Programme-specific Curriculum for the MSc Programme in
Economics
at the Faculty of Social Sciences, University of Copenhagen

2015 (Rev. September 2020)

Department of Economics
University of Copenhagen
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1 Introduction
In addition to this Programme-specific Curriculum for the Master’s Programme in Economics there is a Curricula’s Common Part which applies to all bachelor- and master programmes at The Faculty of Social Sciences. The Curricula’s Common Part contains common rules that apply to all educations on the faculty. The Programme-specific Curriculum describes the academic elements of the Master’s Program in economics.

The curriculum is approved by the Dean of the Faculty of Social Sciences at the University of Copenhagen. This latest revision is approved in March 2020 and it takes effect on 1 September 2020.

2 Title and Affiliation
On successful completion of the Master’s Programme in Economics, graduates are entitled to use the title cand.polit or the optional title cand.oecon. In English: Master of Science (MSc) in Economics.

The programme is under the orders of the Board of Studies in Economics.

The Corps of External Examiners of the Economics Programme provides all external examiners for the programme.

3 Purpose and Competence Profile
3.1 Purpose
The Master’s Programme in Economics is an independent and complete research-based education. The programme is aimed at further developing the knowledge, skills and competences that students have acquired through their bachelor education.

The aim of the Master’s Programme is to:
1. Provide the students with the option to qualify and specialize in economic and econometric theory and methods and to learn from other social science disciplines.
2. Equip students with advanced academic knowledge, theoretical qualifications and methodological skills so that students are capable of independently identifying, formulating and solving advanced complex problems within the fields of economics and econometrics.
3. Equip students with the competences necessary to find employment in economic professions as well as qualify them for admission to PhD programme in economics.

3.2 Competence Profile
The aim of the research based Master’s Programme at University of Copenhagen is to offer students a solid and internationally recognized development of their competencies in economics, econometrics and the application of these in economics and business problems. The education offers students a large variety of freedom of choice, which allows them to specialize in advanced economics and econometrics. Moreover, there are options to choose to combine these with studies within other social science disciplines.
Students can further obtain a degree in economics with a specialization in finance.

The education has been constructed in order to further the ability of continuing, critical, and personal knowledge development. A number of advanced economic theory and methodological courses will bring students’ knowledge to a high level by international standards.

After having completed the programme, a Master in Economics should possess the following knowledge, skills and competences:

**Knowledge**

- Deep and comprehensive knowledge about advanced aspects of economic theory
- Knowledge of advanced statistical and econometric methods
- Deep and comprehensive knowledge about how economic theory and methods can be applied to contemporary economic problems
- Critical, flexible and independent reflection on advanced economic theory and methods

**Skills**

- Skills in using advanced economic theory within a wide range of fields, e.g. public economics, development economics, international economics, finance etc.
- Skills in acknowledging, structuring and solving economic problems in a constructive manner.
- Be able to independently construct, conduct and interpret own analyses using statistical and econometric methods.
- Independently be able to disseminate complex economic problems in writing and orally.
- Be able to take a critical view of economic theory and method in order to compare possible solutions.
- Communicate complex economic issues in a clear language

**Competences**

- Independently be able to discuss and interpret the assumptions and limitations of economic models in relation to varying issues.
- Independently be able to define and carry through complicated statistical and econometric analyses in complex and variable situations that might induce new approaches to solutions.
- Independently be able to formulate an analytical solution to an economic problem by combining advanced economic theory, data and statistical and econometric methods, competently be able to carry through analyses and explain and interpret the new analysis results.
- Independently be able to identify and acquire new research based knowledge on advanced economic theory and methods and master advanced economic theories and models
- Independently be able to initiate and carry through professional teamwork and claim academic responsibility.
3.3 Admission Requirements and Restrictions

Bachelors who have completed a bachelor's degree in economics at the University of Copenhagen have a legal right of admission to the Master's degree program if they apply for admission within three years. The 3-year period is calculated as from the first succeeding summer intake. This means that students who have completed their Bachelor's degree programme in the course of a Summer exam period must apply for admission to the degree programme within three years, while students who have completed their Bachelor's degree programme in the course of a Winter exam period must apply for admission to the degree programme within three and a half years.

Only students who have completed their qualifying Bachelor's degree on or after 1 January 2019 are covered by the provision on legal claim to admission. Students who have completed a Bachelor's degree before 1 January 2019 do not have legal claim to admission.

The programmes below directly qualifies graduates to the Master’s Programme in Economics at the University of Copenhagen.

- Bachelor of Science (BSc) in Economics at the University of Copenhagen
- Bachelor of Science (BSc) in Economics – the Socioeconomic Line at the University of Southern Denmark
- Bachelor of Science (BSc) in Economics at Aarhus University
- Bachelor of Science (BSc) in Mathematics-Economics at Aarhus University
- Bachelor of Science (BSc) in Mathematics-Economics at the University of Copenhagen

Admission depends on the minimum intake number.

Other applicants from universities in Denmark or abroad may be admitted based on a specific, individual, academic assessment provided that they are able to document knowledge, expertise and skills corresponding to the bachelor programme in Economics at the University of Copenhagen.

This assessment will be based on the following requirements:

- The programme must be on the same level as the Bachelor of Science (BSc) in Economics at the University of Copenhagen
- Microeconomics (a minimum of 15 ECTS corresponding to Microeconomics I+II at the Bachelor of Science (BSc) in Economics, UCPH)
- Macroeconomics (a minimum of 15 ECTS corresponding to Macroeconomics I+II at the Bachelor of Science (BSc) in Economics, UCPH)
- Econometrics/Statistics (a minimum of 15 ECTS corresponding to Probability Theory and Statistics + Econometrics I at the Bachelor of Science (BSc) in Economics, UCPH)
- Mathematics (a minimum of 10 ECTS on the same level as Mathematics A+B at the Bachelor of Science (BSc) in Economics, UCPH)
- Proficiency in English corresponding to at least English B-level with a weighted grade point average
of at least 3.0 not rounding up. The requirement may also be met by English on par with Danish A-level with a weighted grade point average of at least 2.0 not rounding up. Go to studies.ku.dk to find out how the Faculty assesses foreign upper secondary school leaving certificates. Non-Danish students enrolled at the master’s programme must document their English proficiency, if their native language is another language than English.

