

Report 2012:12 R

# Certification of Sweden's national qualification framework



In English





Report 2012:12 R

# Certification of Sweden's national qualification framework

Swedish National Agency for Higher Education (Högskoleverket) • Luntmakargatan 13  
P.O. Box 7851, SE-103 99 Stockholm • tel. +46 8 563 085 00 • fax +46 8 563 085 50  
e-mail [hsv@hsv.se](mailto:hsv@hsv.se) • [www.hsv.se](http://www.hsv.se)

**Certification of Sweden's national qualification framework**

Published by the Swedish National Agency for Higher Education 2011

Högskoleverkets rapportserie 2012:12 R

ISSN 1653-0632

Contents: National Agency, University Chancellor's Office, **Jean-Pierre Zune**

Graphic design: National Agency, Department of Communications

# Contents

<b>Introduction</b>	<b>5</b>
Background – the Bologna process	5
European qualification framework	6
Directive for certification	6
Implementation	7
<b>Higher Education in Sweden</b>	<b>8</b>
Overall responsibility	8
Universities and university colleges	8
The tasks of the universities and university colleges	8
Allocation of resources to higher education	9
The regulations that govern higher education institutions	9
Degree-awarding powers	9
<b>Criteria and procedures for comparison and verification of a qualification framework (QF) for higher education</b>	<b>11</b>
Criteria for verifying that the national framework is compatible with the Bologna framework	11
Procedural criteria	15
References	16
<b>Overall evaluation</b>	<b>17</b>
<b>Appendix 1</b>	
<b>National Qualifications Framework for degrees</b>	<b>19</b>
<b>Appendix 2</b>	
<b>Bologna Framework and Certification</b>	<b>49</b>
<b>Appendix 3</b>	
<b>Comparisons Bologna – Swedish qualification descriptors</b>	<b>61</b>



# Introduction

## **Background – the Bologna process**

The Bologna process was launched in 1999 through an agreement between 29 countries, one of them Sweden. One of its fundamental elements was to create a European area for higher education (European Higher Education Area – EHEA). The aim was to enhance Europe's competitiveness as an educational continent and encourage mobility between the European educational systems and labour markets, create a transparent and comparable qualification structure and lay the groundwork for international recognition of different qualifications.

Since then the Bologna process has been the driving force behind reforms by many European countries of their educational systems to render them more comparable and explicit. Today 47 European countries are participating in the process.

The overarching aims of the Bologna process have been broken down into a number of concrete aims. The most important of them are the following:

- Clear and comparable qualifications. Joint reference frameworks that describe the level of a qualification in the educational system and the requirement to issue a Diploma Supplement as an annex to a qualification certificate.
- Three educational cycles that are based on and require each other.
- A comparable credit system to facilitate student mobility.
- Greater mobility for students and staff, for instance through mutual recognition of studies and professional practice.
- European cooperation on quality assurance, for instance through common standards and guidelines.

Within the framework of the Bologna process the European Ministers of Education have also agreed that each country should develop a reference framework for degrees and qualifications (qualification framework). The Swedish reference framework (adopted in November 2008, revised in October 2010) is attached as Annex 1.

The reference framework is a living document that is reviewed regularly and revised to take changes in the regulations, qualification structure etc. into account. During 2011 some new qualifications have been introduced to replace previous ones (mainly in teacher training), which is why a revision is soon likely to take place.

## **European qualification framework**

The Bologna process is followed up regularly through meetings at ministerial level. At a meeting of ministers in Bergen in 2005 a European qualification framework was adopted for qualifications in higher education (QF-EHEA). Its aim was to provide the requisites to enable different national qualification frameworks to be related to each other. It consists of a description of education at three levels, how national qualifications frameworks should relate to the reference framework as well as proposals on how the national qualifications ordinances should be designed and what features they should contain to enable comparison with the qualifications ordinances of other countries.

At the next ministerial conference in London in 2007 it was decided that the national reference frameworks should be evaluated against the European one (the Bologna process reference framework). By adopting a process of self-evaluation conducted by a working group including both national and foreign experts the national agencies could verify that their own national reference frameworks were compatible with the European one.

The Swedish certification process is presented in this report.

## **Directive for certification**

The guidelines on how certification is to be undertaken are provided in a document from 2005 that was produced by a special working group in the Bologna process and adopted by the Bologna Follow Up group. This document is attached as Annex 2.

### **The following items must be evaluated:**

#### **What has to be verified?**

The government agency responsible for the process<sup>1</sup> has a mandate from its ministry for higher education.

That there is a clear link between the national reference framework and the descriptors in the European framework.

Qualifications listed in the national reference framework must be based on learning outcomes and linked to the ECTS-system<sup>2</sup>.

The national reference framework process must be transparent.

The national quality assurance system must be compatible with the Bologna process (and the communiqué issued by the ministerial conference in Berlin in 2003).

A reference to the national reference framework and its links to the European framework must be included in all Diploma Supplements.

---

1. In Sweden this responsibility lies with the Swedish National Agency for Higher Education (Högskoleverket).

2. European Credit Transfer System.



National responsibilities for reference frameworks must be determined by the appropriate decisions and promulgated or published.

#### Procedural requirements

The agency responsible must verify that the national reference framework is compatible with the European one.

The body that is responsible for the national system of quality assurance must express its opinion of the self-evaluation process.<sup>3</sup>

International experts must be involved in the self-evaluation.

The results of the self-evaluation must be announced or published and in doing so all criteria must be mentioned.

The ENIC and NARIC<sup>4</sup> networks must publish a list of all the countries that have completed the self-evaluation process.

## Implementation

The Swedish National Agency for Higher Education has been assisted by a panel of experts consisting of the following members:

- Agneta Bladh, ex-President of Kalmar University College
- Carita Blomqvist, Head of Department, Board of Education, Finland
- Tue Vinther-Jørgensen, Head of Department, EVA, Denmark
- Staffan Wahlén, former analyst, Swedish National Agency for Higher Education
- Ulf Öhlund, ex-Head of Department, Swedish National Agency for Higher Education
- In addition Lars Petersson, Head of Department and Jean-Pierre Zune, analyst, both from the Swedish National Agency for Higher Education, have taken part in the work of the panel.
- The certification process was presented and discussed at a conference attended by the HEIs and others on 15 April 2011.

---

3. In Sweden this is the responsibility of the National Agency for Higher Education (Department of Higher Education Analysis).

4. The National Agency for Higher Education (Department of Qualifications Recognition) is the Naric office in Sweden.

# Higher Education in Sweden

## **Overall responsibility**

In Sweden the overall responsibility for higher education and research rests with the Riksdag and the Government. The Riksdag and the Government determine what rules are to apply in the higher education sector, its aims and guidelines and also allocate the resources for higher education.

In the Government Offices, the Ministry of Education and Research is responsible for the school system, HEIs, research, adult education, popular education and student aid. The public-sector HEIs are public authorities that are accountable to the Ministry. An exception is the Swedish University of Agricultural Sciences, which is accountable to the Ministry for Rural Affairs. Agencies subordinate to the Ministry of Education and Research are the National Agency for Education (Skolverket), which is responsible for schools, the National Agency for Higher Education, responsible for higher education, and the Swedish Research Council (Vetenskapsrådet) which is responsible for research.

## **Universities and university colleges**

All higher education in Sweden is offered by public-sector universities and university colleges or by independent education providers that have been granted degree-awarding powers. Third-cycle education is provided by the universities and by university colleges that have been granted entitlement to award third-cycle qualifications.

There are 14 public-sector universities and 20 public-sector university colleges in Sweden. In addition there are three independent HEIs that have been granted entitlement to award third-cycle qualifications, Chalmers University of Technology, the Stockholm School of Economics and Jönköping University. There are also eleven independent education providers with entitlement to award first-cycle and in certain cases second-cycle qualifications as well as five education providers entitled to award qualifications in psychotherapy.

Decisions on which public-sector university colleges are to exist are made by the Riksdag.

## **The tasks of the universities and university colleges**

The mission of the HEIs is to offer education based on an academic or artistic footing and proven experience. They must also undertake development work, including research and artistic development. In addition, the HEIs must

cooperate with their surrounding communities and provide information about their operations.

The basic central regulations on the operations of the HEIs are provided by the Higher Education Act, which is enacted by the Riksdag. More detailed regulations are published in the Higher Education Ordinance, which is issued by the Government. As public agencies the HEIs are also subject to administrative and labour market legislation, for instance, as well as the provisions of the Instrument of Government. Within the framework of the regulations and parameters laid down by the Riksdag and the Government, the universities and university colleges are free to determine themselves how to organise their operations and allocate their resources.

### **Allocation of resources to higher education**

The Riksdag decides on funding for the HEIs. Resources are allocated to the institutions for first and second-cycle courses and programmes on the basis of the number of students registered and the number of credits they attain. Every year the Government determines the maximum amount that can be paid to each HEI. Direct funding for research and third-cycle courses and programmes is based mainly on past allocations as well as two quality indicators. The Swedish University of Agricultural Sciences has a special budgeting and reporting system.

### **The regulations that govern higher education institutions**

The Higher Education Act contains basic provisions on the operations of public-sector HEIs and lays down a framework for their organisation and governance. The Higher Education Ordinance is linked to the provisions of the Higher Education Act and contains, for instance, regulations on course syllabuses, programme syllabuses, grading and qualifications. The descriptors for each qualification are listed in a separate annex. This also applies to independent education providers. (Corresponding qualification descriptors are also included in annexes to the Ordinance for the Swedish University of Agricultural Sciences and the Ordinance for the Swedish National Defence College, to which these higher education institutions are subject).

The Swedish National Agency for Higher Education exercises supervision of the HEIs, which means ensuring compliance with the statutes and regulations that apply to the higher-education area.

### **Degree-awarding powers**

The structure of qualifications in Sweden is presented in the qualification reference framework (Annex I, pp. 10–13).

An organisation that wants to award a certain qualification, a public-sector HEI or an independent education provider, must have special permission to award this specific qualification.

Universities are entitled to issue first, second and third-cycle general qualifications. Public-sector university colleges have general entitlement to award Higher Education Diplomas, Bachelor's and one-year Master's degrees. Those granted entitlement to award third-cycle qualifications in a specific domain are also entitled to award second-cycle general qualifications in the same domain. In other cases the Government or the National Agency for Higher Education decides on entitlement to award general qualifications.

To award first and second-cycle professional qualifications or degrees in the fine, applied and performing arts both universities and university colleges have to apply to the National Agency for Higher Education for degree-awarding powers. The National Agency is also able to revoke these powers. Only the Government, however, can revoke the entitlement of the Swedish University of Agricultural Sciences and the National Defence College to award a qualification.

# Criteria and procedures for comparison and verification of a qualification framework (QF) for higher education

As made clear in the introduction, certification has to be undertaken by evaluating the Swedish reference framework in the light of 13 criteria, of which seven concern contents and six procedures. Each of these criteria is presented below along with the evaluation of the panel of experts and its conclusions.

## **Criteria for verifying that the national framework is compatible with the Bologna framework**

### **1. The national framework for higher education qualifications and the body or bodies responsible for its development are designated by the national ministry with responsibility for higher education**

The Swedish National Agency for Higher Education is the central authority for universities and university colleges. The Agency is therefore responsible for the Swedish qualifications framework in higher education (Higher Education Act Section 8 ff., the Ordinance with Instructions for the Swedish National Agency for Higher Education SFS 2007:1293, Annex 1 p. 7 ff.).

The European framework has set the parameters on which development of the Swedish Qualifications Ordinance has been based.

The Public Service Agreement issued by the Government to the National Agency for Higher Education for 2011 includes a mandate to certify the national framework (NQF) through comparison with the European framework (QF-EHEA) (Swedish National Agency for Higher Education, reg.no. 12-5202-10).

#### **Conclusion**

The criterion is fulfilled. The National Agency for Higher Education is responsible for the national qualifications framework (NQF) by virtue of the mandate given to it by the Government (Ministry of Education and Research) in its Public Service Agreement. See also 7 below.

### **2. There is a clear and demonstrable link between the qualifications in the national framework and the cycle qualification descriptors of the European framework**

In developing the national framework and its implementation in the Qualifications Ordinance in the Higher Education Ordinance (Higher Education

Ordinance Annex 2) the staff of the National Agency for Higher Education and the Ministry of Education and Research cooperated with experts and representatives of the HEIs, the commercial sector and the social partners, as well as with the working groups in the Bologna process. In this work great emphasis was placed on ensuring the compatibility of the national framework with the European framework (QF-EHEA).

