Programme syllabus

Master's Programme, Economics of Innovation and Growth, 120 credits
Masterprogram, innovations- och tillväxtekonomi
120.0 credits

Valid for students admitted to the education from autumn 12 (HT - Autumn term; VT - Spring term).

This is a translation of the Swedish, legally binding, programme syllabus.

Programme objectives

Beyond the goals that are specified in the Higher Degree Ordinance, there are also specific goals for this programme.

A graduate from the programme will:

Knowledge and understanding

- Demonstrate extensive deep knowledge and understanding in the area of economics and its scientific base as a compliment to and an extension of the knowledge within innovation and entrepreneurship
- Demonstrate an understanding of research and development within the areas of economics, innovation and entrepreneurship
- Display deep knowledge of the economical process in which innovation is a driving factor behind value adding, economical welfare and growth at the company, region as well as national level
- Show in depth knowledge of methods and scientific tools to analyse and evaluate the point of intersection between technology, entrepreneurship, innovation and growth

Skills and abilities

- Display the ability to through a comprehensive view and through different perspectives be able to in a constructive manner identify, formulate and creatively reflect upon questions regarding the entire process from idea to economical commercialisation.
- Display the ability to critically and systematically integrate knowledge in economics and show the ability to model, simulate, predict and evaluate cases even with limited information.
- Show readiness to conduct research and innovative work in order to contribute to knowledge development.
- Demonstrate ability to both orally and in written form present and discuss your point of view and conclusions and the knowledge and reasons behind these.
- Display the ability to make assessments regarding relevant scientific, societal and ethical aspects as well as show awareness of ethical aspects of research and innovation within Economics.

Ability to make judgements and adopt a standpoint

- Demonstrate understanding of the opportunities and limitations within Economics, its role in society and peoples responsibility for its use, including social and economic aspects.
- Display the ability to identify the need for further knowledge and take the responsibility for continuously upgrading their knowledge and skills.
**Extent and content of the programme**

The programme comprises 120 higher education credits which correspond to two years of full-time study. The programme is primarily in the second cycle.

The language of instruction in the programme is English.

**Eligibility and selection**

The basic requirement to be admitted to a master program is having completed a Bachelor’s degree (or the equivalent), of at least 180 higher education credits or the corresponding academic qualification from an internationally recognized university.

*Special requirement:*

The special requirements may be judged as not fulfilled if:

1. The average grade is in the lower third of the grading scale (above level for pass)
2. Those universities that have issued the degree certificates are not seen as meeting the requirements for acceptable quality by the authorities in the country where the institution is situated.
3. The degree does not qualify you for studies at the equivalent of master level studies in the country in which the degree was issued.

According to the special requirements for the master program in Economics of Innovation and Growth the bachelor degree should be within Economics, mathematics, statistics or technology and consist of at least 30 higher education credits (or the equivalent) in economics and / or mathematics and / or statistics. The students must have good knowledge of English, corresponding at least to studies at post-16 level (gymnasierevå), the equivalent to English B in Sweden. The corresponding knowledge in English can be confirmed through one of the internationally recognised tests, for example:

- IELTS (an overall grade of 6,5 and no section below 5,5)
- TOEFL

The selection process for the master programme is based on an overall evaluation of the following criteria: the university, GPA, and courses related to the programme (economics, mathematics, statistics).

**Implementation of the education**

**Structure of the education**

**Structure of the programme**

The program starts with a package of compulsory and elective courses which will give basic skills/tools to study innovation economics and to realise a research project. The knowledge that has been acquired during the initial set of courses will then lay the ground for the degree project (30 higher education credits).

**Courses**

The programme is course-based. Lists of courses are included in [appendix 1].

**Grading system**

Courses in the first and the second cycle are graded on a scale from A to F. A-E are passing grades, A is the highest grade. The grades pass (P) and fail (F) are used for courses under certain circumstances.

**Conditions for participation in the programme**

*Term Enrolment and Course Application*
A prerequisite to be allowed to participate in the studies is that the student verifies enrolment for courses the coming term every spring and fall. This is done via www.antagning.se between the 1st and 15th of November and the 1st and 15th of May.

By verifying his/her enrolment, the student has submitted his/her intention to continue studying and participating in the programme. After that it is possible for the student to:

- registered for courses
- have results reported
- have the possibility to receive financial support from CSN

**Conditions for participation in the programme**

**For studies in year 2:**

At least 45 higher education credits must be completed from study year 1 by the end of the examination period in August. Students who have not fulfilled this requirement must, in collaboration with a study adviser, create an individual study plan. The main intent with the individual study plan is that the student will complete the remaining elements during the next coming study year. In the study plan, the remaining elements should be included as well as suitable courses from the next study year. Special consideration should be given to the courses’ prerequisites.

**Recognition of previous academic studies**

The student has the possibility to apply for recognition of previous academic studies from course(s) from another university or higher education institution, national or international.

KTH’s entire policy for recognition of previous academic studies can be found in KTH’s guidelines www.kth.se

**Studies abroad**

Possibility for studies abroad is given, preferably in relation to the degree project.

**Degree project**

KTH’s rules for the degree project can be found in KTH’s guidelines. Generally, it is required that a main portion of the studies must be completed before starting the degree project.

**Degree**

In order to earn the Degree of Master of Science (Two Years), passing grades in all courses which are included in the student’s study plan are required. The study plan must comprise 120 higher education credits which include a degree project consisting of 30 higher education credits, in the second cycle.

KTH’s local degree ordinance can be found at http://intra.kth.se/regelverk/

Appendix 1 - Course list
Appendix 2 - Programme syllabus descriptions
# Appendix 1: Course list

Master's Programme, Economics of Innovation and Growth, 120 credits (TEINM), Programme syllabus for studies starting in autumn 2012

## General courses

### Year 1

#### Mandatory courses (37.5 credits)

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH2001</td>
<td>Microeconomics</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AH2002</td>
<td>Econometrics</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AH2003</td>
<td>Macroeconomics</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AH2004</td>
<td>Industrial Dynamics</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AH2011</td>
<td>Economics of Innovation</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
</tbody>
</table>

#### Conditionally elective courses

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH2006</td>
<td>Economic Geography</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AH2007</td>
<td>International Economics</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AH2008</td>
<td>Public Economics</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AH2009</td>
<td>Mathematics for Economic Analysis</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AH2015</td>
<td>Managerial Economics</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AH2020</td>
<td>Macroeconomics for Business</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
</tbody>
</table>

#### Supplementary information

At least 3 of the conditionally elective courses must be taken.
### Year 2

**Mandatory courses (37.5 credits)**

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH200X</td>
<td>Degree Project in the Economics of Innovation and Growth, Second Cycle</td>
<td>30.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AH2014</td>
<td>Theory and Methodology of Science</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
</tbody>
</table>

**Conditionally elective courses**

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH2010</td>
<td>Econometrics II</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AH2018</td>
<td>Management and Strategy</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AH2019</td>
<td>Innovation and Entrepreneurship</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
</tbody>
</table>

*A minimum of 3 conditionally elective courses must be taken.*

**Supplementary information**

A minimum of 3 conditionally elective courses must be taken.
Appendix 2: Specialisations

Master's Programme, Economics of Innovation and Growth, 120 credits (TEINM), Programme syllabus for studies starting in autumn 2012

This programme has no specialisations.