Applicants with admission qualifications equal to a professional bachelor's degree are not admitted.

3.4 Prioritisation of Applicants
If the number of qualified applicants to the programme exceeds the number of places available, applicants will be prioritised with emphasis on the following criteria:

- Grades from the qualifying bachelor’s degree
- Grades achieved for bachelor courses relevant to the MSc in Economics, i.e. microeconomics, macroeconomics and econometrics
- Statement of purpose for wanting to study Economics (maximum 1 page) covering your motivation for applying

The maximum intake number can be found on the website: https://studies.ku.dk/masters/economics/application-procedure/

Solely the applicant’s bachelor degree will be considered when the applicant’s academic qualifications is assessed. This means that it is not possible to complete supplementary courses in order to meet the specific admission requirements.

4 Content and Academic Profile

4.1 The Overall Content of the Education
The Master's program in Economics consists of courses and seminars corresponding to at least 90 ECTS incl. the master’s thesis. All courses and seminars offered by the Department of Economics at the University of Copenhagen are counted as constituting. When transferring credits from other institutions, the total of non-constituent courses (related courses) cannot exceed 30 ECTS (see section 4.3).

See section 6.1. for a full list of links to all master’s courses posted in the online course catalogue on www.kurser.ku.dk.
4.2 Overview of the Programme

The table below is an overview of the recommended order of course placement in the program. The courses can be taken in a different order, however, provided that the study activity requirement and the maximum study time are met, cf. the section on study activity requirements and study time in the Curricula’s Common Part:

<table>
<thead>
<tr>
<th>4. sem.</th>
<th>3. sem.</th>
<th>2. sem.</th>
<th>1. sem.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master’s Thesis</td>
<td>Elective courses</td>
<td>Elective courses</td>
<td>Elective course</td>
</tr>
<tr>
<td>30 ECTS</td>
<td>22,5 ECTS</td>
<td>22,5 ECTS</td>
<td>7,5 ECTS</td>
</tr>
<tr>
<td></td>
<td>Seminar</td>
<td>Seminar</td>
<td>Econometrics II</td>
</tr>
<tr>
<td></td>
<td>7,5 ECTS</td>
<td>7,5 ECTS</td>
<td>7,5 ECTS</td>
</tr>
<tr>
<td></td>
<td>Microeconomics III</td>
<td>Macroeconomics III</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7,5 ECTS</td>
<td>7,5 ECTS</td>
<td>Macroeconomics III</td>
</tr>
</tbody>
</table>

The compulsory courses Econometrics II, Microeconomics III and Macroeconomics III are placed in the first semester. Students, who already passed one or more of these courses as part of their admission qualifications, must take elective courses instead.

Econometrics II, Microeconomics III and Macroeconomics III are offered each semester. Most elective courses are offered either in the spring semester or in the fall semester.

Students are free to move seminars and elective courses around. A 30 ECTS mobility window may be placed on the second or third semester.

The thesis (30 ECTS) can be placed either in the 3rd or 4th semester, provided that the student has passed at least 60 ECTS. In unusual circumstances, the Board of Studies may grant exemptions from the placement of the fixed elements.

Elective courses in economics include courses offered by the Department of Economics, as well as courses in economic theory and methodology, econometrics, and mathematics offered at other programmes (see section 4.3. on credits). As part of the elective courses, students may take a maximum of 30 ECTS related courses, i.e. courses within the social sciences in its broadest sense. From the group of elective courses in economics, students may choose to write up to two co-curricular written assignments, each equal to 0.5–7.5 ECTS. See section 6.2.5 on co-curricular written assignments.

4.3 Specialization

Students at the Master’s Programme in Economics may choose one particular track of specialization, i.e. the finance track.

To complete the specialization in Finance, students must have taken at least 45 ECTS F-marked finance courses, completed at least one F-marked seminar, and written their thesis within the field of finance. On the diploma, the specialization in finance will appear on the list of completed courses that the student has completed.
4.4 Registration for Courses and Exams
Students are personally responsible for registering for all courses and exams in the Self Service in KUnet during the registration periods prior to each semester. However, the administration will register all students for the courses and exams in Econometrics II, Microeconomics III and Macroeconomics III on the first semester, provided that the students have not previously passed elements corresponding to these courses. The University expects all students to be full-time students registered for 30 ECTS each semester.

When registering for a course, the student will automatically be registered for the associated exam.

Registration for a course is binding when the late-registration period ends. This means that the course must be included in the student's study programme, and that it cannot be replaced by other courses.

If an elective course / seminar is discontinued, meaning that it will no longer be offered, the student is entitled to a third examination, possibly presented as a re-exam paper. See chapter 6.2.2.4

4.4.1 Allocation of Places on Elective Courses
If an elective course is fully booked during the course registration period, the allocation of places will be by lot. Students who have not been allocated a place on a given course will be contacted by the study administration.

4.4.2 Allocation of Places on Seminars
Students must choose three priorities to make sure they are allocated a place. Students who want to take two seminars must choose two first priorities, one second priority and one third priority.
If there are more students, who have registered for a seminar as their first priority, than there are places on the seminar, the allocation of places will be by lot. Students who do not get a place on their first priority will be allocated a place on their 2nd or 3rd priority, if they have stated such. Students who only choose a first priority and are not allocated a place will not be contacted by the study administration.

4.5 Credit
The Study Board can approve that the student, as part of the program, completes courses at another university or other higher education institution in Denmark or abroad. The student must apply for a pre-approval for these courses.

In order for a course to be transferred as a substitute for a specific course in the Master's program, the course applied for must cover at least 75% of the syllabus / content in the course at the Department of Economics, and no important subjects must be missing.