The Swedish NQF is a description of the Swedish qualifications in terms of the “Dublin Descriptors” for the three cycles. In the process recognised qualifications were organised in terms and cycles compatible with “The framework of qualifications for the European Higher Education Area” (see for instance <http://www.bologna-bergen2005.no/>).

During the certification process the qualitative targets for general qualifications in Sweden and for some professional qualifications have been compared with “the Dublin Descriptors”. The results of that comparison are presented in Annex 3. The wordings that have been assessed as agreeing wholly or in the main have been indicated. As can be seen from this analysis, it has been possible to identify a great degree of agreement.

Particular attention has been devoted during this analysis to three qualifications in the Swedish framework: the Higher Education Diploma, the one-year Master’s degree and the Licentiate degree. The certification group has concluded that the two latter are positioned correctly in the framework, while doubt has been expressed about the cycle to which the Higher Education Diploma has been ascribed. It displays features that mean it should almost be considered a “short-cycle” qualification.

### Conclusions

- There is a clear and demonstrable link between the descriptors in the Swedish national qualifications framework and the European framework (QF-EHEA).
- Qualifications in the Swedish system can be ascribed explicitly in the national qualifications framework and in the European framework (QF-EHEA).
- The certification group proposes, however, that the position of the Higher Education Diploma in the framework should be reviewed in future revision of the framework.

### **3. The national framework and its qualifications are demonstrably based on learning outcomes and the qualifications are linked to ECTS or ECTS compatible credits**

Swedish qualifications in higher education (degrees) are ascribed to three cycles (first, second and third cycle). They are all described in terms of learning outcomes. These are defined under three main headings – knowledge, skills and judgement – and serve to describe the qualifications that can be expected of students when they finish their studies. Together, these three main types of

qualifications reflect the ability and personal qualities required of students on completion of their programmes.

All qualifications in higher education are designated in terms of ECTS credits.

The analysis referred to above (Annex 3) makes it clear that the qualifications in the Swedish national framework are described in terms of learning outcomes.

### Conclusions

- The descriptors in the Swedish national framework are grouped in accordance with the learning outcomes for the different cycles.
- ECTS credits are specified for all qualifications in Swedish higher education.

## **4. The procedures for inclusion of qualifications in the national framework are transparent**

Qualifications awarded in higher education are described in the Higher Education Ordinance (Higher Education Ordinance, Annex 2, Qualifications Ordinance). New qualifications are established by the Government, which also determines to which cycle they are to be ascribed. They are then positioned in the framework by the National Agency for Higher Education. HEIs are responsible for organising their own programmes in compliance with the current frameworks.

As the agency responsible for quality assurance, the National Agency for Higher Education is accountable for the evaluation of both proposed and existing qualifications (Higher Education Act, Section 8 ff., Ordinance with Instructions for the Swedish National Agency for Higher Education SFS 2007:1293). These processes are subject to the principle of public access.

### Conclusion

The procedures for inclusion of (new) qualifications in the national framework are clearly described and transparent.

## **5. The national quality assurance system for higher education refers to the national framework of qualifications and is consistent with the Berlin Communiqué and any subsequent communiqués agreed by ministers in the Bologna Process**

“The European Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)” which was developed by ENQA (the European Association for Quality Assurance in Higher Education), is a keystone of the Swedish quality assurance system (see [http://www.bologna-bergen2005.no/main\\_documents](http://www.bologna-bergen2005.no/main_documents)).

The Swedish quality assurance system for higher education was evaluated in 2006 and approved. In 2010 quality assurance of higher education in Swe-

den was restructured to become a mainly result-oriented system. The National Agency for Higher Education's evaluation system is currently under appraisal by ENQA.

#### Conclusion

The national quality assurance system is organised in accordance with the Berlin Communiqué and subsequent communiqués. The Swedish NQF is designed to provide a basis for quality assurance. The criterion is therefore fulfilled.

### **6. The national framework, and any alignment with the European framework, is referenced in all Diploma Supplements**

Higher education institutions are required to provide a diploma supplement with every qualification certificate issued. A framework for the contents of diploma supplements is provided in the Higher Education Ordinance. More detailed regulations on this are issued by the National Agency for Higher Education (Higher Education Ordinance, 6:10, SFS 2010:64).

The results of a comparison between the NQF and QF-EHEA and verification will be included in diploma supplement documents. Regulations about this will be issued by the National Agency for Higher Education in accordance with its mandate.

#### Conclusion

The certification group finds that this criterion is fulfilled.

### **7. The responsibilities of the domestic parties for the national framework are clearly determined and published**

The Ministry of Education and Research has the ultimate responsibility for the Swedish national qualifications framework. Responsibility for its routine operation has been delegated to the National Agency for Higher Education, where different departments monitor, maintain the system and provide information to various stakeholders and participants through publications, conferences and the Agency's web-site [www.hsv.se](http://www.hsv.se) (cf. 4 above).

The HEIs are responsible for formulating learning outcomes in programme and course syllabuses.

#### Conclusion

The certification panel concludes that responsibilities are clearly determined and published.



## **Procedural criteria**

The self-certification panel has also assessed whether the Swedish national framework for higher education fulfils the procedural criteria laid down for comparison of national frameworks with the Bologna framework.

### **1. The competent national body/bodies shall self-certify the compatibility of the national framework with the European framework**

As the competent authority accountable to the Ministry of Education and Research, the National Agency for Higher Education is also responsible for the certification process. A panel has been appointed by the Agency for this purpose.

This panel, as stated in the introduction, has consisted of members from Denmark, Finland and Sweden with special expertise in this area (Public Service Agreement for 2011; HSV 2010-12-14).

### **2. The self-certification process shall include the stated agreement of the quality assurance bodies in the country in question recognised through the Bologna Process**

Through its Department for Quality Assurance the National Agency for Higher Education is responsible for the evaluation and quality assurance of higher education in Sweden. Its Department for Quality Assurance has reviewed the certification report and approved its conclusions.

The report therefore guarantees agreement with the competent body for quality assurance.

### **3. The self-certification process shall involve international experts**

Two international experts have been involved in the Swedish self-certification process. They are Carita Blomqvist, Board of Education, Helsinki and Tue Vinther-Jørgensen, Danish Evaluation Institute (EVA), Copenhagen.

### **4. The self-certification and the evidence supporting it shall be published and shall address separately each of the criteria set out**

When the self-certification has been completed the National Agency for Higher Education will publish the report on its own web-site ([www.hsv.se](http://www.hsv.se)), on the joint web-site for the Swedish QF-EHEA and QF-LLL ([www.EQFinfo.se](http://www.EQFinfo.se)) and also ensure that it is published in the following contexts: The International Programme Office for Education and Training's web-site ([www.programkontoret.se](http://www.programkontoret.se)), ENIC-NARIC's and the Bologna process web-sites ([www.enic-naric.net](http://www.enic-naric.net), [www.ehea.info](http://www.ehea.info)). A summary of information on European procedures in higher education can also be found on the Council of Europe's web-site ([www.coe.int/lportal/web/coe-portal](http://www.coe.int/lportal/web/coe-portal)).

The report will address each and every one of the criteria set out.

**5. The ENIC and NARIC networks shall maintain a public listing of States that have confirmed that they have completed the self-certification process**

One of the departments at the National Agency for Higher Education – the Department of Qualifications Recognition – houses the Swedish ENIC-NARIC office and also serves as the national information centre for the national qualifications frameworks.

This department will ensure that when the national process is concluded Sweden will be included in the list of countries that have completed self-certification.

**6. The completion of the self-certification process shall be noted on Diploma Supplements issued subsequently by showing the link between the national framework and the European framework.**

In Sweden HEIs awarding a qualification issue Diploma Supplements based on a nationally determined model (see above). On conclusion of the self-certification process the National Agency for Higher Education will update the regulations for these supplements and inform the HEIs.

**Conclusions (criteria 1–6)**

The certification group is able to determine that the self-certification process for the Swedish national qualifications framework for higher education fulfils the six procedural criteria.

**References**

EQF:

[http://ec.europa.eu/education/pub/pdf/general/eqf/broch\\_en.pdf](http://ec.europa.eu/education/pub/pdf/general/eqf/broch_en.pdf)

[http://ec.europa.eu/education/lifelong-learning-policy/eqf\\_en.htm](http://ec.europa.eu/education/lifelong-learning-policy/eqf_en.htm)

[http://ec.europa.eu/eqf/home\\_en.htm](http://ec.europa.eu/eqf/home_en.htm)

ECTS:

[http://ec.europa.eu/education/lifelong-learning-policy/ects\\_en.htm](http://ec.europa.eu/education/lifelong-learning-policy/ects_en.htm)

[http://ec.europa.eu/education/lifelong-learning-policy/doc/ects/guide\\_en.pdf](http://ec.europa.eu/education/lifelong-learning-policy/doc/ects/guide_en.pdf)

ESG:

[http://www.bologna-bergen2005.no/Docs/00-Main\\_doc/050221\\_ENQA\\_report.pdf](http://www.bologna-bergen2005.no/Docs/00-Main_doc/050221_ENQA_report.pdf)

[http://www.enqa.eu/pubs\\_esg.lasso](http://www.enqa.eu/pubs_esg.lasso)

<http://www.eqar.eu/application/requirements/european-standards-and-guidelines.html>

## Overall evaluation

The panel of experts has found that there is great compatibility between the Swedish qualifications reference framework and the European qualifications reference framework (QF-EHEA). This applies to all 13 criteria. This is the unanimous conclusion of the panel of experts.

In connection with this certification the panel has devoted particular attention to three qualifications – the Higher Education Diploma, the one-year Master's degree and the Licentiate degree. Of these the Higher Education Diploma should be subject to further review with regards to its position in the national framework in future revisions of the reference framework.



# Appendix 1

## National Qualifications Framework for degrees



Reg.nr 12-5202-10

# National Qualifications Framework

Revised May 2011

Swedish National Agency for Higher Education (Högskoleverket) • Luntmakargatan  
13

P.O. Box 7851, SE-103 99 Stockholm • tel. +46 8 563 085 00 • fax +46 8 563 085 50  
e-mail [hsv@hsv.se](mailto:hsv@hsv.se) • [www.hsv.se](http://www.hsv.se)

**National Qualifications Framework**

Published by the Swedish National Agency for Higher Education 2011

Reg.nr 12-5202-10

Contents: National Agency, Department of Evaluation, **Jean-Pierre Zune**

Graphic design: National Agency, Department of Communications



# Contents

<b>A European context</b>	<b>5</b>
The Bologna Process	5
A European qualifications framework	5
<b>Higher education in Sweden</b>	<b>7</b>
Overall responsibility	7
Higher education institutions	7
The missions of the higher education institutions	8
Allocation of resources to higher education institutions	8
The regulations that govern higher education institutions	8
Degree-awarding powers	9
<b>The structure of programmes and qualifications</b>	<b>11</b>
Cycles	11
Higher-education credits	11
Categories of qualifications	12
Qualification descriptors	15
Translation of qualification titles	15
Course syllabuses	15
Programme syllabuses	16
Transitional provisions	16
<b>Admission to higher education</b>	<b>17</b>
Admission to first-cycle courses and programmes	17
Admission to second-cycle courses and programmes	19
Admission to third-cycle courses and programmes	20
<b>Quality assurance and inspection</b>	<b>21</b>
Different actors involved in quality assurance	21
The Agency's quality-assurance system	21
<b>International recognition of higher education</b>	<b>23</b>
Recognition of foreign courses and programmes in Sweden	23
Professional recognition	23
Academic recognition	23
International cooperation	24
<b>Annex 1: Diagrammatic presentation of qualifications structure</b>	<b>26</b>
<b>Annex 2: Qualification descriptors: Bachelor's and one-year and two-year Master's degrees</b>	<b>27</b>



# A European context

## The Bologna Process

Since the late 1990s, the Bologna Process has offered an incentive for many European countries to reform their educational systems to make them more comparable and explicit. Today 47 European countries are involved in the process, including Sweden. The creation of a European area for higher education (EHEA) by 2010 is intended to strengthen Europe's competitiveness as an educational continent by enhancing mobility between the European educational systems and the labour market.

The overall aims of the Bologna Process have been broken down into a number of concrete goals. The most important of these are the following:

- Explicit and comparable qualifications. A joint qualifications framework has been created to increase the comparability of different countries' qualifications. Since 2005, all of the countries that signed the Bologna Declaration must also issue Diploma Supplements, an annex to a degree certificate that describes the programme and where it fits into the educational system. Diploma Supplements are issued automatically, free of charge for the student and in a large number of European languages.
- Three educational cycles that are based on and require each other.
- A comparable system of credits to facilitate student mobility.
- Greater mobility for students and staff, for instance through the mutual recognition of studies and professional activity. An important instrument in this context is the Convention on the Recognition of Qualifications concerning Higher Education in the European Region, known as the **Lisbon Convention**.
- European cooperation in quality assurance, for instance through shared standards and guidelines for quality assurance.

