



School of Business,  
Economics and Law  
UNIVERSITY OF GOTHENBURG

**Programme Syllabus**  
for  
**Master of Science in Economics**

120 credits (ECTS)

*Second Cycle*

### **1. Decision and Guidelines**

The study programme for the Master of Science in Economics, 120 Higher Education Credits (equals 120 ECTS), was established by the Faculty Board of the School of Business, Economics and Law on November 14, 2006 and last revised on November 27, 2007. The programme syllabus applies as from autumn term of 2007.

### **2. General Objectives**

Second cycle education shall according to the Swedish Higher Education Act (HEA) build on knowledge that students acquire in first cycle education or corresponding knowledge (see Appendix 1, HEA, ch. 1:9) The general objectives for a Degree of Master (Two Years) are stated in Appendix 2, the Higher Education Ordinance (see Appendix 1).

The overall learning objectives are to develop students'

1. ability to make independent and critical assessments,
2. ability to identify and solve problems,
3. students' skills in searching and evaluating scientific information in economics,
4. skills in exchanging information with people without any specific knowledge in the field of economics,
5. skills in integrating and using the knowledge obtained from the programme
6. skills in understanding and analysing complex problems,
7. necessary qualifications for a professional career in economics or continued studies in a PhD programme in economics.

### **3. Programme Specific Objectives (learning outcomes)**

After successfully completing the programme the student should be able to

1. apply insights from economic theory in order to understand observed behaviour and policies. Moreover, they should understand the theories sufficiently well in order to understand their limitations. More specifically, they should be able to:
  - a. Analyze consumer and firm behaviour at various institutions such as the market and the household.
  - b. Become an expert in one substantive area of economics, such as industrial or development economics as described further below.

2. apply econometric and statistical techniques appropriate for decision making in business and government. More specifically, they should be able to:
  - a. Identify, assess and gather the necessary information.
  - b. Employ relevant quantitative methods and interpret the results.
  - c. Understand what we can learn from the results, as well as understand what we cannot learn, i.e. the limitations of the analysis.
3. effectively communicate the results of their economic analysis. More specifically, they should be able to:
  - a. Write clear, concise and well-disposed reports, including the presentation of quantitative analyses.
  - b. Present the results orally in a clear and convincing way.
  - c. Participate constructively in discussions.

#### 4. Organisation

The programme is managed by a programme coordinator in cooperation with a programme committee appointed by the Faculty Board.

#### 5. Programme Disposition and Content

##### Year 1

Period	Environmental economics	Health economics	Industrial economics	Public economics	Development economics	Historical economics
Autumn Term Period 1	Mathematics Advanced Microeconomics					
Autumn Term Period 2	Econometrics Advanced Macroeconomics					
Spring Term Period 3	Electives	Electives	Advanced Industrial Economics	Quality in Governance		
	Electives					
Spring Term Period 4	Electives	Health Economics	Law and Economics	Public Economics	Electives	Historical 1
	Electives					
	Electives					

Year 2

Period	Environmental economics	Health economics	Industrial economics	Public economics	Development economics	Historical economics
Autumn Term Period 1	Electives	Electives	Advanced Corporate finance	Electives	Advanced Development Economics	Historical 2
	Electives					
Autumn Term Period 2	Economic Policy	Economic Policy	Electives	Economic Policy	Electives	Historical 3
	Env. Econ. Int. Issues	Electives		Electives		Electives
Spring Term Period 3	Master Degree Project in Environmental Economics	Master Degree Project in Health Economics	Master Degree Project in Industrial Economics	Master Degree Project in Public Economics	Master Degree Project in Development Economics	
Spring Term Period 4						

The programme covers four academic terms of full-time study (120 ECTS credits) including three terms of courses (90 ECTS credits) and one term of thesis writing (Degree Project 30 ECTS credits). The programme comprises of core courses, including methods, elective courses and degree project. Core courses are specific for the programme and include courses in methods with the emphasis on quantitative and qualitative analysis. Elective courses can be selected from other master programmes or available second cycle courses either at Göteborg University or at one of our partner universities.