In order for a course to be passed as an elective without replacing a specific course in the master’s program, the applied course must be in the field of economic theory or method, econometrics, statistics, mathematics, programming, computer science or social science in a broader sense. The course should provide the student with economic skills. The Study Board may grant exemption if it is considered that an
applied course is relevant in relation to the student’s individual academic profile. Such a course will be credited as a related course (non-constituent course).

Students on the master’s degree programme in economics are entitled to transfer a maximum of 60 ECTS from courses from another educational institution in Denmark or abroad. 30 ECTS of these may be related courses. No more than one seminar can be transferred.

Exempt from this rule are students who transfer credits for course elements when transferring from another institution or study programme and credits from programmes already successfully completed. Read more about the rules and procedures for approval and transfer of credit in section 5.5 of the Curricula’s Common Part.

5 Exams

5.1 Assessment and Grading

The Examination Order (Eksamensbekendtgørelsen) stipulates that external examiners must evaluate at least one third of the ECTS of the master’s programme (i.e. 40 ECTS). This rule is satisfied by 100 % external assessment of the thesis (30 ECTS) as well as the two seminars (15 ECTS).

In addition, every semester eight courses with written ITX exams are selected to external co-examination of 20% of the exam papers. Courses with an oral exam have always an external co-examiner, if the course has only one teacher. Courses with take-home exams have never external co-examiner, unless very special circumstances apply.

Co-curricular written assignments corresponding to 5.5 ECTS or more are subject to external assessment. Details of the evaluation method of each course are described in section 6.1, and in the Course Catalogue at [www.kurser.ku.dk/](http://www.kurser.ku.dk/).

The Examination Order (Eksamensbekendtgørelsen) stipulates that at least two thirds of the ECTS of the master’s programme (i.e. 80 ECTS) must be assessed with grades. This requirement is satisfied, when the thesis (30 ECTS), Econometrics II (7.5 ECTS), Microeconomics III (7.5 ECTS) and Macroeconomics III (7.5 ECTS), two seminars (15 ECTS), as well as at least another 20 ECTS are assessed with grades. Students who passed Econometrics II, Microeconomics III and Macroeconomics III during their bachelor’s programme must replace these with graded elective courses offered by the Department of Economics.

The majority of courses offered by the Department of Economics are graded according to the 7-point grading scale. However, a small number of courses are assessed with Pass/Fail. When this is the case, it is noted in the course description.
5.2 Exam Language
The language of the exam is the same as the teaching language. This means that it is not possible to write exams in languages other than the teaching language. This also applies if the exam is changed from a written exam to an oral exam and if a re-exam is in an elective course or seminar is changed to a re-exam paper.
The Study Board may dispense from this rule in exceptional circumstances.

Students might sit a Danish examination in either Swedish or Norwegian after prior agreement with the course coordinator.

6 Course Catalogue
6.1 Outline of Programme Elements
Below is an overview of the programme elements.
The overview links to courses offered in autumn 20 and spring 21. Link will be updated annually.

(F) after the course title indicates that the course is part of the finance track.

A take-home exam is defined as a given set of assignment words that must be answered individually. Take-home exams are always with aids. During take-home exams, the student are not allowed to cooperate with others, including communicating with others about the assignment text or the form of the answer.

If students in some take-home examinations is allowed to enter into collaboration with fellow students, this will be stated in the course description.

A project exam is defined as an assignment where the student selects the topic of the assignment within the subject area. The student must prepare a project description that must be approved by the teacher. In principle, project assignments must work together. If not, it will appear in the course description.

For rules on cooperation / sparring in connection with individual answers, refer to the framework study scheme, section 4.12.1.

Courses and exams are quantified in terms of ECTS (the European Credit Transfer System), under which system 60 ECTS correspond to one year of full-time study. If a course is weighted at 7.5 ECTS, this will correspond to 1/8 of one year’s prescribed full-time study.
### Compulsory Courses:

<table>
<thead>
<tr>
<th>Course Title</th>
<th>ECTS Credits</th>
<th>Pre-requisite*</th>
<th>Exam</th>
<th>Assessment</th>
<th>External Assessment</th>
<th>Re-Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Econometrics II</td>
<td>7,5</td>
<td>Yes</td>
<td>Portfolio, 48 hours</td>
<td>Grade</td>
<td>No</td>
<td>Oral with preparation</td>
</tr>
<tr>
<td>Microeconomics III</td>
<td>7,5</td>
<td>Yes</td>
<td>2 hour closed-book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same but possibly oral exam</td>
</tr>
<tr>
<td>Macroeconomics III</td>
<td>7,5</td>
<td>Yes</td>
<td>3 hour closed book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same but possibly oral exam</td>
</tr>
</tbody>
</table>

