. Recognition of study periods undertaken abroad

In all countries examined, it is already established, by law or regulation, that the number of transferable credits are the reference element that universities can use to recognize statutory periods of study or university studies previously done in the same fundamental field.

The rules for the recognition of credits and study periods done in another university in the country or abroad are established by the university and are components of the curricula of study programs.

Studies done in mobility programs are recognized under trilateral agreements concluded between the student, the home university and the host university. In normative acts of each university, there are mentioned rules on how to migrate from one program to another and from one form of education to another.

4.2.3.2. Recognition of documents of studies done abroad

In Sweden, the recognition of education certificates for employment purposes is done by the Swedish Higher Education Authority in accordance with the general directives of the EU.

For the recognition of education certificates obtained abroad, for education or professional promotion purposes, a state authority is appointed (ex. NARIC in Scotland, Swedish Higher Education Authority), which operates under the rules and requirements set by law or by the Government. It is up to employers to decide whether they can use educational qualifications and professional experience acquired abroad.

In the case of admission to studies, education documents and their eligibility are assessed by the institution to which students apply, based on the information provided in the application and attached documents. Recognition of courses and programs is done in order to allow the transfer of credits for the award of a qualification or for admission to studies.

Criterion 4. Accreditation of study programs

4.2.4.1. Internal quality assurance structures

Quality assurance of education and university research is an obligation of the higher education institution. Each university develops its own internal quality assurance system: establishes internal quality management structures, determines the policy, quality assurance strategy. The existence of a quality management structure is usually mandatory for accreditation.

In the university, a Quality Assurance Committee, composed of persons responsible for education, is responsible for quality assurance. At faculties / schools, the responsibility for quality assurance lies with the faculty council, heads of department and program directors.

4.2.4.2. Methodology, evaluation criteria, procedures

Higher education institutions have the right to offer accredited degree programs only. For the external evaluation and accreditation of study programs an Accreditation Agency for Higher Education is created as an independent public body. The methodology, external evaluation procedures of programs and quality and relevance criteria are usually developed by the Agency and approved by order of the Minister of Education or Government decision. Evaluation is based on several fundamental criteria: the demand of the labor market for the program; the program is based on research and is connected to an active high quality research environment; continuous assurance of internal quality of the program.

The external evaluation of study programs is conducted periodically, every 5-6 years. Most of the countries visited, after the first accreditation of study programs, opt for a regular assessment of institutions only. In this case, all areas of activity indicated in the Statute of the institution are evaluated and are based on compliance criteria. Overseas subsidiaries of institutions and subsidiaries of foreign institutions are also subject to accreditation and evaluation.

The British experience is of great interest - the methodology, procedures and evaluation criteria are described very explicitly in the UK Quality Code. Each quality criterion contains detailed and explicit instructions on the normative documentation the institution must have and present to the evaluators. The Code is an integrated document that meets basic regulations for all stages of life cycle of the university training process.

4.2.4.3. Freedom in the choice of external quality assessment body

Universities are free to choose an accreditation agency listed in the EAQAH Register. To the extent that the report will be prepared in accordance with quality and relevance criteria established by the Ministry of the country of origin, it will be recognized for examination in order to obtain national accreditation.

4.2.4.4. Relations of cooperation of the accreditation body with the Ministry of Education in the accreditation process

Actual external evaluation of study programs is performed by the Agency for external evaluation through specialized committees. The results are presented by the Agency to the Ministry of Education, which decides on the accreditation or non-accreditation of the

program, with the respective consequences of termination of funding, if it is from a state university, or withdrawal of the license, if the university is private. For very high quality indicators, when allocating funding by the Government, the university will receive a quality bonus (additional funding).

Criterion 5. The National Qualifications Framework (NQF)

4.2.5.1. The body responsible for NQF in the country

A National Qualifications Authority (NQA) is the statutory body for the award and accreditation of qualifications. NQA provides qualifications recorded with various types of certificates (for secondary education), diplomas and degrees related to higher education levels. Levels of qualification for higher education are described in terms of learning outcomes (descriptors) and in terms of credits.

The national qualifications framework in the countries visited is compatible with the EQF, comprises 8 levels of qualifications, four of which relate to higher education: professional level (5), Bachelor level (6), Master level (7), and PhD level (8). An exception is the QF of Scotland, which provides 12 levels of qualifications, but rules are provided for compatibility with the EQF.

NQA is under the auspices of the Ministry of Education, Government, or as in the case of Denmark – Agency for International Education. NQA also coordinates the development and maintenance of the National Register of Qualifications in Higher Education, which is public.

4.2.5.2. Participation of universities in the development of new qualifications

In establishing, developing and modifying the NQF many stakeholders are involved: higher education institutions, the Ministry of Education, representatives of the economic environment, students, society.

Universities can develop new qualifications which must comply with the general requirements of the NQF. When approving the operation (financing), external evaluation and accreditation of programs, it is verified whether the outcomes of the study program meet the educational standards prescribed by the Quality Code.

The inclusion of certificates and degrees / titles / diplomas in the NQF Register is based on an assessment of learning outcomes that individual degrees / certificates document in relation to the NQF level descriptors.

Higher education institutions are required to register in the Register information on the qualifications they develop through their offer of studies.

4.2.5.3. How are NQF requirements reflected in the study programs (compulsory provisions, internal control procedures, external evaluation)?

Universities should develop study programs and the implementation process so that competences determined by the NQF descriptors are achieved by the student. These

requirements serve as criteria and indicators for the final evaluation of studies, for preparation of self-evaluation reports and external evaluation for program accreditation.

Romanian National Education Act, for example, requires that the curriculum of study programs is consistent with the qualification profile defined in the National Qualifications Framework. This consistency is a mandatory criterion of quality assurance evaluation.

4.2.5.4. Educational standards

Qualifications descriptors for higher education (degrees), present in the NQF, are used as reference standards / quality criteria for the development, evaluation, and accreditation of study programs.

4.2.5.5. Credit system

In all 5 countries, the European Credit Transfer System ECTS is used.

Criterion 6. The content and implementation of the study program (organization of studies)

4.2.6.1. Designing the content of study programs

Higher education institutions are responsible for organizing the whole process of study, design of study programs and courses, current and final evaluation procedures. The entire content of study programs must comply with the objectives and learning outcomes and competences provided in the NQF the students are required to hold at the end of their studies. University degree programs are designed by initiative groups, usually research groups with high results. But the program curriculum must comply with legal acts issued by the Ministry or other subordinate entity.

For example, in the UK, the design, approval and implementation of programs is carried out in accordance with the standards established by the Quality Code, developed by the Agency for Quality Assurance in Higher Education of the UK, including a number of indicators of good practice on program operation, mechanisms that higher education service providers can base on to enhance the quality of the program implemented.

In Lithuania, the general requirements for the program structure, distribution of credits between groups of academic, specialized and practical training courses are defined in the Regulation approved by the Ministry of Education.

The curriculum of the study program is approved by the university senate.

4.2.6.2. Allocation of tasks among academic structures

The internal organization of the programs is the responsibility of the institution. A study program is served by the specialized program team within a department. Some modules are led by faculty members from departments, as appropriate. An important stake is on the

participation of representatives of the economic environment and state structures as providers of problems and projects for the organization of research / problem based studies.

4.2.6.3. Internships

Among the general requirements on study programs, specific requirements can be found on the duration (in credits) of internships, which depend on the program type. Institutional normative acts establish the organization, reporting and evaluation of internships.

For example, the programs offered by vocational academies provide a thorough professional training (internships have a substantial total duration), at Bachelor programs in colleges professional orientation is also evident (one semester, 15 -20%), while at bachelor and research master programs in universities internships in enterprises are missing or are very modest.

4.2.6.3. Final evaluation on cycles

The final evaluation is an act of appreciation of competence obtained by the student in relation to the outcomes prescribed by the program, is achieved through public defence of a project / thesis in front of an evaluation committee. Institutional normative acts define the defence procedures and requirements for the content of the paper.

Project development in a team is widely practiced, but with a personalized evaluation.

In the Danish system, the examination is specific both at the final stage of the study program, and the evaluation of semester modules. One semester of study usually contains 4-5 modules. Of these, at least one (with 10-15 credits) will have external examination, the other - internal examination.

In the Scottish system, there are education certificates and diplomas that can be offered at intermediate stages. They do not provide for a final evaluation.

Criterion 7. Employability

4.2.7.1. The occupational framework (ISCEO). The link between the level of studies - qualification

In the countries examined, the International Standard Classification of Occupations ISCO-88 (COM) recommended by the European Commission is used. ISCO gives a general classification of occupations by levels without specifying competence requirements. For higher education, requirements on general and vocational competencies are clearly expressed in the level descriptors 5, 6, 7 and 8 of the NQF.

The NQF of Romania, Denmark, Scotland clearly define the correspondence between levels of qualifications of the Framework, study documents that are issued, the type of education and professional training programs that can be acquired, qualification levels and reference levels of the European Qualifications Framework (EQF).

4.2.7.2. Place of MA and PhD in the occupational network

The place of the master student is well-defined for the following occupational areas: education, law, other areas of public activity. In the Register of limited specialties at EU level, there are also mentioned restrictions on the level of education for filling the posts in question. For the rest, the employer decides what general and vocational competences are required to meet the planned function.

Scientific master's and doctorate is destined for education and research.

4.2.7.3. Career guidance structures (state level, institution level)

The employment rate of people with higher education varies from one area to another and from one country to another. Being that the rate of employment and career progression is a performance criterion of the study program and institution, efforts are being made to facilitate this process at all levels, including national level. Program teams, departments keep records of their graduate employment and their career advancement. At the stage of studies, there are organized preparatory trainings for the hiring process. Systematically, there are organized labor fairs, meetings with alumni.

In some countries, universities are obliged by law to have in their composition structures responsible for career guiding of students and support for graduates regarding their inclusion on the labor market.

At national level, Sweden is a good example, where the Swedish Higher Education Authority collects data from graduates, every 12-18 months after graduation, then publishes a report on the employment rate of graduates by fields and institutions.

In Scotland, there is an old tradition of relations with alumni in order to bring sponsorship and candidates to studies.

Criterion 8. Teachers' workload

4.2.8.1. Planning the didactic workload

The Labour Code of the countries examined sets for teachers in higher education a working week of 35-40 hours per week. Institutions, by themselves, establish internal methodologies for calculating and distribution of the teaching and research load.

The teaching load and workload of teachers in Scotland is 110 hours of direct contact with students and 560 hours for consultancy. They constitute 40% of the annual volume of work. The remaining 40% of the hours are devoted to research and 20% – activities in the community interest. The total workload is 35 hours per week.

In Denmark, the Employment Act stipulates job positions, the structure of job duties of teachers and researchers in higher education. The main activities of universities consist of conducting research and research-based teaching. The load consists of 490 teaching hours per

semester, which constitute 60%, and 200 hours for scientific research (40%). A part of the academic load is reduced for administrative activity.

4.2.8.2. Distribution of the didactic workload

The method of teaching load distribution within institutions varies from country to country and from one university to another. In most countries visited, the teacher has the right to decide to do whether research only or research and teaching together.

Teaching load calculation and its distribution among the team members of a study and research program is an internal question, the team leader dealing with it.

Only in the Romanian legislation we found certain restrictions on norming the load by teaching positions.

4.2.8.3. The accounting of performing teaching and research workload

The accounting of hours of the teaching load is done at department level, while the accounting of hours devoted to scientific research is a problem virtually for all universities visited. In this context, the positive experience in this field of universities in Scotland is of particular interest.

Criterion 9. University scientific research

4.2.9.1. University structures involved in the organization of scientific research

Education and research policy is defined and implemented by the Ministry of Education, University and Research Council Centre for Quality Evaluation (teaching and research). Similar structures are found: at faculty / school and department level with identical roles.

Scientific research is an indispensable part of the process of training specialists with higher education. Research is concentrated within thematic departments and are funded from the state budget and projects, non-budgetary research grants. Currently, in most universities visited funds from non-budgetary grants together with grants from international cooperation are comparable in size with budgetary ones.

The university is autonomous in creating its own organizational structures and conducting scientific research: centers or laboratories, design units, consulting centers, university clinics, small production units, experimental stations or other production and knowledge and technology transfer units, integrated research, education and business centers. There can be set temporary distinct research units that have autonomy and their own statutes approved by the university senate. The institutions themselves decide on the internal allocation of financial resources for research and doctoral programs.

In order to conduct research, a crucial role is played by HEI's collaboration with the business for technology transfer and innovation purposes.

4.2.9.2. Students' involvement in the process of scientific research (incentive mechanisms)

The scientific master of 90 -120 ECTS is practiced in all countries examined, which is a starting point for doctoral studies. MA students are integrated into applied research so that at cycle III they can develop valuable scientific research autonomously.

In Denmark, student involvement in research is regarded as a fundamental principle of university education. The special attention to doctoral students, young researchers is a strategic direction of universities – which also ensures a good basis for staff recruitment and to enhance the research capacity of the institution.

4.2.9.3. Scientific research of the didactic staff

40% of the annual load of the teacher is usually allocated to scientific research, which is organized and accounted within the research group. Importance is given to the results, that are the bases of academic science funding from state funds. Research conducted by a teacher must meet the strategic plan of research within the department, be appropriate to field of study representative for the department.

2-3 valuable publications in national or international journals are mandatory.

The state encourages research excellence of teachers through specific financial incentives: additional funding for institutional development, grants for research mobility at other universities in the country or abroad.

4.2.9.4. Integrated research, education and business centers

Collaboration with business is an important aspect of university research and is an essential condition for institutions. This collaboration is often organized as competence centers, partnership associations, which are some autonomous units led by a board whose members are also representatives from trade, business and society, and reports directly to the university management.

It is also practiced the organization of specialized research institutes (specializing in the field of a faculty or school), which combine research with the academic process (transfer of knowledge acquired to students).

Criterion 10. The doctorate

4.2.10.1. The right to offer doctoral studies

Doctoral studies are the third cycle of higher education. The Ministry of Education grants the right to offer doctoral studies to universities alone or together with research institutes and with higher education and research institutions from abroad. The right is granted based on the external evaluation.

The doctorate is considered as research based studies, has a minimum duration usually equivalent to 3 years of full time education and in engineering – 4 years. Studies can be also organized remotely (distance learning).

After 1990, in the UK, it was introduced a new type of doctorate called professional, intended for professionals involved in the economy. The doctoral student performs applied research for a company that pays for education and research.

Issues related to the organization of doctoral studies (doctoral candidates admission, the organization of doctoral programs, appointment of the main supervisor, selection of problems to be investigated, research methodology, publication of research results and any other rules of thesis writing, presentation and defence) are part of university autonomy. The university establishes rules on access to the PhD program.

Doctoral study programs are usually held in doctoral schools accredited or provisionally authorized with this right.

Empowerment with the right to supervise doctoral candidates is in the competence of the department within the university. In Romania, the quality of doctoral supervisor is given by order of the Ministry of Education, at the proposal of CNATDCU to grant the habilitation certificate.

4.2.10.2. Doctoral Schools

Doctoral studies are organized in doctoral schools, which can be organized: by a university, university consortium or partnerships which are legally established between a university or university consortium and research and development units and in doctoral centers. The status and the way of organizing doctoral schools are determined by a Regulation, which is developed by the Research Committee. Some specific elements are detailed in the institutions' own regulations.

In Sweden, doctoral studies and research are organized within research platforms, so as to provide studies focused on results and to meet the needs of industries.

Each PhD student has at least two supervisors; has the right to change the supervisor; must draw up an activity plan to guide on and to follow throughout the period of study; is entitled to benefit from all the resources needed to achieve the research objectives.

4.2.10.3. Completion of studies, conferring of degrees

Courses and study programs at cycle III end up with an exam. The defence of a PhD thesis is oral and public. The university decides on the evaluation, grading and defence procedure. Typically, for defending, the faculty / school appoints one or two opponents, persons skilled in the art, and an examination commission of the thesis and defence. 3-5 teachers, at least one from another university, are members of the examination commission. Only the Commission makes decisions on thesis grading and awarding the title of doctor. The degree / title is confirmed by the University Senate (or equivalent body). In Romania, the PhD title is awarded by order of the Ministry of Education, after validation of the dossier by the National Council for the attestation of titles.

Students who were awarded the title of PhD will be issued a diploma of the university concerned.

4.2.10.4. Postdoctorate, habilitate

In Lithuania, Romania and Sweden there is no other degree than the Doctor of Science or Arts.

In the UK and Scotland, the higher doctorate is established, following PhD or something similar, and is awarded to people for valuable research or publications. The title is offered to people from education, based on the published work, but it doesn't have a distinctive position in the qualifications framework and is considered as an honorary title.

In Denmark, the degree of higher doctor (doktorgraden) is awarded, which is similar to the degree of doctor habilitat in Moldova, but in this case the requirements are much simpler.

Post-doctorate is a thorough research program for young people with a PhD title to gain additional experience and qualifications. Postdoctoral positions are funded through grants / scholarships that are offered on a competitive basis by the Research Council. Postdoctoral studies are usually done abroad.

4.3. The analysis of Academic Autonomy in the light of the 5 interfaces of external and interuniversity relations

We consider that it is not necessary to repeat the analysis of academic autonomy in terms of interfaces: university - governance, management - teachers, teachers - students, university - economic environment, internationalization. In the analysis performed in the previous paragraph, depending criterion, it was accentuated its importance to one or more relationships reflected by the interfaces nominated. For example, when analyzing the autonomy to promote new study programs, it was stressed the role of Government on the one hand and freedoms assigned to university, the autonomy of teams of didactic and research staff to propose new programs on the other hand but also management responsibility regarding the quality of programs approved.

4.4. General conclusions

1. Analyzing the legislation of five EU countries (which are part of the consortium) with reference to their higher education systems and internal normative acts at five representative universities in these countries, we observed a greater homogeneity in the treatment of the most important questions with academic and research aspect. This, in our view, is the result of implementation of the baselines of the Bologna Process, which aims at making higher education systems compatible.

2. Higher education institutions in EU countries have a well-defined academic autonomy and concrete obligations and responsibilities towards society and central administrative authorities.

3. Central administration determines policies and development strategies of education, is responsible for assessing the achievement of these strategies.

~~Institutions are autonomous in choosing tools and mechanisms to conduct the educational and research process, are fully responsible for the quality of the final results.~~

4. Institutions are fully responsible for the quality of the final results being autonomous in the choice of procedures, mechanisms and instruments for the deployment of the educational and research process.

The whole process – from planning / program design to the final exam – is focused on providing the intended learning and research outcomes. All partners are involved in these processes: administration of institutions, teachers and research staff, students and employers.

In the legislative acts examined in five European countries and the normative acts of the institutions visited it is specified the important role assigned to students in the quality assurance process: students have a strong voice when it comes to the assessment procedure of the course of (questionnaires / surveys that are made compulsorily after completion of each course / module), students are present in the teams of regular self-evaluation and external evaluation of study programs, they participate in governance and management bodies of the institution and its structures.

The autonomy of universities in the development of relations with the economic environment is also an effective mechanism for increasing the quality in education and research, and is widely used by European universities. By mutual applied research, involving specialists from enterprises in teaching and organization of internships, development of Bachelor / Master theses / projects, through effective technology transfer of industrial and management governance to universities (establishment of strategic development councils at university / faculties), it is exploited the synergy of the development potential of the two sides / environments.

European universities are in constant search for new financing mechanisms / ways, broadening of the spectrum of activities and services provided (such as the entrepreneurship, further education) in order to ensure their sustainable development given the fierce competition on the educational services market.

In recent years, Moldovan universities have felt what it means to operate in conditions of competition: the borders are open to circulation, there are possibilities to choose any of the universities in the country, opportunities to get a scholarship abroad (there are massively offered scholarships in Romania, Russia, Turkey, and the EU), it is required a better language training of students and a greater capacity for financial support from parents, pupils and parents are aware of the fact that they have to choose a specialty and a university that will ensure a job and prosperous future.

The next step in this project will be - a comparative study of academic autonomy in higher education in the Republic of Moldova and the European Union countries in order to define

the tangency and differentiation points and the development of amendment proposals to increase the effectiveness of our higher education system.

5. BIBLIOGRAPHIC REFERENCES BY COUNTRY

I. LITHUANIA

1. **Law on higher education and research.** 30 april 2009 No. XI-242, Vilnius
2. The doctoral degree regulations in Lithuanian University of Health Sciences. 2011
3. **Government of the Republic of Lithuania, Decree No. 1153, on the establishment of higher education institutions and issuance of licenses to pursue studies.** Vilnius, 9 September 2003
4. **Republic of Lithuania. Labour code.** (As last amended on 9 December 2010 – No. XI-1219)
5. **Description of the lithuanian qualifications framework.** Approved by the Government of the Republic of Lithuania , Resolution No. 535 of 4 May 2010
6. **Law on the approval of the description of the law study field.** 19 August 2010 No V-1385, Vilnius
7. **O r d e r** of the Minister of education and science of the Republic of Lithuania. **On approval of the descriptor of study cycles.** 21 November, 2011 No. V-2212, Vilnius
8. **Description of general requirements for the degree-awarding first cycle and integrated study programs.** Approved by Law No. V-501 of the Minister of Education and Science of the Republic of Lithuania, April 9, 2010
9. **Description of general requirements for the master's study programs.** Approved by Order No. V-826 adopted by the Minister of the Republic of Lithuanian on 3 June 2010
10. **O r d e r** of the minister for education and science of the Republic of Lithuania. **Approving the general requirements of joint study programmes.** No. ISAK-2833, 31 December 2009, Vilnius
11. **Accreditation procedure of higher education institutions.** Approved by Resolution No. 1317 of 22 September 2010 of the Government of the Republic of Lithuania
12. Minister of education and science of the Republic of Lithuania. **O r d e r** No. V-1487. **On the ammendment of order, No. ISAK-1652 “on the approval of the description of the procedure for the external evaluation and accreditation of study programs”**, of july 24, 2009 of the minister of education and science, July 29, 2011, Vilnius

13. **Government of the Republic of Lithuania. Resolution No. 535 of 3 May 2004. On approval of the Regulations on recognition of higher education diplomas, diplomas, certificates and other evidence of qualifications awarded within the European Union, European economic area or Swiss confederation for the purpose of taking up or pursuit of a regulated profession or regulated professional activity in the Republic of Lithuania, and of the list of courses having a special structure.** Vilnius
14. **Studijų kryptis sudarančių šakų sąrašas (list of branches of study fields).** Approved by Order of the Minister of Education and Science of the Republic of Lithuania No. V-222 of 19 February 2010
15. **Qualification requirements of the higher legal education for persons wishing to take up the position of judge following the procedure laid down by the laws.** Approved by Resolution No. 1568 adopted by the Government of the Republic of Lithuania on 4 October 2002
16. **Selection conditions for mobility for practices of Mykolas Romeris University students under the Erasmus sub-programme of the lifelong learning programme in academic years 2012/2013.** Approved by Mykolas Romeris University Order No. 1I- 130 of the Rector of 3 February 2012
17. **Senate of Mykolas Romeris University. Resolution regarding approval of the procedure for recognition of academic credits.** 3 June 2011, No. 1SN-36, Vilnius
18. **Procedure for organising student mobility for studies and practices under the Erasmus sub-programme of the lifelong learning programme.** Approved by Mykolas Romeris University Order No. 1I-341 of the Rector of 3 June 2011
19. **Rules of admission of persons to first cycle (bachelor's) studies in 2013.** Approved by Mykolas Romeris University Senate Resolution No. 1SN-46 of 18 April, 2013
20. **Rules of admission of persons to second cycle (master's) studies in 2013,** approved by Mykolas Romeris University Senate, Resolution No. 1SN-46 of 18 April 2013
21. **Procedure for organising supplementary practice of second-cycle students.** Approved by the Senate of Mykolas Romeris University 18 November 2011, Resolution No. 1SN-10
22. **Practical training regulations for students.** Approved by Mykolas Romeris University Senate, Resolution No 1SN-43 of 27 April 2012
23. **Description of the system of the assessment of learning outcomes**
24. **Approval of the procedure for the assessment of study outcomes.** Mykolas Romeris University senate resolution No. 1SN-30. 16 March, 2012. Vilnius
25. **Mykolas Romeris University rektor's order No. 1I-352 on the approval of e-studies organization procedure.** 7 June 2011, Vilnius

26. **Requirements for administering minor field studies.** Approved by the Senate of Mykolas Romeris University, 18 November 2011, Resolution No. 1SN-9
27. **Procedure for recognition of academic credits.** Approved by the Senate of Mykolas Romeris University, 3 June 2011, Resolution No. 1SN-36
28. **Mykolas Romeris University studies procedure.** Approved by Decision No. 1SN-17, adopted by the Senate, 27 January 2011
29. **The procedure for organizing feedback on studies.** Approved by Mykolas Romeris University Senate, Resolution No. 1SN-19, of 23 December 2013
30. **Regulations for study programme committees.** Approved by order No. 1I-246 of the Rector of Mykolas Romeris University of 9 April 2013
31. **Regulations of the committee for study quality assurance.** Approved by Order No. 1I-381 of the Rector of Mykolas Romeris University of 26 June 2013
32. **Regulations of the system of internal study quality assurance.** Approved by Resolution No. 1SN-69 of the Senate of Mykolas Romeris University of 28 June 2013
33. **Quality policy provisions for the studies and research at Mykolas Romeris University.** Confirmed by the decision of the Senate 3 December 2013, No. 1SN-15
34. **Regulations on Doctoral Studies.** Approved by Resolution No. 561 of the Government of the Republic of Lithuania of 12 May 2010 (Valstybės žinios (Official Gazette) No 59-2900, 2010)
35. **The doctoral degree regulations in Lithuanian University of Health Sciences.** 2011
36. **Kaunas University of technology and Lithuanian energy Institute Regulation on doctoral studies in the field of Energetics and power engineering.** Approved by Order No. A-393 of KTU Rector of 29 June 2011
37. **Procedure for arranging final examinations in Mykolas Romeris University**

II. SCOTLAND

1. UK Quality Code for Higher Education

Part A: **Setting and maintaining threshold academic standards, QAA. 12.2011**

Part B: **Assuring and enhancing academic quality, QAA. 2013**

Part C: **Information about higher education provision, QAA. 2012**

2. **Universities Scotland. Defining Responsible Autonomy.** Universities 2014

3. **Review of Higher Education Governance.** Universities Scotland's submission to the Scottish. Government's Review of Higher Education Governance, 2011
4. **United Kingdom. Structure of Educational System.** Pre-higher Education System, Higher Education System, Administrative structure of higher education, Admissions to Higher Education and Recognition
5. **Doctoral degree characteristics.** September 2011. It complements the QAA Code of practice
6. **The UK doctorate: A guide for current and prospective doctoral candidates 2011.** QAA-The Quality Assurance Agency for Higher Education
7. **The framework for qualifications of higher education institutions in Scotland.** 2001
8. **Further and Higher Education (Scotland) Act 2005**
9. **Academic Probationary Period: Guidelines** SUG
10. **Academic Job Level Descriptors** SUB 2006
11. **University of Strathclyde. Calendar 2012-13**
- Part 1. **General Regulations**
- Part 2A. **Regulations for Degrees of Bachelor and Integrated Master**
- Part 2B. **Regulations for Degrees of Bachelor and Integrated Master**
- Part 3. **Postgraduate and Certificate Regulations**
12. **University of Strathclyde. Calendar 2013-14**
13. **Universitatea Northumbria, Newcastle, University Quality and Standards Framework.** Approved by Academic Board March 2009.
<http://www.northumbria.ac.uk/sd/central/ar/qualitysupport/>
14. **Universities and Colleges Admissions Service.** <http://www.ucas.ac.uk>
15. **The UCAS admissions system.** www.internationalstaff.ac.uk/education/ucas
16. **The framework for qualifications of higher education institutions in Scotland.** Quality Assurance Agency for Higher Education 2001 education
17. **USG. Policy on the United Kingdom Border Agency (UKBA) Points Based System of Immigration: Tier 4, 2014**
18. **USG. General and Course Regulations for Degrees of Bachelor and Integrated Master 2013-14, 2013**