The faculty at the Department of Economics is recognized for their research and education on important policy areas such as the energy sector, the environment and developing countries. Training in Economics improves the analytical skill and logical reasoning and it also improves the understanding of how society works. These skills are useful in a wide variety of occupational fields, including general business, government, law, banking and insurance.

The programme has six different tracks. Each track contains a number of core courses aimed to provide the student with a deep understanding of the specific field. Moreover, there is also considerable individual freedom to choose courses in order to obtain a tailor-made and unique education within each track.

### *Environmental Economics*

Environmental economics is a subfield of economics concerned with environmental and natural resource issues, and its importance has increased rapidly within the last few decades. Topics in environmental economics consider consequences for society of environmental problems, how should society address environmental problems, technology adoption, and links between development and the environment. The environmental economics track emphasizes analytical and decision-making skills and provides graduates with many career alternatives in the private as well as in the public sector. The Environmental Economics Unit at the Department is the largest research unit in environmental economics within Sweden and one of the largest in Europe.

### *Health Economics*

Health economics is a branch of economics concerned with issues related to scarcity in the health markets. Topics related to various aspects of health economics include the meaning and measurement of health status, the production of health and health care, the demand for health and health services, health economic evaluation, health insurance, the analysis of health care markets, health care financing, and hospital economics. The programme offers strong analytical skills and is a qualification which furthers career opportunities in national and international health agencies and in the pharmaceutical industry.

### *Industrial Economics*

Industrial Economics includes entrepreneurship, the economics of innovation, the economics of pricing and decision making, the economics of organization, the economics of regulation, corporate restructuring, and economic policy making. The track seeks to acquaint the students with models of strategic interaction between firms in the marketplace, and students will be taught to independently recognize the relevant market structure and understand its implications for market performance.

### *Public Economics*

The goal of this track is to educate tomorrow's leaders who have skills in: (i) analyzing various policy issues in tax systems, social security systems, local public finance, and other areas of public policies, based on a deep understanding of public economics; and (ii) designing politically implementable public policies to improve the quality of our life under the resource constraint of our society.

### *Development Economics*

Development economics deals both with issues in developing countries and issues related to relationships between developing and developed countries. It includes topics such as international trade, fiscal and monetary policy, agricultural economics and policy, and aid policy. Development economists often work in international organizations, development agencies and NGOs.

### *Historical Economics*

Historical economics is an approach to the study of economic history that makes explicit use of economic theory and statistical methods. Economic behaviour takes place in specific historical and institutional settings. By studying historical economics the student's understanding of the relevance and limitations of economic models for the study of real world problems is enhanced. Typical themes are the advent and spread of industrialization and market integration, institutional change, and historical processes of global income divergence and convergence. The track is a suitable background for those interested in working as analysts in international, private and public organizations. The track is organized jointly with the department of Economic History.

With the exception of the first semester, there is no guarantee that all courses will be offered; this depends on the number of students interested in taking the different courses. The first semester is common for all tracks, and consists of four courses in mathematics, econometrics, microeconomics and macroeconomics. For each track there are two to four core (compulsory) courses (7.5 ECTS) in addition to the Degree Project. Students can choose elective courses from this programme, or from other programmes at Göteborg University. They can also choose core courses as electives to the extent that they are not core courses in their chosen track. Students must accumulate a total of 120 Higher Education Credits (equals 120 ECTS), of which at least 90 Higher Education Credits are courses in economics (including methodological courses such as mathematics and statistics and the thesis). For each track certain elective courses will be recommended. In particular this concerns courses given at other departments. It should also be mentioned that the programme is integrated with the Master of Science in Finance programme and the Masters of Science in Environmental Sciences at the School. Furthermore, the Public Economics track is suitable for integration with the Masters of Science in Marketing and Governance programme. Students in

finance at the department of Mathematics will also participate in parts of our programme.