### Elective Courses:

<table>
<thead>
<tr>
<th>Course Title</th>
<th>ECTS Credits</th>
<th>Pre-requisites*</th>
<th>Exam</th>
<th>Assessment</th>
<th>External assessment</th>
<th>Re-exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Development Economics (Micro Aspects)</td>
<td>7,5</td>
<td>Yes</td>
<td>Portfolio, 48 hour</td>
<td>Portfolio</td>
<td>No</td>
<td>Oral exam</td>
</tr>
<tr>
<td>Advanced Development Economics - Macro Aspects</td>
<td>7,5</td>
<td>No</td>
<td>12 hour take-home exam</td>
<td>Grade</td>
<td>No</td>
<td>Oral exam</td>
</tr>
<tr>
<td>Advanced Financial and Macro Econometrics (F)</td>
<td>7,5</td>
<td>Yes</td>
<td>12 hour take-home exam</td>
<td>Grade</td>
<td>No</td>
<td>Same, possible oral exam</td>
</tr>
<tr>
<td>Advanced Industrial Organization</td>
<td>7,5</td>
<td>No</td>
<td>3 hour closed book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible oral exam</td>
</tr>
<tr>
<td>Advanced International Trade</td>
<td>7,5</td>
<td>No</td>
<td>3 hour closed book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible oral exam</td>
</tr>
<tr>
<td>Advanced Macroeconomics: Business Cycles</td>
<td>7,5</td>
<td>Yes</td>
<td>7 days take-home exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible oral exam</td>
</tr>
<tr>
<td>Course</td>
<td>Credits</td>
<td>Exam Type</td>
<td>Exam Duration</td>
<td>Grade Type</td>
<td>Exam Options</td>
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</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>Advanced Macroeconomics: Structural Vector Autoregressive (VAR) Analysis (F)</td>
<td>7.5</td>
<td>Yes</td>
<td>48 hour take-home exam</td>
<td>Grade</td>
<td>Same, possible an oral exam</td>
<td></td>
</tr>
<tr>
<td>Advanced Microeconometrics</td>
<td>7.5</td>
<td>Yes</td>
<td>3 hour closed book written exam</td>
<td>Grade Random sample</td>
<td>Same, possible an oral exam</td>
<td></td>
</tr>
<tr>
<td>Advanced Strategic Management</td>
<td>7.5</td>
<td>No</td>
<td>Oral exam without preparation with synopsis</td>
<td>Grade Yes</td>
<td>Same</td>
<td></td>
</tr>
<tr>
<td>Anvendt økonomisk modellering (in Danish)</td>
<td>7.5</td>
<td>Yes</td>
<td>12 hour take-home exam</td>
<td>Grade Random sample</td>
<td>Same, possible an oral exam</td>
<td></td>
</tr>
<tr>
<td>Applied Econometric Policy Evaluation</td>
<td>7.5</td>
<td>No</td>
<td>12 hour take-home exam</td>
<td>Grade No</td>
<td>Same, possible an oral exam</td>
<td></td>
</tr>
<tr>
<td>Auctions: Theory and Practice</td>
<td>7.5</td>
<td>Yes</td>
<td>12 hour take-home exam</td>
<td>Grade No</td>
<td>Same, possible an oral exam</td>
<td></td>
</tr>
<tr>
<td>Bayesian Econometrics (F) (not offered in 20/21)</td>
<td>7.5</td>
<td>Yes</td>
<td>7 days take-home exam</td>
<td>Grade No</td>
<td>Same, possible an oral exam</td>
<td></td>
</tr>
<tr>
<td>Behavioral and Experimental Economics</td>
<td>7.5</td>
<td>Yes</td>
<td>2 hour closed book written exam</td>
<td>Grade Random sample</td>
<td>Same, possible an oral exam</td>
<td></td>
</tr>
<tr>
<td>Behavioral Finance (F)</td>
<td>7.5</td>
<td>Yes</td>
<td>2hour closed book written exam</td>
<td>Grade Random sample</td>
<td>Same, possible an oral exam</td>
<td></td>
</tr>
<tr>
<td>Contract Theory</td>
<td>7.5</td>
<td>No</td>
<td>3 hour closed book written exam</td>
<td>Grade Random sample</td>
<td>Same, possible an oral exam</td>
<td></td>
</tr>
<tr>
<td>Corporate Finance and Incentives (F)</td>
<td>7.5</td>
<td>Yes</td>
<td>3 hour closed book written exam</td>
<td>Grade Random sample</td>
<td>Same, possible an oral exam</td>
<td></td>
</tr>
<tr>
<td>Corporate Finance Theory (F)</td>
<td>7.5</td>
<td>Yes</td>
<td>14 days take-home exam</td>
<td>Pass / fail No</td>
<td>Same, possible an oral exam</td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td>Grade</td>
<td>Type</td>
<td>Exam Description</td>
<td>Grade Type</td>
<td>Same, possible oral exam</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------</td>
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<td>-------------------------------------------------------</td>
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<td>-----------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Demography</td>
<td>7,5</td>
<td>Yes</td>
<td>Project</td>
<td>Grade</td>
<td>Same, possible oral exam</td>
<td></td>
</tr>
<tr>
<td>Derivative Pricing (F)</td>
<td>7,5</td>
<td>No</td>
<td>3 hour open book written exam</td>
<td>Grade Random sample</td>
<td>Same, possible oral exam</td>
<td></td>
</tr>
<tr>
<td>Development Economics</td>
<td>7,5</td>
<td>No</td>
<td>3 hour closed book written exam</td>
<td>Grade No</td>
<td>Same, possible oral exam</td>
<td></td>
</tr>
<tr>
<td>Dynamic Programming - Theory, Computation, and Empirical Applications</td>
<td>7,5</td>
<td>No</td>
<td>Project + oral exam</td>
<td>Grade No</td>
<td>Same, possible oral exam</td>
<td></td>
</tr>
<tr>
<td>Dynamiske Modeller (in Danish)</td>
<td>7,5</td>
<td>Yes</td>
<td>3 hour open book written exam</td>
<td>Grade Random sample</td>
<td>Same, possible oral exam</td>
<td></td>
</tr>
<tr>
<td>Economic Growth (F)</td>
<td>7,5</td>
<td>No</td>
<td>3 hour closed book written exam</td>
<td>Grade Random sample</td>
<td>Same, possible oral exam</td>
<td></td>
</tr>
<tr>
<td>Economic Sociology</td>
<td>7,5</td>
<td>No</td>
<td>24 hour take-home exam</td>
<td>Grade No</td>
<td>Same, possible oral exam</td>
<td></td>
</tr>
<tr>
<td>Economics of Banking (F)</td>
<td>7,5</td>
<td>No</td>
<td>3 hour closed book written exam</td>
<td>Grade Random sample</td>
<td>Same, possible oral exam</td>
<td></td>
</tr>
<tr>
<td>Economics of Education</td>
<td>7,5</td>
<td>Yes</td>
<td>3 hour closed book written exam</td>
<td>Grade Random sample</td>
<td>Same, possible oral exam</td>
<td></td>
</tr>
<tr>
<td>Economics of Exchange Rates (F)</td>
<td>7,5</td>
<td>Yes</td>
<td>3 hour closed book written exam</td>
<td>Grade Random sample</td>
<td>Same, possible oral exam</td>
<td></td>
</tr>
<tr>
<td>Economics of Misbehavior</td>
<td>7,5</td>
<td>Yes</td>
<td>7 days take-home exam</td>
<td>Grade Random sample</td>
<td>Same, possible oral exam</td>
<td></td>
</tr>
<tr>
<td>Economics of the Environment and Climate Change</td>
<td>7,5</td>
<td>No</td>
<td>3 hour closed book written exam</td>
<td>Grade Random sample</td>
<td>Same, possible oral exam</td>
<td></td>
</tr>
<tr>
<td>Economics of the Environment, Natural Resources, and Climate Change</td>
<td>7,5</td>
<td>Yes</td>
<td>3 hour closed book written exam</td>
<td>Grade Random sample</td>
<td>Same, possible oral exam</td>
<td></td>
</tr>
<tr>
<td>Erhvervsret (F)</td>
<td>7,5</td>
<td>No</td>
<td>3 hour open book exam</td>
<td>Grade Random sample</td>
<td>Same, possible oral exam</td>
<td></td>
</tr>
<tr>
<td>Family Economics</td>
<td>7,5</td>
<td>Yes</td>
<td>48 hour take-home exam</td>
<td>Grade No</td>
<td>Same, possible oral exam</td>
<td></td>
</tr>
<tr>
<td>Course Title</td>
<td>Credits</td>
<td>Exam Type</td>
<td>Syllabus</td>
<td>Grade</td>
<td>Exam Format</td>
<td>Additional Comments</td>
</tr>
<tr>
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<tr>
<td><strong>Financial Econometrics A (F)</strong></td>
<td>7,5</td>
<td>Yes</td>
<td>3 hour closed book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td><strong>Financial Frictions, Liquidity, and the Business Cycle (F)</strong></td>
<td>7,5</td>
<td>Yes</td>
<td>48-hour take-home exam</td>
<td>Grade</td>
<td>No</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td><strong>Financial Markets Microstructure (F)</strong></td>