19. **SUG. Procedure for Admitting and Monitoring Students within the Points Based System (PBS) of Immigration**
20. **SUG. New Policy on Contextual Admissions.** September 2013
21. **Code of practice for the assurance of academic quality and standards in higher education: Postgraduate research programmes**
22. **SUG. University Admissions Policy, 2010.** (1, mapa SUG admitere)
23. **Promotion Procedure for Senior Academic Professional Staff.** University Strathclyde of Glasgow. Jan. 2013
24. **UK Quality Code for Higher Education. Part A: Setting and maintaining threshold academic standards.** Chapter A1: The national level. QAAHE, 2011
25. **National Recognition Information Centre (NARIC).** ECCTIS Ltd.
<http://www.naric.org.com>
26. **Report on the study visit at the Strathclyde University and the Caledonia University, Scotland, in the period during June 24-28, 2013 within the project “Enhancing University Autonomy in the Republic of Moldova”**
27. **Report of the Review of Higher Education Governance in Scotland.** Chaired by Professor Ferdinand von Prondzynsk. Submitted to The Scottish Ministers 16 January 2012
28. **Senior Academic Professional Promotion. Recommendation Form. USG, 2013 (42)**
29. **A strategic analysis of the Scottish Higher Education Sector’s distinctive assets.** A study commissioned by British Council Scotland Neil Kemp, William Lawton, April 2013
30. **An Introduction to The Scottish Credit and Qualifications Framework.** September 2001
31. **The Scottish Credit and Qualifications Framework SCQF. National Plan for Implementation of the Framework.** Dec. 2002
32. **Scottish credit and qualifications framework. National implementation plan. Update from the scqf implementation group.** Aug. 2002
33. **Statement of primary responsibilities.** Updated 6 July 2010, 2 pages
34. **Charter of the University of Strathclyde 10.11.2010, 4 pages**
35. **Ordinances of the University of Strathclyde 26.09.13, 14 pages**
36. **Regulations of the University of Strathclyde 201338**

37. **Servicii de schimb de cercetare si cunostinte.** Louise McKean – avocat si manager contracte in echipa pentru granturi si contracte. SUG, 2013 (45)
38. **Statutes of the University of Strathclyde, 7 pages.** 10 Nov. 2010
39. **Appointment of Visiting Professors.** Process, SUG (44)
40. **Governance and quality guidelines in higher education. A review on governance arrangements and quality assurance guidelines.** Fabrice Hénard, Analyst at the Directorate of Education, OECD and Alexander Mitterle, Political Science Student at Leipzig University
41. **Consultation on the development of a new Scottish Code of Good HE Governance – Issues Paper, November 2012**
42. **SUG. Briefing: How is higher education funded? Public information briefing**
43. **A Review of Governance and Strategic Leadership in English Further Education.** Allan Schofield (ed,) Jo Matthews, Simon Shaw
44. **Teaching Scotland’s future. Report of a review of teacher education in Scotland.** Graham Donaldson, December 2010 port of a review of teacher education
45. **Unison, Edinburgh Napier University, response to The Scottish Code of Good Practice for Governance of Scottish Higher Education Report**
46. **Institutional Consultation Arrangements.** Kevin Clarke, Peter West. September 2012
47. **Guide for Members of Higher Education Governing Bodies in the UK. Incorporate the Governance Code of Practice and General Principles. CUC, Committee of University Chairs.** March 2009, 2009/14
48. **Recommendation for title emeritus professors.** USB, 2011
49. http://www.strath.ac.uk/media/committees/ethics/Code_of_Practice_Oct_2009.pdf
50. **Pagina web a Universității din Strathclyde cu referire la Costul Economic Integral.** www.strath.ac.uk/fec
51. **Metodologia TRAC/CEi a guvernului UK.**
<http://www.hefce.ac.uk/whatwedo/lgm/trac/>
52. **Ghidul de finanțare al Consiliilor pentru Cercetare ale UK.**
<http://www.epsrc.ac.uk/SiteCollectionDocuments/FundingGuide.pdf>
53. **Divulgarea inovației și gestionarea proprietății intelectuale. EUniAM TEMPUS.** 25 mai 2013, Christopher Mort, Manager de Proprietate Intelectuală

III. SWEDEN

Establishment and termination of study programs

1. **The Swedish Higher Education Act.** 17 December 1992
2. **The Higher Education Ordinance.** 4 February 1993
3. **National Qualifications Framework.** Published by the Swedish National Agency for Higher Education 2011
4. **Higher Education in Sweden, 2013 Status Report.** Published by Swedish Higher Education Authority
5. **Establishment of courses at first- and second cycle at KTH.** Internal instruction no. 27/05, applicable from 01-07-2007, changed from 01-01-2008
6. <http://www.doktorandhandboken.nu>
7. www.studyinsweden.se

Admission to studies

8. **Higher Education Act.** 17 December 1992
9. **The Higher Education Ordinance.** 4 February 1993
10. **Higher Education in Sweden, 2013 Status Report.** Published by the Swedish Higher Education Authority
11. **National Qualifications Framework.** Published by the Swedish National Agency for Higher Education in May 2011
12. <http://www.studyinsweden.se>
13. www.universityadmissions.se
14. <http://www.doktorandhandboken.nu/english>

Recognition of studies

15. **National Qualifications Framework.** Published by the Swedish National Agency for Higher Education in May 2011
16. **Recognition of Higher Education Qualifications from Abroad.** Published by the Swedish National Agency for Higher Education (<http://www.hsv.se>)
17. <http://www.uhr.se/en> (The Swedish Council for Higher Education)
18. <http://www.studyinsweden.se>

Accreditation of study programs

19. **The Swedish Higher Education Act.** 17 December 1992
20. **Qualifications ordinance. Annex 2 to the Higher Education Ordinance.** 4 February 1993
21. **Appropriations for Undergraduate Education.** December 20, 1993, developed and approved by the Swedish Ministry of Education and Science
22. **Task of evaluating the quality of first and second-cycle programmes in higher education.** Swedish Government Decision based on the Government Bill *Fokus på kunskap – kvalitet i den högre utbildningen* [Focus on knowledge – quality in higher education (bill. 2009/10:139), which has been enacted by the Swedish Riksdag at the beginning of June 2010 (bet. 2009/10:UbU20, rskr. 2009/10:320)
23. **National Qualifications Framework.** Published by the Swedish National Agency for Higher Education in May 2011
24. **General Guidelines for Self-Evaluation in the Swedish National Agency for Higher Education's Quality Evaluation System 2011-2014.** Published by the Swedish National Agency for Higher Education 2011
25. **The Swedish National Agency for Higher Education's Quality Evaluation System 2011–2014.** Published by the Swedish National Agency for Higher Education 2011
26. **An academy for today** (bill 2009/10:149) cited in Swedish National Agency for Higher Education: Review of ENQA Membership, April 2012
27. **Swedish National Agency for Higher Education: Review of ENQA Membership.** April 2012
28. <http://www.uk-ambetet.se> (the Swedish Higher Education Authority)

The National Qualifications Framework (NQF)

29. **Higher Education Ordinance.** 4 February 1993
30. **National Qualifications Framework.** Published by the Swedish National Agency for Higher Education in May 2011
31. <http://english.uk-ambetet.se> (Swedish Higher Education Authority)

The content and implementation of the study program (organization of studies)

32. **The Higher Education Ordinance.** 4 February 1993
33. **Higher Education in Sweden, 2013 Status Report.** Published by Swedish Higher Education Authority
34. <http://www.euroeducation.net/prof/swedco.htm>

35. **Comprehensive rules and guidelines for degree project work 15 credits, regarding Master (60 credits).** 2007-07-01
36. **Comprehensive rules and guidelines for degree project work 30 credits, regarding Master (120 credits).** 2007-07-01
37. **Regulations for written examinations at KTH, including instructions for invigilators (proctors).** Internal regulation number 6/02, amended from 2010-10-01
38. **Examiners at KTH.** Internal regulation no. 4/2006, valid from 01/02/2006, amended from 18/10/2007
39. **The right for students to request an extra examination.** Internal instruction no. 5/03, applies from 01/02/2003, revised from 08/04/2005
40. **Regulations for schools, examiners and invigilators regarding written examinations.** Appendix 1 to Decision UF-2010-0416, 30-06-2010
41. **Regulations for students regarding written examinations.** Appendix 2 to Decision UF-2010-0416, 30-06-2010
42. **Handling of plagiarism in education at KTH.** Internal regulations 8/2011

Employability

43. **The Higher Education Ordinance.** 4 February 1993
44. **Higher Education in Sweden, 2013 status report.** Published by Swedish Higher Education Authority
45. <http://www.doktorandhandboken.nu/english>

Teachers' workload

46. **Higher Education in Sweden, 2013 Status Report.** Published by Swedish Higher Education Authority

University scientific research

47. **The Swedish Higher Education Act.** 17 December 1992
48. **The Higher Education Ordinance.** 4 February 1993
49. **Higher Education in Sweden, 2013 Status Report.** Published by Swedish Higher Education Authority
50. <http://www.kth.se/en/forskning/finansiering>
51. <http://www.kth.se/en/forskning/forska>
52. <http://www.kth.se/en/forskning/sarskilda-forskningssatsningar>

53. <http://www.kth.se/en/forskning/sarskilda-forskningssatsningar/centrumbildningar-1.11756>
54. <http://www.kth.se/en/forskning/research-office>
55. <http://www.vr.se/inenglish.4.12fff4451215cbd83e4800015152.html>
56. <http://www.government.se/sb/d/6949/a/88166>

The doctorate

57. **The Higher Education Ordinance.** 4 February 1993
58. <http://www.doktorandhandboken.nu/english>
59. <http://www.kth.se/en/forskning/forskningsplattformar>

IV. DENMARK

1. **Ministerial Order concerning the Act on Universities (the University Act).** Consolidation Act No. 1368 of 7 December 2007
2. Consolidated Act No. 189 of 12 February 2010. **Act on the Right to Exercise Certain Professions in Denmark**
3. **Act on Universities (the University Act).** 2012
4. Order No. 575 of 1 June 2011 on the **Recognition of Professional Qualifications etc.** **Bekendtgørelse om Anerkendelse af Erhvervsmæssige Kvalifikationer m.v.** (in Danish)
5. MO on **Bachelor and Master's (Candidatus) Programmes at Universities (the Universities Programmes Order).** No. 1520. December 2013
6. MO on **International Education Activities of Universities.** December 2011
7. MO No. 240 of 11 March 2013 on **Admission and Enrolment on Bachelor Programmes at Universities (Bacheloradgangsbekendtgørelsen)**
8. MO No. 241 of 11 March 2013 on **Admission and Enrolment on Master's (Candidatus) Programmes at Universities (Kandidatadgang bekendtgørelsen)**
9. Ministerial Order on **PhD Programme at the Universities and Certain Higher Artistic Educational Institutions (PhD Order).** Nr. 1039 of 27 August 2013
10. Consolidated Act No. 371 of 13 April 2007. **Assessment of Foreign Qualifications etc.**
11. Consolidated Act No. 189 of 12 February 2010. **Act on the Right to Exercise Certain Professions in Denmark**

12. Order No. 602 of 25 June 2003. **Assessment of Foreign Qualifications etc.**
13. Order No. 447 of 10 May 2007. **Qualifications Board**
14. **The Assessment of Foreign Qualifications.** Order No. 448 of 10 May 2007
15. Act No. 294 of 27 March 2007. **Act on the Accreditation Agency for Higher Education**
16. MO on **Criteria for the Relevance and Quality of University Study Programmes and on Procedures for Approval of University Study Programmes**
17. **Guidelines on Application for Accreditation and Approval of Existing University Study Programmes.** The rotation plan for accreditation of existing university study programmes is available at www.acedenmark.dk. 2nd edition, 1 February 2011
18. **Guidelines on Application for Accreditation and Approval of New University Study Programmes.** For deadlines for application for accreditation and approval of new university study programmes, see www.acedenmark.dk. 3rd edition, 10 February 2012. Valid from the deadline for application on 10 May 2012
19. **Organisation Accr. Institution. Schema structurala a Agentiei de Acreditare**
20. L294 – **Explanatory Notes to the Draft Bill on the Accreditation Agency for Higher Education (The Accreditation Act)**
21. **The Danich GFHE**
22. MO on **Grading Scale and Other Forms of Assessment of University Education** (grading scale order), No. 666/2011
23. MO on the **Appointment of Academic Staff at Universities.** No. 695. June 2011
24. **Recognition of foreign qualification in Denmark.** BiBB BW7 5/2012
25. Memorandum: Job Structure for Academic Staff at Universities 2007
26. MO on **Conferment of the Titles of Affiliated Professor and Affiliated Associate Professor.** Consolidation Act No. 367 of 25 March 2013
27. Ministerial Order on the Grading Scale and Other Forms of Assessment of University Education (grading scale order)
28. Bill No. I.143. Danish Parliament. November 2010. **Act Amending (The university Act).** The Act on Technology etc., at Public Research Institution and the Act on Social Housing etc.
29. June 2012. Ref.: pfr. J. No. 2010-002-00001. **Statutes of the Self-Governing Institution.** Aalborg University. www.aau.dk

30. **Strategy for AAU 2010-2015.** www.aau.dk
31. **Aalborg University's Development Contract 2012-2014.** 8 June 2012
32. **Annual report 2011.** Aalborg University
33. Aalborg University. Facts. 2011 (16 pages). Structura, finante, cercetare
34. 23 March 2009, pfr. J. No. 2005-031/01-0011. **Language Policy at Aalborg University.** www.aau.dk
35. **Principles of Problem and Project Based Learning. The Aalborg PBL Model.** Prepared for Aalborg University Scott Barge Harvard University
36. **Procedure for Selvevaluering og Udvikling af Aalborg Universitets Uddannelser**
37. **Generelle Bemærkninger om Udarbejdelsen af Selvevalueringsrapporten**
38. **Studienævnetsformænd. Udkast til Overordnet Procesplan for Udarbejdelse af Selvevalueringsrapporter**

V. ROMANIA

Laws

1. Lege Nr. 1 din 5 ianuarie 2011. **Legea educației naționale**
2. Lege Nr. 288 din 24 iunie 2004 **privind organizarea studiilor universitare**
3. HG Nr. 917 din 11 august 2005, privind structurile instituțiilor de învățământ **superior** acreditate sau autorizate să funcționeze provizoriu; și specializărilor din domeniul studiilor universitare de licență
4. OMECTS 4.786 din 9 august 2011, privind aprobarea Regulamentului de organizare și funcționare a Comitetului Național de Finanțare a Învățământului Superior
5. Ordin MECTS Nr. 295 din 05.02.2007 privind cadrul general de organizare a examenelor de finalizare a studiilor în învățământul superior – examene de absolvire, licență, diplomă, selecție, disertație și de finalizare a programelor de pregătire universitară avansată din cadrul studiilor universitare de doctorat
6. OMECTS Nr. 4868 din 07.08.2006 privind suplimentul la diplomă
7. Anexă la ordinul MEdC Nr. 3928/21.04.2005. Sistemul de asigurare a calității la nivelul instituției de învățământ superior
8. OMEC Nr. 3759 din 9 februarie 2011 privind aprobarea Regulamentului de organizare și funcționare a Consiliului Național de Atestare a Titlurilor, Diplomelor și Certificatelor Universitare și a structurii acestuia

9. OMEC Nr. 6049 din 03.12.2009 privind acordarea titlurilor didactice de conferențiar universitar
10. OMEC Nr. 6050 din 03.12.2009 privind neacordarea titlurilor didactice de profesor universitar și, respectiv, conferențiar universitar
11. OG Nr.75 din 12 iulie 2005 privind asigurarea calității educației
12. HG privind aprobarea metodologiei de evaluare în scopul clasificării universităților și ierarhizării programelor de studii
13. Statutul Studentului

Universities

14. OG Nr. 20 din 30 ianuarie 2003 privind acordarea dreptului de a procura, deține și folosi sigilii cu stema României și timbru sec instituțiilor de învățământ superior particular acreditate, care fac parte din sistemul național de învățământ
15. HG 916/2005 Structura organizațională a instituțiilor superioare de învățământ...
16. Lege Nr. 287 din 24 iunie 2004. Legea consorțiilor universitare
17. Lista instituțiilor de învățământ superior din România conform H.G. 676/2007

Admission to studies

18. HG Nr. 749 din 24 iunie 2009, privind Nomenclatorul domeniilor, structura instituțiilor de învățământ superior și specializările / programele de studii universitare de licență acreditate sau autorizate să funcționeze provizoriu organizate de acestea

Accreditation of HEIs and recognition of diplomas / degrees

19. Supliment la diplomă, forma tip
20. Legea Nr. 88/1993 republicată privind acreditarea instituțiilor de învățământ superior și recunoașterea diplomelor
21. Un șir de reglementări privind completarea suplimentului la diploma de licență și de arhitect

Quality assurance

22. Regulamentul de organizare și funcționare al Agenției Române de Asigurare a Calității în Învățământul Superior (ARACIS)
23. Metodologia de evaluare externă, standardele de referință și lista indicatorilor de performanță a ARACIS
24. Ordin privind asigurarea calității serviciilor educaționale în instituțiile de învățământ superior

25. Anexă la ordinul MEd Nr. 3928/21.04.2005 sistemul de asigurare a calității la nivelul instituției de învățământ superior
26. Ordin privind promovarea eticii profesionale în universități
27. Ordin de numire a membrilor Consiliului Interimar al Agenției Române de Asigurare a Calității în Învățământul Superior
28. Ordonanță de urgență Nr. 75 din 12 iulie 2005 privind organizarea calității educației (OUG-75-2005)

CNC

29. HG 918/2013 privind aprobarea Cadrului Național
30. Ordinului de Ministru Nr. 5703/ 18.10.2011 cu privire la Registrul Național al Calificarilor din Învățământul Superior (RNCIS)
31. HG 885/2010 privind organizarea și funcționarea Unității Executive a Consiliului Național al Calificărilor și al Formării Profesionale a Adulților

Deployment of the study programmes at B-M-D levels

32. Ordin MECT Nr. 3315 din 28.02.2008, privind criteriile generale de organizare și desfășurarea admiterii în ciclul de studii universitare de licență, de masterat și de doctorat pentru anul universitar 2008-2009
33. Ordin MECT Nr. 3861 din 13.04.2005, privind înființarea Programelor de Cercetare Postdoctorală
34. Ordin MECT Nr. 3617 din 16.03.2005, privind aplicarea generalizată a Sistemului European de Credite Transferabile
35. HG Nr. 365 din 24 iunie 2008, privind structura instituțiilor de învățământ superior și specializările / programele de studii universitare de licență acreditate sau autorizate să funcționeze provizoriu organizate de acestea
36. OMEC privind organizarea ciclului de studii universitare de licență, 2005
37. HG Nr. 88/2005 privind organizarea studiilor universitare de licență
38. OMECT Nr. 6012 din 21.11.2008 privind aprobarea Metodologiei și instrumentelor de lucru privind studiile de monitorizare a inserției pe piața muncii a absolvenților de învățământ superior din România
39. Hotărâre Nr. 404/2006 din 29/03/2006 privind organizarea și desfășurarea studiilor universitare de masterat

40. OMEC Nr. 4644 din 30.06.2008 privind completarea și modificarea ordinului ministrului educației, cercetării și tineretului Nr. 3628 din 31.03.2008 privind aprobarea programelor de studii universitare de masterat evaluate de ARACIS
41. Ordin MEC Nr. 4666 din 03.08.2009 pentru modificarea Ordinului ministrului educației, cercetării și tineretului Nr. 3.628/2008 privind aprobarea programelor de studii universitare de masterat evaluate de ARACIS
42. HG Nr. 567 din 15 iunie 2005, privind organizarea și desfășurarea studiilor universitare de doctorat
43. Anexa la OMEC Nr. 3861/13.04.2005, organizarea programelor postdoctorale
44. OMEC Nr. 4491 din 6 iulie 2005, privind organizarea și desfășurarea studiilor universitare de doctorat începând cu anul universitar 2005/2006

Research. Doctorate

45. OMEC Nr. 6172 din 17.12.2009 privind transparența decizională referitor la acordarea titlurilor științifice și didactice
46. Ordin MEC Nr. 5098 din 03.10.2005, de aprobare a Sistemului de evaluare privind conferirea titlului de profesor universitar
47. Anexă la OMEC Nr. 5098/03.10.2005, S i s t e m d e e v a l u a r e privind conferirea titlului de profesor universitar
48. Anexă la OMEC Nr. 5098/03.10.2005, S i s t e m d e e v a l u a r e privind conferirea titlului de conferențiar universitar
49. OMEC Nr. 5771/29.11.2006 privind aprobarea Regulamentului de organizare și funcționare a Consiliului Național al Cercetării Științifice din Învățământului Superior
50. Anexa Nr. 1 la OMEC Nr. 5771/29.11.2006. Regulament de organizare și funcționare a Consiliului Național al Cercetării Științifice din Învățământul Superior (C.N.C.S.I.S.)
51. OMEC 3904 privind organizarea și funcționarea Consiliului Național de Atestare a Titlurilor, Diplomelor și Certificatelor Universitare (C.N.A.T.D.C.U.)
52. Anexa Nr. 1 la OMEdC_3904, Regulamentul de organizare și funcționare al Consiliului Național de Atestare a Titlurilor, Diplomelor și Certificatelor Universitare (C.N.A.T.D.C.U.)

ANNEX 1. IDENTIFICATION OF RESOURCES, FORMULATION OF QUESTIONS CONCERNING ACADEMIC AUTONOMY IN LITHUANIA

Stating the problem	Consulted material / document	Unresolved issue / problem
<p><u>I. Introduction / initiation and liquidation/termination of study programs:</u></p> <ul style="list-style-type: none"> • Introduction of study programs at the Bachelor / undergraduate level (initiation procedures, conception, obtaining the right to open a program, links with NQF) • Introduction of study programs at the Master level • Introduction of study programs at the PhD / doctoral level • Awards provided • Termination of degrees (programs) – (who decides, procedures) • Language of instruction at undergraduate level – (Whose is the decision, procedures for obtaining the right) 	<p>1. Republic of Lithuania, Law on higher education and research. 30 april 2009 no xi-242</p> <p>2. Republic of Lithuania law amending the law on education. 17 March 2011 No XI-1281 (cap.)</p> <p>3. Order of the MES of the RL, approving the general requirements of joint study programmes. No isak-2833, 31 december 2009</p> <p>4. Government of the Republic of Lithuania, decree no. 1153, on the establishment of higher education institutions and issuance of licenses to pursue studies. Vilnius, 9 september 2003</p>	<p>1. Is the launching of a new study program conditioned by any external factors? Is it required or not the approval or recommendation of any external bodies / structures or everything is left at the disposal of the university?</p> <p>2. In many countries, before launching a new study program, it is subject to external evaluation/review by a Quality Assurance Agency or Ministry of Education. Is it the case of Lithuania, too?</p> <p>3. Is there any nomenclature of specialties (programs), the institution can / is obliged to choose from? Is there any procedure difference for cycle 1 and 2?</p> <p>4. How to initiate a program that is entirely new, for example at border between areas?</p> <p>5. How are “minorfield studies” organized?</p>
<p><u>II. Admission:</u></p> <ul style="list-style-type: none"> • Admission quota of local students with grants from the government / own account • Procedures for admission to undergraduate / Bachelor cycle (educational documents, mark level, procedure) • Procedures for admission to the Master cycle • Admission of foreign students (non EU): 	<p>2.25. Procedure for admission of citizens of foreign states to first-cycle and second-cycle studies for 2013 at mykolas romeris university. Approved by Senate, Res. No. 1SN-46 of 18 April 2013</p> <p>2.26. Rules of admission of persons to mykolas romeris university first cycle (bachelor's) studies in 2013, approved by Senate Res. No. 1SN- 46 of 18 April, 2013</p> <p>2.27. Rules of admission of</p>	<p>1. Is there a framework regulation of ME on the organization of the admission process to higher education, cycles 1, 2, 3?</p> <p>2. Is the matriculation quota established by a higher authority or it relates to the autonomy of the university?</p> <p>3. Is the competitor allowed to participate in the contest concomitantly at several programmes / universities?</p>

<ul style="list-style-type: none"> • Admission quota of students. Admission procedures (are they similar or not to those for local students) 	<p>persons to mykolas romeris university second cycle (master's) studies in 2013, approved by Senate, Res. No. 1SN- 46 of 18 April 2013</p>	<p>4. Do master's programs suppose the access of Bachelor degree graduates from other related or less related fields?</p> <p>5. To what degree Bachelor programs within the department / faculty have a common core? At what level is the specialization of students done?</p> <p>6. Is it possible to break away from a program offered by another department / faculty?</p> <p>7. How is the admission capacity to a study program determined?</p> <p>8. How are the interests of the national economy in specialists of different profiles taken into account? Are there any mechanisms to regulate / direct student flows toward less prestigious, but strictly necessary specialties?</p>
<p><u>III. Recognition of studies:</u></p> <ul style="list-style-type: none"> • Of study periods performed abroad at Bachelor, Master, Doctoral level • Recognition of educational documents for the studies done abroad at Bachelor, Master, Doctoral level (recognition bodies, procedures, conditions) 	<p>2.17. Senate of MRU. Resolution regarding approval of the procedure for recognition of academic credits at MRU. 3 June 2011, No. 1SN-36,Vilnius</p> <p><u>Veyi Lista: nr. 13-19</u></p> <p>1.14. Government of the RLit. Resolution no 535 of 3 may 2004. On approval of the Regulations on recognition of higher education diplomas, diplomas, certificates and other evidence of qualifycations awarded.</p>	<p>A considerable number of students from Lithuanian universities undertake one or two semesters abroad. What are the recognition procedures / equivalence of courses / modules or study periods performed in other (local or abroad) universities?</p> <p>Does each university determine autonomously its procedures for the recognition of studies done outside the university or there is a framework regulation approved by ME or other higher authority?</p>
<p><u>IV. Quality assurance, accreditation of study programs:</u></p>	<p>1.12. Accreditation procedure of higher education institutions. Resolution No 1317</p>	<p>1. If it is possible, we would like to get some additional methodical</p>

<ul style="list-style-type: none"> • Internal structures of quality assurance, student involvement in the process of quality assurance • Methodology, evaluation criteria, procedures (self-evaluation, external evaluation) • Freedom in the choice of external quality assurance body • Relationships / how does the accreditation body cooperate with the Ministry of Education in the accreditation process • Assessment of the internal system of quality management (ISO 9000) 	<p>of 22 September 2010 of the Government of the RL</p> <p>1.13. Minister of education and science. O r d e r no. V-1487. On the ammendment of order No. ISAK-1652 “on the approval of the description of the procedure for the external evaluation and accreditation of study programs”, July 29, 2011, Vilnius</p> <p>2.40. Regulations of the committee for study quality assurance of mykolas romeris university, Order No. 1I-381 of the Rector of 26 June 2013</p> <p>2.41. Regulations of the system of internal study quality assurance at mykolas romeris univers, Resolution No. 1SN-69 of the Senate of 28 June 2013</p> <p>2.42. Quality policy provisions for the studies and research at mykolas romeris university. The decision of the Senate, 3 December 2013, No. 1SN-15</p> <p>2.38. The procedure for organizing feedback on studies of m ru, approved by Senate, Res. No. 1SN-19, of 23 December 2013</p>	<p>materials / documents on:</p> <ul style="list-style-type: none"> • The functioning of the internal quality assurance system.
<p><u>V. National Qualification Framework:</u></p> <ul style="list-style-type: none"> • The body responsible for the NQF in the country (functions, structure, relations with ME and universities) • How do universities (ME, management bodies of HEIs) participate in the development of new qualifications • How are the NQF requirements reflected in the 	<p>1.7. O r d e r of MEC on approval of the descriptor of study cycles, 21November, 2011 No. V-2212</p> <p>1.8. O r d e r of MEC. Approving the general requirements of the first degree and integrated study programmes, 9 April 2010 No V-501</p> <p>1.9. O r d e r of MEC. Approval of the general requirements for master degree study programmes, No.</p>	<p>1. What are the procedures for initiating, promoting, approving new qualifications?</p> <p>2. Are there in Lithuania any educational standards on branches / domains developed on the basis of general descriptors?</p> <p>3. What is the typical structure of a (point) credit transfer on components of guided work (contact hours) and individual work? Does</p>