Collaboration with other disciplines within School of Business, Economics and Law is planned for each track. For example, within the track *Environmental Economics*, students should take a course in Environmental Law at the Law Department. The details and exact timings of these collaborations are yet to be developed, however. We are also collaborating with the department of Political Science, where one joint course will be given: The quality of governance in a comparative perspective.

Furthermore, collaboration is planned with both the private and the public sector as well as with international organisations in order to identify topics of interest for the courses and the Degree Project. The purpose is to make sure that the students are appropriately prepared for a professional role outside the academia and also to help the students to establish valuable contacts. For example, within the track Health Economics, the company AstraZeneca will be invited to a discussion about topics of particular relevance to the pharmaceutical industry.

## 6. Tuition and Examination

The tuition is in English throughout the programme. Courses will include lectures, seminars and case studies. The students will also work together in small groups, according to educational principles such as problem-based learning, experiential learning and action learning. Group reports will be assessed and graded individually, as will individual term papers and individually written exams.

The courses will be examined separately. Each course is graded with Pass with Distinction (väl godkänd, VG), Pass (godkänd, G) or Fail (underkänd, U). Grades are translated with a set model where the grades correspond to the following intervals in the ECTS scale:

Pass with Distinction (väl godkänd, VG)	A-B
Pass (godkänd, G)	C-E
Fail (underkänd, U)	FX-F

A student has the right to be examined a maximum of five times for each course.

## **7. Admission Requirements and Selection Process**

### General Admission Requirements

The applicant must hold the minimum of a Bachelors degree (i.e. the equivalent of 180 ECTS credits at an accredited university). The applicant's university education must include a minimum of 90 ECTS credits in a major subject and a thesis, term paper or equivalent proof of proficiency in academic writing, a minimum of 15 ECTS credits in Statistics as well as the programme specific entrance requirements, or equal qualification as assessed by the Graduate School.

### English Proficiency Requirements

The applicant must prove English proficiency by one of the following:

- TOEFL IBT (internet based)
- TOEFL (computer based)
- TOEFL (paper based)
- IELTS

For information about required test results, please see admission information on Graduate School's webpage: [www.handels.gu.se/gs](http://www.handels.gu.se/gs)

This requirement does not apply to students with a Bachelors Degree, based upon at least 3 years of full-time studies, from an education with English as the only language of instruction (with the exception of applicants with a Bachelors Degree from Pakistan or Bangladesh), or to students having passed English level B at the Swedish Upper Secondary School.

### Programme Specific Entrance Requirements

The applicant's university education must include a minimum of 60 ECTS credits in Economics and 7.5 ECTS credits in Econometrics included in the general statistics requirement or in addition to this.

The admission requirements listed above apply for admission to the programme. For continued studies within the programme individual courses have specific requirements, as provided in each course outline.

### Selection Process

The selection process is based on the number of ECTS credit equivalents. The minimum number of credits required is 180 ECTS credits. Ranking of applicants is based on the interval up to and including 210 ECTS credits.

Should the situation arise that a group ties due to equal qualifications, selection is made according to the applicant's first choice of programme. If this process does not resolve the tie, a final selection is made by ballot.

### **8. Degree Certificate and Degree Title**

Upon completion (receiving a minimum grade of Pass) of all the courses and the degree project, and fulfilment of the requirements given above, students will receive a Degree of Master of Science (Two Years) in Economics with a certain specialization depending on the track followed:

- with specialization in Environmental Economics
- with specialization in Health Economics
- with specialization in Industrial Economics
- with specialization in Public Economics
- with specialization in Development Economics
- with specialization in Historical Economics

### **9. Programme Evaluation**

All courses in the programme will be anonymously evaluated by the students after completion. Electronic evaluations are available for each course and must be performed online through "Kursportalen". The results of the evaluation will be communicated to the students and will function as a guide for the development of the course and of the programme.