Hitherto the Bologna Process has been monitored at regular meetings at ministerial level. The most recent meeting took place in Vienna and Budapest in March 2010. The next forum will be held in Bucharest in April 2012. You can find more details on the **Bologna Process** website.

## A European qualifications framework

Within the framework of the Bologna Process, the European ministers of education have agreed that each country should develop its own framework for degrees and qualifications (qualifications framework).

An overall European framework for qualifications in the area of higher education (European Qualifications Framework – European Higher Education Area) has also been developed within the parameters of the Bologna Process.

This consists of a description of three cycles of education to which national qualifications frameworks must be related as well as proposals on how the national qualifications frameworks should be designed and what features they should contain to enable comparison with the qualification systems of other European countries.

The Swedish qualifications ordinance, with its qualification descriptors, could be described as forming the backbone of a national framework for qualifications in Sweden. Several other countries have produced their own national frameworks. These can be found on the [ENIC/NARIC](#) website.

# Higher education in Sweden

## Overall responsibility

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.

The Ministry of Education and Research is responsible for issues relating to schools, higher education institutions (HEIs), research, adult education, popular education and student aid. The public-sector HEIs are public agencies responsible to the Ministry of Education and Research. One exception is Sveriges Lantbruksuniversitet (Swedish University of Agricultural Studies), which is accountable to the Ministry of Agriculture. Other agencies, such as Skolverket (Swedish National Agency for Education), Högskoleverket (Swedish National Agency for Higher Education) and Vetenskapsrådet (Swedish Research Council), are also accountable to the Ministry of Education and Research.

## Higher education institutions

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. Third-cycle courses and programmes are offered by universities and university colleges that have been granted entitlement to award third-cycle qualifications. The decision to grant entitlement to award a third-cycle qualification is made by the Swedish National Agency for Higher Education according to new regulations that apply from 2010 onwards.

There are 14 public-sector universities and 21 public-sector university colleges in Sweden. In addition there are three independent HEIs that are entitled to award third-cycle qualifications: Chalmers University of Technology, the Stockholm School of Economics and Jönköping University Foundation. There are also nine independent education providers entitled to award first-cycle, and in some cases second-cycle, qualifications as well as five course providers entitled to award qualifications in psychotherapy.

The Swedish Parliament decides which public-sector HEIs are to exist. The government can decide whether an HEI may use the title of university. A list of universities and university colleges and their addresses can be found on the Agency's website.

## **The missions of the higher education institutions**

The mission of the higher education institutions is to offer education based on an academic or artistic footing and proven experience. They must also undertake development work, including research and artistic development. In addition, the HEIs must cooperate with their surrounding communities and provide information about their operations.

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.

## **Allocation of resources to higher education institutions**

The Swedish Parliament decides on funding for the HEIs. Resources are allocated to the institutions for first- and second-cycle courses and programmes on the basis of the number of students admitted to each cycle, expressed in terms of full-time equivalents (FTEs) and the number of credits attained (annual performance equivalents). Every year the government determines a ceiling figure for the institutions, which indicates the maximum amount that can be paid to each HEI.

The direct funding for research and third-cycle courses and programmes is based mainly on past allocations, but 10 per cent of the funding and new resources is allocated on the basis of two quality indicators from 2009. Those are citations and research funding from external sources.

The Swedish University of Agricultural Sciences has a special budgeting and reporting system in which funding for research, courses and programmes is allocated for a three-year period together with the educational targets for the same period.

## **The regulations that govern higher education institutions**

In Sweden, public-sector HEIs are agencies in their own right that report directly to the government. The operations of HEIs are regulated by the laws and statutes that apply to the area of higher education. As government agencies, the HEIs are also subject to administrative and labour-market legislation and the provisions of the Instrument of Government. Their operations are also governed by the parameters and funding decided by the Swedish Parliament and the government.

Higher education in Sweden is governed by the Higher Education Act and the Higher Education Ordinance.

The Higher Education Act is enacted by the Swedish Parliament and contains regulations about the operations of HEIs. These are often supplemented by the provisions laid down in the Higher Education Ordinance. The Higher Education Act contains fundamental regulations about the courses and programmes offered by HEIs. For instance, it sets out what should characterise these courses and programmes in the different cycles and stipulates freedom of research. It provides a framework for the organisation and governance of the HEIs, and states that every HEI must have a board of governors and a vice-chancellor. It also has regulations about the duties of professors, senior lecturers and other teaching staff, and contains provisions about student influence.

The Higher Education Ordinance is laid down by the government and is linked to the provisions of the Higher Education Act. For instance, the Ordinance states that students must be able to influence their courses and programmes and that HEIs must foster equality of opportunity and broaden recruitment. It stipulates that courses and programmes at HEIs be offered free of charge to students. It contains regulations on entrance qualifications and selection to courses and programmes, as well as the appointment of teachers and doctoral students. It also includes regulations on syllabuses for courses and programmes, grades and qualifications.

Annex 2 to the Higher Education Ordinance and the annexes to the Ordinances on the Swedish University of Agricultural Sciences and the Ordinance on the Swedish National Defence College are qualification ordinances that contain the descriptors for all qualifications.

Within these parameters, the HEIs have relatively wide freedom to decide on their own organisation, allocation of resources and course offerings. The system is based on the principle of management by objectives.

The government lays down the directives for operations at the HEIs in their public-service agreements. The Agency exercises supervision of the HEIs, which means ensuring their compliance with the statutes and regulations that apply to the higher-education area.

## **Degree-awarding powers**

In order to be able to award a specific qualification, the institution organising a programme – whether it is accountable to the state or independent – is required to have degree-awarding powers, i.e. special permission to award this particular qualification.

Universities are entitled to award first-, second- and third-cycle general qualifications.

The public-sector university colleges have a general entitlement to award Higher Education Diplomas, Bachelor's degrees and one-year Master's degrees. Those granted entitlement to award third-cycle qualifications within a speci-

fied field according to the new regulations that apply from 2010 are also entitled to award two-year Master's degrees in the field specified.

In other cases the government or the Agency decides on entitlement to award general qualifications. In the case of first- and second-cycle professional qualifications and qualifications in the fine, applied and performing arts in every cycle, both universities and university colleges have to apply to the Agency for degree-awarding powers.

Independent education providers have to apply to the government for degree-awarding powers. This is also the case for the Swedish University of Agricultural Sciences and the National Defence College.

The qualifications that may be awarded are listed in the National Qualifications Ordinance. You can find out which qualifications each HEI is entitled to award by searching the degree-awarding powers database on the Agency's website.



# The structure of programmes and qualifications

The Swedish Higher Education Act and Higher Education Ordinance have been amended in accordance with the agreements reached within the framework of the Bologna Process, including the European Qualifications Framework (QF-EHEA). These amendments apply to courses and programmes offered from 1 July 2007 as well as to qualifications awarded after that date. Courses and programmes that started earlier are subject to transitional provisions.

## Cycles

All courses, programmes and qualifications are ascribed to three cycles: first, second and third. There is progression, i.e. each cycle is based on the former. The formal requirements that distinguish these cycles are specified in the Higher Education Act.

All first- and second-cycle educational offerings consist of courses. These courses can be combined to form programmes

Cycle	Entry requirements	Cycle descriptor
First cycle	Completed secondary education or corresponding competence	Develop the students' ability to make autonomous and critical appraisals ability to identify, formulate and solve problems autonomously and preparedness to cope with changes in professional practice.  Within the field covered by their studies the students will, in addition to their knowledge and skills, develop the ability to: search for and evaluate knowledge at an academic level keep up to date with the development of knowledge discuss their knowledge, even with individuals who have no specialist insights in the field.
Second cycle	First-cycle degree or corresponding competence	Acquire specialised knowledge, skills and capacities in relation to first-cycle programmes by: further developing the students' ability to integrate and apply knowledge autonomously developing the students' ability to deal with complex phenomena, issues and situations developing the students' potential for employment that demands great autonomy or for research and development work.
Third cycle	First- and second-cycle degree or corresponding competence	Develop the knowledge and skills required to undertake autonomous research

## Higher-education credits

An academic year that comprises 40 weeks of full-time study corresponds to 60 credits. The number of credits awarded for each course is determined by the amount of study normally required to attain its objectives.

This credit system applies from 1 July 2007. When converting from the previous higher-education credit system, 1 credit in the old system corresponds to 1.5 credits in the current system.

The credits awarded in higher education in Sweden can be compared with European Credit Transfer and Accumulation System (ECTS) credits, where 60 ECTS credits are attained after one academic year of full-time study.

## **Categories of qualifications**

There are three categories of qualifications:

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

Professional qualifications are awarded mainly in the regulated professions on the basis of the appropriate requirements.

Both general qualifications and qualifications in the fine, applied and performing arts are assigned to the first, second or third cycle. Third-cycle qualifications in the fine, applied and performing arts were introduced on 1 January 2010.

This is reflected in the National Qualifications Ordinance, as illustrated in the following table.

Cycle	General qualifications	Qualifications in the fine, applied and performing arts	Professional qualifications
<b>First cycle</b>	Higher Education Diploma: 2 years, 120 credits Bachelor of Arts/Science: 3 years, 180 credits	Higher Education Diploma: 2 years, 120 credits Bachelor of Fine Arts: 3 years, 180 credits	BSc in Occupational Therapy: 3 years, 180 credits BSc in Audiology: 3 years, 180 credits BSc in Biomedical Laboratory Science: 3 years, 180 credits BSc in Fire Protection Engineering: 3.5 years, 210 credits BSc in Dietetics: 3 years, 180 credits Higher Education Diploma in Veterinary Nursing: 2 years, 120 credits Higher Education Certificate in Folk High School Education: 1 year, 60 credits Higher Education Diploma in Equine Science: 2 years, 120 credits BSc in Engineering: 3 years, 180 credits BSc in Landscape Construction and Management: 3 years, 180 credits Higher Education Diploma in Agricultural and Rural Management: 2 years, 120 credits BA/BSc in Education: 3 years, 180 credits; 3.5 years, 210 credits BSc in Military Studies: 3 years, 180 credits BSc in Optometry: 3 years, 180 credits BSc in Prosthetics and Orthotics: 3 years, 180 credits BSc in Pharmacy: 3 years, 180 credits BSc in Diagnostic Radiology Nursing: 3 years, 180 credits BSc in Physiotherapy: 3 years, 180 credits BSc in Nursing: 3 years, 180 credits BSc in Marine Engineering: 3 years, 180 credits BSc in Nautical Science: 3 years, 180 credits BSc in Forest Management: 3 years, 180 credits Higher Education Diploma in Forest Management: 2 years, 120 credits BSc in Social Work: 3.5 years, 210 credits BA in Study and Career Guidance: 3 years, 180 credits Higher Education Diploma in Dental Hygiene: 2 years, 120 credits BSc in Dental Technology: 3 years, 180 credits Higher Education Diploma in Horticultural Management: 2 years, 120 credits

Cycle	General qualifications	Qualifications in the fine, applied and performing arts	Professional qualifications
<b>Second cycle</b>	Master of Arts/ Science: (1 year), 60 credits Master of Arts/ Science: (2 years), 120 credits	Master of Fine Arts: (1 year), 60 credits Master of Fine Arts: (2 years), 120 credits	MSc in Agriculture: 4.5 years, 270 credits MSc in Pharmacy: 5 years, 300 credits Master of Architecture: 5 years, 300 credits Postgraduate Diploma in Midwifery: 1.5 years, 90 credits (requires a BSc in Nursing or professional status qualification) MSc in Business and Economics: 4 years, 240 credits MSc in Engineering: 5 years, 300 credits MSc in Horticulture: 5 years, 300 credits Master of Laws: 4.5 years, 270 credits MSc in Forestry: 5 years, 300 credits MSc in Landscape Architecture: 5 years, 300 credits MSc in Speech and Language Pathology: 4 years, 240 credits MSc in Medicine: 5.5 years, 330 credits MA/MSc in Education: 4 years, 240 credits; 4.5 years, 270 credits; 5 years, 300 credits; 5.5 years, 330 credits MSc in Psychology: 5 years, 300 credits Postgraduate Diploma in Psychotherapy: 1.5 years, 90 credits (requires a MSc in Psychology, Medicine, Social Work or the equivalent) MSc in Medical Physics: 5 years, 300 credits Postgraduate Diploma in Specialist Nursing: 1 year, 60 credits (requires a BSc in Nursing or professional status qualification) Postgraduate Diploma in Special Needs Training: 1.5 years, 90 credits (requires teaching qualification) Postgraduate Diploma in Special Educational Needs: 1.5 years, 90 credits (requires teaching qualification) MSc in Dental Surgery: 5 years, 300 credits MSc in Veterinary Medicine: 5.5 years, 330 credits
<b>Third cycle</b>	Licentiate: 2 years, 120 credits Doctor of Philosophy: 4 years, 240 credits	Licentiate in the fine, applied and performing arts: 120 credits Doctorate in the fine, applied and performing arts: 240 credits	

Teaching qualifications may be awarded in the second cycle as a Bachelor of Arts/Science in Education or in the third cycle as a Master of Arts/Science in Education, depending on the duration of studies. From July 2011 those degrees will be replaced by four new degrees in the field of Education.