<td>7,5</td>
<td>No</td>
<td>12 hour take-home exam</td>
<td>Grade</td>
<td>No</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td><strong>Financial Theory and Models (F)</strong></td>
<td>7,5</td>
<td>No</td>
<td>3 hour open book exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td><strong>Foundations in Behavioral Economics</strong></td>
<td>7,5</td>
<td>No</td>
<td>3 hour closed book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td><strong>Health Economic Evaluations</strong></td>
<td>7,5</td>
<td>No</td>
<td>Project</td>
<td>Grade</td>
<td>No</td>
<td>Same</td>
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<tr>
<td><strong>Health Economics</strong></td>
<td>7,5</td>
<td>No</td>
<td>3 hour closed book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td><strong>Incentives and Organization</strong></td>
<td>7,5</td>
<td>No</td>
<td>3 hour closed book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td><strong>Industrial Organization</strong></td>
<td>7,5</td>
<td>No</td>
<td>3 hour closed book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td><strong>International Economics</strong></td>
<td>7,5</td>
<td>Yes</td>
<td>3 hour closed book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td><strong>Introduction to Programming and Numerical Analysis</strong></td>
<td>7,5</td>
<td>Yes</td>
<td>Portfolio</td>
<td>Pass/fail</td>
<td>No</td>
<td>Same</td>
</tr>
<tr>
<td><strong>Introduction to Social Data Science</strong></td>
<td>7,5</td>
<td>Ja</td>
<td>Projekt, 7 days</td>
<td>Grade</td>
<td>No</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td><strong>Kapitalmarkedsførhold (F) (In Danish, not offered 20/21)</strong></td>
<td>7,5</td>
<td>No</td>
<td>2 hour closed book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Oral exam</td>
</tr>
<tr>
<td><strong>Labour Economics</strong></td>
<td>7,5</td>
<td>No</td>
<td>12 hour take-home exam</td>
<td>Grade</td>
<td>No</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td>Course</td>
<td>Credits</td>
<td>Exam Format</td>
<td>Grade</td>
<td>Sample Method</td>
<td>Oral Exam Possible</td>
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<tr>
<td>Lineære Modeller</td>
<td>7,5</td>
<td>3 hour open book exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible</td>
<td></td>
</tr>
<tr>
<td>Macropreudential policy and systemic financial risks (F)</td>
<td>7,5</td>
<td>12 hour take-home exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible</td>
<td></td>
</tr>
<tr>
<td>Macroeconomic Risk Management (F)</td>
<td>7,5</td>
<td>48 hour take-home exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible</td>
<td></td>
</tr>
<tr>
<td>Managerial Accounting (F)</td>
<td>7,5</td>
<td>3 hour closed book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible</td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td>7,5</td>
<td>3 hour open book exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible</td>
<td></td>
</tr>
<tr>
<td>Mechanism Design</td>
<td>7,5</td>
<td>24 hour take-home exam</td>
<td>Grade</td>
<td>No</td>
<td>Same, possible</td>
<td></td>
</tr>
<tr>
<td>Monetary Policy</td>
<td>7,5</td>
<td>3 hour closed book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible</td>
<td></td>
</tr>
<tr>
<td>Multivariat analyse og kategoriserede data</td>
<td>7,5</td>
<td>14 days take-home exam</td>
<td>Grade</td>
<td>No</td>
<td>Same, possible</td>
<td></td>
</tr>
<tr>
<td>Offentlig Forvaltning - Jura og Politik</td>
<td>7,5</td>
<td>3 hour closed book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible</td>
<td></td>
</tr>
<tr>
<td>Organization Theory</td>
<td>7,5</td>
<td>48-hour take-home exam</td>
<td>Grade</td>
<td>No</td>
<td>Same, possible</td>
<td></td>
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<tr>
<td>Political Economics</td>
<td>7,5</td>
<td>3 hour closed book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible</td>
<td></td>
</tr>
<tr>
<td>Praktisk tidsrækkeanalyse (in Danish)</td>
<td>7,5</td>
<td>24 hour take-home exam</td>
<td>Grade</td>
<td>No</td>
<td>Same, possible</td>
<td></td>
</tr>
<tr>
<td>Course Title</td>
<td>ECTS</td>
<td>Exam</td>
<td>Exam Type</td>
<td>Grade</td>
<td>Sampling</td>
<td>Oral Exam Possible</td>
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<tr>
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<tr>
<td>Pricing Financial Assets (F)</td>
<td>7.5</td>
<td>No</td>
<td>3 hour closed book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td>Private Equity (F)</td>
<td>7.5</td>
<td>No</td>
<td>Project</td>
<td>Grade</td>
<td>No</td>
<td>Same</td>
</tr>
<tr>
<td>Programmering og statistik med SAS (in Danish)</td>
<td>7.5</td>
<td>No</td>
<td>3 hour open book exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td>Public Finance</td>
<td>7.5</td>
<td>No</td>
<td>3 hour closed book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td>Regnskabsanalyse og aktievurdering (F)</td>
<td>7.5</td>
<td>No</td>
<td>3 hour open book exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td>Science of Behavior Change</td>
<td>7.5</td>
<td>Yes</td>
<td>2-hour closed book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td>Skatteret (F)</td>
<td>7.5</td>
<td>No</td>
<td>3 hour open book exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Oral exam</td>
</tr>
<tr>
<td>Social Data Science: Econometrics and Machine Learning</td>
<td>7.5</td>
<td>Yes</td>
<td>24 hour take-home exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td>Social Data Science: Text Data and Deep Learning</td>
<td>7.5</td>
<td>Yes</td>
<td>24 hour take-home exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td>Stikprøvetekori</td>
<td>7.5</td>
<td>No</td>
<td>7-days open-book take-home exam and oral exam without aids</td>
<td>Grade</td>
<td>Yes</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td>Strategic Management</td>
<td>7.5</td>
<td>Yes</td>
<td>Oral with preparation</td>
<td>Grade</td>
<td>Yes</td>
<td>Same</td>
</tr>
<tr>
<td>Tax Policy</td>
<td>7.5</td>
<td>No</td>
<td>3 hour closed book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td>The Economic History of Europe</td>
<td>7.5</td>
<td>Yes</td>
<td>24 hour take-home exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td>Subject</td>
<td>ECTS</td>
<td>Prerequisites</td>
<td>Exam</td>
<td>Assessment</td>
<td>External assessment</td>
<td>Re-exam</td>
</tr>
<tr>
<td>----------------------------------------------</td>
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</tr>
<tr>
<td>The Psychology of Choice - Experimental Theory and Methods</td>
<td>7.5</td>
<td>Yes</td>
<td>3 hour closed book written exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td>Topics in Social Data Science (not offered from 2020, replaced by 2 new courses in SDS)</td>
<td>7.5</td>
<td>Yes</td>
<td>Project</td>
<td>Grade</td>
<td>No</td>
<td>Same</td>
</tr>
<tr>
<td>Videregående Statistik</td>
<td>7.5</td>
<td>Yes</td>
<td>Submission of mandatory assignments</td>
<td>Pass / Fail</td>
<td>No</td>
<td>Same</td>
</tr>
<tr>
<td>Økonomiske Prognoser i Praksis</td>
<td>7.5</td>
<td>No</td>
<td>12 hour take-home exam</td>
<td>Grade</td>
<td>No</td>
<td>Same, possible an oral exam</td>
</tr>
<tr>
<td>Årsregnskab og Regnskabsanalyse</td>
<td>7.5</td>
<td>No</td>
<td>4 hour open book exam</td>
<td>Grade</td>
<td>Random sample</td>
<td>Same, possible an oral exam</td>
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</tbody>
</table>