<p>study programs (compulsory provisions, procedures, internal control, external evaluation)</p> <ul style="list-style-type: none"> Educational standards (exist or not, if yes – how are they related to NQF) 	<p>V-826 of 3 June 2010</p> <p>1.5. Government of the RL</p> <p>Resolution, approving the description of the lithuanian qualifications Framework No. 535,4 May 2010</p>	<p>this structure differ by levels and forms of education?</p> <p>4. Are higher education non-university programs organized separately from the university ones? Are there any migration possibilities between these two types of programs?</p> <p>5. What is the popularity of I and II levels among students and their demand on the labour market?</p> <p>6. Is it possible to obtain a (HE) qualification based on the assessment of non-formal education (independent studies and practical experience at the workplace)?</p> <p>7. What are the possibilities of returning to studies for obtaining a higher degree?</p>
<p><u>VI. Employability:</u></p> <ul style="list-style-type: none"> Occupational framework (ISCED) Differentiation by level of education. Place of Master and PhD 		<p>1. What are the mechanisms to support students in the employment process?</p> <p>2. How are these efforts supported by the ME, other governing bodies?</p>
<p><u>VII. Content and implementation of the study program (organization of studies):</u></p> <ul style="list-style-type: none"> Content laboration / designing The distribution between university structures Internships Final evaluation (exams, theses) on cycles 	<p>2.37. Mykolas romeris university studies procedure. Approved by Decision No 1SN-17 adopted by the Senate on 27 January 2011</p> <p>2.29. Practical training regulations for students of mykolas romeris university, approved by Senate, Res. No 1SN-43 of 27 April 2012</p> <p>2.31. Procedure for arranging final examinations in mykolas romeris university, dezvoltate in baza...</p> <p>2.33. MRU senate res. no.</p>	<p>1. Are there any methodical guidelines on content development of study disciplines / courses? Could you please provide us with some concrete examples?</p> <p>2. How are internships /practical trainings organized?</p> <p>3. Obtaining the HE Diploma requires the acquisition of practical skills / profession. How to get them at 3/3 and 5 years of study? What are Bachelor / Master studies completed with?</p>

	<p>1sn-30. Approval of the procedure for the assessment of study outcomes, 16 March, 2012. Vilnius</p> <p>2.28. Procedure for organising supplementary practice of second-cycle students of mykolas romeris university, Approved by the Senate 18 November 2011, Res. No. 1SN-10</p>	<p>4. What are the procedures for amending the statute of the state scholarship student into contract student status (paying tuition fees)?</p>
<p><u>VIII. Teaching load of the didactic staff:</u></p> <ul style="list-style-type: none"> • Planning the teaching load () • The distribution of teaching load • Accounting of the teaching and research load achievement 	<p>1.2. Republic of lithuania. Law amending the law on education, 17 march 2011</p> <p>1.4. Republic of lithuania. Labour code</p> <p>1.15. Republic of Lithuania. Law on the employment contract. 28 November 1991, No. I-2048, Vilnius</p>	<p>1. What is the methodology of calculation and allocation of the teaching load among teachers of the department?</p> <p>2. How does the department, responsible for a study program, involve other departments in ensuring the educational process at this program?</p> <p>3. What are the mechanisms and procedures for the allocation and distribution of teaching loads at the university and departments level?</p>
<p><u>IX. University scientific research (organization):</u></p> <ul style="list-style-type: none"> • University structures involved in the organization of scientific research • Involving students in the process of scientific research (incentive mechanisms /incentives for the parties ...) • Scientific research of teachers (achievement planning and control, the methodology of assessing the research activity ...) • Research Master 		<p>What are the cooperation relations between universities and research institutes?</p> <p>How is the research workload of teachers accounted?</p> <p>To what extent do students get involved in research in the first 2 cycles?</p>
<p><u>X. Doctorate (PhD types),</u></p> <ul style="list-style-type: none"> • doctoral schools, 		<p>1. What is the popularity of doctorates in Lithuania?</p>

<ul style="list-style-type: none"> • Post-doctorate, • Habilitate 		<p>2. Who determines the admission quota and what is the structure of this quota?</p> <p>3. What are the procedures for creating professional doctorate programs?</p> <p>4. What are the procedures of defending a PhD thesis and awarding a scientific degree?</p> <p>5. How are PhD supervisors empowered?</p> <p>6. Can there be organized inter-university doctoral schools, in international consortia?</p>
---	--	--

ANNEX 2. IDENTIFICATION OF RESOURCES, FORMULATION OF QUESTIONS CONCERNING ACADEMIC AUTONOMY IN SCOTLAND

Stating the problem	Consulted material / document	Unresolved issue / problem
<p><u>I. Introduction / initiation and liquidation/termination of study programs:</u></p> <ul style="list-style-type: none"> • Introduction of study programs at the Bachelor/ undergraduate level (initiation procedures, conception, obtaining the right to open a program, links with NQF) • Introduction of study programs at the Master level • Introduction of study programs at the PhD / doctoral level • Awards provided • Termination of degrees (programs) – (who decides, procedures) • Language of instruction at undergraduate level – (Whose is the decision, procedures for obtaining the right) 	<p>1. CHARTER of the University of Strathclyde 10.11.2010</p> <p>2. STATUTES of the University of Strathclyde, 10 Nov 2010</p> <p>3. REGULATIONS of the University of Strathclyde. 2013</p> <p>4. ORDINANCES of the University of Strathclyde, 26.09.13</p> <p>5. USG. General and Course Regulations for Degrees of Bachelor and Integrated Master 2013-14, 2013</p> <p>6. University of Strathclyde Calendar 2012-13, part 2A, part 2B, part 3</p>	<p>1. Is the launching of a new study program conditioned by any external factors? Is it required or not the approval or recommendation of any external bodies / structures or everything is left at the disposal of the university?</p> <p>2. In many countries, before launching a new study program, it is subject to external evaluation / review by a Quality Assurance Agency. Is it the case of Scotland, too?</p>
<p><u>II. Admission:</u></p> <ul style="list-style-type: none"> • Admission quota of local students with grants from the government / own account • Procedures for admission to undergraduate / Bachelor cycle (educational documents, mark level, procedure) • Procedures for admission to the Master cycle • Admission of foreign students (non EU): • Admission quota of students. Admission procedures (are they similar or 	<p>1. USG. General and Course Regulations for Degrees of Bachelor and Integrated Master 2013-14, 2013</p> <p>2. USG.University Admissions Policy, 2010</p> <p>3. USG. Procedure for Admitting and Monitoring Students within the Points Based System (PBS) of Immigration 2009</p> <p>4. USG. Policy on the United Kingdom Border Agency (UKBA) Points Based System of Immigration: Tier 4, 2014</p>	<p>1. There are made references to some documents that we didn't find – Regulation 2, 4, 5; Course Handbooks; University's Course Regulations. Where / how can we find them? Can you give them to us?</p> <p>2. Is there a framework regulation on the organization of the admission process to undergraduate / Bachelor level?</p> <p>3. A student who has obtained a diploma or degree can be enrolled at the same department in order to obtain a higher level?</p> <p>4. How to calculate the</p>

not to those for local students)		<p>score for degree classification (simple, merit, distinction), the rule 12.49?</p> <p>5. Integrated master programs have common trunk with Bachelor or are carried out in parallel?</p> <p>6. The programs within the department have a common trunk?</p> <p>7. Is it possible to change / transfer to a program offered by another department / faculty?</p> <p>8. How is the admission capacity to a study program determined?</p> <p>9. How are the interests of the national economy in specialists of different profiles taken into account? Are there any mechanisms to regulate / direct student flows toward less prestigious, but strictly necessary specialties?</p>
<p>III. Recognition of studies:</p> <ul style="list-style-type: none"> • Of study periods performed abroad at Bachelor, Master, Doctoral level • Recognition of educational documents for the studies done abroad at Bachelor, Master, Doctoral level (recognition bodies, procedures, conditions) 	<p>1. USG. General and Course Regulations for Degrees of Bachelor and Integrated Master 2013-14, 2013</p> <p>2. UK Quality Code for Highe Education. Parts A, B</p>	<p>1. A considerable number of students from Scottish universities undertake one or two semesters abroad. What are the recognition procedures / equivalence of courses / modules or study periods performed in other (local or abroad) universities?</p>
<p>IV. Quality assurance, accreditation of study programs:</p> <ul style="list-style-type: none"> • Internal structures of quality assurance, student involvement in the process of quality assurance • Methodology, evaluation criteria, procedures (self-evaluation, external 	<p>1. UK Quality Code for Highe Education. Part B: Assuring and enhanscing academique quality. QAAHE, 2012</p> <p>2. Regulations of the University of Strathclyde. 2013, (cap. 1.3)</p> <p>3. Code of practice for the assurance of academic</p>	<p>1. If it is possible, we would like to get some additional methodical materials / documents on: the functioning of the internal quality assurance system.</p>

<p>evaluation)</p> <ul style="list-style-type: none"> • Freedom in the choice of external quality assurance body • Relationships / how does the accreditation body cooperate with the Ministry of Education in the accreditation process • Assessment of the internal system of quality management (ISO 9000) 	<p>quality and standards in higher education: Postgraduate research programmes. QAA, 2004.</p>	
<p><u>V. National Qualification Framework:</u></p> <ul style="list-style-type: none"> • The body responsible for the NQF in the country (functions, structure, relations with ME and universities) • How do universities (ME, management bodies of HEIs) participate in the development of new qualifications • How are the NQF requirements reflected in the study programs (compulsory provisions, procedures, internal control, external evaluation) • Educational standards (exist or not, if yes – how are they related to NQF) 	<p>1. An Introduction to The Scottish Credit and Qualifications Framework, 2001</p> <p>2. The framework for qualifications of higher education institutions in Scotland, 2001</p> <p>3. UK Quality Code for Higher Education. Part A: Setting and maintaining threshold academic standards. Chapter A1: The national level. QAA, 2011</p>	<p>1. What are the procedures for initiating, promoting, approving new qualifications?</p> <p>2. Are there in Scotland or the UK educational standards on branches / domains developed on the basis of SCGF?</p> <p>3. In UK Quality Code Part (and other mentioned documents) it is presented the description of qualification levels. Levels 7-12 are for higher education. For each level it is indicated: duration of studies, the document of finishing the studies, the minimum number of credits.</p> <p>Problems: What is the typical structure of a (point) credit transfer on components of guided work (contact hours) and individual work? Does this structure differ by levels and forms of education?</p> <p>4. Are CertHE, DipHE, Bachelor, BSc Hons programs organized as common programs with many outputs or parallel programs with migration possibilities between them? Are there any document describing these procedures?</p> <p>5. What is the popularity of</p>

		<p>CertHE, DipHE levels among students and their demand on the labour market?</p> <p>6. What are the possibilities of returning to studies for obtaining a higher degree?</p> <p>7. Is it possible to obtain a (HE) qualification based on the assessment of non-formal education (independent studies and practical experience at the workplace)?</p>
<p><u>VI. Employability:</u></p> <ul style="list-style-type: none"> Occupational framework (ISCED) Differentiation by level of education. Place of Master and PhD 		<p>1. What are the mechanisms to support students in the employment process?</p> <p>2. How are these efforts supported by the ME, other governing bodies?</p>
<p><u>VII. Content and implementation of the study program (organization of studies):</u></p> <ul style="list-style-type: none"> Content elaboration / designing The distribution between university structures Internships Final evaluation (exams, theses) on cycles 	<p>1. UK Quality Code for Higher Education. Part B: Assuring and enhancing academic quality. Chapter B1. Programme design, development and approval, B3: Learning and teaching, QAA, 2013</p>	<p>1. Are there any methodical guidelines on content development of study disciplines / courses?</p> <p>2. Bachelor and Master programs are made based on subjects of 20 transferable credits, this practice being different from the practice of the RM and other continental European countries (France, Belgium, and Romania). It's an interesting practice, and to better understand the essence of subjects with solid volume, I would like to get acquainted with some concrete examples, especially related to Electrical Engineering.</p> <p>3. How are internships organized?</p> <p>4. Obtaining the HE Certificate and Diploma requires the acquisition of practical skills. How to get them at 1 or 2 years of study?</p>
<u>VIII. Teaching load of the</u>		<p>1. What is the methodology</p>

<p><u>didactic staff:</u></p> <ul style="list-style-type: none"> • Planning the teaching load • The distribution of teaching load • Accounting of the teaching and research load achievement 		<p>of calculation and allocation of the teaching load among teachers of the department?</p> <p>2. How does the department, responsible for a study program, involve other departments in ensuring the educational process at this program?</p>
<p><u>IX. University scientific research (organization):</u></p> <ul style="list-style-type: none"> • University structures involved in the organization of scientific research • Involving students in the process of scientific research (incentive mechanisms /incentives for the parties ...) • Scientific research of teachers (achievement planning and control, the methodology of assessing the research activity ...) • Research Master 	<p>1. UK Quality Code for Highe Education. Part B: Assuring and enhanscing academique quality. B11. Reaserch degrees, QAA, 2012</p>	
<p><u>X. Doctorate (PhD types), doctoral schools. Post-doctorate, Habilitate;</u></p>	<p>1. Doctoral degree characteristics. QAA, 2011</p> <p>2. The UK doctorate: a guide for current and prospective doctoral candidates.QAA, 2011</p> <p>3. Code of practice for the assurance of academic quality and standards in higher education: Postgraduate research programmes. QAA, 2004</p> <p>4. University of Strathclyde Calendar 2012-13, part 3</p>	<p>1. What is the popularity of professional doctorates in the UK?</p> <p>2. What are the procedures for creating professional doctorate programs?</p> <p>3. How are PhD supervisors empowered?</p> <p>4. Can there be organized inter-university doctoral schools in consortium?</p>

ANNEX 3. IDENTIFICATION OF RESOURCES, FORMULATION OF QUESTIONS CONCERNING ACADEMIC AUTONOMY IN SWEDEN

Problem formulation	Material consulted	Unresolved question/issue
<p>Admission to first-, second-, and third-cycle courses and study programs</p> <ul style="list-style-type: none"> - applications - entry requirements - selection criteria - allocation of places - study and career guidance - Admission to courses and study programs that begin in the first cycle and are intended for students who are not new entrants to higher education <p>Admission quota of local students with grants from the government / own account</p> <p>Admission of foreign students (non EU):</p> <p>Admission quota of students. Admission procedures (are they similar or not to those for local students)</p>	<p>The Swedish Higher Education Act[1]</p> <p>The Higher Education Ordinance[2]</p> <p>Admission regulations for first cycle and second cycle courses and study programs at Stockholm University[3]</p> <p>Admission procedures for education at Bachelor, Master and Doctoral levels at Karlstad University[4]</p> <p>Application and admission to courses at SLU[5]</p> <p>Higher education in Sweden. 2013 status report [6]</p>	<p>Is there a limitation in number of people to be admitted to a certain course or study program? If yes, then who decides on the number of people to be admitted to a course / study program?</p> <p>What are the means higher education institutions use to actively promote and widen recruitment to higher education?</p> <p>Is there an age limit when applying to courses or study programs?</p> <p>Who provides students with study and career guidance in the university?</p> <p>Is it allowed to apply to more than one university and more than one study program at a time / in parallel?</p> <p>Do master's programs suppose the access of Bachelor degree graduates from other related or less related fields?</p> <p>In chapter 7 of the Higher Education Ordinance it is stated that “Admission to first or second-cycle higher education studies refers to <i>a course</i> or a study program”. Is it possible to apply to different courses, relating to one study program, but at different universities and get a Bachelor / Master’s degree?</p> <p>In the Higher Education Ordinance there are often made references to the Swedish National Agency for Higher Education which, for example, may permit a higher education institution in its selection of applicants for a certain course or study program to allocate places in some way, may issue further regulations on the evaluation of grades, may issue regulations on which field-specific courses shall be weighted courses for separate field-specific entry</p>

		<p>requirements etc. Isn't this a limitation to the higher education institution's autonomy?</p> <p>To what degree Bachelor programs within the department / faculty have a common core? At what level is the specialization of students done?</p> <p>Is it possible to change / transfer to a program offered by another department / faculty?</p> <p>How is the admission capacity to a study program determined?</p> <p>Is the matriculation quota established by a higher authority or it relates to the autonomy of the university?</p> <p>How are the interests of the national economy in specialists of different profiles taken into account? Are there any mechanisms to regulate / direct student flows toward less prestigious, but strictly necessary specialties?</p>
<p>Study programs</p> <p>First and second-cycle courses and study programs</p> <p>Course syllabuses</p> <p>Program syllabuses</p> <p>Assessment</p> <p>Degree projects</p> <p>Grades</p> <p>Course certificates</p> <p>Number of examinations</p> <p>Amending grades</p> <p>Reviewing grades</p> <p>Content and implementation of the study program (organization of studies):</p> <p>Content elaboration / designing</p> <p>The distribution between university structures</p> <p>Internships / practical training</p> <p>Final evaluation (exams,</p>	<p>The Swedish Higher Education Act[7]</p> <p>The Higher Education Ordinance[8]</p> <p>Administrative Procedure Act (1986:223) [9]</p> <p>Examination regulations at SLU [11]</p> <p>Course information and documentation at SLU [12]</p> <p>Assessment and grades at SLU [13]</p> <p>Independent project (degree project) at SLU [14]</p> <p>Study programs and qualifications (degrees) at SLU [15]</p>	<p>Can students change from one study program to another related or non-related study program? What is the procedure for doing that? When can they change their study programs?</p> <p>How do municipalities and county councils participate in higher education courses and study programs?</p> <p>What is the grading system in Sweden and the description of the grades?</p> <p>According to the Higher Education Ordinance "The higher education institution may determine which grading system is to be used". Does it mean that there is no unique grading system in Sweden?</p> <p>Is it necessary that a student gets course certificates for all courses and finally a program certificate?</p> <p>Could you provide us with some more detailed information on amending and reviewing grades?</p> <p>What shall be done if an examiner</p>

<p>theses) on cycles</p> <p><u>Introduction / initiation and liquidation / termination of study programs:</u></p> <p>Introduction of study programs at the Bachelor / undergraduate level (initiation procedures, conception, obtaining the right to open a program, links with NQF)</p> <p>Introduction of study programs at the Master level</p> <p>Introduction of study programs at the PhD / doctoral level</p> <p>Awards provided</p> <p>Termination of degrees (programs)</p> <p>Language of instruction at undergraduate level – (Whose is the decision, procedures for obtaining the right)</p>		<p>finds that a decision on a grade is obviously incorrect and the grade should be lowered?</p> <p>Is the launching of a new study program conditioned by any external factors? Is it required or not the approval or recommendation of any external bodies / structures or everything is left at the disposal of the university?</p> <p>In many countries, before launching a new study program, it is subject to external evaluation / review by a Quality Assurance Agency or Ministry of Education. Is it the case of Sweden, too?</p> <p>Is there any nomenclature of specialties (programs), the institution can / is obliged to choose from? Is there any procedure difference for cycle 1 and 2?</p> <p>How to initiate a program that is entirely new, for example at border between areas?</p> <p>Are there any methodical guidelines on content development of study disciplines / courses?</p> <p>How are internships / practical training organized?</p>
<p>Qualifications</p> <p>Entitlement to award qualifications</p>	<p>The Swedish Higher Education Act[16]</p> <p>The Higher Education Ordinance[17]</p> <p>National Qualifications Framework[18]</p> <p>Act Concerning Authority to Award Certain Qualifications[19]</p> <p>Higher education in Sweden. 2013 status report [20]</p>	<p>What is the procedure for / the steps followed by universities to get permission to award a third-cycle qualification from the Government and the Swedish National Agency for Higher Education?</p> <p>In Section 12 of the Swedish Higher Education Act it is stated that “The Swedish National Agency for Higher Education decides on permission to award qualifications in the third cycle at <i>higher education institutions that are not universities</i>, and in the first and second cycle at universities and higher education institutions.” Also, in the Higher Education Ordinance it is stated: “Entitlement to award general third-cycle qualifications may</p>

		<p>be granted to higher education institutions <i>other than universities</i>". Does it mean that universities are not higher education institutions and that they are not allowed to offer third cycle study programs?</p> <p>How often does the monitoring and evaluation of courses and programs take place?</p>
<p>National Qualification Framework:</p> <p>The body responsible for the NQF in the country (functions, structure, relations with ME and universities)</p> <p>How do universities (ME, management bodies of HEIs) participate in the development of new qualifications</p> <p>How are the NQF requirements reflected in the study programs Educational standards</p>	<p>The Swedish Higher Education Act [21]</p> <p>The Higher Education Ordinance [22]</p> <p>National Qualifications Framework [23]</p> <p>Act Concerning Authority to Award Certain Qualifications [24]</p> <p>Higher education in Sweden. 2013 status report [25]</p>	<p>What are the procedures for initiating, promoting, approving new qualifications?</p> <p>Are there in Sweden educational standards on branches / domains developed on the basis of general descriptors?</p> <p>What is the typical structure of a (point) credit transfer on components of guided work (contact hours) and individual work? Does this structure differ by levels and forms of education?</p> <p>What are the possibilities of returning to studies for obtaining a higher degree?</p> <p>What are the migration possibilities between study programs?</p> <p>Is it possible to obtain a (HE) qualification based on the assessment of non-formal education (independent studies and practical experience at the workplace)?</p> <p>What is the popularity of I and II cycles among students and their demand on the labour market?</p>
<p>Recognition of studies:</p> <p>Of study periods performed abroad at Bachelor, Master, Doctoral level</p> <p>Recognition of educational documents for the studies done abroad at Bachelor, Master, Doctoral level</p>	<p>The Swedish Higher Education Act[26]</p> <p>The Higher Education Ordinance[27]</p>	<p>A considerable number of students from Swedish universities undertake one or two semesters abroad. What are the recognition procedures / equivalence of courses / modules or study periods performed in other (local or abroad) universities?</p> <p>Does each university determine autonomously its procedures for the recognition of studies done outside the university or there is a framework</p>

		regulation approved by ME or other higher authority?
Credit transfer	The Higher Education Ordinance [28]	<p>In the Higher Education Ordinance, section 6, it is stipulated: “If a student at a higher education institution in Sweden has successfully completed a higher education course or study program, she or he is entitled to transfer the credits awarded for a course or study program at another higher education institution. This does not apply, however, if there is a substantial difference between these courses or study programs”. Is it possible for a student to apply for another study program, and to transfer credits from general subjects taught all around Swedish universities (e.g. philosophy, professional ethics, foreign language etc.)?</p> <p>In the Higher Education Ordinance, section 7, it is stipulated: “A student is entitled to transfer credits from a course or study program other than that laid down in Section 6 if the nature and extent of the <i>knowledge and skills cited by the student are such that they correspond on the whole to the course or study program</i> for which the credits are to be recognized”. How do you assess these skills and knowledge?</p>
Joint degree – institutional cooperation to provide joint degrees	<p>The Swedish Higher Education Act [29]</p> <p>Act Concerning Authority to Award Certain Qualifications[30]</p> <p>The Higher Education Ordinance [31]</p>	<p>What are the general requirements to apply to a joint degree?</p> <p>How does the educational process in a joint degree program take place?</p> <p>How is the evaluation process organized?</p> <p>Are the institutional cooperation agreements of general nature or apply only for specific study programs?</p>
Employability Occupational framework (ISCED) Differentiation by level of	<p>The Public Employment Act</p> <p>Employment Protection Act [33]</p>	<p>What are the mechanisms to support students in the employment process?</p> <p>How are these efforts supported by the ME, other governing bodies?</p>

education. Place of Master and PhD	Employment Ordinance (1994:373) [34]	
Teaching staff Teaching load of the didactic staff: Planning the teaching load The distribution of teaching load Accounting of the teaching and research load achievement	The Swedish Higher Education Act [35] The Higher Education Ordinance [36] The Public Employment Act [37] Employment Protection Act [38] Employment Ordinance (1994:373) [39] Higher education in Sweden. 2013 status report [40]	Is the teaching staff allowed, under state or university regulations, to undertake teaching and research activities in parallel in other educational or research institutions (except healthcare)? Does this type of employment mean “secondary employment”? In the Higher Education Ordinance, section 9 it is stated that: “Employment as an assistant may not correspond to more than 40 per cent and employment as a teaching assistant to more than 50 per cent of a full-time post.” Could you please provide us with some more detailed information on this statement? What is the methodology of calculation and allocation of the teaching load among teachers of the department? How does the department, responsible for a study program, involve other departments in ensuring the educational process at this program?
Students and student unions Students’ role in the governing of the higher educational institution Students’ influence in the development or improvement of courses and study programs	The Swedish Higher Education Act [41] The Higher Education Ordinance [42] Student influence at SLU [43]	What is the proportion of students’ representatives in the university’s governing body? What actions do students usually undertake and how do they participate in the development or improvement of courses and study programs?
Quality assurance, accreditation of study programs: Internal structures of quality assurance, student involvement in the process of quality assurance Methodology, evaluation criteria, procedures (self-evaluation, external evaluation) Freedom in the choice of	The Swedish Higher Education Act [44] The Higher Education Ordinance [45] Course and program evaluation at SLU [46]	How is internal / external quality assurance organized? Are there quality assurance offices / departments within higher educational institutions, and what is their role and tasks? What quality assurance procedures are applied within universities? How are course evaluations by students taken into account at improving the course content? How much credibility do you give to these

<p>external quality assurance body</p> <p>Relationships / how does the accreditation body cooperate with the Ministry of Education in the accreditation process,</p> <p>Assessment of the internal system of quality management (ISO 9000)</p>		<p>evaluations?</p> <p>Are there didactic staff evaluations by students performed? If yes, what measures are applied if a teacher fails this evaluation?</p>
<p>Doctorate (PhD types), doctoral schools. Post-doctorate, Habilitate</p> <p>Third-cycle courses and study programs</p> <p>Supervision</p> <p>Individual study plans</p> <p>Entitlement to supervision and other resources</p> <p>Examination grades</p> <p>Public defenses and grading doctoral theses</p>	<p>The Swedish Higher Education Act [44]</p> <p>The Higher Education Ordinance [45]</p> <p>Higher education in Sweden. 2013 status report [46]</p>	<p>Who proposes / develops the research issues for PhD students?</p> <p>In which situations a doctoral student is allowed to change his or her supervisor?</p> <p>According to the Higher Education Act “Examinations that form part of third-cycle courses and study programs shall be assessed in accordance with the grading system prescribed by the higher education institution.” Is there a specific grading system for the third cycle?</p> <p>Is it possible to enroll for a second time to a third-cycle study program if you failed the first time (for example if you succeeded to complete the courses but didn’t defend the doctoral thesis)? If yes, then what are the requirements?</p> <p>What is the popularity of professional doctorates in Sweden?</p> <p>Who determines the admission quota and what is the structure of this quota?</p> <p>What are the procedures for creating professional doctorate programs? How are PhD supervisors empowered?</p> <p>What are the procedures of defending a PhD thesis and awarding a scientific degree?</p> <p>Can there be organized inter-university doctoral schools, in international consortia?</p> <p>What are the incentives used by the state and university to attract students in research at the PhD level?</p>

		Who is in charge for PhD programs and students at the university?What are the cooperation relations between universities and research institutes?
--	--	---

ANNEX 4. IDENTIFICATION OF RESOURCES, FORMULATION OF QUESTIONS CONCERNING ACADEMIC AUTONOMY IN DENMARK

Problem formulation	Material consulted	Unresolved question / issue
<p>Admission to first-, second-, and third-cycle courses and study programs</p> <ul style="list-style-type: none"> - applications - entry requirements - selection criteria - allocation of places - study and career guidance - Admission to courses and study programs that begin in the first cycle and are intended for students who are not new entrants to higher education <p>Admission quota of local students with grants from the government / own account</p> <p>Admission of foreign students (non EU):</p> <p>Admission quota of students. Admission procedures (are they similar or not to those for local students)</p>	<p>The Danish (Consolidation) Act on Universities (the University Act)</p> <p>Ministerial Order no. 240 of 11 March 2013 on Admission and Enrolment on Bachelor Programmes at Universities</p> <p>Ministerial Order no. 241 of 11 March 2013 on Admission and Enrolment on Master's (Candidatus) Programmes at Universities</p> <p>Ministerial Order on the PhD Programme at the Universities and Certain Higher Artistic Educational Institutions (PhD Order)</p> <p>Rules on admission to and enrolment on full-time programmes at Aarhus University</p>	<p>What are the general and specific admission requirement?</p> <p>Is there a limitation in number of people to be admitted to a certain course or study program? If yes, then who decides on the number of people to be admitted to a course / study program?</p> <p>What are the means higher education institutions use to actively promote and widen recruitment to higher education?</p> <p>Is there an age limit when applying to courses or study programs?</p> <p>Who provides students with study and career guidance in the university?</p> <p>Is it allowed to apply to more than one university and more than one study program at a time / in parallel?</p> <p>Do master's programs suppose the access of Bachelor degree graduates from other related or less related fields?</p> <p>Is it possible to apply to different courses, relating to one study program, but at different universities and get a Bachelor / Master's degree?</p> <p>To what degree Bachelor programs within the department / faculty have a common core? At what level is the specialization of students done?</p> <p>Is it possible to change / transfer to a program offered by another department / faculty?</p> <p>How is the admission capacity to a study program determined?</p>