Of the professional qualifications awarded in the second cycle, the Postgraduate Diplomas in Midwifery, Specialist Nursing, Psychotherapy, Special Needs Teaching and Special Educational Needs require a previous qualification. Other programmes that lead to the award of a professional qualification in the second cycle are undivided, i.e. are not split between the cycles. The Swedish system differs from many others in this respect. In addition to the programmes that lead to the award of qualifications, higher education in Sweden offers a wide range of freestanding courses.

## Qualification descriptors

The Qualifications Ordinance contains descriptors for all the qualifications. These state the following.

- Scope: the exact number of credits required for the qualification.
- Outcomes: the knowledge and understanding, competence and skills, and judgement and approach that students are required to demonstrate for the award of the qualification.
- Independent project: the requirements that apply to the independent project.<sup>1</sup>
- Miscellaneous: in addition to the above specifications, specific requirements are laid down by the HEIs for the qualifications awarded within the parameters of the qualification descriptors.

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 titles of qualifications awarded in the first and second cycles comprise the title laid down in the Higher Education Ordinance or the Ordinances on the Swedish University of Agricultural Sciences and the Swedish National Defence College, together with a designation determined by the HEI indicating the field of specialisation.

The titles of qualifications listed in the Qualifications Ordinance can be found on the **Lagrummet** website.

## Translation of qualification titles

The Agency issues regulations and general advice on the translation of Swedish qualification titles to English.

## Course syllabuses

Every first- or second-cycle course must have a course syllabus. This states which cycle the course belongs to and its learning outcomes, among other things.

---

1. The degree project or independent project required for first- and second-cycle qualifications, thesis for a licentiate degree or doctoral thesis required for a doctorate (although not for a doctorate in the fine, applied and performing arts).

## **Programme syllabuses**

Every programme must have a programme syllabus. This must state, for instance, which courses the programme consists of, how the programme is organised and what general and specific entry requirements apply.

## **Transitional provisions**

Students who began their studies before 1 July 2007 leading to a qualification according to the earlier provisions of Annex 2 of the Higher Education Ordinance, the Degree Ordinance or the Annex to the Ordinance on the Swedish University of Agricultural Sciences are entitled to complete their studies for the award of a qualification according to the earlier provisions. This applies until the end of June 2015.

# Admission to higher education

Sweden has a more uniform system of admission to higher education than many other countries. National admission regulations are laid down in the Higher Education Act, the Higher Education Ordinance and the regulations issued by the Agency. The detailed national regulations apply mainly to the admission of university entrants to courses and programmes. There are also regulations on admission to second- and third-cycle courses and programmes, but these are less comprehensive.

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 are also demanded by many courses and programmes.

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. Selection is based mainly on grades or results from the Swedish Scholastic Aptitude Test. More information is available on the Agency's website.

The Higher Education Ordinance stipulates the general entry requirements that apply for all courses and programmes, as well as listing any selection criteria that may be invoked. It also contains regulations on the evaluation of final school grades.

The government has decided that the Agency should issue regulations in a number of areas. These regulations supplement and clarify the provisions of the Higher Education Act and the Higher Education Ordinance.

Matters relating to admission are decided by the HEIs. They must have an admission procedure that sets out their regulations. An appeal may be made against an HEI's admission decision via the Higher Education Appeals Board.

The vast majority of admissions are pooled. Verket för Högskoleservice (The National Agency for Services to Universities and University Colleges (VHS)) is responsible for pooled admissions on behalf of the HEIs.

## **Admission to first-cycle courses and programmes**

### **General entry requirements**

Those with final school grades from a complete programme in a Swedish upper-secondary school or adult education at upper-secondary level with at least a pass grade in courses worth 2,250 upper-secondary credits and at least a pass grade in the core subjects of Swedish, English and mathematics meet the general entry requirements for first-cycle courses and programmes.

Applicants who met the general entry requirements before 1 January 2010 will continue to do so in the future. There is even a transitional provision dealing with what was known as the 25:4 rule. Those born before the end of 1983 and who before 1 July 2008 had the required knowledge in the core subjects of Swedish and English and at least four years of vocational experience will meet the general entry requirements until 31 December 2011.

Secondary education outside Sweden that offers qualifications for higher education in the country in which it was pursued can also enable fulfilment of the general entry requirements. Those who have undergone education of this kind need to verify their knowledge of Swedish, English and mathematics. It is also possible to fulfil the general entry requirements by studying at a folk high school or through 'prior learning'.

### **Specific entry requirements**

For admission to many courses and programmes, the general entry requirements are supplemented by additional specific entry requirements. Specific entry requirements generally comprise knowledge from one or more courses in secondary school or the equivalent, and must be totally necessary to enable students to benefit from the courses and programmes they are applying for.

The specific entry requirements for university entrants are organised by field in Högskoleverkets föreskrifter (HSVFS 2007: 8). More information can be found via [www.hsv.se/highereducationinsweden/studyingatheis/newentrants/tohighereducation.4.28afa2dc11bdc557480002489.html](http://www.hsv.se/highereducationinsweden/studyingatheis/newentrants/tohighereducation.4.28afa2dc11bdc557480002489.html)

### **Prior learning**

An applicant may be considered qualified even though he or she does not meet the formal entry requirements. This may be the case if the applicant's acquired knowledge and experience enables the university or university college to consider that he or she has the potential to cope with the course or programme. The HEI can then decide that the applicant meets the entry requirements through prior learning.

### **Selection**

When there are more applicants for a course or programme than places, a selection is made. The applicants are ranked by calculating their grade tariff. This tariff is based on their final school grades or the results of the Swedish Scholastic Aptitude Test. At least one third of the places have to be allocated on the basis of final school grades and another third on the results of the Swedish Scholastic Aptitude Test. There are four categories, including one for applicants with grades awarded outside Sweden.

It is also possible for an HEI to decide on its own selection criteria for no more than one third of the places. An HEI may, with the permission of the Agency, use these selection criteria for a larger proportion of the places. The selection criteria that may be invoked in such a situation are:



1. specific tests other than the Swedish Scholastic Aptitude Test
2. knowledge, vocational experience or other experience that is of particular value for the course or programme applied for
3. other objective circumstances relating to the course or programme.

Alternative selection procedures may be used for all of the places in courses and programmes leading to the award of qualifications in the fine, applied and performing arts.

## **Admission to second-cycle courses and programmes**

### **General entry requirements**

For entry to second-cycle programmes leading to a general qualification or one in the fine, applied and performing arts, a first-level qualification comprising at least 180 credits or a corresponding qualification from abroad is required.

Some second-cycle programmes that lead to the award of a professional qualification require possession of a specific qualification or professional status qualification.

Completion of first-cycle studies is required for admission to second-cycle courses.

### **Specific entry requirements**

Again, the HEI may lay down its own specific entry requirements. These must be totally necessary for the students to benefit from their studies, and may include:

- knowledge from one or several courses and programmes in higher education
- other conditions that the programme entails or that are important for the professional area for which the programme offers preparation.

### **Prior learning**

Applicants may also be qualified through another educational programme in Sweden or abroad, practical experience or some other circumstance. For this to be the case, they must be considered to have acquired the potential to benefit from their studies.

The HEIs decide whether applicants meet entry requirements on the grounds of prior learning.

### **Selection**

Selection is based on each applicant's merits. The criteria may be grades, the results from the Swedish Scholastic Aptitude Test, earlier courses and programmes, specific tests other than the Swedish Scholastic Aptitude Test, knowledge, vocational or other experience that is particularly valuable for the

studies applied for or other objective circumstances relating to these studies. The HEIs may decide which selection criteria are to be used and how places are to be allocated.

## **Admission to third-cycle courses and programmes**

For admission to third-cycle courses and programmes, applicants must meet the general entry requirements and any specific entry requirements stipulated by a faculty board and also be considered capable of benefiting from their studies. An HEI that intends to admit doctoral students must advertise or provide equivalent information about these admissions.

### **General entry requirements**

Applicants who have completed the courses required for 240 higher-education credits – of which at least 60 must have been awarded in the second cycle – meet the general entry requirements, as do those who have acquired substantially similar knowledge in Sweden or elsewhere.

### **Specific entry requirements**

Specific entry requirements must be totally necessary to enable students to benefit from their studies and may involve:

- knowledge from studies in higher education or corresponding studies
- specific vocational experience
- requisite foreign-language skills
- other conditions entailed by the course of study.

### **Transitional provisions**

For those who were qualified for admission on 30 June 2007, the earlier regulations will apply until 30 June 2015.

### **Selection**

If there are more applicants than places, an HEI must make a selection. The faculty board at the HEI determines which selection criteria will apply to the assessment of applicants' capacity to benefit from studies. Information about third-cycle courses and programmes can be found in the Handbook for Postgraduate Students on the Agency's website [www.hsv.se/highereducationinsweden/studyingatheis/newentrantstohighereducation.4.28afa2dc11bdcdc557480002489.html](http://www.hsv.se/highereducationinsweden/studyingatheis/newentrantstohighereducation.4.28afa2dc11bdcdc557480002489.html).

# Quality assurance and inspection

## **Different actors involved in quality assurance**

The existence of a quality-assurance process is important in establishing and maintaining confidence in the educational system.

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.

National responsibility for evaluating and monitoring higher education in Sweden rests with the Agency. The overall aim of the Agency's evaluation procedures is to ensure the fundamental quality of courses and programmes. Its evaluations also contribute to the development work of the HEIs. An additional aim is to inform students and others about the areas of education offered in Sweden: for example where they can be found, what profiles they have adopted, and their resources and infrastructure.

The Agency is a member of the European Association for Quality Assurance in Higher Education (ENQA), the International Network for Quality Assurance Agencies in Higher Education (INQAAHE) and the Nordic Quality Assurance Network in Higher Education (NOQA).

There are a number of other organisations and networks that work with quality assurance at national and international levels in Europe and the rest of the world. A European Register of Quality-assurance Organisations (EQAR) was established in 2008.

## **The Agency's quality-assurance system**

During 2010, a new system for the quality assurance of higher education will be introduced. This will comprise two components: programme evaluation and appraisal of degree-awarding powers.

### **Programme evaluation**

The Swedish National Agency for Higher Education has been assigned by the Government to develop a system for quality assurance for education in the first and second cycle. In the new system there will be a greater emphasis on the results of the education. From 2011 the Agency will start evaluating the first- and second-cycle education according to the new system.

### **Appraisal of degree-awarding powers**

Appraisal of degree-awarding powers is an important component of the quality-assurance system. The HEIs that seek entitlement to award certain qualifications are evaluated by the Agency. The descriptors in the Qualifications Ordinance provide the guidelines for this process. General criteria on which to base these appraisals have been determined. They include teachers' qualifications, the educational setting, the organisation of courses, and programmes and outcomes. The concrete criteria that apply for each specific appraisal are drawn up by the external panel of assessors.

### **Supervision**

The Agency has been given the task of supervising the HEIs – in other words, ensuring their compliance with the statutes and regulations that apply to higher education. This is undertaken by dealing with cases (initiated as the result of complaints or by the Agency itself), evaluation visits and projects. Most complaints come from students and may concern breaches by HEIs of the regulations that apply, for instance, to admissions, examinations, student influence or procedural delays. It is not unusual for student unions to make similar complaints.

The Agency cannot invoke sanctions but may express varying degrees of criticism. The Agency also makes visits to the HEIs subject to its supervision: three HEIs are inspected each year, with the results presented in a report.

# International recognition of higher education

## **Recognition of foreign courses and programmes in Sweden**

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.

## **Professional recognition**

The professions that require a professional status qualification or the equivalent in Sweden are called the regulated professions. A list of the programmes that lead to the award of qualifications in these professions can be found on the Agency's website.