Seminars:

<table>
<thead>
<tr>
<th>Subject</th>
<th>ECTS</th>
<th>Prerequisites</th>
<th>Exam</th>
<th>Assessment</th>
<th>External assessment</th>
<th>Re-exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seminars</td>
<td>7.5</td>
<td>Yes</td>
<td>Project</td>
<td>Grade</td>
<td>Yes</td>
<td>Re-exam paper</td>
</tr>
<tr>
<td>The variety changes every semester</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Seminars: The variety changes every semester
Re-exam paper in elective courses and seminar:

<table>
<thead>
<tr>
<th>Subject</th>
<th>ECTS</th>
<th>Prerequisites*</th>
<th>Exam</th>
<th>Assessment</th>
<th>External Assessment</th>
<th>Re-exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Re-exam paper</td>
<td>7.5 ECTS</td>
<td>No</td>
<td>Project</td>
<td>Grade</td>
<td>Yes</td>
<td>Same</td>
</tr>
</tbody>
</table>
  - Re-exam in seminars (2. and 3. exam attempt)
  - Re-exam in an elective course, if the exam not is offered on a regular basis

Co-Curricular Written Assignments:

<table>
<thead>
<tr>
<th>Subject</th>
<th>ECTS</th>
<th>Prerequisites*</th>
<th>Exam</th>
<th>Assessment</th>
<th>External assessment</th>
<th>Re-exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-Curricular Written Assignment</td>
<td>0.5–7.5</td>
<td>No</td>
<td>Project</td>
<td>Pass/Fail (0.5–5 ECTS)</td>
<td>No (0.5–5 ECTS)</td>
<td>Same</td>
</tr>
</tbody>
</table>
  Students select the title; the assignment is written in continuation of a course

Master’s Thesis:

<table>
<thead>
<tr>
<th>Subject</th>
<th>ECTS</th>
<th>Prerequisites*</th>
<th>Exam</th>
<th>Assessment</th>
<th>External assessment</th>
<th>Re-exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master’s Thesis</td>
<td>30</td>
<td>Yes</td>
<td>Project with oral defense</td>
<td>Grade</td>
<td>Yes</td>
<td>Same</td>
</tr>
</tbody>
</table>
  Students select title
  Students can choose to write a finance thesis
*Students must meet the prerequisites before they are allowed to take the examination of the course, e.g. compulsory assignments, attendance, active participation, presentation and/or submission of a paper or a contract. The examination of some courses may be a project. In these cases it may be a requirement that students submit a project description or similar before being eligible to write the project. This may not necessarily be mentioned above.