		<p>Is the matriculation quota established by a higher authority or it relates to the autonomy of the university?</p> <p>How are the interests of the national economy in specialists of different profiles taken into account? Are there any mechanisms to regulate / direct student flows toward less prestigious, but strictly necessary specialties?</p>
<p>Study programs</p> <p>First and second-cycle courses and study programs</p> <p>Course syllabuses</p> <p>Program syllabuses</p> <p>Assessment</p> <p>Degree projects</p> <p>Grades</p> <p>Course certificates</p> <p>Number of examinations</p> <p>Amending grades</p> <p>Reviewing grades</p> <p>Content and implementation of the study program (organization of studies):</p> <p>Content elaboration / designing</p> <p>The distribution between university structures</p> <p>Internships / practical training</p> <p>Final evaluation (exams, theses) on cycles</p> <p><u>Introduction / initiation and liquidation/termination of study programs:</u></p> <p>Introduction of study programs at the Bachelor / undergraduate level (initiation procedures, conception, obtaining the right to open a program, links with NQF)</p> <p>Introduction of study programs at the Master level</p>	<p>The Danish (Consolidation) Act on Universities (the University Act)</p> <p>Ministerial Order on University Examinations and Grading (the Examination Order)</p> <p>Ministerial Order on the Grading Scale and Other Forms of Assessment of University Education (grading scale order)</p> <p>Language Policy at Aalborg University</p> <p>Principles of Problem and Project Based Learning. The Aalborg PBL Model</p>	<p>Can students change from one study program to another related or non-related study program? What is the procedure for doing that? When can they change their study programs?</p> <p>How does the Government and business participate in the development of higher education courses and study programs?</p> <p>Is it necessary that a student gets course certificates for all courses and finally a program certificate?</p> <p>Could you provide us with some more detailed information on amending and reviewing grades?</p> <p>Is the launching of a new study program conditioned by any external factors? Is it required or not the approval or recommendation of any external bodies / structures or everything is left at the disposal of the university?</p> <p>In many countries, before launching a new study program, it is subject to external evaluation /review by a Quality Assurance Agency or Ministry of Education. Is it the case of Denmark, too?</p> <p>Is there any nomenclature of specialties (programs), the institution can / is obliged to choose from? Is there any</p>

<p>Introduction of study programs at the PhD/doctoral level</p> <p>Awards provided</p> <p>Termination of degrees (programs)</p> <p>- (who decides, procedures)</p> <p>Language of instruction at undergraduate level – (Whose is the decision, procedures for obtaining the right)</p>		<p>procedure difference for cycle 1 and 2?</p> <p>How to initiate a program that is entirely new, for example at border between areas?</p> <p>Are there any methodical guidelines on content development of study disciplines / courses?</p> <p>How are internships / practical training organized?</p>
<p>Qualifications</p> <p>Entitlement to award qualifications</p>		<p>What is the procedure for / the steps followed by universities to get permission to award a third-cycle qualification?</p> <p>How often does the monitoring and evaluation of courses and programs take place?</p> <p>Who entitles universities to award qualifications and what is the procedure?</p>
<p>National Qualification Framework:</p> <p>The body responsible for the NQF in the country (functions, structure, relations with ME and universities)</p> <p>How do universities (ME, management bodies of HEIs) participate in the development of new qualifications</p> <p>How are the NQF requirements reflected in the study programs (compulsory provisions, procedures, internal control, external evaluation)</p> <p>Educational standards (exist or not, if yes – how are they related to NQF)</p>		<p>What are the procedures for initiating, promoting, approving new qualifications?</p> <p>Are there in Denmark educational standards on branches / domains developed on the basis of general descriptors?</p> <p>What is the typical structure of a (point) credit transfer on components of guided work (contact hours) and individual work? Does this structure differ by levels and forms of education?</p> <p>What are the possibilities of returning to studies for obtaining a higher degree?</p> <p>What are the migration possibilities between study programs?</p> <p>Is it possible to obtain a (HE) qualification based on the assessment of non-formal education (independent studies and practical experience at the workplace)?</p>

		What is the popularity of I and II cycles among students and their demand on the labour market?
Recognition of studies: Of study periods performed abroad at Bachelor, Master, Doctoral level Recognition of educational documents for the studies done abroad at Bachelor, Master, Doctoral level (recognition bodies, procedures, conditions)	Assessment of Foreign Qualifications etc. (Consolidation) Act Assessment of Foreign Qualifications etc. Order Qualifications Board Order	A considerable number of students from Danish universities undertake one or two semesters abroad. What are the recognition procedures / equivalence of courses / modules or study periods performed in other (local or abroad) universities? Does each university determine autonomously its procedures for the recognition of studies done outside the university or there is a framework regulation approved by ME or other higher authority?
Credit transfer		Is it possible for a student to apply for another study program, and to transfer credits from general subjects taught all around Danish universities (e.g. philosophy, professional ethics, foreign language etc.)?
Joint degree – institutional cooperation to provide joint degrees	The Danish (Consolidation) Act on Universities (the University Act) • Ministerial Order on the International Education Activities of Universities	What are the general requirements to apply to a joint degree? How does the educational process in a joint degree program take place? How is the evaluation process organized? Are the institutional cooperation agreements of general nature or apply only for specific study programs?
Employability Occupational framework (ISCED) Differentiation by level of education. Place of Master and PhD	The Danish (Consolidation) Act on Universities (the University Act)	What are the mechanisms to support students in the employment process? How are these efforts supported by the ME, other governing bodies?
Teaching staff Teaching load of the didactic staff:		Is the teaching staff allowed, under state or university regulations, to undertake teaching and research activities in parallel

<p>Planning the teaching load</p> <p>The distribution of teaching load</p> <p>Accounting of the teaching and research load achievement</p>		<p>in other educational or research institutions (except healthcare)?</p> <p>Could you please provide us with some more detailed information on the planning of the teaching load, distribution of the teaching load?</p> <p>What is the methodology of calculation and allocation of the teaching load among teachers of the department?</p> <p>How does the department, responsible for a study program, involve other departments in ensuring the educational process at this program?</p>
<p>Students and student unions</p> <p>Students' role in the governing of the higher educational institution</p> <p>Students' influence in the development or improvement of courses and study programs</p>		<p>What is the proportion of students' representatives in the university's governing body?</p> <p>What actions do students usually undertake and how do they participate in the development or improvement of courses and study programs?</p>
<p>Quality assurance, accreditation of study programs:</p> <p>Internal structures of quality assurance, student involvement in the process of quality assurance</p> <p>Methodology, evaluation criteria, procedures (self-evaluation, external evaluation)</p> <p>Freedom in the choice of external quality assurance body</p> <p>Relationships / how does the accreditation body cooperate with the Ministry of Education in the accreditation process</p> <p>Assessment of the internal system of quality management (ISO 9000)</p>	<p>The Danish (Consolidation) Act on Universities (the University Act)</p> <p><u>Act on the Accreditation Agency for Higher Education</u></p> <p><u>Ministerial Order on Criteria for the Relevance and Quality of University Study Programmes</u></p> <p>Guidelines on application for accreditation and approval of existing university study programmes</p> <p>Guidelines on application for accreditation and approval of new university study programmes</p>	<p>How is internal / external quality assurance organized?</p> <p>Are there quality assurance offices / departments within higher educational institutions, and what is their role and tasks?</p> <p>What quality assurance procedures are applied within universities?</p> <p>How are course evaluations by students taken into account at improving the course content? How much credibility do you give to these evaluations?</p> <p>Are there didactic staff evaluations by students performed? If yes, what measures are applied if a teacher fails this evaluation?</p>
Doctorate (PhD types), doctoral	The Danish	Who proposes/develops the

schools. Habillate Third-cycle courses and study program Supervision Individual study plans Entitlement to supervision and other resources Examination grades Public defenses and grading doctoral theses	Post-doctorate, (Consolidation) Act on Universities (the University Act) Ministerial Order on the PhD Programme at the Universities and Certain Higher Artistic Educational Institutions (PhD Order) Ministerial Order on University Examinations and Grading (the Examination Order) Ministerial Order on the Grading Scale and Other Forms of Assessment of University Education (grading scale order)	research issues for PhD students? In which situations a doctoral student is allowed to change his or her supervisor? Is there a specific grading system for the third cycle? Is it possible to enroll for a second time to a third-cycle study program if you failed the first time (for example if you succeeded to complete the courses but didn't defend the doctoral thesis)? If yes, then what are the requirements? What is the popularity of professional doctorates in Denmark? Who determines the admission quota and what is the structure of this quota? What are the procedures for creating professional doctorate programs? How are PhD supervisors empowered? What are the procedures of defending a PhD thesis and awarding a scientific degree? Can there be organized inter-university doctoral schools, in international consortia? What are the incentives used by the state and university to attract students in research at the PhD level? Who is in charge for PhD programs and students at the university? What are the cooperation relations between universities and research institutes?
--	---	--

ANNEX 5. ANSWERS TO QUESTIONS CONCERNING ACADEMIC AUTONOMY IN LITHUANIA

Criteria and indicators of autonomy	Findings. Documented arguments	Comments
<p><u>I. Introduction / initiation and liquidation / termination of study programs:</u></p> <p>Types of higher education institutions. Types of programs offered by Higher Education Institutions (HEIs)</p>	<p>Two types of higher education institutions (HEIs) are provided by the Law of Higher Education: university colleges [1, art. 6] and institutions offering higher education services and developing high level applied research [art. 9, p. 8]. [art. 35, 36]. The right to provide higher education services is granted to state institutions by Authorization, and to private institutions – by License. It set up a state registry that lists institutions offering educational services [a 38, 12]. A new university shall be established based on the Seim decision. The order of organization of state institutions and licensing of private ones is described in [3].</p>	
<ul style="list-style-type: none"> • Introduction of study programs at the Bachelor / undergraduate level (initiation procedures, conception, obtaining the right to open a program, links with NQF) 	<p>Requirements for the first cycle programs, in general form, are determined by the Law on Education [1, art. 48]. By Ministry of Education' order [8] shall be approved general and specific requirements for study programs at the college level, cycle I and integrated studies. At cycle I double specialties programs are also accepted [1, art. 48, 7], which can be implemented by two universities in the country or abroad.</p> <p>New programs should correspond to specialties designated in the list / nomenclature approved by the Minister of Education [15].</p> <p>For some fields of study, such as Law, the Ministry of Education also approves specific requirements to those programs of study [6].</p>	
<ul style="list-style-type: none"> • Introduction of study programs at the Master level 	<p>Article 48 (2) of the Law on Education states that institutions with</p>	

	<p>research in the field can organize master programmes.</p> <p>The Ministry approves the general and special requirements for fields of study of second cycle Master's degree. New programs are developed by program committees, they are discussed in the institute / department, and they are approved by the Senate and proposed for approval to the Council of Higher Education of the Ministry of Education and Research. If the program meets the requirements defined in [9], it is approved having permission to proceed.</p> <p>In [31] are mentioned procedures of formation of program committees, their composition, their rights and obligations and rules to develop new programs in the University of Mykolas Romeris in Vilnius.</p>	
<ul style="list-style-type: none"> • Introduction of study programs at the PhD/doctoral level: - Awards provided - Termination of degrees (programs) – (who decides, procedures) 	<p>Doctoral studies are organized in the field of natural sciences, humanities and arts [1, art. 48, 4, 5].</p> <p>The Ministry of Education decides which institutions may organize doctoral studies. The decision shall be based on the evaluation (according to the Regulation on Doctoral Studies approved by the Government on the recommendation of the Committee of Science) of scientific research led by the institution. Doctoral studies can be organized in consortia with other research institutes or universities in the country or abroad.</p> <p>The degree offered is Doctor of Science or Doctor of Arts. The degree of Doctor Habilitate is not stipulated by law [1, art. 48, 6]</p>	
<ul style="list-style-type: none"> • Language of instruction at undergraduate level – (Whose is the decision, procedures for obtaining the right) 	<p>Language of instruction – Lithuanian, but studies may be in other languages (with a fee)</p> <p>The legislation provides that studies may be in other languages only at</p>	

	programs where studies are not provided in the national language.[1, art. 49]	
<p><u>II. Admission:</u></p> <ul style="list-style-type: none"> • Admission quota of local students with grants from the government / own account • Procedures for admission to undergraduate / Bachelor cycle (educational documents, mark level, procedure) • Procedures for admission to the Master cycle. Admission quota of students. Admission procedures 	<p>The Ministry determines the admission plan (budgetary places, vouchers for specialties). Based on the contest of candidates, the grades in secondary education diploma, applicants can obtain or not the claimed voucher. The application is submitted for a particular specialty and at a specific institution. The student comes to university with the state paid voucher. Those who did not receive vouchers come to study places with tuition fees, the number of study places is defined by the capacity of the institution.</p> <p>The groups are formed for programs if there are 15 students or more (option of the institution).</p> <p>At Master, the same procedures are applied. The contest is done based on the Bachelor degree in related programs. College graduates are admitted after one compensatory year (see Rules). There are several provisions regulating the conduct of master studies depending on the type of previous studies (prerequisites and difference credits).</p> <p>Mechanism of student contingent formation - student orientation: various measures are undertaken at university, faculty, and program level. These measures have become central for all universities due to the reducing number of students.</p>	<p>Admission to studies carried out in a joint center allows objective distribution of scholarships among students, but restricts university autonomy to maneuver, to take measures of vocational guidance, especially for less popular specialties.</p> <p>The university cannot reflect the specifics of the institution or specific profile at the admission</p>
<p>Admission of foreign students (non EU). Admission quota of students. Admission procedures (are they similar or not to those for local students)</p>	<p>Admission of foreign students is only on tuition fee basis, which is different from that for national students. Their number is not limited. The equivalent level of education of 12 years (high school) is required for admission.</p>	
<p>Admission to the doctorate</p>	<p>Admission to PhD is based on the Regulation developed by the</p>	

	Research Committee. The Master's degree diploma in the respective field of studies serves as the basis for admission.	
<u>III. Recognition of studies:</u> <ul style="list-style-type: none"> • Of study periods performed abroad at Bachelor, Master, Doctoral level 	Article 50 of the Law on Education states that the results of studies partially achieved and certified in another country, in a local institution or another program of the same institution must be recognized. General recognition procedures are established by the Government / Ministry of Education [14] under which each institution develops its own Regulation on procedures for recognition of academic credits [18, 28].	
<ul style="list-style-type: none"> • Recognition of educational documents for the studies done abroad at Bachelor, Master, Doctoral level 	Diplomas and qualifications acquired in EU and other countries are assessed and recognized under the rules set by the Government [14].	
<u>IV. Quality assurance, accreditation of study programs:</u> <ul style="list-style-type: none"> • Internal structures of quality assurance, student involvement in the process of quality assurance 	<p>The Law on Education [1, art. 41] defines that internal quality assurance is the responsibility of educational and / or research institutions which establish internal quality management structures. The institution shall inform stakeholders about the quality of education and research, organize systematic self-assessment.</p> <p>Universities determine independently: the policy, quality management strategy, and system structure. Responsible of quality assurance are: head of the QMS department, dean of the Faculty, head of the program [34]. An important role is given to students' participation in quality assurance process [30].</p>	It is not reflected the role of professional associations and relevant ministries
<ul style="list-style-type: none"> • Methodology, evaluation criteria, procedures (self-evaluation, external evaluation) 	Article 42 of the Law on Education defines that the external evaluation and accreditation of study programs is mandatory. Higher education institutions have the right to provide education only at externally assessed	It is interesting the methodology for the selection of experts for external evaluation committees, and also the criteria for evaluating

	<p>and accredited programs [1, art. 42]. External evaluation is carried out by the Centre for Quality Assessment in Higher Education (Central Evaluation body) or another agency, indicated by MES, appearing in the EAQAHE Register. Accredited programs are included in the Register of accredited programs accessible to all stakeholders.</p> <p>The Ministry of Education and Research initiates every six years the external evaluation and accreditation of higher education and research institutions [1, art. 43]. Evaluation is done on all fields indicated in the Statute of the institution and based on compliance criteria. External evaluation results are used for accreditation. If the results are negative, the institution is given two years to fix the situation, followed by further external evaluation. If repeated evaluation's results are not satisfactory, the Ministry of Education initiates proceedings to revoke the authorization or license of organization of studies.</p> <p>The methodology and assessment criteria descriptors are approved by the Government.</p> <p>External evaluation of research institutions is carried out by the Research Committee of Lithuania. The respective descriptors are approved by the Government. Negative results of the evaluation lead to the closure or restructuring of the institution by Government Decision.</p> <p>The methodology, criteria and procedures for external evaluation are presented in [13], which are approved by MES's order. The methodology for the selection of experts for external evaluation committees is</p>	research
--	--	----------

	<p>presented as a separate document.</p> <p>In Lithuania subsidiaries of foreign institutions operating in the country are also subject to evaluation and accreditation.</p>	
<ul style="list-style-type: none"> Freedom in the choice of external quality assurance body 	<p>External evaluation is carried out by the Centre for Quality Assessment or another agency, indicated by MES, appearing in the EAQAHE Register.</p>	
<ul style="list-style-type: none"> Relationships / how does the accreditation body cooperate with the Ministry of Education in the accreditation process 	<p>The Centre for Quality Assessment in Higher Education is a budgetary organization created by MES, and the Regulation of the Centre is approved by MES. The basic objective of the Center is to encourage quality. The agency has a committee of 11 members appointed by the Seim on the recommendation of the Council of Higher Education of the Ministry of Education, Science and Culture Committee, Government, etc. The Director is the sole manager and is elected by the Council for a term of 5 years [1, art. 17].</p> <p>The accreditation of study programs, Institutions of Higher Education and Research is based on the findings of the external evaluation.</p> <p>New institutions are subject to accreditation no later than two years after their foundation. An additional external evaluation by the Centre will be submitted. The accreditation is followed by the recall of the functioning authorization (MES decides) or license revocation (non-state institutions).</p> <p>The accreditation process procedures are approved by the Government. Accredited study programs and institutions are listed in the Register which is made public.</p>	<p>The selection and appointment of the committee is a good practice that can be applied easily in RM</p>
<p><u>V. National Qualification Framework:</u></p> <ul style="list-style-type: none"> The body responsible for the NQF in the country 	<p>In Lithuania the General Qualifications Framework is designed with 8 levels of qualifications, similar to the EQF, approved by GD</p>	

(functions, structure, relations with ME and universities)	<p>Nr.535.4, 2010, in which there are determined criteria for each qualification level [5]. When comparing the descriptors of the national system with the EQF one, there has not been observed something very essential. NQFLIT determines / sets four levels that correspond broadly to the degrees / qualifications in higher education: 5 – corresponds to the professional Bachelor, offered by colleges, 6 – university Bachelor degree 7 – Master's degree 8 – PhD degree. Descriptors for higher education levels are defined in detail in the three orders of the Ministry of Education:</p> <ul style="list-style-type: none"> • Order 2212-2011 [7] sets higher education study cycles in Lithuania; • Order 501 of 2010 [8] establishes general criteria for the first cycle and integrated studies; • Order 826 of 2010 [9] defines the specific descriptors for the second cycle, Master. 	
<ul style="list-style-type: none"> • How do universities (ME, management bodies of HEIs) participate in the development of new qualifications 	<p>The general competences being established, the initiative to create new study programmes most often comes from the departments / institutes or program committees, which are formed freely. The Ministry and the Quality Assurance Centre engage at the stage of external evaluation and approval of operation of these programs.</p>	<p>It is not found the role of professional associations</p>
<ul style="list-style-type: none"> • How are the NQF requirements reflected in the study programs (compulsory provisions, procedures, internal control, external evaluation) 	<p>Universities have to develop (design) study programs and the process of implementation so that competences determined by of the descriptors of the respective levels of education to be achieved by the student. The requirements specified above will serve as criteria and indicators (reference standards) at the final evaluation of studies, preparation of</p>	

	self-assessment reports and external evaluation for the accreditation of programs.	
<ul style="list-style-type: none"> Educational standards (exist or not, if yes – how are they related to NQF) 	Educational standards on fields are developed as an exception, such as specific requirements determined for the field of Law [6].	
VI. Employability <ul style="list-style-type: none"> Occupational framework (ISCO) 	<p>In the university the responsibility for working with graduates is attributed to the program team. A register of graduates is made (MEC Commission), out of which it will be possible retrieve data on the employment of graduates, their jobs and salaries. Data taken from the database of the tax inspectorate are used, and the wage levels of graduates are estimated on the basis of the declared income.</p> <p>Lithuania faces the same problems as RM. Regulations and methodical materials have not been developed in Lithuania. Each team determines how to work with its alumni.</p>	A unique catalog of graduates in the country would be a solution for tracking graduates career
<ul style="list-style-type: none"> Differentiation by level of education. Place of Master and PhD 	<p>From discussions held with project partners from UMR we found that it would be good to determine positions that can be occupied by individuals with a level not lower than master. In Lithuania this fact is stipulated such as the Law on the jurisprudence [6].</p> <p>In ISCO-88 – are listed only the general requirements of specialties. The employer is free to choose between - college, Bachelor or Master graduates. There should be emphasized only areas with specific requirements, e.g. those related to human safety, environmental security, etc.</p> <p>The right of becoming a specialist in construction design, for example, is granted only to those who have a master qualification plus special requirements.</p>	To determine together with the Chamber of Commerce or Ministry of Labour the list of specialties for which it is necessary to impose strict requirements
VII. Content and	Program content is developed by a	To introduce the concept of

<p><u>implementation of the study program (organization of studies):</u></p> <ul style="list-style-type: none"> • Content elaboration / designing 	<p>program team (committee) formed usually at the initiative of teachers.</p> <p>Designing the content is based on transversal and professional competences, which must be achieved by the graduate during his/her studies.</p> <p>General requirements for program structure, distribution of credits between groups of university disciplines, specialized and practical training are specified in [8], document similar to the Framework Plan implemented in RM. A special role in the guidance process of the program, from design to implementation, is assigned to the Programme Committee [31].</p> <p>Requirements on the organization of studies, assessment of students, organization of internships, organization and realization of the final assessment are the responsibility of each institution and are defined by the internal normative acts [23, 25, 26, 28, 29].</p>	<p>program Team (Committee), its rights and responsibilities in the framework plan of RM</p>
<ul style="list-style-type: none"> • The distribution between university structures 	<p>In [1, art. 47] the structure of the academic year is established: 2 semesters, summer vacation – 1 month. The university determines the beginning, end of the semester, holidays. The credit structure is determined for cycles I, II and Integrated Studies. Master programs have a duration of 90÷120 credits. Teachers from several institutes specializing in a particular field are involved in carrying out the program.</p>	
<ul style="list-style-type: none"> • Internships 	<p>Programme without degrees – [1, art. 47, 9] 30÷120 credits.</p> <p>Art.48[1] establishes requirements for study programs offering degrees and doctoral degrees.</p>	
<ul style="list-style-type: none"> • Final evaluation (exams, theses) on cycles 	<p>In [1, art. 51] it is established that in the end a Diploma and the Diploma Supplement is provided. The College offers Certificate and Supplement</p>	<p>It is applied a flexible autonomy, possible to be also used in the RM, to exclude the approval</p>

	<p>and, in some cases, qualification certificate (internship).</p> <p>The procedures of offering degrees and manufacturing the diploma itself rests with the Government. The list of qualifications offered by the higher education institution is approved by the Government [15].</p> <p>For programs that are not in the list – diplomas can be provided (individually) with government approval on the recommendation of ME.</p>	procedure by law.
<p><u>VIII. Teaching load of the didactic staff:</u></p> <ul style="list-style-type: none"> Planning the teaching load 	<p>Lithuanian law does not establish specific rules and regulations on the didactic workload of teachers and institutions, by themselves, develop internal regulations for calculating and allocating the workload.</p> <p>Sharing functions of the state and university autonomy.</p>	
<ul style="list-style-type: none"> The distribution of teaching load 	<p>The annual workload of a teacher consists of 1,000 hours of didactic activities, 400 hours of research activities and 200 hours for other activities. Contact hours are included in those 1000 hours and are determined after a certain scale. At the University of Mykolas Romeris there were approved the following workloads: university professor – 180 hours, associate professor – 280 hours, university lecturer – 380 hours. It is accept internal part-time job of up to 1.5 time norms.</p>	
<ul style="list-style-type: none"> Accounting of the teaching and research load achievement 	<p>Remuneration: minimum and maximum norm is set. It is set the minimum wage – the first part and the second part is variable, which is based on the teacher's performance. Performance indicators: scientific research – by number of publications. Payment for research projects constitute a separate article. The money is divided among team members – very wide autonomy.</p>	It is interesting but very complicated

	<p>Project funding is made by CSL Committee.</p> <p>Attention – the study voucher has 2 components: learning and research. The salary the teacher receives includes these 2 components. The proportion would be determined objectively: $\frac{1000}{1400}100 = 70\%$ for academic work; $\frac{400}{1400} = 30\%$ for research.</p> <p>UMR set the constant part of 55%, and the variable one of 45%.</p>	
<p><u>IX. University scientific research (organization):</u></p> <ul style="list-style-type: none"> University structures involved in the organization of scientific research Involving students in the process of scientific research (incentive mechanisms / incentives for the parties ...) 	<p>Research institutes are state and non-state [1, art. 10]. State institutions conduct long term research of social and economic development important to the state. The non-state institutions conduct research in an area that is defined by the founder. Objective - developing research relevant to the continuity and development of the national economy, culture, health and society.</p> <p>Art. 11 [1] establish the rights and duties of research institutions. The foundation of research institutions and their liquidation is done by GD [1, art. 34]. Article 12 [1] refers to the integration of higher education and research.</p>	<p>To examine more deeply other sources related to Article 12</p>
<ul style="list-style-type: none"> Scientific research of teachers (achievement planning and control, the methodology of assessing the research activity ...) 	<p>Annual workload of teachers includes 400 hours of research per year. Two publications in the country or one publication in international journals. Other tasks, performed based on grants, can enter the 20% which are paid in addition to the basic salary. Money for basic research is included in the voucher.</p>	<p>The money provided by the state for research should be also distributed according to the number of students in our country</p>
<ul style="list-style-type: none"> Research Master 	<p>In Lithuania there is the scientific master of 90÷120 ECTS, which is a starting point for doctoral studies.</p>	
<ul style="list-style-type: none"> Scientific research of teachers (achievement planning and control, the 	<p>In [1, art. 15, 16] it is specified that the technology transfer park includes people who have the primary function</p>	<p>Professional Master in RM could be treated as postgraduate studies</p>

methodology of assessing the research activity ...)	to stimulate the communication of scientific knowledge and technological dissemination, creation of conditions for commercialization of research results.	
Integrated research, education and business centers	Integrated research, education and business centers are established by Government Decision [1, Art. 16], the development of its program will be coordinated by a supervisory counselor approved by the institution.	
<u>X. Doctorate (PhD types),</u> <ul style="list-style-type: none"> • doctoral schools, • Post-doctorate, • Habilitate 	<p>The third cycle of higher education in Lithuania is doctorate [1, art. 48], which is held in the fields of natural sciences, humanitarian sciences and arts.</p> <p>The purpose of doctoral studies in science and humanitarian sciences shall be to prepare scientists who would be able to independently conduct research and experimental (social, cultural) development work, and to solve scientific problems. The Ministry of Education and Science shall grant the right of doctoral studies to universities and universities together with research institutes conducting high-level research in conformity with a field of sciences and humanities, or universities together with foreign higher education and research institutions. The right shall be granted on the basis of the evaluation, performed in accordance with the Regulations of Doctoral Studies, of a level of research in an appropriate field of sciences and humanities conducted by the institutes which apply for doctoral studies in the field of sciences and humanities. The Regulations of Doctoral Studies shall be approved by the Government on the recommendation of the Research Council of Lithuania. Persons who have defended their dissertation shall be awarded a Doctor of Science</p>	It is interesting the organization of doctoral studies – the participation of research institutes in this process.