For each of these programmes there is a 'competent authority' that has legal responsibility for the assessment of programmes outside Sweden. The Agency is the competent authority for the teaching profession and therefore carries out these assessments and issues qualified teacher status certificates to those with teaching qualifications from abroad. A list of all the competent authorities can be found on the Agency's website. The Agency has also been appointed Swedish Contact Point for EU Directive 2005/36/EC.

In order to facilitate entry into the Swedish labour market for those whose professions are not regulated, the Agency evaluates higher-education programmes outside Sweden that have lasted for at least two years and have concluded with the award of a qualification. The foreign HEI that awarded the qualification must be recognised by the educational authorities of the appropriate country or a corresponding organisation. More information about how these evaluations are made can be found on the Agency's website.

## **Academic recognition**

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. The Agency acts as an expert body for the academic recognition of qualifications from higher education outside Sweden.

## **International cooperation**

### **Information offices in every country**

National Academic Recognition Information Centres (NARICs) have been established in all EU member states to facilitate mutual recognition of programmes of study and qualifications in the various countries. These offices provide information about both professional and academic recognition and also publish and exchange information on educational systems in Europe and elsewhere. They can be consulted by anyone who has completed higher education in Sweden and wants to work abroad, as well as by those who have studied in Sweden and want to continue their studies abroad. The NARICs can provide information about how courses and programmes in Sweden are evaluated and can identify the competent authorities in the countries in question. NARICs also belong to a larger network, the European Network of Information Centres (ENIC). ENIC extends beyond the EU and the European Economic Area and its role is similar to that of the NARICs. More information can be found on the joint ENIC/NARIC website.

The Agency's Department for Qualifications Recognition is the Swedish ENIC/NARIC office. The department also works to enhance international recognition of Swedish courses and programmes. The recognition offices in the Nordic countries have also set up a network, the Nordic National Recognition Information Centres (NORRIC).

### **Diploma supplements to facilitate mobility**

HEIs are also required to issue a Diploma Supplement with a student's degree certificate. This supplement describes the Swedish qualification, where it fits into the educational system and higher education in Sweden, and is intended to make it easier for those with academic qualifications to study or work in other countries. Since 2003 HEIs are, according to the Swedish HE ordinance, required to issue Diploma Supplement. Since 1 July 2007 they have also been issued with all qualifications, including third-cycle degrees.

### **Agreements on professional recognition**

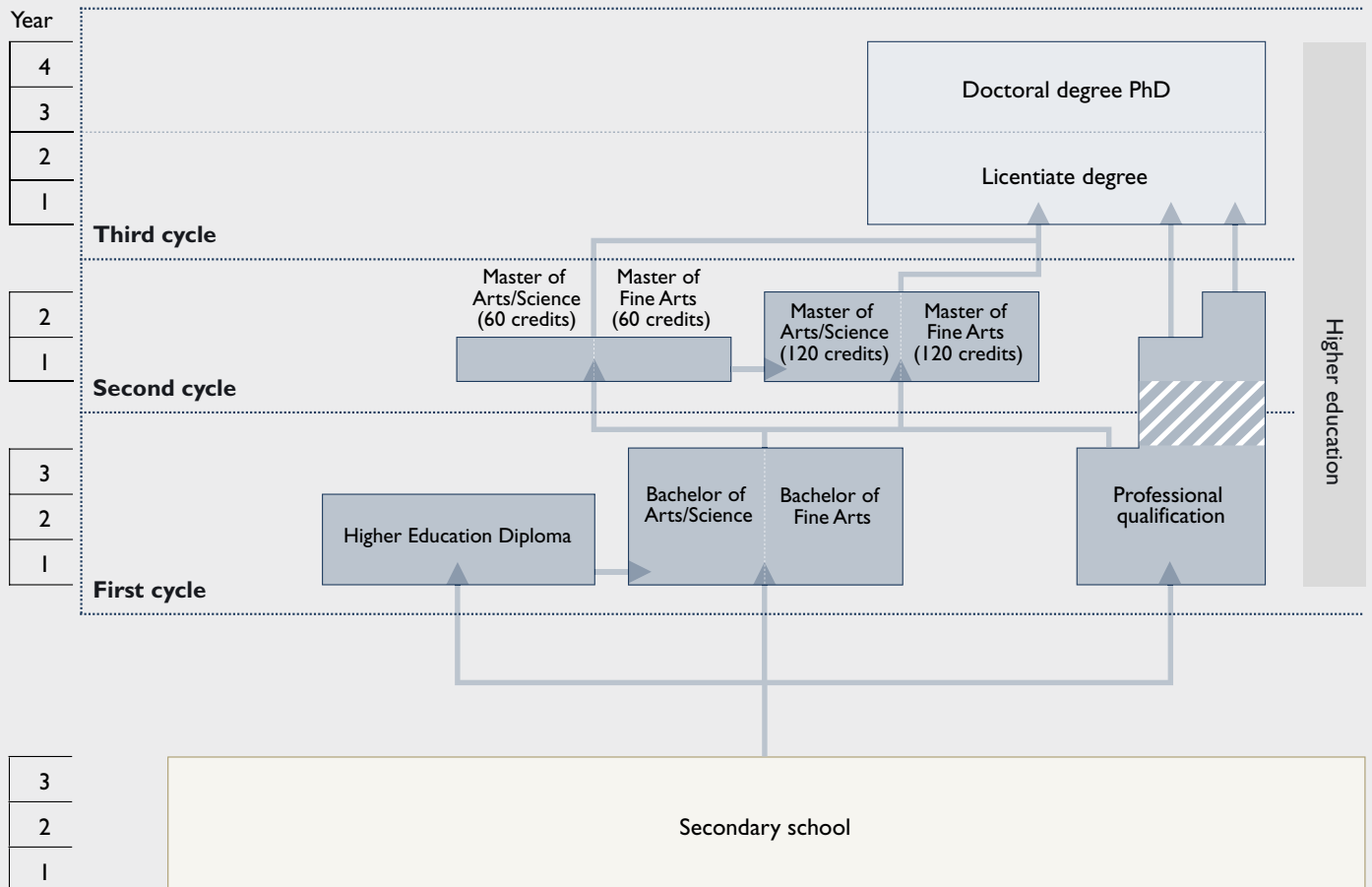
Like the EU's other member states, together with Iceland, Norway, Liechtenstein and Switzerland, Sweden is subject to an EC Directive about the recognition of educational and professional status qualifications. The aim of the directive is to make it easier for those who want to pursue a regulated profession in a member state.

### **Agreements on academic recognition**

Since November 2001, the Lisbon Recognition Convention has been incorporated in the Swedish Higher Education Ordinance. This convention contains regulations on mutual academic recognition, i.e. admission to higher education, accreditation of periods of study and admission to further studies. There

are also rules about entitlement to specific academic titles. In ratifying the convention, Sweden has bound itself to comply with it. The Lisbon Convention is based on the principle of mutual recognition of all higher education. Only if there are substantial differences between courses and programmes in different countries can member states refuse to recognise them, either wholly or in part.

# Annex I: Diagrammatic presentation of qualifications structure





## Annex 2: Qualification descriptors: Bachelor's and one-year and two-year Master's degrees

The tables that follow present the differences between Bachelor's degrees and one- and two-year Master's degrees. This annex offers an example of the progression that takes place within general qualifications. Corresponding documents exist for qualifications in the fine, applied and performing arts and professional qualifications.

All of the Higher Education Ordinance's qualification descriptors can be found on the Lagrummet website.

### Total credits and required specialisati

Bachelor's degree	Master's degree (60 credits)	Master's degree (120 credits)
<p>A Bachelor's degree is awarded after the student has completed the courses required to gain 180 credits in a defined specialisation determined by each HEI, of which 90 credits are for progressively specialised study in the principal field (main field of study) of the programme. Completion by the student of an independent project (degree project) for at least 15 credits in the main field of study is a requirement for the award of a Bachelor's degree.</p>	<p>A Master of Arts/Science (60 credits) is awarded after the student has completed the courses required to gain 60 credits in a defined specialisation determined by each HEI, of which at least 30 credits are for specialised study in the principal field (main field of study) of the study programme. In addition the prior award of a Bachelor's degree, Bachelor's degree in fine arts, professional or vocational qualification of at least 180 credits or a corresponding qualification from abroad is required.</p> <p>Completion by the student of an independent project (degree project) for at least 15 credits in the main field of study is a requirement for the award of a Master of Arts/Science degree (60 credits).</p>	<p>A Master of Arts/Science (120 credits) is awarded after the student has completed the courses required to gain 120 credits in a defined specialisation determined by each HEI, of which at least 60 credits are for specialised study in the principal field (main field of study) of the study programme. In addition the prior award of a Bachelor's degree, Bachelor's degree in fine arts, professional or vocational qualification of at least 180 credits or a corresponding qualification from abroad is required.</p> <p>Completion by the student of an independent project (degree project) for at least 30 credits in the main field of study is a requirement for the award of a Master of Arts/Science (120 credits). The degree project may comprise less than 30 credits, but no less than 15 credits, if the student has already completed an independent project in the second cycle for at least 15 credits in the main field of study or the equivalent from a programme of study outside Sweden.</p>

## Outcomes

Bachelor's degree	Master's degree (60 credits)	Master's degree (120 credits)
<p>The student shall have:</p> <p><b>Knowledge and understanding</b></p> <ul style="list-style-type: none"> <li>- demonstrated knowledge and understanding in the main field of study, including knowledge of the disciplinary foundation of the field, understanding of applicable methodologies in the field, specialised study in some aspect of the field as well as awareness of current research issues.</li> </ul> <p><b>Competence and skills</b></p> <ul style="list-style-type: none"> <li>- demonstrated the ability to search for, gather, evaluate and critically interpret the relevant information for a formulated problem and also discuss phenomena, issues and situations critically</li> <li>- demonstrated the ability to identify, formulate and solve problems autonomously and to complete tasks within predetermined time frames</li> <li>- demonstrated the ability to present and discuss information, problems and solutions in speech and writing and in dialogue with different audiences, and</li> <li>- demonstrated the skills required to work autonomously in the main field of study.</li> </ul> <p><b>Judgement and approach</b></p> <ul style="list-style-type: none"> <li>- demonstrated the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues</li> <li>- demonstrated insight into the role of knowledge in society and the responsibility of the individual for how it is used, and</li> <li>- demonstrated the ability to identify the need for further knowledge and ongoing learning.</li> </ul>	<p>The student shall have:</p> <p><b>Knowledge and understanding</b></p> <ul style="list-style-type: none"> <li>- demonstrated knowledge and understanding in the main field of study, including both an overview of the field and specialised knowledge in certain areas of the field as well as insight into current research and development work, and</li> <li>- demonstrated specialised methodological knowledge in the main field of study.</li> </ul> <p><b>Competence and skills</b></p> <ul style="list-style-type: none"> <li>- demonstrated the ability to integrate knowledge and analyse, assess and deal with complex phenomena, issues and situations even with limited information</li> <li>- demonstrated the ability to identify and formulate issues autonomously as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames</li> <li>- demonstrated the ability in speech and writing to report clearly and discuss his or her conclusions and the knowledge and arguments on which they are based in dialogue with different audiences, and</li> <li>- demonstrated the skills required for participation in research and development work or employment in some other qualified capacity.</li> </ul> <p><b>Judgement and approach</b></p> <ul style="list-style-type: none"> <li>- demonstrated the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues and also to demonstrate awareness of ethical aspects of research and development work</li> <li>- demonstrated insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and</li> <li>- demonstrated the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning.</li> </ul>	<p>The student shall have:</p> <p><b>Knowledge and understanding</b></p> <ul style="list-style-type: none"> <li>- demonstrated knowledge and understanding in the main field of study, including both broad knowledge of the field and a considerable degree of specialised knowledge in certain areas of the field as well as insight into current research and development work, and</li> <li>- demonstrated specialised methodological knowledge in the main field of study.</li> </ul> <p><b>Competence and skills</b></p> <ul style="list-style-type: none"> <li>- demonstrated the ability to critically and systematically integrate knowledge and analyse, assess and deal with complex phenomena, issues and situations even with limited information</li> <li>- demonstrated the ability to identify and formulate issues critically, autonomously and creatively as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames and so contribute to the formation of knowledge as well as the ability to evaluate this work</li> <li>- demonstrated the ability in speech and writing both nationally and internationally to report clearly and discuss his or her conclusions and the knowledge and arguments on which they are based in dialogue with different audiences, and</li> <li>- demonstrated the skills required for participation in research and development work or autonomous employment in some other qualified capacity.</li> </ul> <p><b>Judgement and approach</b></p> <ul style="list-style-type: none"> <li>- demonstrated the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues and also to demonstrate awareness of ethical aspects of research and development work</li> <li>- demonstrated insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and</li> <li>- demonstrated the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning.</li> </ul>

## Appendix 2

### Bologna Framework and Certification



## THE BOLOGNA FRAMEWORK AND NATIONAL QUALIFICATIONS FRAMEWORKS – AN INTRODUCTION

### INTRODUCTION

The Bologna Process was initiated in 1999. It now involves 46 countries. An important action line in the Process is the restructuring of higher education programmes and changes to the qualifications (diplomas) that are made as a result. In 2003, Ministers with responsibility for higher education gathered in Berlin to review progress in the Bologna Process. They called on each participating country to develop a national framework of qualifications. They also called for the elaboration of an overarching Framework for Qualifications of the European Higher Education Area. For the purposes of brevity, this Framework will be referred to as the *Bologna Framework*. Subsequently in Bergen in 2005 Ministers adopted the Bologna Framework. This framework had been developed by a working group set up by and reporting to the Bologna Follow-Up Group and chaired by Mogens Berg. This document aims to introduce readers to the principal elements of the Bologna Framework.