**In courses where the exam is a take-home assignment or project and where the re-sit is changed to an oral exam the students might be required to hand in the assignment/project or a synopsis before attending the oral exam. The specific exam registration requirements can be found in the course description in the electronic course catalog at [http://kurser.ku.dk/](http://kurser.ku.dk/).

### 6.2 Course Descriptions

The following section contains course descriptions for the:

- Compulsory Courses: Econometrics II, Microeconomics III & Macroeconomics III
- Master’s Thesis
- Master’s Thesis in Finance
- Seminars
- Co-curricular Written Assignments
- Re-exam paper in Seminars and Elective Courses
6.2.1 Econometrics II

MSc programme in Economics
– mandatory course at first semester - if not taken at the BSc programme in Economics

Content
Econometrics II gives a detailed account of principles for estimation and inference based on the likelihood function and based on generalized method of moments estimation with application to cross-sectional data and time series data.

In addition, Econometrics II presents the econometric analysis of time series data, applying the concepts of non-stationarity, unit roots, co-integration, vector autoregressions, and autoregressive conditional heteroskedasticity (ARCH).

As an integral part of the course, students will learn how to carry out, present, and discuss an empirical analysis on their own.

Intended Learning Outcome
After completing the course the student is expected to be able to:

Knowledge:

• Account for the different principles for estimation and inference – specifically the method of maximum likelihood, the (generalized) method of moments – and discuss relative advantages and drawbacks.

• Give a precise definition and interpretation of the concept of stationarity of time series data, and precisely describe the conditions for consistent estimation and valid inference in a statistical model.

• Give a precise definition of the concept of unit roots, explain the consequences of unit roots in economic time series data, and interpret statistical models for stationary and non-stationary time series.

• Give a precise definition and interpretation of the concepts cointegration and error correction, and give an account of statistical models based on cointegration and error correction.

• Give a precise definition and interpretation of the concept of autoregressive conditional heteroskedasticity (ARCH), and give an account of statistical models with ARCH in financial time series.

Skills:

• Identify the characteristic properties of a given data set of economic time series and suggest and construct relevant statistical models.

• Derive estimators of the statistical model’s parameters using the principles of method of moments and
maximum likelihood. Estimate and interpret the parameters.

- Construct misspecification tests and analyze to what extent a statistical model is congruent with the data.

- Construct statistical tests for unit roots in economic time series.

- Construct statistical tests for cointegration in economic time series.

- Formulate economic questions as hypotheses on the parameters of the statistical model and test these hypotheses.

- Use statistical and econometric software to carry out an empirical analysis.

- Present a statistical model and empirical results in a clear and concise way. This includes using statistic and econometric terms in a correct way, giving statistically sound and economically relevant interpretations of statistical results, and presenting results in a way so that they can be reproduced by others.

**Competencies:**

- Choose the relevant statistical model given the characteristics of a given data set of economic time series and apply the statistical tools to carry out, present, and discuss an empirical analysis and test specific economic hypotheses.

- Read and critically evaluate research papers containing applied econometric time series analyses.

**Recommended Academic Qualifications**

The course requires knowledge equivalent to that achieved in 'Probability Theory and Statistics' and Econometrics I at the Study of Economics, University of Copenhagen.

**Teaching and learning methods**

Lectures and exercise classes.

Activities to challenge and activate students, such as in quizzes and peer-discussions, are used in lectures and as preparation. The exercise classes are both theoretical and applied with written assignment covering important topics in the course. Some of the exercise classes will be organized as workshops with all students together.

**Exam registration requirements**

3 out of 4 mandatory assignments must be approved + give written peer feedback based on specific criteria for a minimum of 3 of the 4 assignments to two other students, to be able to sit the exam.
6.2.2 Microeconomics III

MSc programme in Economics
– mandatory course at first semester - if not taken at the BSc programme in Economics.

Content
This course furthers the introduction of game theory, non-cooperative as well as cooperative, and its applications in economic models. The student who successfully completes the course will learn the basics of game theory and will be enabled to work further with advanced game theory. The student will also learn how economic problems involving strategic situations can be modeled using game theory, as well as how these models are solved. The course intention is that the student becomes able to work with modern economic theory, for instance within the areas of industrial organization, macroeconomics, international economics, labor economics, public economics, political economics and financial economics.

In the process of the course the student will learn about:

- Static games with complete information
- Static games with incomplete information
- Dynamic games with complete information
- Dynamic games with incomplete information  Basic cooperative game theory

The first part of the course is devoted to static games with complete information. This part of the course extends the initial treatment of the subject from Microeconomics B (Mikroøkonomi B). The concept of a normal form game and solution concepts such as dominance and Nash Equilibrium are reintroduced in a formally rigorous way. Students will also study a variety of economic applications of the theory. Finally, they will look more deeply into the theory of static games with complete information by studying mixed strategies and mixed-strategy Nash equilibria, and discussing equilibrium existence.

The second part of the course extends the treatment of dynamic games with complete information. The students will learn this theory in a more rigorous way and discuss various economic applications. The students will then study games with imperfect information and repeated games. They will be introduced to extensive form games, and will learn about the relevant refinement of the Nash equilibrium concept: subgame-perfect Nash equilibrium. Again, the theory will be illustrated by economic applications. In the third part of the course the students will study simultaneous games of incomplete information. They will learn about the concept of Bayesian Nash equilibrium and apply their knowledge to different kinds of auctions, mechanism design problems, and other applications.