	<p>degree.</p> <p>In the field of arts, the purpose and organization of doctoral studies are specific, and differ substantially from other areas [1, art. 48, 6]. At the moment, there is no document that determines the organization of doctoral schools.</p> <p>In Lithuania there is no other higher degree than the Doctor of Science or Arts.</p> <p>Who can be granted the right to supervise PhD students and based on what?</p> <p>Degree offered - Doctor of Science, Doctor of Arts.</p> <p>Doctor habilitate degree is not provided by law [1, art. 48, 6].</p> <p>PhD studies are organized in the fields of natural sciences, humanitarian sciences and arts [1, art. 48, 4, 5].</p>	
--	--	--

ANNEX 6. ANSWERS TO QUESTIONS CONCERNING ACADEMIC AUTONOMY IN SCOTLAND

Stating the problem	<u>Findings. Answers.</u>
<p><u>I. Introduction / initiation and liquidation/termination of study programs:</u></p> <ul style="list-style-type: none"> Types of higher education institutions. Types of programs offered by Higher Education Institutions (HEIs) 	<p>In Scotland and other parts of the UK there are three types of institutions in Higher Education: colleges, institutes and universities. Colleges offer bachelor degrees or certificates, universities offer bachelor and master programs and integrated programs. Specific for the UK is that the student can get a document of partial studies at intermediate stages: Higher Education Certificate (60 credits), HE Diploma (120 credits) and Bachelor certificate (150 credits). Bachelor's and master's degrees are offered having achieved a fixed number of credits (180/300) and defended the graduation paper / thesis. These university programs are continuous, moving from a cycle of study to another [5].</p>
<ul style="list-style-type: none"> Introduction of study programs at the Bachelor/ undergraduate level (initiation procedures, conception, obtaining the right to open a program, links with NQF) 	<p>The initiator of a new Bachelor program is the department in which they form a program committee, which discusses and then develops the program curricula. The program is discussed within the Department and then at the Academic Committee of the Faculty. Final approval – University Academic Council. A special role is assigned to professional associations, their opinion is required. [5].</p> <p>Bachelor programs in colleges have a technical orientation and are usually completed with the passing of qualification examinations. Graduates obtain professional bachelor's degree [5].</p>
<ul style="list-style-type: none"> Introduction of study programs at the Master level 	<p>The normal entry requirement for a Master's degree is a good Bachelor's degree. College graduates with Bachelor certificates shall complete their studies up to a Bachelor degree during one year.</p>
<ul style="list-style-type: none"> Introduction of study programs at the PhD/doctoral level: <ul style="list-style-type: none"> Awards provided Termination of degrees (programs) – (who decides, procedures) 	<p>New doctoral programs usually occur as development of research programs. Doctoral programs are accessible to people with Master's degree in the field.</p>
<ul style="list-style-type: none"> Language of instruction at undergraduate level – (Whose is the decision, procedures for obtaining the right) 	<p>Studies are held in English. Just some college programs are organized in the national language of the Gauls (in Scotland there is a minority).</p>
References	<p>[1]. CHARTER of the University of Strathclyde 10.11.2010; [2]. STATUTES of the University of Strathclyde, 10 Nov 2010; [3]. REGULATIONS of the University of Strathclyde. 2013; [4]. ORDINANCES of the University of Strathclyde, 26.09.13; [5]. USG. General and Course Regulations for Degrees of Bachelor</p>

	and Integrated Master 2013-14, 2013.
II. Admission: <ul style="list-style-type: none"> • Admission quota of local students with grants from the government / own account 	<p>In Scotland there are established rules and limitations that apply to admission to higher education by a special Council at the level of Parliament. The Funding Council sets the share of admissions for each university and study program that can then be exceeded by no more than 10%.</p>
<ul style="list-style-type: none"> • Procedures for admission to undergraduate / Bachelor cycle (educational documents, mark level, procedure) 	<p>For admission to universities and colleges in the UK to studies at cycle I is done centrally by a specialized body UCAS (Universities and Colleges Admissions Service) [5]. The Funding Council, subject to the Government, establishes the capacity of universities and universities determine admission requirements for candidate students (the level of grades at certain school subjects, work experience), specific admission requirements (tests, aptitude tests, etc.). The candidate shall also submit a letter of motivation / rationale, bringing valuable arguments in support of admission application. The candidate may indicate in the application up to 4 universities. A special committee examines the dossiers and test results, which are passed within committees created by USCA, and determines which specialty and universities meet the conditions. The candidate decides which institution to enroll.</p> <p>In the UK studies cycle I are charged. Candidates who have passed the competition can ask for information concerning the non-promotion. Students from low-income families can apply for exemption from tax after the first year of they have good results in studies. All students may apply for loans (scholarships). The loan is given at the beginning of the next school year if the year is passed. Borrowed money is returned after employment and the achievement of the net salary of £ 2,000, but not more than 15 years. Professional orientation of students is done by institutions and UCAS in the form of open day fairs.</p> <p>In Scotland local (Scottish) students can get places paid from the state (local) budget at cycle I. Budgetary places are given to universities by performance criteria. Students from other parts of the UK pay the fee.</p> <p>The number of study places at specialties related to the public sector (teaching, law, medicine, dentistry, etc.) is strictly limited. For other areas there are held negotiations, the basic criteria being the capacity of the university, the support for good quality.</p> <p>Students can be employed at work with a program of not more than 20 hours per week.</p>
<ul style="list-style-type: none"> • Procedures for admission to the Master cycle. Admission quota of students. Admission procedures 	<p>Master studies are offered only on fee base. Master's students may also receive loans. Admission is organized by universities, which set their own rigors to each area or program. The University determines its admission capacity. Admission is based on graduation grades.</p>
Admission of foreign students (non EU). Admission quota of	<p>Matriculation in higher education of students from EU and other countries is based on a document of studies [5]. Particular attention is paid to the institution graduated and level of knowledge of English.</p>

students. Admission procedures (are they similar or not to those for local students)	Institutions organize recruitment companies in countries with potential candidates (Anglophone countries), special language courses (China, South Korea, Indonesia, Malaysia). Non EU students pay fees by 60% higher than UK citizens. At the UK level there are set general rules for immigration [4].
Admission to PhD studies	<p>Doctoral studies are offered for an extra charge. Admission is organized / conducted by universities. Foreign students will pay a fee increased by 60%. At admission, the candidate shall submit a report in which it is argued the research topic. The share of foreign students in some areas exceeds 80%.</p> <p>The Research Committee of the Faculty deals with the admission of doctoral candidates. It examines the research topic and program proposed by the applicant, then the program is examined by the educational council of the faculty and is recommended to the rector for approval. The director of academic board, committee, decides who will be supervisors (one internal, the other one from the outside - from home or other institution). Supervisors are teachers.</p> <p>In [6] is an example of how to organize admission and subsequent stages of doctoral studies</p>
References	<p>[1]. USG. General and Course Regulations for Degrees of Bachelor and Integrated Master 2013-14, 2013;</p> <p>[2]. USG. University Admissions Policy, 2010;</p> <p>[3]. USG. Procedure for Admitting and Monitoring Students within the Points Based System (PBS) of Immigration 2009;</p> <p>[4]. USG. Policy on the United Kingdom Border Agency (UKBA) Points Based System of Immigration: Tier 4, 2014;</p> <p>[5]. The UCAS admissions system. www.ucas.ac.uk/education</p>
III. Recognition of studies: <ul style="list-style-type: none"> Of study periods performed abroad at Bachelor, Master, Doctoral level 	Studies done in mobility programs are recognized under trilateral agreements between student, University of origin and the host University. In [2] there are mentioned rules of migration from one program to another and from one form of study to another in the university. The Quality Code [1] defines legal documents the HEI must have for the evaluation process.
<ul style="list-style-type: none"> Recognition of educational documents for the studies done abroad at Bachelor, Master, Doctoral level (recognition bodies, procedures, conditions) 	Recognition of educational documents obtained outside the UK is made by the National Recognition Center (NARIC) [3]. Services provided: recognition of diplomas for access to studies and professions; recognition and equivalence of information. Inside universities the Education Committee is dealing with these problems [2].
References	<p>[1]. UK Quality Code for Higher Education. Parts A, B;</p> <p>[2]. USG. General and Course Regulations for Degrees of Bachelor and Integrated Master 2013-14, 2013;</p> <p>[3]. National Recognition Information Centre (NARIC), ECCTIS</p>

	Ltd. http://www.naric.org.com
<p><u>IV. Quality assurance, accreditation of study programs:</u></p> <ul style="list-style-type: none"> Internal structures of quality assurance, student involvement in the process of quality assurance 	<p>Responsible for quality assurance in the university is the Quality Assurance Committee [37, art. 1, 3, 12]. The Committee is composed of persons responsible for education (vice-rector, four vice-deans, three personnel / auxiliary staff, two students, faculty managers, head of department, responsible for the strategy of studies and quality improvement). At faculties / schools responsibility for quality assurance lies with the faculty council, heads of departments and program directors.</p> <p>Quality Assurance Committee is responsible for:</p> <ul style="list-style-type: none"> (a) monitoring and reporting on student progress and retention; (b) monitoring External Examiner's reports and Department Answers to ensure that appropriate measures are taken and to inform policy development ; (c) monitoring and reporting on the Faculty Annual Reports on Quality; (d) monitoring reviews / analyses of departments regarding learning, teaching and assessment and the experience of students and dissemination of results to competent committees and individuals; (e) consideration of issues arising in the course's approval and review; (f) monitoring and reporting on general issues arising from student discipline, appeals and complaints; (g) advising on business processes and templates that support annual and cyclical quality assurance procedures of the University; (h) reporting regularly to the Committee of Education Strategy, in order to inform the development of policies and strategies for appropriate learning, teaching and assessment of the University. <p>Institutions shall have their own quality assurance code [3].</p>
<ul style="list-style-type: none"> Methodology, evaluation criteria, procedures (self-evaluation, external evaluation) 	<p>External evaluation methodology, procedures and evaluation criteria are described very explicitly in the Quality Code [1]. Each quality criterion contains detailed and explicit instructions on regulatory documentation that the institution must have and which it should present to evaluators. The Code is an integrated document that meets the basic requirements for all stages of a life cycle of the university training process.</p> <p>The Code contains three parts: A, B and C: Part A defines the qualifications framework; Part B – learning outcomes, criteria for quality assurance and enhancement (11 subchapters in each of which a key aspect of the educational process is reflected); part C contains information about the prospects of higher education.</p> <p>The outcomes in each chapter are accompanied by a series of indicators that reflect profoundly the practice that each higher education provider will be able to demonstrate with regards to meeting relevant outcomes. Indicators are defined not to be used as a checklist, they have been</p>

	identified to help providers to develop their own regulations, procedures and practices to demonstrate that the prescriptions of the Quality Code are satisfied / met. Each indicator is accompanied by an explanatory note with more information about it, as well as examples of how the indicator can be interpreted and applied in practice.
<ul style="list-style-type: none"> Freedom in the choice of external quality assurance body 	<p>External evaluation is the responsibility of the UK's QAA [1,3]. The Quality Code is valid throughout the UK and the UK suppliers operating abroad. It protects the interests of all students who study full-time and part-time at the undergraduate or postgraduate cycle.</p> <p>The control of higher education providers is conducted by the Quality Assurance Agency for Higher Education (QAA) which is a unique agency in the UK which requires to satisfy all the expectations of partners. The Review / Evaluation Commission of QAA controls whether these expectations / outcomes are met.</p>
<ul style="list-style-type: none"> Relationships / how does the accreditation body cooperate with the Ministry of Education in the accreditation process 	The results of external evaluations are made public, and are submitted to the Board of Financing.
References	<p>[1]. UK Quality Code for Higher Education. Part B: Assuring and enhancing academic quality. QAAHE, 2012;</p> <p>[2]. Regulations of the University of Strathclyde. 2013, (cap. 1.3);</p> <p>[3]. Code of practice for the assurance of academic quality and standards in higher education: Postgraduate research programmes. QAA, 2004.</p>
<p><u>V. National Qualification Framework:</u></p> <p>The body responsible for the NQF in the country (functions, structure, relations with ME and universities)</p>	<p>In [1] is presented the general structure of the UK Qualifications Framework, which is distinct for Scotland and other parts of the UK.</p> <p>Cadrul Scotlandn al Creditelor și Calificărilor este stabilit în comun de:</p> <p><u>The Scottish Credit and Qualifications Framework (SCQF)</u> was developed by the Scottish Qualifications Authority (SQA) jointly with the Council of Rectors (Universities) in Scotland, Quality Assurance Agency for Higher Education (QAA), by his Scottish office, Executive Scottish Enterprise and the Department of Lifelong Learning (SEELLD) and the Scottish Executive Education Department (SEED). SQA is a statutory accreditation and awarding body in Scotland for the qualifications delivered in schools, colleges, training centers, and workplaces in Scotland. SQA provides qualifications at most levels in the SCQF. These include national units, courses, and certificates from levels 1-7, HNC and HND at levels 7 and 8, and SVQ at levels 4 -11 [31]. Although it is self-funded, SQA is accountable to the Government and people of Scotland for the credibility, reliability and value of its qualifications. Its key functions are to maintain the quality of set qualifications and develop new ones where needed. It does this in partnership with people in education, industry, commerce and</p>

	<p>government to develop qualifications relevant to the needs of individuals, society and the economy.</p> <p>The Scottish Credit and Qualifications Framework (SCQF) was created by bringing together all the main Scottish qualifications in a unified framework: qualifications of SQA higher education institutions and SVQ vocational institutions [16]. There are 12 levels - from Access 1 (National Qualifications) at SCQF level 1 up to Doctorate at SCQF level 12 [31]. Higher education with a degree of Bachelor, Bachelor with Honours degree, master's degree and doctorate (with respective degrees) correspond to levels 9, 10, 11, 12 (equivalent to 6, 7, 8 of the EQF). The Scottish Framework was extended to 12 levels to reflect lower qualifications obtained in the early stages of higher education: levels 7, 8 correspond respectively to higher education certificates (equivalent to a full year of study), higher education diploma (equivalent to two years of studies), and bachelor studies (with certificate). Qualification levels are described in terms of learning outcomes (as descriptors) and also in terms of Scottish credits / SCOTCAT points (table of descriptors in [31]).</p> <p>Scottish credits (SCOTCAT points) are determined based on the amount of time an „average” student at a specified level might expect to have to obtain results. A SCQF credit represents the learning outcomes achieved during 10 notional hours of learning time.</p> <p>SCQF also provides awarding qualifications based on practical experience gained at the workplace on the basis of continuing training courses of the respective level.</p>
How do universities (ME, management bodies of HEIs) participate in the development of new qualifications	When drafting a new study program it is based on the general requirements of the qualifications framework [16]. When approving its deployment (financing), the external evaluation and accreditation of programs checks whether the learning outcomes of this program meet the educational standards prescribed by the Quality Code. A special role in this process lies with professional organizations. Particular emphasis is given to the flexibility of qualifications' system.
How are the NQF requirements reflected in the study programs (compulsory provisions, procedures, internal control, external evaluation)	Study programs are developed based on the learning outcomes, which must correspond to general requirements reflected in the descriptors of the respective levels of qualification. The descriptors in question are also used as standard requirements / indicators used in external evaluation of programs [16].
Educational standards (exist or not, if yes – how are they related to NQF)	Educational standards are developed by each institution on the basis of criteria and indicators outlined in the Quality Code.
ECTS in Scotland	A full year of full-time education usually consists of approximately 1,200 hours of learning activity. The results obtained are therefore valued / marked with 120 SCOTCAT points. Higher National and Higher Education Certificates, for example, correspond to the learning

	outcomes rated with 120 points, which are usually obtained in one year of full-time studies. No rigid time connection is involved in this system. This is very important for the development of part-time and distance education. As with the allocation of levels, comparisons with major SCQF qualifications are also important.
References	<p>[1]. UK Quality Code for Higher Education.2013;</p> <p>[2]. An Introduction to The Scottish Credit and Qualifications Framework, 2001 [31];</p> <p>[3]. The framework for qualifications of higher education institutions in Scotland, 2001;</p> <p>[4]. UK Quality Code for Higher Education. Part A: Setting and maintaining threshold academic standards. Chapter A1: The national level. QAA, 2011.</p>
<u>VI. Employability</u>	
<ul style="list-style-type: none"> Occupational framework (ISCO) 	
<ul style="list-style-type: none"> Differentiation by level of education. Place of Master and PhD 	Everything depends on the the employer. Prescriptions are made only for positions / specialties / public servants (medicine, law, other public servants).
Working with graduates	<p>In the UK particular attention is given to the work with graduates. At universities (particularly at SUG) there are created special structures for these activities, the <i>Office for Development of Relationships with Graduates</i> (alumni). The main aim of the Office is to develop long-term relationships with individuals and organizations where graduates work, relationships that have the purpose of fundraising, information about university of graduates and operation with databases of graduates.</p> <p>Fundraising activities are directed through the <i>Alumni Fund</i> to priority areas: Teaching and Learning - refers to the development of the library, improving the experience of students - extra curricular and social events, offering scholarships.</p> <p>Office activity is divided into groups of alumni which are organized in cities in the UK and other countries. The groups are structured by goals: fundraising events – concerts, commemorative dates with fundraising; recruitment events – organizing meetings of pupils with alumni who have successstories, joint alumni events, etc.; entrepreneurial events – support through the Alumni network for young entrepreneurs – graduate already affirmed in business helps the beginner graduate.</p> <p>The office is organized centrally by the management of the University. At the college level there are individuals who coordinate the activity with the graduates of the faculty concerned.</p>
References	[5]. Presentation of Mrs. Suzanne Tinning , Graduates Relations Officer (Groups and Networks) Alumni and Development
<u>VII. Content and implementation of the</u>	The design, approval and implementation of programs is carried out in accordance with the rules set on the Quality Code [1, Ch. B1].

<u>study program (organization of studies):</u> <ul style="list-style-type: none"> • Content elaboration / designing 	<p>The program team draws up the program within the department and, as a rule, relies on the results acquired in scientific research.</p> <p>Chapters B2-B7 of the Code treat various aspects of program's deployment. Chapter B8 examines the mechanisms that higher education service provider relies on to enhance the quality of the implemented program. Also, here are examined mechanisms of closing / liquidation of a program. These rules shall apply concurrently with the general rules "Setting and Maintaining Academic Standards", set out in Part A of the Code.</p>
<ul style="list-style-type: none"> • The distribution between university structures 	<p>The program team usually includes people from several departments and outside the institution.</p>
<ul style="list-style-type: none"> • Final evaluation (exams, theses) on cycles 	<p>Programs are completed differently [2]. The gradual ones end with the public defence of a work/thesis. If non-gradual programs, certificate or diploma is issued based on credits earned under the rules set by the program.</p>
<p>References</p>	<p>[1]. UK Quality Code for Higher Education. Part B: Assuring and enhancing academic quality. Chapter B1. Programme design, development and approval, B3: Learning and teaching, QAA, 2013;</p> <p>[2]. University of Strathclyde Calendar 2012-13.</p>
<u>VIII. Teaching load of the didactic staff:</u> <ul style="list-style-type: none"> • Planning the teaching load 	<p>The teaching load and workload of teachers: 110 of direct contact hours with students and 560 hours for consulting. They constitute 40% of the annual volume of work. The remaining 60% are devoted to research – 40% and 20% for activities in the interest of the community. Total workload is 35 hours per week.</p>
<ul style="list-style-type: none"> • The distribution of teaching load 	<p>The head of the department, the dean and other teachers holding a leading position have reduced teaching load, the salary remains intact. Each member of the department has certain public responsibilities within the department, faculty or university.</p>
<ul style="list-style-type: none"> • Accounting of the teaching and research load achievement 	<p>The accounting of the academic task is based on the schedule. Scientific research is assessed primarily on the basis of publications of textbooks, monographs, articles in journals with impact-factor. The university establishes rules for different categories of teachers. Publications are rated with points depending on the category of the journal.</p>
<u>IX. University scientific research (organization):</u> <ul style="list-style-type: none"> • University structures involved in the organization of scientific research 	<p>The research activity in the universities of Scotland (and the UK) is carried out by Universities Research Council (URC with 7 subcommittees on branches). Similar structures are found vertically: at college / school and department with identical roles. The management activity of committees is recognized in account of those 20% of tasks - for the benefit of society.</p>
<ul style="list-style-type: none"> • Involving students in the process of scientific research (incentive mechanisms / incentives 	<p>The organization of scientific research, commercialization of its results, protection of intellectual property rights, knowledge transfer are described in detail in the presentations made during the visit in June 2013 at SUG.</p>

for the parties	
<ul style="list-style-type: none"> Scientific research of teachers (achievement planning and control, the methodology of assessing the research activity) 	From the annual charge of the teacher, 40% constitutes scientific research that is well accounted for in the research group. There are special software to follow the progress and appreciate the work of teams. Funding science from Scotland and UK funds is based on these results. [4, 5].
<ul style="list-style-type: none"> Research Master 	All master's programs have research elements. Other types of MAs in Scotland are not used [7].
<ul style="list-style-type: none"> Finanțarea științei universitare 	Universities are classified into three groups: historical, legalized in 1965, and those formed under the act of 1992. The funding mechanism for each group is different. UK's Research Committee divides finances based on the criterion „results achieved (Excellence criterion)”.
References	<p>[1]. UK Quality Code for Higher Education. Part B: Assuring and enhancing academic quality. B11. Research degrees, QAA, 2012;</p> <p>[2]. http://www.rcuk.ac.uk</p> <p>[3]. Pagina web a Universității din Strathclyde cu referire la Costul Economic Integral, www.strath.ac.uk/fec</p> <p>[4]. Metodologia TRAC/CEi a guvernului RU, http://www.hefce.ac.uk/whatwedo/lgm/trac/</p> <p>[5]. Ghidul de finanțare al Consiliilor pentru Cercetare ale RU, http://www.epsrc.ac.uk/SiteCollectionDocuments/FundingGuide.pdf</p> <p>[6]. Divulgarea inovației și gestionarea proprietății intelectuale, EUniAM TEMPUS, 25 mai 2013;</p> <p>[7]. UK Quality Code for Higher Education. Part A. Cadrul calificărilor.</p>
<p><u>X. Doctorate (PhD types),</u></p> <ul style="list-style-type: none"> doctoral schools, Post-doctorate, Habilitate 	<p>In the UK the basic form of doctorate is integrated doctorate or doctorate in philosophy (PhD). The name can also contain the scientific area (medicine, psychology, engineering). The doctorate is regarded as research based studies. The minimum duration of the studies is usually equivalent to 3 years of full time studies. The studies may be organized remotely.</p> <p>Doctoral students' training takes place in doctoral schools organized by universities or doctoral centers [5, 6].</p> <p>The state grants a certain number of budget places, but institutions may admit PhD students on tuition fee basis. As compensation to the fee can serve the employment of the doctoral student in teaching position. The PhD student is assigned a scholarship from the budget. What are the conditions?</p> <p>Doctoral studies are completed with the defending of the doctoral thesis – written work based on research results. As autonomous structures, higher education institutions themselves make decisions on qualifications and form of certificate.</p> <p>After 1990, the UK introduced a new type doctorate called professional and practice-based (or practitioner) doctorates (eg PhD in engineering –</p>

	<p>EngD), which is intended for specialists trained in a particular branch of the economy who develop applied research for the company which shall bear the expenses related to studies and research.</p> <p>Comprehensive information about doctoral programs in the UK, goals, structure, content, titles and assessment methods can be found in [1, 5, 6].</p> <p>In the the UK and Scotland [5] a higher Ph.D. degree is set (<i>Higher Doctorate</i>), which follows after the PhD or another similar degree, is offered to individuals for valuable research or publications. The title is given to persons in education, based on published works, who don't have a distinct position in the qualifications and is considered honorific title. <i>Individual institutions' regulations specify a limited range of titles for higher doctorates, which can be awarded either for a substantial body of published original research of distinction over a significant period or as an 'honorary' degree, to recognise an individual's contribution to a particular field of knowledge.</i></p> <p>Graduate schools were introduced to provide coherent research skills training and support for postgraduates; some combine taught and research postgraduates, others are solely for research candidates. The structure and coherence of the graduate school structure, whether single-subject, at faculty or school level, or as an institutional phenomenon (single institution or as part of a collaboration), also helps to encourage timely progress and completion and to provide postgraduates with a peer group network. Graduate schools may have a geographical location or may be virtual, with postgraduates from multiple institutions sometimes being part of a collaborative and possibly interdisciplinary graduate school.</p> <p>During the twenty-first century another feature of doctoral education has been introduced, primarily initiated by the UK research councils, who have begun to focus their support through various forms of partnerships for doctoral training. Most are commonly known as doctoral training centres (DTCs). Most DTCs are organised in a similar way to graduate schools and although established initially for the benefit of research council funded doctoral candidates, are often extended to all research postgraduates studying in the relevant subject area, as long as resources permit. DTCs are often multi or interdisciplinary and reflect some of the major research themes supported by their respective research councils. They are seen by many as a model of effective practice in providing research methods and skills training for early career researchers. Universities are still in the process of integrating the DTC model with their existing governance and structures, and in many cases reporting lines and management, together with the DTCs' relationship with any existing graduate school(s) are still to be decided upon.</p> <p>A residual concern for some is the potential creation of a 'two-tier' system for postgraduate training, with some doctoral candidates being part of a DTC and others not. Further information about doctoral</p>
--	--

	<p>training centres can be found on the individual research councils' websites, accessed from the Research Councils UK home pages.</p> <p>Many institutions award the PhD/DPhil 'by publication' or 'by published work' which may then be reflected in the title (PhD by Publication, or by Published Work). Institutions have different eligibility requirements for this degree, which is awarded infrequently [5].</p> <p>Each institution organizing doctoral programs develops its own regulations based on quality criteria shown in [1], for example see USG regulations [45].</p> <p>Methods of financing doctoral studies are very diverse, ranging from case to case. Most often they are paid by the PhD student, from sponsorship or from funds allocated for research, grants [6].</p> <p>Ph.D. degree is offered by the University, which issues the diploma without any approval from any higher authority.</p> <p>Thesis defending procedure is quite simple and is based on the authority and responsibility of the supervisor, faculty research council (2 persons) and two experts who review the thesis. Supervisors are not present at thesis defending. The degree is confirmed at the Academic Board.</p>
References	<p>[1]. The U [5] Doctoral degree characteristics, QAA, 2011;</p> <p>[2]. Code of practice for the assurance of academic quality and standards in higher education: Postgraduate research programmes. QAA, 2004;</p> <p>[3]. UK Quality Code HE, part. B11, 2013;</p> <p>[4]. University of Strathclyde Calendar 2012-13, part 3;</p> <p>[5]. Postgraduate research code of practice, january 2012, http://www.northumbria.ac.uk</p>