### RATIONALE AND PURPOSE OF THE BOLOGNA FRAMEWORK

There are a number of countries with national frameworks of qualifications already in place or being put in place, each reflecting national structures and policy priorities. Some of these relate to all education and training while others just to higher education. The ministers of all countries in the Bologna process have committed to having national frameworks in place by 2010.

The rationale for the Bologna Framework is to provide a mechanism to relate national frameworks to each other so as to enable:

- (a) International transparency – this is at the heart of the Bologna process and while devices, such as the Diploma Supplement, have a role to play in this objective, it is difficult to ensure that qualifications can be easily read and compared across borders without a simplifying architecture for mutual understanding.
- (b) International recognition of qualifications – this will be assisted through a framework, which provides a common understanding of the outcomes represented by qualifications for the purposes of employment and access to continuing education.
- (c) International mobility of learners and graduates – this depends on the recognition of their prior learning and qualifications gained. Learners can ultimately have greater confidence that the outcomes of study abroad will contribute to the qualification sought in their home country. A framework will also be of particular help in supporting the development and recognition of joint degrees from more than one country.

### THE BOLOGNA FRAMEWORK IN DETAIL

The first, second and third cycles established in the Bologna Process are the key elements of the overarching framework. These cycles can be best understood by reference to internationally acceptable descriptors which have been developed jointly by stakeholders across Europe – the so-called “Dublin descriptors” (see Appendix 1). They are of necessity quite general in nature. Not only must they accommodate a wide range of disciplines and profiles but they must also accommodate, as far as possible, the national variations in how qualifications have been developed and specified. Qualification descriptors are usually designed to be read as general statements of the typical achievement of learners who have been awarded a qualification on successful completion of a cycle.

The working group that established the Bologna Framework also examined the nature, development and effectiveness of existing national frameworks of qualifications. This revealed a wide pattern of different experiences from which a number of good practice recommendations was developed by the group. This is attached in appendix 2.

## **BUILDING TRUST**

The success and acceptance of the Bologna Framework depends on trust and confidence among all stakeholders. This is to be achieved through a 'process in each participating country seeking to verify the compatibility of its national framework with the Bologna Framework.

This verification process requires more than a mere expression of qualifications by the competent national body. National frameworks and their associated quality assurance arrangements must satisfy a series of criteria and procedures, including the designation of competent bodies responsible for the maintenance of the Framework by the national ministry with responsibility for higher education, a clear and demonstrable link between the qualifications in the national framework and the cycle qualification descriptors of the Bologna Framework, the existence of national quality assurance systems for higher education consistent with the Berlin Communiqué and any subsequent communiqué agreed by ministers in the Bologna Process. Furthermore, the national framework, and any alignment with the Bologna Framework, is to be referenced in all Diploma Supplements. The verification report must be made public so that partners in the Bologna Process are able to see the reasons that lead the competent national authorities to conclude that their framework is compatible with the Bologna framework. It is strongly recommended that the verification exercise include at least one foreign expert. The detailed outline of these criteria and procedures is included in Appendix 3.

Following the adoption of the Bologna Framework in 2005, a further working group was established. Various seminars and other activities were organised to help countries develop their national frameworks and two countries' existing frameworks went through self-certification processes. The group concluded in 2007 that the Bologna Framework and the procedures and criteria for verification of compatibility of national qualifications framework with the Bologna framework are adequate and serve their purpose. The Group made a number of recommendations to be considered by countries in undertaking the verification process. These are included in appendix 4.

A Coordination Group was established in 2007, under the chair of the Council of Europe, to support the development of national frameworks and the implementation of the Bologna Framework.

## **EUROPEAN QUALIFICATIONS FRAMEWORK FOR LIFELONG LEARNING**

Parallel to these developments, there is a second European overarching Framework for Qualifications which has now been adopted – the European Qualifications Framework for Lifelong Learning (EQF). This has been adopted by the European Union and relates to all education and training awards in Europe, including those aligned with the Bologna Framework. While EQF directly incorporates the cycle descriptors of the Bologna Framework, it does have its own separate level descriptors.

Diagrammatically, the relationship between the Bologna Framework and the EQF may be illustrated as follows:

EQF	Bologna Framework
1	
2	
3	
4	
5	*
6	----- First Cycle
7	Second Cycle
8	Third Cycle

\* EQF level 5 is linked with Dublin Descriptor Short Cycle Qualification (within or linked to the first cycle). This is not formally part of the Bologna Framework – In adopting the Bologna Framework, Ministers agreed that the Framework would include, within national contexts, the possibility of intermediate qualifications.

It is planned that the countries within the European Union and other states participating in the Lisbon Strategy will align their national frameworks of qualifications with the EQF by 2012.

#### **CONCLUSION**

The strength of European higher education is the cultural richness and diversity, as represented by the 46 participating countries in the Bologna Process. This is an advantage for European students and an attraction for students from outside Europe. The Bologna Framework and the development and implementation of national frameworks of qualifications are central to removing the barriers to mobility and the creation of a common language for qualifications.

**Appendix 1**  
**Dublin Descriptors**  
**(Extract from Working Group on Qualifications Frameworks Report, 2005)**

Short Cycle Qualification (within or linked to the first cycle)*	First Cycle	Second Cycle	Third cycle
<p><i>Qualifications that signify completion of the <b>higher education short cycle (within or linked to the first cycle)</b> are awarded to students who:</i></p> <ul style="list-style-type: none"> <li>• have demonstrated knowledge and understanding in a field of study that builds upon general secondary education and is typically at a level supported by advanced textbooks; such knowledge provides an underpinning for a field of work or vocation, personal development, and further studies to complete the first cycle;</li> <li>• can apply their knowledge and understanding in occupational contexts;</li> <li>• have the ability to identify and use data to formulate responses to well-defined concrete and abstract problems;</li> <li>• can communicate about their understanding, skills and activities, with peers, supervisors and clients;</li> <li>• have the learning skills to undertake further studies with some autonomy.</li> </ul>	<p><i>Qualifications that signify completion of <b>the first cycle</b> are awarded to students who:</i></p> <ul style="list-style-type: none"> <li>• have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study;</li> <li>• can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study;</li> <li>• have the ability to gather and interpret relevant data (usually within their field of study) to inform judgements that include reflection on relevant social, scientific or ethical issues;</li> <li>• can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences;</li> </ul>	<p><i>Qualifications that signify completion of <b>the second cycle</b> are awarded to students who:</i></p> <ul style="list-style-type: none"> <li>• have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context;</li> <li>• can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study;</li> <li>• have the ability to integrate knowledge and handle complexity, and formulate judgements with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgements;</li> <li>• can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously;</li> </ul>	<p><i>Qualifications that signify completion of <b>the third cycle</b> are awarded to students who:</i></p> <ul style="list-style-type: none"> <li>• have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field;</li> <li>• have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity;</li> <li>• have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication;</li> <li>• are capable of critical analysis, evaluation and synthesis of new and complex ideas;</li> <li>• can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise;</li> <li>• can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society.</li> </ul>



	<ul style="list-style-type: none"> <li>• have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.</li> </ul>	have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous.	
Approximately 120 ECTS credits	Typically include 180-24-ECTS credits	Normally carry 90-120 ECTS credits – minimum of 60 ECTS credits at the second cycle level	Credits not specified

\*This is not formally part of the Bologna Framework – In adopting the Bologna Framework, Ministers agreed that the Framework would include, within national contexts, the possibility of intermediate qualifications.

## Appendix 2

### **Good practice for the development of national frameworks of qualifications (Extract from Working Group on Qualifications Frameworks Report, 2005)**

- The development and review process for producing good frameworks is most effective when it involves all relevant stakeholders both within and outside higher education. Higher education frameworks naturally link to VET and post-secondary education and as such are best viewed and treated as a national initiative. This also makes possible the inclusion of, or links to, other areas of education and training outside higher education.
- The framework for higher education qualifications should identify a clear and nationally-agreed set of purposes.
- Frameworks for higher education qualifications benefit from the inclusion of cycles and /or levels, and articulation with outcome-focussed indicators and/or descriptors of qualifications.
- The use of learning outcomes in describing units, modules, and whole qualifications aids their transparency, recognition and subsequent student and citizen mobility. The identification of formal links to learning outcomes should play an important role in the development of national frameworks of qualifications.
- More flexible higher education frameworks of qualifications have the benefit of promoting multiple pathways into and through higher education, and thus through encouraging lifelong learning and the efficient use of resources promote greater social cohesion.
- Higher education frameworks of qualifications benefit from being directly linked to credit accumulation and transfer systems. Credits are student-centred tools that can enhance the flexibility, clarity, progression and coherence of educational systems when they are expressed in terms of learning outcomes, levels/cycles and workload. Credit systems facilitate bridges and links between different forms, modes, levels and sectors of education and can be instrumental in facilitating access, inclusion and lifelong learning.
- Higher education frameworks of qualifications should explicitly link to academic standards, national and institutional quality assurance systems, and public understanding of the place and level of nationally recognised qualifications.
- Public confidence in academic standards requires public understanding of the achievements represented by different higher education qualifications and titles. This confidence and understanding is enhanced by the publication of appropriate institutional audits and/or subject review reports.
- The development and application of 'new style' national frameworks of qualifications facilitates the development of autonomous higher education institutions by creating clear external reference points that help to promote high quality, responsible and responsive institutions.
- National frameworks of qualifications need to articulate in a transparent way with the overarching European framework for qualifications. The process of articulation should involve the careful mapping of national qualifications (their levels, learning outcomes and descriptors) with the cycle descriptors identified for the European overarching framework.

## Appendix 3

### **Criteria & Procedures for Verification of Framework Compatibility (Extract from Working Group on Qualifications Frameworks Report, 2005)**

Criteria for verifying that national frameworks are compatible with the Bologna framework are as follows:

1. The national framework for higher education qualifications and the body or bodies responsible for its development are designated by the national ministry with responsibility for higher education
2. There is a clear and demonstrable link between the qualifications in the national framework and the cycle qualification descriptors of the European framework
3. The national framework and its qualifications are demonstrably based on learning outcomes and the qualifications are linked to ECTS or ECTS compatible credits
4. The procedures for inclusion of qualifications in the national framework are transparent
5. The national quality assurance system for higher education refer to the national framework of qualifications and are consistent with the Berlin Communiqué and any subsequent communiqué agreed by ministers in the Bologna Process
6. The national framework, and any alignment with the European framework, is referenced in all Diploma Supplements
7. The responsibilities of the domestic parties to the national framework are clearly determined and published.

Procedures for verifying that national frameworks are compatible with the Bologna framework are as follows:

1. The competent national body/bodies shall certify the compatibility of the national framework with the European framework.
2. The self-certification process shall include the stated agreement of the quality assurance bodies in the country in question recognised through the Bologna Process
3. The self-certification process shall involve international experts
4. The self-certification and the evidence supporting it shall be published and shall address separately each of the criteria set out
5. The ENIC and NARIC networks shall maintain a public listing of States that have confirmed that they have completed the self-certification process [[www.enic-naric.net](http://www.enic-naric.net)]
6. The completion of the self-certification process shall be noted on Diploma Supplements issued subsequently by showing the link between the national framework and the European framework.