ANNEX 7. ANSWERS TO QUESTIONS CONCERNING ACADEMIC AUTONOMY IN SWEDEN

Stating the problem	<u>Findings, answers</u>
<p><u>I. Introduction / initiation and liquidation / termination of study programs:</u></p> <p>Types of higher education institutions. Types of programs offered by Higher Education Institutions (HEIs)</p>	<p>In Sweden, overall responsibility for higher education and research rests with the Riksdag (Swedish Parliament) and the government. They decide on the regulations that are applied in the higher-education area. They also determine objectives, guidelines and the allocation of resources for the area. All higher education is offered by public-sector higher education institutions or by independent education providers that have been granted degree-awarding powers by the government.</p> <p>The Swedish Parliament decides which public-sector HEIs are to exist. The government can decide whether an HEI may use the title of university. (ref. National Qualifications Framework, Published by the Swedish National Agency for Higher Education 2011)</p> <p>Higher education institution shall refer to universities and university colleges, for which the accountable authority is the Government, a municipality or a county council (ref. The Swedish Higher Education Act, 17 December 1992, Ch. 1, Sec. 1; The Higher Education Ordinance, 4 February 1993, Ch. 1, Sec. 2).</p> <p>Thus, in Sweden there are 24 public HEIs (accountable to the government) and 3 independent HEIs entitled to offer degrees for cycle I, II and III and there are 10 public HEIs (accountable to the government) and 10 independent HEIs entitled to offer degrees for cycle I and II. (ref. Higher Education in Sweden, 2013 Status Report, by Swedish Higher Education Authority)</p> <p>Higher education institutions provide: <i>courses and study programmes</i> based on scholarship or artistic practice and on proven experience, and research and artistic research and development as well as other forms of development activities (ref. The Swedish Higher Education Act, 17 December 1992, Ch. 1, Sec. 2).</p> <p>Courses and study programmes shall be provided at:</p> <ul style="list-style-type: none"> - first cycle - second cycle, and - third cycle. (ref. The Swedish Higher Education Act, 17 December 1992, Ch. 1, Sec. 7) <p>Municipalities and county councils may establish higher education institutions only with the consent of the Government. This consent may be restricted to first-cycle courses and study programmes. (ref. The Swedish Higher Education Act, 17 December 1992, Ch. 1, Sec. 10)</p> <p>The Swedish National Agency for Higher Education (now Swedish Higher Education Authority) decides on permission to award qualifications:</p> <ul style="list-style-type: none"> - in the third cycle at higher education institutions that are not universities, and

	<p>- in the first and second cycle at universities and higher education institutions.</p> <p>The Government issues regulations on the qualifications that may be awarded at Swedish University of Agricultural Sciences and Swedish National Defence College. (ref. The Swedish Higher Education Act, 17 December 1992, Ch. 1, Sec. 12)</p>
<ul style="list-style-type: none"> • Introduction of study programs at the Bachelor / undergraduate level (initiation procedures, conception, obtaining the right to open a program, links with NQF) 	<p>The central regulations that govern the way in which HEIs operate are contained in the Higher Education Ordinance, which is laid down by the government.</p> <p>Within the framework of the regulations and parameters determined by the Swedish Parliament and the government, HEIs enjoy great freedom to decide how to organise their operations, use their resources and conduct their courses and programmes. (ref. National Qualifications Framework, Published by the Swedish National Agency for Higher Education 2011; ref. Higher Education in Sweden, 2013 Status Report, by Swedish Higher Education Authority)</p> <p>The system is based on the principle of management by objectives. (ref. Higher Education in Sweden, 2013 Status Report, by Swedish Higher Education Authority)</p> <p>The State / Government does not decide on the initiation of new programmes of study. This is done at the university level. At the Government level trends are only discussed (based on statistical data), they are made public and are presented to the community and at the university level these trends are discussed and it is decided on the initiation of new programmes of study.</p> <p>The schools and/or professional organizations are usually the initiators of new study programmes, sometimes it is upon the president's suggestion. Subject areas are not directly mapped to KTH organization, there are overlaps between schools and there are existing programmes where more than one school provides courses. Same procedure as for all programmes, application is discussed in the educational committee, approved (or not) by the faculty board and final decision is made by the president.</p> <p>According to the Swedish Higher Education Ordinance (1993:100) Chapter 6, Sec. 14-15, there must be a course syllabus for first and second cycle courses. First cycle courses are established by the Head of School following consultation with other schools concerned. A decision on the establishment of a course is made at the school the course is to be held. The continuing education courses offered are decided by the Vice-Dean of faculty following preparation by the Head of School and in the university administration. The director of undergraduate and master studies is responsible for the preparatory measures on the establishment of courses. A special form must be completed in order for a course to be formally set up. (ref. Establishment of courses at first- and second cycle at KTH, Internal instruction no. 27/05, Applicable from 01-07-2007, Changed from 01-01-2008)</p> <p>All first and second-cycle study programmes shall be offered in the form</p>

	<p>of courses. Courses may be combined to create study programmes. A course shall have a course syllabus.</p> <p>The course syllabus shall indicate the following: the cycle in which the course is given, the number of credits, objectives, specific entry requirements, how student performance is assessed and any other regulations required. A study programme shall have a programme syllabus. The programme syllabus shall indicate the following: the courses that the study programme comprises, specific entry requirements and other regulations required. (ref. The Higher Education Ordinance, 4 February 1993, Ch. 6, Sec. 13-17)</p> <p>At KTH – Application and running of programmes:</p> <ul style="list-style-type: none"> - Schools apply for new programmes - The President may give out assignment to a school to develop a new programme - The application is handled by the Education Committee and thereafter by the Faculty Council - The President decides to establish programme (or not) - Dean of school determines the study-plan for the programme - The President decides number of students to be admitted to each programme <p>Establishment of courses:</p> <ul style="list-style-type: none"> - Departments/units apply for new courses - The application is handled within the school(s) - Decision to establish a course is made by the Dean of school <p>Dean of school also:</p> <ul style="list-style-type: none"> - determines the syllabus - appoints examiner <p>No accreditation process is required when launching a new study program. As a university KTH can make its own decisions in establishing programmes on second level due to the fact that KTH is granted examinations rights for the third level.</p> <p>University colleges must apply when introducing programmes on second cycle in subject areas where they previously haven't been granted examination rights for third-cycle education. Swedish Higher Education Authority will scrutinize the application looking for teaching capacity, teacher's qualifications, research in the subject area and so on.</p>
<ul style="list-style-type: none"> • Introduction of study programs at the Master level 	<p>Given that in Sweden cycle I and cycle II form a whole process and are offered as integrated studies (<i>undergraduate studies</i>), the same rules apply when it comes to initiating or liquidation of study programmess.</p>
<ul style="list-style-type: none"> • Introduction of study programs at the PhD / doctoral level: - Awards 	<p>A university or higher education institution entitled to award third-cycle qualifications shall determine the subjects in which third-cycle courses and programmes may be offered. For each subject in which third-cycle courses or study programmes are offered a general study syllabus is</p>

<p>provided</p> <p>- Termination of degrees (programs) – (who decides, procedures)</p>	<p>required. A general study syllabus shall indicate the following: the main content of the study programme, specific entry requirements and any other regulations required. (ref. The Higher Education Ordinance, 4 February 1993, Ch. 6, Sec. 25-27).</p> <p><u>Third-cycle qualifications</u> (ref. Higher Education in Sweden, 2013 Status Report, by Swedish Higher Education Authority; http://www.doktorandhandboken.nu):</p> <p>- Completion of doctoral studies leads to the award of a doctoral degree – the most advanced degree awarded in Sweden.</p> <p>Third-cycle programmes can lead to the award of the following degrees:</p> <p>General qualifications:</p> <p>- A licentiate degree, 120 higher education credits</p> <p>- A doctoral degree, 240 higher education credits</p> <p>Qualifications in fine, applied and performing arts:</p> <p>- A Degree of Licentiate of Fine Arts, 120 higher education credits</p> <p>- A Degree of Doctor of Fine Arts, 240 higher education credits</p> <p>It is possible, therefore, to be admitted to a third-cycle programme even if this is intended to lead only to the award of a licentiate degree.</p>
<p>• Language of instruction at undergraduate level – (whose is the decision, procedures for obtaining the right)</p>	<p>The medium of instruction for the undergraduate and graduate level courses is Swedish. However, the master's degree programs and the PhD level programs usually use English as a medium of instruction.</p> <p>A growing number of bachelor's courses have been made available in English in order to make them more accessible, but for the most part, programmes require a very good command of written and spoken Swedish. Most courses at the bachelor's level offered in English are intended for exchange students. If free movers are admitted, they must meet all the normal requirements with regard to previous university studies and knowledge of English. Universities will normally require verification of language proficiency in the form of an international proficiency test certificate. (ref. www.studyinsweden.se)</p>
<p>Nota Bene</p>	<p>From 1 January 2013, the Swedish National Agency for Higher Education has ceased to exist as a public authority. Its operations have been transferred to two new public authorities:</p> <p>- the Swedish Higher Education Authority – has got the role to look after the Swedish universities and university colleges, and evaluate the quality of higher education and the right to issue exams.</p> <p>- the Swedish Council for Higher Education – has a role to play regarding admissions, applications for studies etc., and is also in charge of international collaboration.</p>
<p>References</p>	<p>[1]. The Swedish Higher Education Act, 17 December 1992</p> <p>[2]. The Higher Education Ordinance, 4 February 1993</p> <p>[3]. National Qualifications Framework, Published by the Swedish National Agency for Higher Education 2011</p>

	<p>[4]. Higher Education in Sweden, 2013 Status Report, by Swedish Higher Education Authority</p> <p>[5]. Establishment of courses at first- and second cycle at KTH, Internal instruction no. 27/05, Applicable from 01-07-2007, Changed from 01-01-2008</p> <p>[6]. http://www.doktorandhandboken.nu</p> <p>[7]. www.studyinsweden.se</p>
<p>II. Admission:</p> <ul style="list-style-type: none"> Admission quota of local students with grants from the government / own account 	<p>National admission regulations to first, second and third-cycle courses and programmes are laid down in the Higher Education Act, the Higher Education Ordinance and the regulations issued by the Swedish Higher Education Authority. (ref. National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011)</p>
<ul style="list-style-type: none"> Procedures for admission to undergraduate / Bachelor cycle (educational documents, mark level, procedure) 	<p>Specific prior knowledge is required for admission to higher education. Those who have the required knowledge qualify for entry. Entry requirements can be either general or specific. The general entry requirements apply to all courses and programmes in higher education; specific (additional) entry requirements can be found on the website of each higher education institution (http://www.studyinsweden.se/Universities/). All first-cycle courses and programmes, apart from those that lead to the award of a qualification in the fine, applied and performing arts, use more or less the same selection criteria. These are based mainly on school-leaving grades or results from the Swedish Scholastic Aptitude Test. (ref. The Higher Education Ordinance, 4 February 1993)</p> <p>The Government has decided that the Swedish Council for Higher Education is to issue further regulations regarding admission, for example concerning applicants with foreign grades. The vast majority of admissions are pooled. The Swedish Council for Higher Education is responsible for pooled admissions on behalf of the HEIs (which means that students can apply for courses and programmes at all universities on the same application) (ref. www.universityadmissions.se), but the individual HEIs decide on the admission of students. An appeal may be made to the Higher Education Appeals Board against a HEI's admission decision regarding eligibility but not regarding selection. (Higher Education in Sweden, 2013 Status Report; The Higher Education Ordinance, 4 February 1993, Ch. 7)</p> <p><i>Tuition fees</i></p> <p>For a long time Sweden was one of the few countries in Europe in which higher education was completely free of charge for both Swedish students and those from other countries. In June 2010 the Riksdag (Swedish Parliament) enacted a provision in the Higher Education Act that means that higher education is free for Swedish citizens and for citizens of the EU/EEA countries and Switzerland. Citizens of other countries, "third country students", have to pay an application fee and tuition fees for first and second-cycle higher education courses and programmes starting from</p>

	the autumn semester of 2011. The HEIs are required to charge tuition fees that cover their costs in full for these students. (Higher Education in Sweden, 2013 Status Report)
<ul style="list-style-type: none"> • Procedures for admission to the Master cycle. Admission quota of students. Admission procedures • Procedures for admission to the Doctorate cycle 	<p>According to The Higher Education Ordinance, 4 February 1993, <i>admission to the second cycle</i> is based on general and specific admission requirements.</p> <p>A person meets the general entry requirements for courses or study programmes that lead to the award of a second-cycle qualification if he or she:</p> <ul style="list-style-type: none"> - possesses a first-cycle qualification comprising at least 180 credits or a corresponding qualification from abroad, or - by virtue of courses and study programmes in Sweden or abroad, practical experience or some other circumstance has the aptitude to benefit from the course or study programme. <p>The specific entry requirements laid down shall be essential for students to be able to benefit from the course or study programme. These requirements may comprise:</p> <ul style="list-style-type: none"> - knowledge from one or more higher education courses, and - other conditions determined by the course or study programme or of significance for the professional or vocational area for which students are to be prepared. <p>The higher education institution may decide which of the selection criteria are to be applied and how places are to be allocated. (ref. The Higher Education Ordinance, 4 February 1993)</p> <p>To be admitted to <i>doctoral studies</i>, you need to have completed courses for at least 240 credits, of which at least 60 credits must be for Master's level studies. In most cases, students will hold a Bachelor's degree and a Master's degree, with a major in the same subject as the intended postgraduate study.</p> <p>PhD studies are organised at the faculty level and the process for applying for PhD positions is specific to each faculty. There is no set application period for PhD positions. Some departments advertise their positions in spring, while others advertise on an ongoing basis, as and when positions arise. Admission to PhD positions is restricted and competition for advertised positions is usually tough. (ref. http://www.doktorandhandboken.nu/english)</p> <p>The number of doctoral students admitted to third-cycle courses and study programmes may not exceed the number that can be offered supervision. A higher education institution may only admit applicants to third-cycle courses and study programmes who have been appointed to doctoral studentships or awarded doctoral grants.</p> <p>Decisions relating to admissions are made by the higher education institution. A person who wishes to be admitted to a third-cycle course or study programme shall apply within the time prescribed and in compliance with the procedures laid down by the higher education</p>

	<p>institution.</p> <p>When a higher education institution intends to admit one or several third-cycle students, information shall be provided by the higher education institution through advertising or some equivalent method.</p> <p>A higher education institution that has been entitled to award third-cycle qualifications within a field may permit a third-cycle student who has been admitted to some other university or some other higher education institution to transfer without a new admission process to the higher education institution and to continue his or her courses and study programmes and receive his or her qualification there.</p> <p>A person meets the general entry requirements for third-cycle courses and study programmes if he or she:</p> <ul style="list-style-type: none"> - has been awarded a second-cycle qualification - has satisfied the requirements for courses comprising at least 240 credits of which at least 60 credits were awarded in the second-cycle, or - has acquired substantially equivalent knowledge in some other way in Sweden or abroad. (ref. The Higher Education Ordinance, 4 February 1993).
<p>Admission of foreign students (non EU). Admission quota of students. Admission procedures (are they similar or not to those for local students)</p>	<p>The Bachelor's programmes are open to all students who have completed their upper secondary level schooling and who meet the specific admission requirements of the programme. (ref. www.universityadmissions.se)</p> <p><u>Bachelor's studies</u></p> <p>Most undergraduate (bachelor's level) students come to Sweden as <u>exchange students</u>; their home university has an exchange agreement with a Swedish institution, either as part of an EU exchange program or through a bilateral scheme.</p> <p>Opportunities for students to come to Sweden to study at the bachelor's level as <u>degree students, or free movers</u> – students who apply on an individual basis – are limited.</p> <p>The largest exchange scheme is the <u>Erasmus programme</u>.</p> <p>There are a certain number of places and grants available at each host university. These are awarded after a selection process organised by the student's home university.</p> <p>It is necessary to have your grades translated into English or – at some universities – another major European language. Most universities and university colleges will accept translations by an authorised translator. The student should contact the institutions directly for their exact requirements.</p> <p>The general requirements are:</p> <ul style="list-style-type: none"> - Completion of an upper-secondary school (high school) programme conferring eligibility for university studies in the same country and corresponding in level to the equivalent programme in Sweden. - Language proficiency in English and/or Swedish, depending on the language of study. <p>Entrance requirements for a particular course or programme are established</p>

	<p>independently at each academic institution. These requirements vary and you will need to contact the institution directly for exact information.</p> <p>Admission to all bachelor's level education is limited. All study programmes and courses have a fixed number of places, which are usually exceeded by the number of applicants. Every university and university college has its own procedure for selecting among eligible applicants. The criteria applied include: grades obtained, results from previous courses, assessment of work samples, interview results, special admission tests and work experience. These criteria vary from university to university.</p> <p><i>Language requirements</i></p> <p>If you plan to study in English, you need to show that you have attained a level of written and oral proficiency equivalent to that acquired on completion of Swedish upper-secondary (high school) education. You will need to support your application with an international proficiency test certificate. The required score is decided by the individual university and may therefore vary.</p> <p>To apply for a bachelor's degree program or an individual course, you should use the online application system at Universityadmissions.se, which processes your application. (ref. http://www.studyinsweden.se)</p> <p><i>Master's degree programmes</i></p> <p>Some 600 master's degree programmes at Swedish universities are taught entirely in English.</p> <p><i>General requirements</i></p> <p>Before applying, the candidate should have completed a course of study leading to a degree or diploma equivalent to 180 ECTS (three years of full-time bachelor's level studies). In most cases a bachelor's degree will be regarded as fulfilling this requirement.</p> <p><i>Language requirements</i></p> <p>For English-language programmes, it is necessary to have documented proficiency in English, for example in the form of <u>TOEFL</u> or <u>IELTS</u> test results.</p> <p>Universityadmissions.se is a central application service where the candidate can apply for up to four different master's programmes at different universities around Sweden with just one application. (ref. http://www.studyinsweden.se)</p> <p><i>Admission of foreign students to doctoral studies</i></p> <p>Foreign students enrolled as PhD students at their home universities can register for postgraduate courses and seminars in Sweden for a limited period, provided there is an exchange agreement or some other link between the Swedish institution and its foreign counterpart.</p> <p>Otherwise, admission to doctoral studies is restricted and universities and university colleges may only admit students who have funding for the entire study period. Many departments have no formal admission requirements with regard to Swedish language skills. However, it may be</p>
--	---

	<p>helpful to take some classes in Swedish.</p> <p>To be admitted to a postgraduate research position, a student must hold a university degree equivalent to a bachelor's degree or higher, with a major in the same subject as the intended field of study. In most cases a master's degree is required. The major must have included a degree thesis presenting the results of independent research.</p> <p>Foreign students wishing to study for a PhD in Sweden are advised to prepare with a master's degree in Sweden first, if a relevant programme is available in English. A Swedish master's degree is likely to improve a student's chances of being admitted to a PhD programme.</p> <p>Specific requirements are set for each subject. For information about these, you should contact the department you are interested in. An assessment will also be made of the applicant's suitability and his or her ability to complete doctoral studies. Students must also have a good command of English.</p> <p>In some cases, students will be advised to attend Swedish language courses parallel to their doctoral studies. (ref. http://www.doktorandhandboken.nu/english)</p>
Formation of contingent	<p>Students shall be provided with study and career guidance. Higher education institutions shall ensure that those intending to begin a course or study programme have access to the information about it that is required.</p> <p>Higher education institutions shall also ensure that the admission regulations are available. The admission regulations comprise the regulations that apply at the higher education institution to applications, entry requirements, selection, and admission, as well as how decisions are made and how appeal can be made against them. (ref. The Higher Education Ordinance, 4 February 1993)</p>
References	<p>[1]. Higher Education Act, 17 December 1992</p> <p>[2]. The Higher Education Ordinance, 4 February 1993</p> <p>[3]. Higher Education in Sweden, 2013 Status Report – published by the Swedish Higher Education Authority</p> <p>[4]. National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011</p> <p>[5]. http://www.studyinsweden.se</p> <p>[6]. www.universityadmissions.se</p> <p>[7]. http://www.doktorandhandboken.nu/english</p>
<p>III. Recognition of studies:</p> <ul style="list-style-type: none"> • Of study periods performed abroad at Bachelor, Master, Doctoral level 	<p>Recognition is a term that is often used in relation to the evaluation of qualifications so that they can be used in Sweden. There are two types of recognition:</p> <ul style="list-style-type: none"> • professional recognition for use in the labour market • academic recognition to enable accreditation for the award of qualifications or admission to further studies and the transfer of credits from earlier studies – responsibility for the assessment of courses and programmes to enable credits to be transferred for the award of a

	<p>qualification or for admission to further studies rests with the HEI offering the programme. (ref. National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011)</p> <p>The Swedish Council for Higher Education (former Swedish National Agency for Higher Education) acts as an expert body for the academic recognition of qualifications from higher education outside Sweden. (ref. http://www.uhr.se/en (The Swedish Council for Higher Education))</p> <p>The Swedish Council for Higher Education evaluates most foreign higher education programmes. The Swedish Council for Higher Education compares undergraduate and postgraduate programmes from other countries with those provided in Sweden. The comparison is expressed in terms of Swedish degree levels. The evaluation does not involve any award of a Swedish degree. The evaluation is intended to serve as a recommendation for an employer. It can also serve as guidance for Swedish universities and higher educational institutions. All decisions regarding admissions and transfer of credits from prior learning abroad are made by the universities and higher educational institutions themselves. This is the case with both completed and uncompleted education programmes. Information is provided by study counselors at universities and higher education institutions. (ref. Recognition of Higher Education Qualifications from Abroad, by the Swedish National Agency for Higher Education (http://www.hsv.se))</p>
<ul style="list-style-type: none"> • Recognition of educational documents for the studies done abroad at Bachelor, Master, Doctoral level (recognition bodies, procedures, conditions) 	<p>There is no special recognition procedure for foreign students who want to study in Sweden. Their education and eligibility are assessed by the university or university college they apply to on the basis of the information given in their application and the attached documents. Their grades are translated, using set formulas, into the Swedish grading scale.</p> <p>If their academic transcripts are in any language other than a Scandinavian language, English, French or German, they will need to submit a copy of their transcript in the original language PLUS provide an authorised translation. The authorised translation can be in English, Swedish, French or German.</p> <p>Recognition of foreign degrees for purposes other than studies</p> <p>Recognition of general academic degrees is undertaken by the Swedish Higher Education Authority. The Authority is also the first point of contact for general EU directives on recognition of professional qualifications in the EU.</p> <p>If the person is living in Sweden and looking for work, a formal recognition of his/her foreign diplomas or degrees may be helpful. Recognition of foreign upper-secondary diplomas is done by the Swedish Council Higher Education. (ref. http://www.studyinsweden.se)</p>
References	<p>[1]. National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011</p> <p>[2]. Recognition of Higher Education Qualifications from Abroad, by the Swedish National Agency for Higher Education (http://www.hsv.se)</p>

	<p>[3]. http://www.uhr.se/en (The Swedish Council for Higher Education)</p> <p>[4]. http://www.studyinsweden.se</p>
<p>IV. Quality assurance, accreditation of study programs:</p> <ul style="list-style-type: none"> Internal structures of quality assurance, student involvement in the process of quality assurance 	<p>Quality assurance procedures are the shared concern of staff and students at higher education institutions. (ref. The Swedish Higher Education Act, 17 December 1992).</p> <p>The Swedish quality-assurance system is based on the quality procedures of the universities and university colleges themselves. Within the framework of the regulations laid down by the Swedish Parliament and the government, they have a relatively large amount of freedom to organise their own quality assurance. However, each institution must determine targets that can be monitored, and then report to the government about the quality-assurance measures to which it assigns priority and how these measures contribute to raising standards. (ref. National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011)</p> <p>The Government's proposals and considerations on quality in higher education are based on a policy directed towards increased autonomy for the higher education institutions. This has been developed in greater detail in the bill <i>An academy for today</i> (bill 2009/10:149). An important point of departure is that the higher education institutions shall themselves assume responsibility for the development of their operations.</p> <p>KTH example:</p> <p><u>QA Strategy:</u></p> <p><i>The quality process at KTH is to be based on the principle of continuous improvement</i></p> <p>Quality policy 2011-2015</p> <ul style="list-style-type: none"> - Education - Research - Interaction with the wider community - Staff recruitment and professional development <p>Action plan to the quality policy</p> <ul style="list-style-type: none"> - Sets out priorities and activities for each year <p>Annual quality report</p> <ul style="list-style-type: none"> - Gives an overview of activities and results <p><u>QA – roles and responsibilities:</u></p> <p><i>Responsibility for quality is to be carried by the individual student, teacher and employee in their daily actions</i></p> <p>Formal organisation</p> <ul style="list-style-type: none"> - Faculty Council: academic responsibility for quality • Dean, Vice Dean - President, University Board - University Administration

	<ul style="list-style-type: none"> • Department of Strategic Planning and Resource Allocation: quality assurance support - KTH Schools • Director of Undergraduate and Masters' studies • Director of Doctoral studies • Programme Director <p>External Advisory Group</p> <p><i>Networks</i></p> <p>The Faculty Council represents the entire faculty and acts as an advisory body to the President. The Council has overall responsibility for issues relating to the quality of education, research and community interaction. Within the university administration's there is a quality coordinator who coordinates efforts made before / during / after external (and internal) evaluation is carried out.</p> <p>The President has decided that course analyzes should be done for all courses at KTH (no exceptions are made). The course analysis is done by the course director. It should be based on an evaluation, discussion with students, talk with involved teachers and examiners, as well as own reflections. There are recommendations that course assessment should be completed within one month after the course and that the analysis is uploaded on the course web page. A summary of recent course analysis should be included in the course description. In addition, the course director at the first lecture of the course should outline the changes made to the course since the last time and what it was that caused them.</p> <p>In all courses, the students will get the chance to do a course evaluation. Most often this is done in the form of a student questionnaire filled out anonymously. The questionnaire can be designed by student representatives, or by the course instructor or preferably in consultation between them. It is the course director's responsibility that a course evaluation is carried out.</p> <p>The questions on the survey shall apply to all parts of the course (objectives, prerequisites, textbook, course content, teaching, examination). It is important that questions are asked on parts of the course that has not worked as well or as students may have specific comments on. It should be possible for the students to give general comments about the course at the end of the survey. A summary of results is included in the course analysis.</p> <p>Internal evaluation was carried out in 2012 (Education Assessment Exercise-EAE). Courses are internally analyzed every year.</p>
<ul style="list-style-type: none"> • Methodology, evaluation criteria, procedures (self-evaluation, external evaluation) 	<p>National responsibility for evaluating and monitoring higher education in Sweden rests with the Swedish Higher Education Authority (SHEA). The overall aim of the Authority's evaluation procedures is to ensure the fundamental quality of courses and programmes. (ref. National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011)</p>

	<p>In general, authorization to provide a programme leading to a degree-level award in the first and second cycles ('degree-awarding powers') is granted by the SHEA (former Swedish National Agency for Higher Education) (with the authority of the Ministry) in the case of the public HEIs, and by the Ministry on the basis of the SHEA's advice in the case of independent HEIs. Degree-awarding powers in respect of the Swedish University of Agricultural Sciences and the National Defence College are in the gift of the Ministry direct. Authority's primary responsibilities for quality assurance in HEIs relate to the recognition of new programmes, and the periodic evaluation of recognised programmes. Both these activities are the responsibility of the Department of Quality Assurance in SHEA. (ref. Swedish National Agency for Higher Education: Review of ENQA Membership, April 2012)</p> <p>The system for the quality assurance of higher education comprises two components:</p> <p><u>Programme evaluation</u> – The SHEA evaluates all first and second-cycle programmes. Evaluation of third-cycle programmes will start later. Courses and programmes have to be evaluated on the basis of how well they fulfil the requirements laid down in the Higher Education Act and the qualification descriptors in the statutes linked to the Act. In other words, the SHEA assesses to what extent the learning outcomes achieved by the students correspond to the intended learning outcomes.</p> <p><u>Appraisal of degree-awarding powers</u> – Before a higher education programme can be started, entitlement to award a qualification is required. The SHEA awards degree-awarding powers to public-sector higher education institutions but can also revoke them if there are shortcomings in their courses and programmes. (ref. National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011)</p> <p>The SHEA's evaluations are made by panels of external experts which include subject experts, students and representatives of the labour market. The panel has to propose an evaluation of each programme it assesses using a three-level scale:</p> <ul style="list-style-type: none"> • Very high quality • High quality • Inadequate quality <p>The report from the assessment panel provides the basis on which the SHEA then decides on the overall evaluation to be awarded for each course or programme. Those that are assessed as having "inadequate quality" will be reviewed within one year. After that the SHEA decides whether or not to revoke its entitlement to award a qualification. (ref. http://www.uk-ambetet.se) The material on which the experts base their assessments are independent projects (degree projects) produced by students, the higher education institutions' own self-evaluations, questionnaires sent to alumni and the students' own perceptions of the outcomes of their programmes of study in relation to the targets in the qualification descriptors. The self-</p>
--	--

	<p>evaluation is important for the Authority's evaluations but should also offer an important tool for the work of the institutions themselves on the quality assurance of their courses and programmes. (ref. General Guidelines for Self-Evaluation in the Swedish National Agency for Higher Education's Quality Evaluation System. 2011-2014, Published by the Swedish National Agency for Higher Education 2011)</p> <p>The self-evaluation procedure is described in detail in ref. General Guidelines for Self-Evaluation in the Swedish National Agency for Higher Education's Quality Evaluation System. 2011-2014, Published by the Swedish National Agency for Higher Education 2011.</p> <p>Today resources are allocated to the higher education institutions on the basis of student performance as indicated by the number of higher education credits awarded for first and second-cycle courses and programmes. In June 2010 the Riksdag (Swedish Parliament) decided that the results of the quality evaluations should also affect allocation of resources at these levels. Higher education institutions whose courses and programmes are considered to attain "very high quality" will receive the incentive of an extra funding increment. This quality-based allocation of funding applies for courses and programmes offered by public-sector higher education institutions. The same thing is stipulated in the Appropriations for Undergraduate Education, December 20, 1993, developed and approved by the Swedish Ministry of Education and Science, under the paragraph "Quality Premium".</p> <p>More information about the system of quality assessment, ie assessment methods and assessment process can be found in "The Swedish National Agency for Higher Education's quality evaluation system 2011-2014", published by the Swedish National Agency for Higher Education in 2011.</p>
<ul style="list-style-type: none"> Freedom in the choice of external quality assurance body 	<p>External evaluation is carried out by the Swedish Higher Education Authority based on qualification descriptor for each qualification awarded by the higher education institutions laid down by the Government; The Swedish Higher Education Act, 17 December 1992; Qualifications ordinance, Annex 2 to the Higher Education Ordinance, 4 February 1993; National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011.</p>
<ul style="list-style-type: none"> Relationships / how does the accreditation body cooperate with the Ministry of Education in the accreditation process 	<p>The Swedish Higher Education Authority is to report its assessments to the Government Offices (Ministry of Education and Research). (ref. Task of evaluating the quality of first and second-cycle programmes in higher education, Swedish Government Decision based on the Government Bill <i>Fokus på kunskap – kvalitet i den högre utbildningen</i> [Focus on knowledge – quality in higher education] (bill. 2009/10:139), which has been enacted by the Swedish Riksdag (bet. 2009/10:UbU20, rskr. 2009/10:320)</p>
References	<p>[1]. The Swedish Higher Education Act, 17 December 1992</p> <p>[2]. Qualifications ordinance, Annex 2 to the Higher Education Ordinance, 4 February 1993</p> <p>[3]. Appropriations for Undergraduate Education, December 20, 1993, developed and approved by the Swedish Ministry of Education and</p>

	<p>Science</p> <p>[4]. Task of evaluating the quality of first and second-cycle programmes in higher education, Swedish Government Decision based on the Government Bill <i>Fokus på kunskap – kvalitet i den högre utbildningen</i> [Focus on knowledge – quality in higher education (bill. 2009/10:139), which has been enacted by the Swedish Riksdag at the beginning of June 2010 (bet. 2009/10:UbU20, rskr. 2009/10:320)</p> <p>[5]. National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011</p> <p>[6]. General Guidelines for Self-Evaluation in the Swedish National Agency for Higher Education's Quality Evaluation System. 2011-2014, Published by the Swedish National Agency for Higher Education 2011</p> <p>[7]. The Swedish National Agency for Higher Education's quality evaluation system 2011-2014, Published by the Swedish National Agency for Higher Education 2011</p> <p>[8]. An academy for today (bill 2009/10:149) cited in Swedish National Agency for Higher Education: Review of ENQA Membership, April 2012</p> <p>[9]. Swedish National Agency for Higher Education: Review of ENQA Membership, April 2012</p> <p>[10]. http://www.uk-ambetet.se (the Swedish Higher Education Authority)</p>
<p>V. National Qualification Framework:</p> <ul style="list-style-type: none"> The body responsible for the NQF in the country (functions, structure, relations with ME and universities) 	<p>National Qualifications Framework was Revised in May 2011 and published by the Swedish National Agency for Higher Education in 2011 under the Reg.nr 12-5202-10. The Swedish qualifications ordinance (ref. Qualifications Ordinance, Annex 2 to The Higher Education Ordinance, 4 February 1993) with its qualification descriptors, could be described as forming the backbone of a national framework for qualifications in Sweden. The Swedish NQF was elaborated on the bases of the:</p> <ul style="list-style-type: none"> Swedish Higher Education Act, 17 December 1992 Higher Education Ordinance, 4 February 1993 European Qualifications Framework (QF-EHEA) <p>There are provided the entry requirements and cycle descriptors for each cycle: first, second and third.</p> <p>There are three categories of qualifications:</p> <ol style="list-style-type: none"> general qualifications qualifications in the fine, applied and performing arts professional qualifications <p>The Qualifications Ordinance provides:</p> <ul style="list-style-type: none"> the qualifications that may be awarded in the first, second and third cycles, and the requirements to be fulfilled for the award of each qualification (qualification descriptors). (ref. National Qualifications

	<p>Framework, Published by the Swedish National Agency for Higher Education in May 2011)</p> <p>The targets in the qualification descriptors are grouped under three headings, or forms of knowledge, that apply for all courses and programmes:</p> <ul style="list-style-type: none"> • Knowledge and understanding • Competence and skills • Judgement and approach (ref. http://english.uk-ambetet.se) <p>Independent projects are required for all first- and second-cycle qualifications. For licentiates and doctorates, a scholarly thesis or a research thesis is required. Special regulations apply for doctorates in the fine, applied and performing arts.</p> <p>The Swedish Higher Education Authority issues regulations and general advice on the translation of Swedish qualification titles to English. (ref. National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011)</p> <p>Levels that correspond broadly to degrees / qualifications in higher education: 5 – high school certificate, 6 – bachelor degree 7 – Master's degree, and 8 – doctoral degree.</p>
<ul style="list-style-type: none"> • How do universities (ME, management bodies of HEIs) participate in the development of new qualifications 	<p>The qualifications are set by the Government, based on previous discussion held with stakeholders (HEI, business, students and the society at large).</p>
<ul style="list-style-type: none"> • How are the NQF requirements reflected in the study programs (compulsory provisions, procedures, internal control, external evaluation) 	<p>Universities have to develop (design) study programs and their implementation process so that competences determined by the descriptors to be achieved by the student. Requirements defined will serve as criteria and indicators for the final evaluation of studies for the preparation of self-evaluation reports and external evaluation for the accreditation of the program.</p> <p>A course shall have a course syllabus. The course syllabus shall indicate the following: the cycle in which the course is given, the number of credits, objectives, specific entry requirements, how student performance is assessed and any other regulations required. A study programme shall have a programme syllabus. The programme syllabus shall indicate the following: the courses that the study programme comprises, specific entry requirements and other regulations required. (ref. The Higher Education Ordinance, 4 February 1993; National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011)</p> <p>Courses and programmes have to be evaluated on the basis of how well they fulfil the requirements laid down in the Higher Education Act and the qualification descriptors in the statutes linked to the Act. In other words, the Swedish Higher Education Authority assesses to what extent the</p>

	learning outcomes achieved by the students correspond to the intended learning outcomes. The courses and programmes that have to be evaluated are those that can lead to the award of a first-cycle or second-cycle qualification. (ref. http://english.uk-ambetet.se)
<ul style="list-style-type: none"> Educational standards (exist or not, if yes – how are they related to NQF) 	Branch educational standards are not developed.
References	<p>[1]. Higher Education Ordinance, 4 February 1993</p> <p>[2]. National Qualifications Framework, Published by the Swedish National Agency for Higher Education in May 2011</p> <p>[3]. http://english.uk-ambetet.se (Swedish Higher Education Authority)</p>
VI. Employability <ul style="list-style-type: none"> Occupational framework (ISCO) 	<p>In Sweden the demand for graduates has been rising for a long time and statistics also show that higher education increases the possibilities of becoming established in the labour market. The total number of graduates from higher education entering the labour market in Sweden is considerably larger than the number of graduates who retire each year. In today's labour market qualifications from higher education are required for a greater number of jobs than before. The number of places offered by HEIs in Sweden must meet student demand and the needs of the labour market. The increasing focus placed on the links between higher education and the labour market and its relevance is largely the result of the increased expectations from the labour market and the influence it exerts. (ref. Higher Education in Sweden, 2013 status report)</p> <p>100% of KTH graduates find a job. This however does not happen immediately after graduation. Most graduates decide to spend a year to resolve some personal interests and only then begin to look for a job according to field of study graduated. The organizers of programmes, university departments are aware of the post-graduation activity of their former students. Based on discussions held with the Head of Administration at KTH it is a culture that university graduates announce whether they have been employed or not, where, position, etc.</p>
<ul style="list-style-type: none"> Differentiation by level of education. Place of Master and PhD 	<p>The Swedish Higher Education Authority assesses graduates as established if they were gainfully employed in November, earn more than a specific amount and have not been students, moved abroad or had periods of unemployment during the year or been involved in labour market policy measures. Establishment is measured 12-18 months after graduation and graduates are grouped in different categories on the basis of which sector of the labour market their qualifications relate to.</p> <p>The proportion varies from discipline to discipline. The largest proportion of graduates who gained a footing in the labour market had qualifications in areas such as technology, medicine and health care. Nine out of ten graduates who qualified as physicians, dentists or had Master's degrees in engineering had established themselves within 1.5 years. (ref. Higher Education in Sweden, 2013 status report)</p>

	<p>All students at KTH follow the “undergraduate” level which includes, in the form of integrated study: cycle I - Bachelor and cycle II - Master (financed from the state budget by 95%). Although, theoretically and according to Swedish law, it is possible to graduate only from cycle I, and that graduates can be employed in the labor market, this is not practical. All graduates receive upon completion of studies, the level of “undergraduate”, a certificate / diploma (to which the Diploma Supplement is attached describing the study programme and its place in the educational system) (ref. The Higher Education Ordinance, 4 February 1993).</p> <p>Regarding the employment of graduates with the title of PhD (doctor), the employment rate is also 100%. The more advanced the educational qualifications acquired, the greater the chance of establishment in the labour market. The largest proportion of PhDs to establish themselves in the labour market were those with degrees in medical subjects and also in the technological sciences. The smallest proportion were those graduating in the humanities and religious studies. (ref. Higher Education in Sweden, 2013 status report)</p> <p>According to the Higher Education Ordinance, 4 February 1993, HEIs can create / establish specific full-time positions (1 unit) within the institution for students from cycle III, who obtained a doctoral studentship, to help and enable them to finish their studies and are paid for their work (about 30 000 SEK). They must dedicate themselves to their studies first, but, however, they can also carry out, to a lesser extent, educational, research, creative development and administrative tasks as well. Also, if the student in the third cycle asks, he can be employed in the higher education institution at a part-time position. In addition, if necessary for example for the company / enterprise, it can finance its employees to undertake the doctoral studies required.</p> <p>More detailed information on the employment of graduates from higher education institutions in Sweden is offered in “Higher Education in Sweden, 2013 status report”, pp. 41-45.</p> <p><u><i>Postdoctoral positions in Sweden</i></u></p> <p>In 2005 the Swedish Research Council also established national post-doc appointments.</p> <p>This programme applies to those with doctorates awarded in Sweden and abroad. The universities can therefore choose either to recruit researchers with foreign PhD's or Swedish researchers from another faculty or university. Funding from the Swedish Research Council is paid to the higher education institution that establishes a position for a fixed term of two years.</p> <p>In Sweden, it is increasingly common for higher education institutions to advertise post-doc appointments themselves.</p> <p>In 2008, the Swedish Agency for Government Employers and union representatives reached a new agreement on fixed-term employment as a post-doc. This agreement also allows for the employment of a postdoctoral researcher until further notice, but for no more than two</p>
--	---

	years, with the opportunity for an extension if there are special circumstances. (ref. http://www.doktorandhandboken.nu/english)
Career guidance structures	<ul style="list-style-type: none"> • Higher education institutions • Swedish Research Council • Swedish Agency for Government Employers
References	<p>[1]. The Higher Education Ordinance, 4 February 1993</p> <p>[2]. Higher Education in Sweden, 2013 status report</p> <p>[3]. http://www.doktorandhandboken.nu/english</p>
VII. Content and implementation of the study program (organization of studies): <ul style="list-style-type: none"> • Content elaboration / designing 	<p>Universities in Sweden have general degree awarding powers at:</p> <ul style="list-style-type: none"> • first cycle (Higher Education diplomas – 120 ECTS and Bachelors' degrees – 180 ECTS) • second cycle (one-year – 60 ECTS and two-year – 120 ECTS Masters' degrees) and • third cycle (licentiate – 120 ECTS and doctoral – 240 ECTS degrees) (ref. Higher Education in Sweden, 2013 Status Report, by Swedish Higher Education Authority) <p>The content of study programmes and courses is developed by the initiator(s) of the programme.</p> <p>All first and second-cycle study programmes shall be offered in the form of courses. Courses may be combined to create study programmes. (ref. The Higher Education Ordinance, 4 February 1993)</p> <p>At KTH, for instance, content is controlled by the program learning objectives and competences the student should achieve during his/her studies, described in the Qualifications Ordinance, Annex 2 to the Higher Education Ordinance, 4 February 1993. Programme management can receive development support in writing learning objectives from the Department of Learning at the School of Education and Communication in Engineering Science.</p> <p>Requirements on organization of studies, student assessment, organization and deployment of the final assessment is made the responsibility of each institution and are defined by The Swedish Higher Education Act, 17 December 1992; The Higher Education Ordinance, 4 February 1993, but also through internal arrangements.</p> <p>A university or higher education institution entitled to award third-cycle qualifications shall determine the subjects in which third-cycle courses and programmes may be offered. For each subject in which third-cycle courses or study programmes are offered a general study syllabus is required. (ref. The Higher Education Ordinance, 4 February 1993)</p>
<ul style="list-style-type: none"> • The distribution between university structures 	<p>In Higher Education Ordinance, 4 February 1993 is set the structure of the academic year: one academic year comprises 40 weeks of full-time study which corresponds to 60 credits.</p> <p>The number of HE credits awarded for each course is determined by the amount of study normally required to attain its objectives. The HE credits</p>

	<p>awarded in higher education in Sweden can be compared to European Credit Transfer and Accumulation System (ECTS) credits. (ref. Higher Education in Sweden, 2013 Status Report).</p> <p>The university establishes the beginning and the end of semesters, and vacations. It is determined the credit structure of cycle I (120 or 180 ECTS), II (60 or 120 ECTS) and III (120 or 240 ECTS) depending on qualifications to be obtained upon completion of the study program (ref. Higher Education in Sweden, 2013 Status Report). Teachers from several schools specializing in a particular field participate in the deployment of a program.</p> <p>The Academic Cycle at KTH:</p> <ul style="list-style-type: none"> • Starts in early September ends in June • 40 weeks divided into four study periods • Examination period after each study period
Internships	<p>Normative documents do not provide the organization of internships in HEIs. At KTH internships are not organized. This was confirmed by the Head of Administration of KTH. However, practical activities are conducted when carrying out year projects, graduation projects / theses by students, providing solving specific problems derived from the economic environment.</p>
<ul style="list-style-type: none"> • Final evaluation (exams, theses) on cycles 	<p>Unless otherwise provided by the higher education institution, a grade shall be awarded on completion of a course. The higher education institution may determine which grading system is to be used.</p> <p>The grade shall be determined by a teacher specifically nominated by the higher education institution (the examiner).</p> <p>The number of sessions laid down shall be at least five.</p> <p>Upon request, a student who has successfully completed a course shall receive a course certificate from the higher education institution. If the course certificate is awarded for studies at more than one higher education institution, the certificate shall be issued by the institution at which the student completed the course. This does not apply, however, if the higher education institutions concerned have specifically agreed otherwise. A certificate shall be accompanied by a diploma supplement that describes the study programme and its place in the educational system (ref. The Higher Education Ordinance, 4 February 1993).</p> <p>At KTH, the degree project area (the course) is established by the school committee. Proposal to the degree project is given within the school. The degree project must have a course plan according to regulations in the Higher Education Ordinance. The degree project is a course consisting of 15/30 credits, which means that the degree projects must correspond to 10/20 weeks of full-time studies. The degree project may not include other courses (courses with established course numbers). The degree project can include elements such as seminars, information searching, student teaching, or other elements which the examiner or supervisor deems suitable. The degree project can be performed at KTH or externally. The</p>

	<p>degree project can also be performed abroad. The degree project are carried out individually or together with another student. If the project is done by more than one student, it is the responsibility of the examiner to ensure that every student's work corresponds to the requirements for an individual degree project.</p> <p>If the degree project is performed at another university and if it equals the degree project at KTH, then credit transfer should be made. The supervisor is appointed by the examiner. More than one supervisor can be appointed. If the degree project is done, for example, at a company, a supervisor should be appointed at the company as well. The examiner should be attentive of the responsibility distribution between the examiner and the supervisors. The degree projects should be reviewed in a seminar. The degree project report should be registered within the school. Much care should be taken to how the report is formed, especially with consideration to language usage. The degree project can be written and presented in Swedish or English. A summarization should exist in both languages. The degree project report must be checked for plagiarism. The degree project must be given a grade on the scale A-F based on those KTH common evaluation criteria. The school committee decides, based on these evaluation criteria, about rules and guidelines for the degree projects area, including methods for grading.</p> <p>All degree projects should be evaluated based on three KTH-common evaluation criteria; engineering-related and scientific contents, process, and presentation. The president decides about further evaluation criteria after proposal from the school. (ref. Comprehensive rules and guidelines for degree project work 15 credits, regarding Master (60 credits), 2007-07-01; Comprehensive rules and guidelines for degree project work 30 credits, regarding Master (120 credits), 2007-07-01)</p> <p>Doctoral studies consist of seminars, reading and methodology courses, individual literature surveys and independent research. The thesis must describe and account for organization and results of research, be published and be publicly defended. (ref. http://www.euroeducation.net/prof/swedco.htm)</p> <p>At KTH the grading scale A-F is used starting with 1 July 2007 (mandate 708/06). (ref. Comprehensive rules and guidelines for degree project work 15 credits, regarding Master (60 credits), 2007-07-01)</p> <p>Detailed information on the final evaluation at KTH are included in the internal regulatory acts of the institution:</p> <ul style="list-style-type: none"> • Regulations for written examinations at KTH, including instructions for invigilators (proctors), Internal regulation number 6/02, Applies from 2002-06-19, Amended from 2010-10-01 • Examiners at KTH, Internal regulation no. 4/2006, Valid from 01/02/2006, Amended from 18/10/2007 • The right for students to request an extra examination, Internal instruction no. 5/03, Applies from 01/02/2003, Revised from 08/04/2005
--	--

	<ul style="list-style-type: none"> • Regulations for schools, examiners and invigilators regarding written examinations, Appendix 1 to Decision UF-2010-0416, 30-06-2010 • Regulations for students regarding written examinations, Appendix 2 to Decision UF-2010-0416, 30-06-2010 • Handling of plagiarism in education at KTH, Internal regulations 8/2011
References	<p>[1]. The Higher Education Ordinance, 4 February 1993</p> <p>[2]. Higher Education in Sweden, 2013 Status Report, by Swedish Higher Education Authority</p> <p>[3]. http://www.euroeducation.net/prof/swedco.htm</p> <p>[4]. Comprehensive rules and guidelines for degree project work 15 credits, regarding Master (60 credits), 2007-07-01</p> <p>[5]. Comprehensive rules and guidelines for degree project work 30 credits, regarding Master (120 credits), 2007-07-01</p> <p>[6]. Regulations for written examinations at KTH, including instructions for invigilators (proctors). Internal regulation number 6/02. Applies from 2002-06-19. Amended from 2010-10-01</p> <p>[7]. Examiners at KTH. Internal regulation no. 4/2006. Valid from 01/02/2006. Amended from 18/10/2007</p> <p>[8]. The right for students to request an extra examination. Internal instruction no. 5/03. Applies from 01/02/2003. Revised from 08/04/2005</p> <p>[9]. Regulations for schools, examiners and invigilators regarding written examinations. Appendix 1 to Decision UF-2010-0416, 30-06-2010</p> <p>[10]. Regulations for students regarding written examinations. Appendix 2 to Decision UF-2010-0416, 30-06-2010</p> <p>[11]. Handling of plagiarism in education at KTH. Internal regulations 8/2011</p>
VIII. Teaching load of the didactic staff: <ul style="list-style-type: none"> • Planning the teaching load 	<p>Swedish legislation does not lay down specific rules on the workload of teachers. The law only stipulates that a teacher employed at a HEI should combine research with teaching. Institutions develop internal rules regarding the allocating of tasks, remuneration rules.</p>
<ul style="list-style-type: none"> • The distribution of teaching load 	<p>Since 2005 Statistics Sweden has conducted a questionnaire survey every other year covering a selected population of employees (with research and teaching duties) at the HEIs. The employees, including those appointed to doctoral studentships, are asked, for instance, how they divided their total number of working hours between different tasks.</p> <p>The findings of the latest survey, which covers 2011, show that 41 per cent of the total number of working hours is allocated to research and development (R&D), 22 per cent to teaching in first and second-cycle courses and programmes, 3 per cent to teaching in third-cycle programmes and the remaining 35 per cent to other tasks.</p> <p>Teaching in first and second-cycle courses and programmes is mainly undertaken by lecturers and senior lecturers. The lecturers state that they</p>

	devote 60 per cent of their working hours to this teaching, the senior lecturers 42 per cent. At the same time these two categories devote fewest hours to R&D. Those who spend most of their time on R&D are researchers and post-doctoral research fellows (who are included in the group of other research and teaching staff), 70 per cent of their working hours. The professors devote 17 per cent of their time to teaching on first and second-cycle courses and programmes, 10 per cent to teaching on third-cycle programmes and 42 per cent to R&D. (ref. Higher Education in Sweden, 2013 status report).
<ul style="list-style-type: none"> Accounting of the teaching and research load achievement 	<p>At KTH the salary is usually negotiated.</p> <p>Total workload = 1700 astronomical hours / year.</p> <p>1 astronomical hour = 4 academic hours.</p> <p>Respectively, 1700 astronomical hours / year = 425 academic hours / year, of which 30% teaching and 70% research.</p> <p>A full-time lecturer = 600 academic hours / year, which includes: lectures, laboratories, examination.</p> <p>At KTH: 200 academic hours / year.</p> <p>Didactic workload varies from one university to another. There are teachers who only do research, others - teaching and research.</p>
References	[1]. Higher Education in Sweden, 2013 status report
<p>IX. University scientific research (organization):</p> <ul style="list-style-type: none"> University structures involved in the organization of scientific research 	<p>Almost two thirds of publicly funded research in Sweden is conducted at universities and other higher education institutions. Other publicly funded actors conducting research include industrial research institutes, certain sectoral agencies as well as municipalities and county councils.</p> <p><i>Universities and other higher education institutions</i></p> <p>In Sweden there are 34 state higher education institutions. Research and postgraduate studies are also carried out at three private education providers. The large higher education institutions conduct teaching and research in many subjects and fields, unlike smaller higher education institutions which often have established profiles in specific areas, sometimes by concentrating on subject areas of relevance to the local business sector, or in a specific scientific field.</p> <p>All state higher education institutions have their own research resources and conduct research.</p> <p><i>Industrial research institutes</i></p> <p>Some publicly funded research is also conducted at industrial research institutes. Central government ownership is channelled via IRECO Holding AB. IRECO has completed a restructuring process and the previously 16 institutes are now combined into 3-4 larger groups of institutes.</p> <p><i>The business sector</i></p> <p>The business sector in Sweden invests a lot in research compared to other countries. In comparison with the other Nordic countries, Sweden has industries that are varied and high-tech. Several different sectors allocate</p>

	<p>large amounts of money to research. Particular emphasis is placed on the automotive and pharmaceutical industries, as well as on the IT and telecommunications industries.</p> <p>Innovations resulting from research are playing an increasingly important role. This is reflected in a clearer mandate for the higher education institutions to work in this direction. Collaboration with the business sector plays a major role in this. (ref. http://www.government.se/sb/d/6949/a/88166)</p> <p>In Sweden, research and third-cycle courses and programmes receive finance from:</p> <ol style="list-style-type: none"> 1. Direct government funding 2. Government agencies 3. Other public funding and EU funding 4. Private funding in Sweden 5. Sources outside Sweden excluding EU 6. Financial revenues <p>Less than half the funding for research and third-cycle courses and programmes (47 per cent) takes the form of direct government allocations and the state channels a considerable proportion of the funding (26 per cent) through research councils (ref. Swedish Research Council – http://www.vr.se/inenglish.4.12fff4451215cbd83e4800015152.html) and other government agencies. Other significant sources of funding for research are private foundations and non-profit organisations. (ref. Higher Education in Sweden, 2013 Status Report, by Swedish Higher Education Authority)</p> <p>Research efforts at KTH are <u>financed via two main sources</u>. One is <u>government</u> appropriation for research, the “research grant”, which includes both research and postgraduate education. The other is “<u>external funding</u>”.</p> <p>About one-third of KTH’s activities are financed by means of appropriations or grants. The rest are met by various sources of external funding, which are applied for on a competitive basis. After being accepted by the allocating financier, external funds are allocated directly to the proper unit or body. So far, the faculty appropriation has been distributed directly to the various units. A small percentage of it has been reserved for support of special purposes. Supportive activities common to the entire KTH are mainly financed by a “college fee”, which is set by the KTH University Board.</p> <p>The internal allocation of resources was subject to investigation during 2006. A new model for this, based on the KTH President requesting specific efforts from each School, is being employed from 2007 onwards. One of its aims is to improve control of our activities, both strategically and financially. This applies not least to our research, as the demands for co-financing of these from outside financiers have increased considerably. Hence the distribution of the faculty appropriation has assumed increasing</p>
--	---

	importance. (ref. http://www.kth.se/en/forskning/finansiering)
<ul style="list-style-type: none"> Involving students in the process of scientific research (incentive mechanisms / incentives for the parties) 	<p>In Sweden only the Master with a duration of 60 -120 ECTS is practiced, where students are involved in applied research and finishing this level serves as a starting point for doctoral studies. At doctoral level, PhD students are 70-80% involved in research.</p>
<ul style="list-style-type: none"> Scientific research of teachers (achievement planning and control, the methodology of assessing the research activity) 	<p>The duties assigned to teaching staff may comprise educational responsibilities, research or artistic research and development, and also administrative tasks.</p> <p>Higher education institutions shall employ professors and senior lecturers to undertake teaching and research. (ref. The Swedish Higher Education Act, 17 December 1992).</p> <p>More than 2,200 people are engaged in research at KTH. Some 1,500 of these are postgraduate / doctoral students, about 460 are researchers or research engineers (i e, with a doctoral or licentiate degree) and some 235 are Professors.</p> <p>A researcher at KTH is associated with one of KTH's Schools. Normally, each Professor is heading a research team of doctoral students and/or other scholars, and his/her team is involved in one or more research projects, running for a number of years. (ref. http://www.kth.se/en/forskning/forska)</p> <p>A person who has demonstrated both research and teaching expertise shall be qualified for employment as a <i>professor</i>.</p> <p>Those qualified for appointment as a <i>senior lecturer</i> are a person who has demonstrated teaching expertise and been awarded a PhD or has the corresponding research competence or some other professional expertise.</p> <p><i>Assistants'</i> and <i>teaching assistants'</i> duties shall comprise educational tasks, administration or participation in research. (ref. The Higher Education Ordinance, 4 February 1993)</p>
<ul style="list-style-type: none"> Centre integrate de cercetare, studii și business 	<p>KTH Royal Institute of Technology is a research intensive university where more than 60% of the total income is research related. This funding is acquired by KTH in competition with other universities and parties. In total, approximately 25% of research income is related to international funding and national funding, where collaboration with industrial or other parties is a prerequisite. Industrial collaboration is hence an important aspect of research at KTH. (ref. http://www.kth.se/en/forskning/research-office)</p> <p>Research at KTH's is to a large extent conducted in co-operation with companies and various societal bodies. The co-operations are often organized as competence centres, connected to a certain KTH Department, but still conducting research on its own. Most of the centres have a board, with representatives from trade, business and society. (ref. http://www.kth.se/en/forskning/sarskilda-forskningssatsningar), others are</p>