## Appendix 4

### Recommendations to be considered by countries in undertaking the verification process (Extract from Qualifications Frameworks Working Group Report, 2007) The procedures and criteria are those referred to in Appendix 3 (above)

#### Procedures:

- *In developing their National Frameworks, countries should have a eye on the need to align the National Framework to the Bologna Framework while noting that the Framework development process and the subsequent alignment are separate processes.*
- *countries should ensure that there is some element of testing or implementation of a national framework before the process of aligning it to the Bologna Framework is completed*
- *it might be helpful for small groups of countries to co-operate in undertaking alignment processes*
- *while some countries have qualifications recognition agreements with other countries, sometimes outside of Europe, and the Working Group suggests that consultation be undertaken by a country aligning a national framework to the Bologna Framework with any such country with which it has a qualifications recognition agreement. Furthermore, countries with a tradition of having award holders move to other (perhaps neighbouring) countries may also wish to discuss any alignment process with those countries or perhaps involve peers from such countries in their alignment process.*
- *the small steering group model, together with consultation with stakeholders on a transparent basis is a good model for all countries. At the same time, the Working Group recognises that different models may work well for other countries.*
- *It is important that there is clarity on the arrangements for requiring the stated agreement of certain stakeholders of the verification when a verification process is initiated.*
- *the manner in which Scotland and Ireland have involved international experts in their work through membership of the steering group has been exemplary*
- *there are issues that will need to be addressed in the future about the availability and financing of experts to assist countries in their verification processes. There will be linguistic challenges, particularly where a verification process is undertaken in a national language whose use is not widespread across Europe and, certainly at this stage in the development of national frameworks, there is not a significant number of potential experts available. One option which the working Group suggests could be explored is that the Council of Europe might assist some countries in the identification of potential international experts for national verification processes.*
- *The format of the Scottish and Irish reports can act as exemplars for the formats of the reports of other countries.*
- *there is a need for two outcomes from each self-certification process:*
  - *The first is the detailed verification document analysing in detail all issues and addressing each of the criteria and procedures*
  - *The second is a simple summary of the outcomes for communication to the general public*
- *all future alignment processes should take note of any alignment that has been completed.*

Criteria (Note the working group made no recommendations regarding criteria 3, 4, 6 or 7) :

- **Criterion 1 – The national framework for higher education qualifications and the body or bodies responsible for its development are designated by the national ministry with responsibility for higher education.**
  - *that while there were not any particular issues arising for Ireland and Scotland in relation to the designation of the body with responsibility for the Framework in each country, this could be an issue for other countries. For such countries, the national actors who initiate Framework development may not be the same as the body ultimately responsible for the Framework. This is a natural development and does not undermine the ultimate legitimacy of the Framework which will eventually need to be adopted in a formal way in each country.*

- **Criterion 2 – There is a clear and demonstrable link between the qualifications in the national framework and the cycle qualification descriptors of the European framework**
  - *that the work of the ENIC and NARIC networks in examining issues relating to the concept of substantial difference be informed of issues arising in the verification process and that consideration be given to the development of formal linkages to this work.*
  - *that in making report all countries should seek to address progression issues.*
  - *that there will be issues for many countries in terms of having more than one level in a National Framework relating to a Bologna cycle and of having intermediate qualifications and levels and that the approaches undertaken in the Scottish and Irish Reports, in terms of identifying these can act as examples for other countries which have intermediate qualifications/ levels.*
  - *The Working Group recommends that countries should identify intermediate qualifications in their verification processes and examine the possibility of aligning any first cycle intermediate qualifications with the Joint Quality Initiative's descriptor for the higher education short cycle.*
  - *The concept of 'best fit' is a crucial one. It is not expected, nor is it desirable, that there will be an exact match between descriptors of different frameworks, which will have different purposes and contexts. The pilots showed that many qualifications will have elements which fit to a higher or lower level of the framework than the level at which the qualification as a whole is placed. The purpose of frameworks is to help understand both similarities and differences between different qualifications which do not have exact matches or equivalences.*
  - *there is a need to ensure that national verification reports address the issue of labour market relevance of first cycle completion.*
  - *The working group notes that it has been very difficult for Scotland and Ireland to address such recognition issues [i.e., recognition by higher education institutions in other countries of Scottish and Irish qualifications and of other country qualifications by Irish and Scottish institutions] given the state-of-play in the implementation of the national frameworks incorporating the Bologna cycles. Nevertheless, the Group considers that given that this is one of the key aims of the Bologna Framework, it is important that all countries endeavour to seek appropriate information in this regard as part of their verification work. The Group considers that this is an area where the ENIC and NARIC networks can be of assistance.*
  - *that all countries should provide for the review of the verification of the alignment of their National Framework to the Bologna Framework where there have been any major amendments to their National Framework.*
  - *that it is important that legacy awards (awards that will no longer be made but which are important as there will continue to be many holders of such awards) are included in, or related to, National Frameworks as they are being developed and implemented and that these are taken into account in the verification of the alignment with the Bologna Framework.*
  
- **Criterion 5 – The national quality assurance systems for higher education refer to the national framework of qualifications and are consistent with the Berlin Communiqué and any subsequent communiqué agreed by ministers in the Bologna Process**
  - *that in the implementation of the verification process countries should demonstrate that their national systems – at institutional and agency level – are deliberately seeking to implement the Standards and Guidelines for Quality Assurance in the European Higher Education Area and that the state-of-play in relation to reviews in line with the Standards and Guidelines should be set out while at this time such review need not to been undertaken. The working group notes that it is the intention of many countries to implement the standards and guidelines within the next four years and considers that any verification report should be added to and the Council of Europe notified where a review in line with the Standards and Guidelines has been completed. Additionally, the Working Group recommends that for any self-certification process underway after 2010, it should be a requirement that agency reviews in line with the standards and guidelines are completed in a satisfactory way prior to the completion of any self-certification process.*

## Appendix 5

### Bibliography

Working Group on Qualifications Frameworks Report, 2005 [http://www.bologna-bergen2005.no/Docs/00-Main\\_doc/050218\\_QF\\_EHEA.pdf](http://www.bologna-bergen2005.no/Docs/00-Main_doc/050218_QF_EHEA.pdf)

Qualifications Frameworks Working Group Report, 2007  
<http://www.dfes.gov.uk/londonbologna/uploads/documents/WGQF-report-final2.pdf>

# Appendix 3

## Comparisons Bologna – Swedish qualification descriptors

### Comparisons between Bologna Dublin Descriptors and the Swedish qualification descriptors in the Higher Education Ordinance

#### General qualification

<b>Grundnivå First cycle</b>	<b>Högskoleexamen, 120 hp Higher Education Diploma</b>
<ul style="list-style-type: none"> <li>• <b>have demonstrated knowledge and understanding in a field of study</b> that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study;</li> </ul>	<p><b>demonstrate knowledge and understanding in the principal area (main field of study)</b> of the study programme, including awareness of the disciplinary foundation of the field and knowledge of some applicable methodologies in the field.</p>
<ul style="list-style-type: none"> <li>• <b>can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation</b>, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study;</li> </ul>	<p><b>demonstrate the skills required to work autonomously with specific tasks in the main field of study.</b></p>
<ul style="list-style-type: none"> <li>• <b>have the ability to gather and interpret relevant data (usually within their field of study)</b> to inform judgements that include reflection on relevant social, scientific or ethical issues;</li> </ul>	<p><b>demonstrate the ability to search for, gather and critically interpret the relevant information</b> in order to formulate answers to well defined issues in the main field of study</p>
<ul style="list-style-type: none"> <li>• <b>can communicate information</b>, ideas, problems and solutions to both specialist and non-specialist audiences;</li> </ul>	<p><b>demonstrate the ability to present and discuss his or her knowledge with different audiences</b>, and</p>
<ul style="list-style-type: none"> <li>• have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.</li> </ul>	
<b>Grundnivå First cycle</b>	<b>Kandidatexamen, 180 hp Bachelor of Arts/Science</b>
<ul style="list-style-type: none"> <li>• <b>have demonstrated knowledge and understanding in a field of study</b> that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, <b>includes some aspects that will be informed by knowledge of the forefront of their field of study;</b></li> </ul>	<p><b>demonstrate knowledge and understanding in the main field of study</b>, including knowledge of the disciplinary foundation of the field, understanding of applicable methodologies in the field, specialised study in some aspect of the field <b>as well as awareness of current research issues.</b></p>
<ul style="list-style-type: none"> <li>• <b>can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation</b>, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study;</li> </ul>	<p><b>demonstrate the ability to identify, formulate and solve problems</b> autonomously and to complete tasks within predetermined time frames demonstrate the skills required to work autonomously in the main field of study.</p>
<ul style="list-style-type: none"> <li>• <b>have the ability to gather and interpret relevant data (usually within their field of study) to inform judgements that include reflection on relevant social, scientific or ethical issues;</b></li> </ul>	<p><b>demonstrate the ability to search for, gather, evaluate and critically interpret the relevant information</b> for a formulated problem and also discuss phenomena, issues and situations critically</p> <p><b>demonstrate the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues</b></p> <p>demonstrate insight into the role of knowledge in society and the responsibility of the individual for how it is used, and</p>

<b>Grundnivå</b> <b>First cycle</b>	<b>Kandidatexamen, 180 hp</b> <b>Bachelor of Arts/Science</b>
<ul style="list-style-type: none"> <li>• can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences;</li> </ul>	<p>demonstrate the ability to present and discuss information, problems and solutions in speech and writing and in dialogue with different audiences, and</p>
<ul style="list-style-type: none"> <li>• have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.</li> </ul>	<p>demonstrate the ability to identify the need for further knowledge and ongoing learning.</p>
<b>Avancerad nivå</b> <b>Second cycle</b>	<b>Magisterexamen, 60 hp</b> <b>(Master of Arts)</b>
<ul style="list-style-type: none"> <li>• have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context;</li> </ul>	<p>demonstrate knowledge and understanding in the main field of study, including both an overview of the field and specialised knowledge in certain areas of the field as well as insight into current research and development work, and demonstrate specialised methodological knowledge in the main field of study.</p>
<ul style="list-style-type: none"> <li>• can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study;</li> </ul>	<p>demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used,  demonstrate the ability to identify and formulate issues autonomously as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames</p>
<ul style="list-style-type: none"> <li>• have the ability to integrate knowledge and handle complexity, and formulate judgements with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgements;</li> </ul>	<p>demonstrate the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues and also to demonstrate awareness of ethical aspects of research and development work  demonstrate the ability to integrate knowledge and analyse, assess and deal with complex phenomena, issues and situations even with limited information  demonstrate the skills required for participation in research and development work or employment in some other qualified capacity.</p>
<ul style="list-style-type: none"> <li>• can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously;</li> <li>• have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous.</li> </ul>	<p>demonstrate the ability in speech and writing to report clearly and discuss his or her conclusions and the knowledge and arguments on which they are based in dialogue with different audiences, and  demonstrate the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning.</p>
<b>Avancerad nivå</b> <b>Second cycle</b>	<b>Masterexamen, 120 hp</b> <b>Master of Arts/Science</b>
<ul style="list-style-type: none"> <li>• have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context;</li> </ul>	<p>demonstrate knowledge and understanding in the main field of study, including both broad knowledge of the field and a considerable degree of specialised knowledge in certain areas of the field as well as insight into current research and development work,  and demonstrate specialised methodological knowledge in the main field of study.</p>



<b>Avancerad nivå</b> <b>Second cycle</b>	<b>Masterexamen, 120 hp</b> <b>Master of Arts/Science</b>
<ul style="list-style-type: none"> <li>• can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study;</li> </ul>	<p><b>demonstrate the ability to critically and systematically integrate knowledge and analyse, assess and deal with complex phenomena, issues and situations</b> even with limited information</p> <p>demonstrate the ability to identify and formulate issues critically, autonomously and creatively as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames and so contribute to the formation of knowledge as well as the ability to evaluate this work</p> <p>demonstrate the skills required for participation in research and development work or autonomous employment in some other qualified capacity.</p>
<ul style="list-style-type: none"> <li>• have the ability to integrate knowledge and handle complexity, and formulate judgements with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgements;</li> </ul>	<p><b>demonstrate the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues and also to demonstrate awareness of ethical aspects of research and development work</b></p> <p>demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and</p>
<ul style="list-style-type: none"> <li>• can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously; have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous.</li> </ul>	<p><b>demonstrate the ability in speech and writing both nationally and internationally to report clearly and discuss his or her conclusions and the knowledge and arguments on which they are based in dialogue with different audiences,</b> and</p> <p>demonstrate the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning.</p>
<b>Forskarnivå</b> <b>Third cycle</b>	<b>Licentiatexamen, 120 hp</b> <b>(Licentiate)</b>
<ul style="list-style-type: none"> <li>• have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field;</li> </ul>	<p><b>demonstrate knowledge and understanding in the field of research including current specialist knowledge in a limited area of this field</b> as well as specialised knowledge of research methodology in general and the methods of the specific field of research in particular.</p>
<ul style="list-style-type: none"> <li>• have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity;</li> </ul>	<p><b>demonstrate the ability to identify and formulate issues with scholarly precision critically,</b> autonomously and creatively, and to plan and use appropriate methods to undertake a limited piece of research and other qualified tasks within predetermined time frames in order to contribute to the formation of knowledge as well as to evaluate this work</p> <p><b>demonstrate the ability to make assessments of ethical aspects</b> of his or her own research</p>
<ul style="list-style-type: none"> <li>• have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication;</li> </ul>	
<ul style="list-style-type: none"> <li>• are capable of critical analysis, evaluation and synthesis of new and complex ideas;</li> </ul>	<p><b>demonstrate the skills required to participate autonomously in research and development work and to work autonomously in some other qualified capacity.</b></p>
<ul style="list-style-type: none"> <li>• can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise;</li> </ul>	<p><b>demonstrate the ability in both national and international contexts to present and discuss research and research findings in speech and writing and in dialogue with the academic community and society in general, and</b></p>