	<p>autonomous units directly subordinate to the KTH President. The majority of centres are maintaining close connections with industry. Some of them are also acting as liaison offices between KTH and other universities. (ref. http://www.kth.se/en/forskning/sarskilda-forskningssatsningar/centrumbildningar-1.11756)</p>
References	<p>[1]. The Swedish Higher Education Act, 17 December 1992</p> <p>[2]. The Higher Education Ordinance, 4 February 1993</p> <p>[3]. Higher Education in Sweden, 2013 Status Report, by Swedish Higher Education Authority</p> <p>[4]. http://www.kth.se/en/forskning/finansiering</p> <p>[5]. http://www.kth.se/en/forskning/forska</p> <p>[6]. http://www.kth.se/en/forskning/sarskilda-forskningssatsningar</p> <p>[7]. http://www.kth.se/en/forskning/sarskilda-forskningssatsningar/centrumbildningar-1.11756</p> <p>[8]. http://www.kth.se/en/forskning/research-office</p> <p>[9]. http://www.vr.se/inenglish.4.12fff4451215cbd83e4800015152.html</p> <p>[10]. http://www.government.se/sb/d/6949/a/88166</p>
<p>X. Doctorate (PhD types)</p> <ul style="list-style-type: none"> The right to offer doctoral studies 	<p>Courses and programs in cycle III are offered by universities and university colleges which were granted the right to award / offer qualifications for the third cycle.</p> <p>Decision on granting the right to offer third cycle qualifications is done by the Swedish National Agency for Higher Education under the new rules applied from 2010.</p> <p>As the accountable authority, the Government shall establish higher education institutions for the provision of:</p> <ul style="list-style-type: none"> courses and study programmes, and research and artistic research and development as well as other forms of development activities. <p>The operations of higher education institutions shall be organised to ensure that there are close links between research, and courses and study programmes.</p> <p>The following general principles shall apply to research:</p> <ul style="list-style-type: none"> research issues may be freely selected research methodologies may be freely developed, and research results may be freely published.
Doctoral schools	<p>Research at KTH is organised in five Research Platforms, designed to break down traditional barriers between academic disciplines. The goal is to deliver practical results that can help solve overarching global challenges. KTH's five Research Platforms are organised to deliver focussed, results-oriented study that meets the needs of governments and industries grappling with unprecedented threats – as well as promising new</p>

	opportunities. (ref. http://www.kth.se/en/forskning/forskningsplattformar)
Completion of studies, conferring of degrees	<p><i>Supervision</i></p> <p>At least two supervisors shall be appointed for each doctoral student. One of them shall be nominated as the principal supervisor. Doctoral students are entitled to supervision during their studies unless the vice-chancellor has decided otherwise. A doctoral student who so requests shall be allowed to change supervisor.</p> <p><i>Individual study plans</i></p> <p>An individual study plan shall be drawn up for each doctoral student. This plan shall contain the undertakings made by the doctoral student and the higher education institution and a timetable for the doctoral student's study programme. The plan shall be adopted after consultation with the doctoral student and his or her supervisors.</p> <p>The individual study plan shall be reviewed regularly and amended by the higher education institution to the extent required after consultation with the doctoral student and his or her supervisors. The period of study may only be extended if there are special grounds for doing so. Such grounds may comprise leave of absence because of illness, leave of absence for service in the defence forces or an elected position in a trade union or student organisation, or parental leave.</p> <p><i>Entitlement to supervision and other resources</i></p> <p>If a doctoral student substantially neglects his or her undertakings in the individual study plan, the vice-chancellor shall decide that the doctoral student is no longer entitled to supervision and other study resources. Before such a decision is made, the doctoral student and the supervisors shall be given an opportunity to make representations. The case shall be considered on the basis of their reports and any other records available. The assessment shall take into account whether the higher education institution has fulfilled its own undertakings in the individual study plan. A written record of the decision shall be made, which is to include reasons for the decision.</p> <p>Resources may not be withdrawn for any period in which the third-cycle student has been appointed to a doctoral studentship or is receiving a doctoral grant.</p> <p>If study resources have been withdrawn pursuant to Section 30, the doctoral student may, on application to the vice-chancellor, recover his or her entitlement to supervision and other resources. The doctoral student must then demonstrate convincingly, by presenting prospective study results of considerable quality and scope or in some other way, that he or she can fulfill his or her remaining undertakings in the individual study plan.</p> <p><i>Examination grades</i></p> <p>Examinations that form part of third-cycle courses and study programmes shall be assessed in accordance with the grading system prescribed by the higher education institution.</p>

	<p>The grade shall be determined by a teacher specially nominated by the higher education institution (the examiner).</p> <p><i>Public defences and grading doctoral theses</i></p> <p>The doctoral thesis shall be presented and defended orally in public. A faculty examiner (<i>opponent</i>) shall be appointed for this presentation.</p> <p>At least one of those participating in the grading of a doctoral thesis shall be someone who does not have a post at the higher education institution awarding the degree.</p> <p>A higher education institution may issue regulations on the grading system to be used and on public defences and grading in other respects. (ref. The Higher Education Ordinance, 4 February 1993)</p> <p>The actual period of study stipulated for third-cycle programmes (the time devoted to third-cycle study) is four years for a PhD and two years for a licentiate degree.</p> <p>The average length of time spent on these studies is, however, just under 4½ years for a PhD and just over 2½ years for a licentiate degree.</p> <p><i>Licentiate examination or the public defence of a doctoral thesis</i></p> <p>For a Licentiate or PhD, students are required to have passed the tests that are a part of the postgraduate programme and have written an academic thesis or thesis that has been accepted.</p> <p>To be awarded a PhD, students must pass the courses that are included in the doctoral programme and have written a thesis corresponding to at least 120 higher education credits that has been given a pass grade.</p> <p><i>Requirements prior to the public defence</i></p> <ol style="list-style-type: none"> 1. Printing the thesis 2. Posting of the thesis 3. Press release <p><i>Public defence of a doctoral thesis</i></p> <p>Supervisors should ensure that the thesis is good enough to be approved before the student is recommended to defend it.</p> <p>The defence of the thesis is oral and public.</p> <p><i>One opponent</i></p> <p>According to The Higher Education Ordinance a faculty examiner (<i>opponent</i>) shall be appointed for this presentation.</p> <p>The opponent should have good command of the thesis topic and study the thesis in detail. If the opponent comes from another country and is not certain about the Swedish educational system, it is the duty of the chairman to inform him or her about what requirements and expectations are entailed.</p> <p>The opponent and/or in some cases the student gives a general overview of the topic with a description of how the thesis can contribute to knowledge in the field and a presentation of its contents.</p> <p>Then there is a discussion, with the opponent offering questions and</p>
--	--

	<p>views on the scientific relevance, methods and results and the student then orally defending his or her thesis in relation to the questions raised by the opponent.</p> <p><i>Question session</i></p> <p>The members of the examination board then have the opportunity to ask the student questions. The floor is then opened up to the audience, with the public having the right to ask the student questions in the order determined by the chairman. Students always have the right to express themselves in Swedish or English.</p> <p><i>After the public defence or examination</i></p> <p><i>The examination board</i></p> <p>The examining board consists of three or five members, who have to be professors or qualified for appointment as professors, although not necessarily active in the same field as the doctoral student. The board decides whether to award the doctoral thesis a pass grade or not.</p> <p>The examining board is appointed by the faculty on the recommendations of subject representatives at the higher education institution. Normally the majority of the members of an examining board are recruited from other higher education institutions. At least one must come from another higher education institution. The members should not have unduly close relationships to the student submitting the thesis or the student's supervisors. The student's supervisor may not be a member of the board, unless there are exceptional grounds for this.</p> <p>The faculty examiner and the supervisor are entitled to attend the meetings of the board. They may take part in discussions but not in decisions.</p> <p>Normally, theses are awarded either a pass or fail.</p> <p><i>Degree certificate</i></p> <p>Students awarded a PhD or Licentiate degree will be given a degree certificate from their higher education institution upon request.</p> <p><i>The Licentiate degree</i></p> <p>A Licentiate degree of 120 higher education credits with an academic essay or thesis corresponding to 60 higher education credits may be a degree in its own right or a stage in the programme leading to award of a PhD.</p> <p>Writing a Licentiate thesis naturally takes extra time, but many people find that in return the time is used more effectively after getting the Licentiate; taking notes becomes more systematic, and students have the training to write and an understanding of how much time it requires.</p> <p>For students who do not complete their doctoral studies for some reason, the Licentiate degree is valuable proof of what they have achieved. The Licentiate degree is also recognised in the private sector.</p> <p><i>Licentiate seminar</i></p> <p>The Ordinance does not stipulate how the academic essay is to be</p>
--	--

	<p>examined, but it is customary that students seeking a Licentiate degree hold a seminar and discuss their work. Listeners can present their views and any criticism - it is like a mini-defence.</p> <p>There must be an examiner who studies the essay, but in many instances there is an opponent as well as a more or less official examination board.</p>
Postdoctorate habilitate	<p>Postdoctoral research, as a post-doc, offers newly qualified PhD's the chance to acquire further research experience. The most usual thing is to find a post-doc position at a university or research institute abroad.</p> <p>After obtaining a PhD, it is possible to undertake a postdoctoral period to acquire further experience and qualifications. However, there is a lot of competition for postdoctoral financing and most post-docs finance their studies through grants, which is the form of financing that has the poorest social safety net.</p> <p>The majority of postdoctoral positions are financed through stipends. Most post-doc stipends are awarded by the Swedish Research Council. The Swedish Research Council finances post-doc stipends in the areas of the Humanities and Social Sciences, Medicine, Natural Sciences and the Technological Sciences and Educational Sciences.</p> <p>The stipends are valid for at least six months but no more than two years, and are announced twice per year. They are tax-free and are calculated on the basis of the general cost of living in the relevant country.</p> <p>There are also a large number of other stipend donors, both large and small, private and public. The Bank of Sweden Tercentenary Foundation, for example, only provides support at post-doc level and above. Another major post-doc stipend donor is the Wenner-Gren Foundations.</p>
References	<p>[1]. The Higher Education Ordinance, 4 February 1993</p> <p>[2]. http://www.doktorandhandboken.nu/english</p> <p>[3]. http://www.kth.se/en/forskning/forskningsplattformar</p>

ANNEX 8. ANSWERS TO QUESTIONS CONCERNING ACADEMIC AUTONOMY IN DENMARK

Stating the problem	Findings, answers	Comments
<p><u>I. Introduction / initiation and liquidation/termination of study programs:</u></p> <p>Types of higher education institutions. Types of programs offered by Higher Education Institutions (HEIs)</p>	<p>In Denmark there are four types of institutions providing higher education programs, and each has its own specific profile and level [3, part. 2; 7, p. 8].</p> <p>Academies – provide higher professional education such as business, technology, IT. Programs are 90 and 120 ECTS. Academies are highly specialized</p> <p>University colleges and specialized colleges – provide professional Bachelor programs of 180-240 ECTS. Programs are focused on practical activities and include more long-term internships in companies.</p> <p>Universities – provide higher education programs based on research: Bachelor's degree programmes comprising 180 ECTS credits, Master's (candidatus) degree programmes comprising 120 ECTS credits, PhD degree programmes comprising 180 ECTS credits. One year of full-time study corresponds to 60 ECTS points. Universities are accountable to the Ministry of Research, Technology and Innovation.</p> <p>Institutes of university level – they are within the Ministry of Culture, provide studies in the respective field of the first, second and third level.</p>	<p>It is important to consider the need for implementation in RM University College to prepare senior technicians / engineers for production and Academies.</p>
<ul style="list-style-type: none"> • Introduction of study programs at the Bachelor / undergraduate level (initiation procedures, conception, obtaining the right to open a program, links with NQF) 	<p>The initiative to create a new program usually comes from a teacher or a group of teachers forming the program team. At the faculty there is a person with legal experience in the field of legal educational regulations who helps the team to create the package of documents. The dean signs the package after rigorous judicial scrutiny. The program is approved by the dean, and then it is subject to evaluation at the Academic Council level.</p>	
<ul style="list-style-type: none"> • Introduction of study 	<p>Drafting and approval of the Master</p>	

programs at the Master level	programs lies totally on university's competences [8].	
<u>The internationalization of education</u>	Danish legislation provides for offering a wide range of programs offered by Danish universities abroad with and without cooperation with universities in these countries, joint programs, Erasmus-Mundus programs and programs in off-site institutions [3].	
<ul style="list-style-type: none"> • Introduction of study programs at the PhD/doctoral level 		
<ul style="list-style-type: none"> • Language of instruction at undergraduate level 	The language of instruction in higher education institutions is Danish. Some programs are taught in English but they are paid. These programs are intended primarily for foreign students in mobility [35].	One way to increase the mobility of students and teachers.
<u>II. Admission:</u> <ul style="list-style-type: none"> • Admission quota of local students with grants from the government / own account 	<p>Access to higher education programs at the first cycle, Bachelor, have graduates of upper secondary school (usually after 12 years of study). Access also depends on specific requirements: such as, the particular combination of subjects taken at school or the level of grades / marks. At some programs there may be provided entrance exams / aptitude tests.</p> <p>Admission capacity: According to the rules on free education, it is the responsibility of the university to decide how many students it wants to admit at each Bachelor program, except when the Ministry of Science sets an annual limit for admission (see art. section 4 of the Act of University). For study programs with free contribution, the university establishes the admission capacity, based on the possibility to provide quality teaching based on adequate research using qualified teachers and sufficient research base. In this context, the university should also consider that the number of admitted students must be in accordance with the needs of society. Applicants with a master's degree (Candidatus) may be admitted at an</p>	

	undergraduate program only if there are vacant places.	
<ul style="list-style-type: none"> Procedures for admission to undergraduate / Bachelor cycle (educational documents, mark level, procedure) 	<p>Admission to an undergraduate program requires: prior completion of upper secondary education, compliance with specific requirements for admission regarding the grades (level grades: A, B, C), and compliance with all requirements of the degree. In addition, admission may require the applicant to pass an entrance examination in accordance with rules established by the university [7, art. 2, 4].</p> <p>Specific admission requirements are set by the Ministry of Research / Ministry of Education on the recommendation of the university. Any new specific requirements regarding admission are notified, made public at least two years before the entry into force.</p> <p>Conditions for admission to universities in Denmark are quite flexible [7, art. 5, 6, 7] and have the purpose to be enrolled to study all those who are able to complete an undergraduate program. At places where there are more applicants a competition is organized on quotas - three categories of candidates. Quotas are set by the university.</p> <p>Organization of admission – Application and registration procedures are established by the Ministry of Research in accordance with the requirements determined by the university [7, art. 23]. Application is online. Some institutions may make the registration by themselves, but under the control of the Ministry.</p> <p>A student, during his/her studies, may require switching to another undergraduate program at the same or another university. Transfer documents from the same undergraduate program to another university shall apply for admission under the rules outlined in [7, art. 26]. The same conditions apply to applicants who have previously been enrolled in a program without completing</p>	<p>To apply the quota method: quota 1 with the grades A, B for mathematics and physics, grade B that have mathematics included but are from high schools with humanitarian profile, quota 3 – candidates with special conditions.</p>

	it and wishing to be admitted to the same program or another undergraduate program at the same university or another university.	
<ul style="list-style-type: none"> Procedures for admission to the Master cycle. Admission quota of students. Admission procedures	<p>Admission to a master's (candidatus) programme shall require a relevant bachelor degree or other relevant Danish or foreign qualifications at the same level. The admission requirements for the individual master's (candidatus) programme shall appear from the curriculum for the programme. [8, art. 2, 3].</p> <p>If a study program or many parts of it are offered in English, the applicant must document English language skills with at least a B level before starting the program.</p> <p>For study programs with free contribution, the university establishes its admission capacity, taking into account the possibility to provide appropriate research-based teaching using skilled teachers and respective capabilities. In this context, the university must also take into account that the number of admitted students must be in accordance with society's need for education in the relevant subject. The Ministry sets quotas only for specialties related to medicine, dentistry, veterinary medicine [8, art. 8, 9, 10].</p> <p>MA is an extension of an undergraduate program, but under certain conditions there may be also taken graduates from other programs and other universities. The university establishes the conditions of access: evidence of skills, additional courses (up to 30 ECTS, to be taken up to the admission or during the program [3, art. 11].</p> <p>The organization of admission is all about the competence of the university.</p>	Total autonomy of universities in the organization of admission to master.
Admission of foreign students (non EU). Admission quota of students.	Admission of foreign applicants is done based on national studies documents nostrificated by the Danish Agency for	

Admission procedures (are they similar or not to those for local students)	Evaluation of foreign qualifications (Lov om af vurdering udenlandske uddannelseskvalifikationer). Admission rules for foreigners are more complicated: there shall be assessed their knowledge of the Danish / English language and professional skills [2, 3].	
Procedures for admission to the Doctorate cycle	Admission to PhD is carried out by the university. Admission to the PhD programme is based on a Master's degree or equivalent [4, art. 5].	
<u>III. Recognition of studies:</u> <ul style="list-style-type: none"> • Of study periods performed abroad at Bachelor, Master, Doctoral level 	<p>Academic and professional recognition of foreign qualifications in Denmark is governed by various regulations [10-15, 25].</p> <p>On the basis of the Act [6], the following ministerial order implements parts of the European Directive 2005/36/EC on the recognition of professional qualifications [7].</p> <p>The procedures for recognition of foreign qualifications are regulated by and founded on the Assessment of Foreign Qualifications etc. Act, adopted by the Danish Parliament in 2007.</p>	
<ul style="list-style-type: none"> • Recognition of educational documents for the studies done abroad at Bachelor, Master, Doctoral level (recognition bodies, procedures, conditions) 	<p>The objective of the ministerial orders is: "to secure access to have foreign qualifications assessed with a view to easing access to the Danish labour market and the Danish education system and to improve the possibility of obtaining credit and foreign qualifications within a Danish programme of education" (Part One of the Consolidation Act).</p> <p>According to the University Act [3, art. 8] universities in Denmark have the right to provide research-based education programs for all 3 levels outside the country, too. The rules for the organization of extensions are prescribed in [7].</p>	
<u>IV. Quality assurance, accreditation of study programs:</u> <ul style="list-style-type: none"> • Internal structures of quality assurance, student 	The structure and functions of the continuous quality assurance system are predetermined by criteria set out in The University Act [3, art. 3], and Ministerial Order "Criteria for the Relevance and	

involvement in the process of quality assurance	<p>Quality of University Study Programmes and on Procedures for Approval of University Study Programmes” [17, chap. 5] (Continuous internal quality assurance of the study programme). The institution providing study programs must demonstrate that it has:</p> <ol style="list-style-type: none"> 1. Policy and procedures for quality assurance. 2. Approval, monitoring and periodic review of programmes and awards (cf. the University Act, [16]. 3. Assessment of students (cf. the Examination Order [6], the Grading Scale Order [23] and the Order on External Examiners. 4. Quality assurance of teaching staff (cf. the Order on Admission and Enrolment). 5. Learning resources and student support (cf. the Order on Admission and Enrolment. 6. Information systems. 7. Public information (cf. the Act on Transparency and Openness in Education). <p>The quality assurance structure at Aalborg University can be considered as an example.</p>	
<ul style="list-style-type: none"> • Methodology, evaluation criteria, procedures (self-evaluation, external evaluation) 	<p>For external evaluation and accreditation of study programs (existing and new ones) there was created in 2007 the Accreditation Agency for Higher Education (AAHE) [16, art. 1]. The agency was created by the Ministry MSTI as independent public body and consists of the Accreditation Council (AC), the Council Secretariat and the Academic Secretariat with evaluation functions.</p> <p>For an existing program, the Academic Secretariat (AS) forms an Accreditation Panel of relevant experts including foreign guests. Based on the results presented by the Panel, AS drafts the assessment report. The validity period of</p>	Sunt foarte relevante criteriile de evaluare a programelor existente, dar deosebit de importante pentru aprobarea programelor noi.

	<p>accreditation is determined by the AC, usually 4-5 years.</p> <p>For new programs, AS drafts an evaluation report based on the documents submitted by the institution. In some cases the Council may decide to form an evaluation panel.</p> <p>Accreditation is mandatory for all programs. State institutions' accreditation is the basic criterion for funding from the budget [9, art. 3 (1)].</p> <p>Program's external evaluation procedures and quality and relevance criteria are approved by order of MSTI [16, Appendix 1]. Evaluation is based on five fundamental criteria:</p> <ol style="list-style-type: none"> 1. Demand for the study programme in the labour market; 2. The study programme must be based on research and connected with an active research environment of high quality; 3. Academic profile of the study programme and learning outcome targets; 4. Structure and organisation of the study programme; 5. Continuous internal quality assurance of the study programme. <p>A detailed description of the performance criteria and the stages of external evaluation and accreditation procedures of existing and new programs, can be found in "Guidelines on application for accreditation and approval of existing university study programmes" [4c] and "Guidelines on application for accreditation and approval of new university study programmes" [4d].</p> <p>The Accreditation Council makes decisions concerning accreditation, conventional accreditation or non-accreditation. The Council consists of the Chairman, appointed by the Minister and eight members appointed at the proposal of MSTI (3pers.), MEd (3pers.), MCult (1</p>	
--	--	--

	<p>pers.), Students Association (1 pers.). Eligibility period - four years, the student – one year.</p> <p>The Council developed criteria for relevance and quality of study programs, which were approved by order of MSTI [3]. Based on these criteria, from 1 January 2010, all higher education programs offered by the ministries mentioned above are evaluated.</p> <p>The Council makes decisions based on the report prepared by the operators appointed by the Council for programs provided by institutions subordinated to MSTI or by the experts of the Danish Institute for Evaluation (EVA).</p> <p>In Denmark the process of accreditation of institutions started. Repeated evaluation and accreditation of programs will entrust universities. Only new programs shall be subject to the accreditation procedure.</p>	
<ul style="list-style-type: none"> Freedom in the choice of external quality assurance body 	It is possible.	
<ul style="list-style-type: none"> Relationships / how does the accreditation body cooperate with the Ministry of Education in the accreditation process 	The Accreditation Agency is autonomous but cooperates with MSTI permanently which approves evaluation criteria, appoints the chairman and members of the Council.	
<p><u>V. National Qualification Framework:</u></p> <ul style="list-style-type: none"> The body responsible for the NQF 	A qualifications framework for higher education has been implemented in Danish accreditation legislation. Denmark has had a national Qualifications Framework for Higher Education since 2003. The framework has been widely implemented and used by institutions of higher education.	
<ul style="list-style-type: none"> How do universities participate in the development of new qualifications 	The inclusion of certificates and degrees into the NQF is based on an assessment of the learning outcomes that the individual degree / certificate documents in relation to the level descriptors of the framework [22, p. 5.4.2].	
<ul style="list-style-type: none"> How are the NQF 	Universities have to develop (design)	

requirements reflected in the study programs (compulsory provisions, procedures, internal control, external evaluation)	study programs and the implementation process so that competences determined by descriptors be achieved by the student. Requirements defined above will serve as the final assessment criteria and indicators of studies for drawing up the self assessment and external evaluation reports for the accreditation of the program.	
<ul style="list-style-type: none"> Educational standards (exist or not, if yes - how are they related to NQF) 	Descriptors for higher education qualifications (degrees), presented in Table 2 of the NQF [22], are used as reference quality standards / criteria both at the development and the evaluation and accreditation of study programs.	
Sistemul de credite transferabile.	The European Credit Transfer System ECTS is accepted without modifications.	
<u>VI. Employability</u> <ul style="list-style-type: none"> Occupational framework (ISCO 	The existing links between the education level and qualification levels is explicitly set by the Danish qualifications framework [3, art. 9].	
<ul style="list-style-type: none"> Differentiation by level of education. Place of Master and PhD 	Master's is oriented towards research and continuing doctoral studies.	
<u>VII. Content and implementation of the study program (organization of studies):</u> <ul style="list-style-type: none"> Content elaboration / designing 	University study programs in Denmark are usually designed at the initiative of the research groups with high results, based on human and material potential already obtained from research.	
<ul style="list-style-type: none"> The distribution between university structures 	A study program is provided by the program team within a department, but for some modules use is made of other departments such as for teaching mathematics modules.	
<ul style="list-style-type: none"> Final evaluation (exams, theses) on cycles 	In the Danish system of higher education, the examination is specific both at the final phase of the study programs and at the evaluation of semester modules. One semester of study usually contains 4-5 modules with 5.10 or 15 ECTS. Of these, at least one (10 or 15 credits) will have external examination, other modules are subject to internal examination.	
<u>VIII. Teaching load of the</u>	Teaching load of teachers is calculated	Institutions are granted

<p><u>didactic staff:</u></p> <ul style="list-style-type: none"> • Planning the teaching load 	<p>starting from 37 hours per week. It consists of 490 hours of teaching per semester, which constitutes 60%, and 200 hours for scientific research (40%). For administrative work, a part of the academic load is reduced.</p> <p>The Council of Studies calculates the number of units needed, announces the Employment Council dealing with searching and implementation of employment and enrollment procedures in accordance with the Employment Act [24] and the internal rules of the institution, developed under this Act. In [33] are given, as examples, employment rules at Aalborg University.</p>	<p>large autonomy for employing teachers and researchers.</p>
<ul style="list-style-type: none"> • The distribution of teaching load 	<p>The didactic workload calculation and its distribution among team members of a program of study and research is an internal matter dealt by the team leader.</p>	
<ul style="list-style-type: none"> • Accounting of the teaching and research load achievement 	<p>There are no official documents describing the methodology of the calculation the workload related research. The number of publications shall be reported, as a rule.</p>	
<p><u>IX. University scientific research (organization):</u></p> <ul style="list-style-type: none"> • University structures involved in the organization of scientific research 	<p>Departments are the basic structures responsible for organizing scientific research that serves as support for education based on research [24, 25, 30, 31].</p>	<p>This aspect deserves to be studied in depth in the perspective of implementation in RM.</p>
<ul style="list-style-type: none"> • Involving students in the process of scientific research (incentive mechanisms / incentives for the parties ...) 	<p>The very principle of organization of study programs at all levels in Denmark requires a harmonious link between education and research - research based learning. The importance of this point is particularly strategic for programs of universities [30, 31].</p>	
<ul style="list-style-type: none"> • Scientific research of teachers (achievement planning and control, the methodology of assessing the research activity) 	<p>Academic staff shall be subject to freedom of research within their own academic field of employment and may consequently carry out free research activity within the research strategic framework of the university during the time when they are not instructed to undertake other work. Academic staff must not be instructed, during an</p>	

	extended period of time, to undertake tasks for the entire duration of their working hours, so that in reality they are prevented from exercising their freedom of research.[24-28].	
• Research Master	University masters in Denmark shall be oriented towards research.	
• University research funding	Funding is from the state budget, but universities are increasingly oriented towards attracting funds from business (private sector), international programs, research grants in collaboration with other countries [32].	
<u>X. Doctorate (PhD types):</u> <ul style="list-style-type: none"> • doctoral schools, • Post-doctorate, • Habilitate. 	<p>In [9] are described requirements concerning: admission to doctoral studies, the structure of the study program, doctoral program content, program completion, doctoral thesis, the evaluation, correction of the thesis, PhD thesis defense procedure and conferring the degree of doctor. Article 25 of this document includes institutional rules regarding: admission to the doctoral program; the organization of the doctoral program; appointment of the main supervisor as well as any other supervisors, PhD students supervision rules, rules for writing, presentation and defense of the thesis. The University also sets rules on access to the PhD program. Rules should contain a provision to the extent that the institution may grant exemptions from the rules established by the institution. Institution rules and amendments thereto shall be made public on the institution's website.</p> <p>Doctoral studies shall be organized in doctoral schools at faculty or department level. A PhD program comprises 180 ECTS credits. Performing the didactic activity by the PhD student is mandatory.</p> <p>In Denmark industrial doctorate is practiced. In this case the costs are covered by a company and the theme of the doctoral thesis includes the research of important issue for the company.</p>	

	During 3 years after the defending of the PhD thesis, researchers can present a second thesis. The right to supervise PhD students – the competence of the department in the university [9]	
--	---	--