<b>Forskarnivå Third cycle</b>	<b>Licentiatexamen, 120 hp (Licentiate)</b>
<ul style="list-style-type: none"> <li>• can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society.</li> </ul>	<p>demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and demonstrate the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning.</p>
<b>Forskarnivå Third cycle</b>	<b>Doktorsexamen, 240 hp Doctor of Philosophy (PhD)</b>
<ul style="list-style-type: none"> <li>• have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field;</li> </ul>	<p>demonstrate broad knowledge and systematic understanding of the research field as well as advanced and up-to-date specialised knowledge in a limited area of this field, and demonstrate familiarity with research methodology in general and the methods of the specific field of research in particular. demonstrate the ability to identify the need for further knowledge and</p>
<ul style="list-style-type: none"> <li>• have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity;</li> </ul>	<p>demonstrate the ability to identify and formulate issues with scholarly precision critically, autonomously and creatively, and to plan and use appropriate methods to undertake research and other qualified tasks within predetermined time frames and to review and evaluate such work demonstrate intellectual autonomy and disciplinary rectitude as well as the ability to make assessments of research ethics, and demonstrate specialised insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used.</p>
<ul style="list-style-type: none"> <li>• have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication;</li> </ul>	<p>demonstrate through a dissertation the ability to make a significant contribution to the formation of knowledge through his or her own research</p>
<ul style="list-style-type: none"> <li>• are capable of critical analysis, evaluation and synthesis of new and complex ideas;</li> </ul>	<p>demonstrate the capacity for scholarly analysis and synthesis as well to review and assess new and complex phenomena, issues and situations autonomously and critically</p>
<ul style="list-style-type: none"> <li>• can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise;</li> </ul>	<p>demonstrate the ability in both national and international contexts to present and discuss research and research findings authoritatively in speech and writing and in dialogue with the academic community and society in general</p>
<ul style="list-style-type: none"> <li>• can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society.</li> </ul>	<p>demonstrate the capacity to contribute to social development and support the learning of others both through research and education and in some other qualified professional capacity.</p>

## YRKESEXAMINA

<b>Grundnivå First cycle</b>	<b>Sjuksköterskeexamen, 180 hp Bachelor of Science in Nursing</b>
<ul style="list-style-type: none"> <li>• have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study;</li> </ul>	<p>demonstrate knowledge of the disciplinary foundation of the field and awareness of current research and development work as well as the links between research and proven experience and the significance of these links for professional practice demonstrate knowledge of the planning, management and coordination of health care measures demonstrate knowledge of social circumstances that affect the health of children, women and men, and demonstrate knowledge of the relevant statutory provisions.</p>

Grundnivå First cycle	Sjuksköterskeexamen, 180 hp Bachelor of Science in Nursing
<ul style="list-style-type: none"> <li>• can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study;</li> </ul>	<p>demonstrate the ability to identify health care needs, draw up care plans and provide care and treatment autonomously and in cooperation with patients and those close to them</p> <p>demonstrate the ability to manage pharmaceuticals appropriately and also to inform patients of the effects and side effects of pharmaceuticals</p> <p>demonstrate the ability to identify the need of measures to promote health and prevent ill-health and implement them</p> <p>demonstrate the ability to initiate methodological improvements and quality assurance</p> <p>demonstrate the ability to apply his or her knowledge to deal with different situations, phenomena and issues on the basis of the needs of individuals and groups</p> <p>demonstrate the capacity for teamwork and cooperation with other professional categories, and demonstrate the ability to review, assess and use relevant information critically and to discuss new data, phenomena and issues with various audiences and so contribute to the development of the profession and professional practice.</p>
<ul style="list-style-type: none"> <li>• have the ability to gather and interpret relevant data (usually within their field of study) to inform judgements that include reflection on relevant social, scientific or ethical issues;</li> </ul>	<p>demonstrate self-awareness and the capacity for empathy</p> <p>demonstrate the ability to assess interventions using a holistic approach to individuals informed by the relevant disciplinary, social and ethical aspects and taking particular account of human rights</p> <p>demonstrate the ability to adopt a professional approach to clients or patients and those close to them, and</p>
<ul style="list-style-type: none"> <li>• can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences;</li> </ul>	<p>demonstrate the ability to inform and instruct different audiences and also to undertake supervisory duties</p> <p>demonstrate the ability to present and discuss in speech and writing interventions and treatment outcomes with those concerned and to document them in accordance with the relevant statutory provisions</p>
<ul style="list-style-type: none"> <li>• have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.</li> </ul>	<p>demonstrate the ability to identify the need for further knowledge and undertake ongoing development of his or her skills</p>
Avancerad nivå Second cycle	Läkarexamen, 330 hp Master of Science in Medicine
<ul style="list-style-type: none"> <li>• have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context;</li> </ul>	<p>demonstrate knowledge of the disciplinary foundation of the field and insight into current research and development work as well as the links between research and proven experience and the significance of these links for professional practice</p> <p>demonstrate both broad and specialised knowledge in the field of medicine and knowledge and understanding of the social circumstances that affect the health of individuals and groups, children as well as women and men</p> <p>demonstrate economic and organisational knowledge of significance for the health care services, and</p> <p>demonstrate knowledge of the relevant statutory provisions.</p>

<p><b>Avancerad nivå</b> <b>Second cycle</b></p>	<p><b>Läkarexamen, 330 hp</b> <b>Master of Science in Medicine</b></p>
<p>• <b>can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study;</b></p>	<p>demonstrate specialised skills in diagnosing the most frequent illnesses autonomously and in treating them in collaboration with the patients demonstrate the ability to initiate and undertake health promotion and preventive measures in the health care services for both individuals and groups of patients demonstrate the ability to integrate and apply knowledge critically and systematically and also to analyse and assess complex phenomena, issues and situations demonstrate specialised skills in informing and instructing various audiences and also in undertaking supervisory tasks demonstrate the capacity for teamwork and cooperation with other professional categories in both the health care services and the health and social services demonstrate specialised skills in initiating, participating in and undertaking improvement measures and also in evaluating medical treatment.</p>
<p>• <b>have the ability to integrate knowledge and handle complexity, and formulate judgements with incomplete or limited information, but that include reflecting on social and ethical responsibilities</b> linked to the application of their knowledge and judgements;</p>	<p>demonstrate self-awareness and the capacity for empathy <b>demonstrate the ability to adopt a holistic view of patients informed by a disciplinary and humanistic approach with special consideration of human rights</b> <b>demonstrate the ability to adopt an ethical and professional approach to patients and those close to them,</b> and demonstrate the ability to identify the need for further knowledge</p>
<p>• <b>can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously;</b> have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous.</p>	<p><b>demonstrate the ability to account in speech and writing for interventions and treatment outcomes with those concerned</b> and to document them in accordance with the relevant statutory provisions <b>demonstrate specialised skills in discussing new data, phenomena and issues in the field of medicine with various audiences</b> on a disciplinary basis and also to review, assess and use relevant information critically undertake ongoing development of his or her skills.</p>
<p><b>Avancerad nivå</b> <b>Second cycle</b></p>	<p><b>Civilekonomexamen, 240 hp (Master of Science in Business and Economics)</b></p>
<p>• <b>have demonstrated knowledge</b> and understanding that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or <b>applying ideas, often within a research context;</b></p>	<p><b>demonstrate knowledge</b> of the disciplinary foundation of and proven experience in his or her chosen field of business and economics as well as <b>insight into current research and development work</b> demonstrate both broad knowledge of the field of business and economics as well as a considerable degree of specialised knowledge in certain areas in his or her chosen field of business and economics demonstrate specialised knowledge of theories and methodology in his or her chosen field of business and economics, and demonstrate knowledge of relevant national and international regulatory systems in his or her chosen field of business and economics.</p>
<p>• <b>can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments</b> within broader (or multidisciplinary) contexts related to their field of study;</p>	<p><b>demonstrate the ability to integrate knowledge and also to analyse, assess and deal with complex phenomena, issues and situations</b> demonstrate the ability to identify and formulate issues in business and economics autonomously as well as to plan and use appropriate methods to undertake advanced tasks within predetermined time frames demonstrate the skills required for participation in research and development work or employment in some other qualified capacity.</p>

<p><b>Avancerad nivå</b> <b>Second cycle</b></p>	<p><b>Civilekonomexamen, 240 hp (Master of Science in Business and Economics)</b></p>
<ul style="list-style-type: none"> <li>• <b>have the ability to integrate knowledge and handle complexity</b>, and formulate judgements with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgements;</li> </ul>	<p><b>demonstrate the ability in his or her chosen field of business and economics to make assessments informed by relevant disciplinary and social considerations</b> such as human rights and ethical issues as well as awareness of ethical aspects of research and development work demonstrate insight into the significance of leadership and the exercise of leadership, and demonstrate the ability to identify the need for further knowledge and undertake ongoing development of his or her skills.</p>
<ul style="list-style-type: none"> <li>• <b>can communicate their conclusions</b>, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously; have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous.</li> </ul>	<p><b>demonstrate the ability to present his or her conclusions in speech and writing</b> to different audiences in both national and international contexts, and</p>
<p><b>Avancerad nivå</b> <b>Second cycle</b></p>	<p><b>Civilingenjörsexamen, 300 h</b> <b>Master of Science in Engineering</b></p>
<ul style="list-style-type: none"> <li>• <b>have demonstrated knowledge and understanding</b> that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context;</li> </ul>	<p><b>demonstrate knowledge of the disciplinary foundation</b> of and proven experience in his or her chosen field of technology as well as insight into current research and development work, and demonstrate both broad knowledge of his or her chosen field of technology, including knowledge of mathematics and the natural sciences, as well as a considerable degree of specialised knowledge in certain areas of the field.</p>
<ul style="list-style-type: none"> <li>• <b>can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study;</b></li> </ul>	<p><b>demonstrate the ability to identify, formulate and deal with complex issues autonomously and critically and with a holistic approach and also to participate in research and development work and so contribute to the formation of knowledge</b> demonstrate the ability to create, analyse and critically evaluate various technological solutions demonstrate the ability to plan and use appropriate methods to undertake advanced tasks within predetermined parameters demonstrate the ability to integrate knowledge critically and systematically as well as the ability to model, simulate, predict and evaluate sequences of events even with limited information demonstrate the ability to develop and design products, processes and systems while taking into account the circumstances and needs of individuals and the targets for economically, socially and ecologically sustainable development set by the community demonstrate the capacity for teamwork and collaboration with various constellations,</p>
<ul style="list-style-type: none"> <li>• <b>have the ability to integrate knowledge and handle complexity, and formulate judgements with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgements;</b></li> </ul>	<p><b>demonstrate the ability to make assessments informed by relevant disciplinary, social and ethical aspects as well as awareness of ethical aspects of research and development work</b> <b>demonstrate insight into the possibilities and limitations of technology, its role in society and the responsibility of the individual for how it is used, including both social and economic aspects and also environmental and occupational health and safety considerations, and</b></p>
<ul style="list-style-type: none"> <li>• <b>can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously;</b> have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous.</li> </ul>	<p><b>demonstrate the ability to present his or her conclusions and the knowledge and arguments on which they are based in speech and writing to different audiences in both national and international contexts.</b> demonstrate the ability to identify the need for further knowledge and undertake ongoing development of his or her skills.</p>

The Swedish National Agency for Higher Education is an authority that deals with issues concerning Swedish universities and other institutions of higher education. The Agency's tasks involve quality reviews, the supervision, monitoring and development of higher education, producing reports and analyses, evaluation of foreign qualifications and the provision of information for students.

More information on our website [www.hsv.se](http://www.hsv.se).