The fourth part of the course is devoted to dynamic games of incomplete information. The students will analyze the implications of introducing sequential moves into the games with incomplete information. They will gain knowledge of the Perfect Bayesian Equilibrium and its refinements, and apply the theory to signaling games and other relevant economic problems. In particular, they will look into the job-market signaling model of Spence and other asymmetric information models.

Finally, the course will address cooperative games. The students will learn the basics of bargaining theory and cooperative game theory.
Intended Learning Outcome
After completing the course, the student should be able to:

Knowledge:
- Formally state the definition of a game and explain the key differences between games of different types (static games of complete information, static games of incomplete information, dynamic games of complete information, and dynamic games of incomplete information).
- In detail account for the equilibrium (solution) concepts that are relevant for these games (Nash Equilibrium, Subgame Perfect Nash Equilibrium, Bayes-Nash Equilibrium, Perfect Bayesian Equilibrium).
- Identify a number of special games and particular issues associated with them, such as repeated games (including infinitely repeated games), auctions and signaling games.

Skills:
- Explicitly solve for the equilibria of these games.
- Explain the relevant steps in the reasoning of the solution.
- Interpret the outcomes of the analysis.
- Apply equilibrium refinements and the solution concepts.

Competencies:
- Analyze strategic situations by modeling them as formal games.
- Set up, prove, analyze and apply the theories and methods used in the course in an independent manner.
- Evaluate and discuss the crucial assumptions underlying the theory.

Recommended Academic Qualifications
The course requires knowledge equivalent to that achieved in Microeconomics I and Microeconomics II at the Bachelor of Economics, University of Copenhagen.

Teaching and learning methods
The teaching will consist of lectures, as well as exercise classes. While the lectures will discuss and put perspectives on the curriculum, the exercise classes will focus on exercises and applications of the theory. Some relevant experiments will be discussed. During the semester mandatory assignments must be handed in to the teaching assistants and not later than the given deadline.

Exam registration requirements
3 out of 3 mandatory assignments must be approved to be able to sit the exam.

6.2.3 Macroeconomics III
MSc programme in Economics
– mandatory course at first semester - if not taken at the BSc programme in Economics

Content
This course aims at providing insight into the basic models, concepts, methods and results of modern macroeconomics and to be a prerequisite for the more specialized macroeconomic courses. We will study what determines savings and capital accumulation in a general equilibrium framework. How taxes and public debt affect the economy. The effects of uncertainty and expectations, in particular how stabilization policy is affected by the way expectations are formed. Political limits to fiscal and monetary policy are analyzed.

Intended Learning Outcome
After completing the course, the student should be able to:

Knowledge:
• Understand the basic models, concepts, methods and results of modern dynamic macroeconomic analysis.
• Identify and discuss how shocks propagate in the economy.

Skills:
• Analyze the role of expectations and dynamic linkages.
• Analyze a macroeconomic problem, where the above-mentioned concepts and methods are central.
• Apply the models and explain in economic terms the results and implications and how they derive from the assumptions of the model.

Competencies:
• Manage the topics, tools and theories learned during the course and be proficient in the application of the concepts and methods which then can be used in other courses or in a future job after graduation.

Recommended Academic Qualifications
The course requires knowledge equivalent to that achieved in Macroeconomics I, Macroeconomics II, "Probability theory and statistics" (Sandsynlighedsteori og statistik) and Econometrics I at the Bachelor of Economics, University of Copenhagen.

Teaching and learning methods
The teaching will consist of lectures, as well as exercise classes. During the semester mandatory assignments must be handed in to the teaching assistants and not later than the given deadline.

Exam registration requirements
3 written assignments should be approved to be able to sit the exam.
6.2.4 Master’s Thesis

The master’s thesis comprises 30 ECTS and must be placed on the second year of the master’s programme.
The student must have passed 60 ECTS in the program before writing the Master’s Thesis.

Content
The Master’s thesis must demonstrate competence to work with academic theories and methods within a specific topic based on key areas of economic theory and applied economics. The Master’s thesis must be written on the basis of the core courses and other teaching activities (including those that are transferred from other degree programs), which are included in the bachelor’s and master’s programs in economics.

Intended Learning Outcome:
In the master’s thesis, the student is expected to be able to:

Knowledge:

- Explain and relate critically to relevant theoretical and/or empirical issues within the core areas of the study program.
- Explain and discuss new research-based knowledge of advanced theory and methodology within the core areas of the study program.

Skills:

- The student should be able to: Identify and describe a relevant, defined research question and carry out an independent scientific analysis within one or more core areas of the programme.
- Apply relevant theories in a well-informed manner and critically reflect upon the applied theories, methods and empirical data that form the basis for the analysis.
- Design strategies for solutions related to the specific research question
- Carry out a written and an oral reporting of research questions, method, analysis and conclusions on an academic level.

Competencies:

- Structure and initiate theoretical and/or empirical analyses within one or more core areas of the study programme.
- Independently formulate an analytical solution to an economic problem, if needed, by combining advanced economic theory, data and statistic and econometric methods.
- Remain analytically self-correcting towards the applied theories, methods and own empirical work.
- Independently be able to achieve academic development and specialization through the answering of the research question.

Students whose master’s thesis and oral defense exam meet the specified requirements in an excellent way (that is, with no or only a few minor weaknesses) are awarded the highest mark possible (12).
Registration
Students must register for the thesis in accordance with the rules described in section 4.2.4 of the Curricula’s Common Part. For a detailed description of the registration procedures see the study pages in KUnet.

It is not possible to cancel the registration once approved by the University.

Students must find a supervisor among one of the full-time lecturers at the Department of Economics, or among one of the part-time lecturers affiliated with the department. In unusual circumstances, students may apply to the Board of Studies for an external supervisor employed at another Danish university. The exemption will be granted on condition that none of the supervisors at the Department are capable of supervising the students.

Students, who write their theses in collaboration with a company and make use of company data, should draw up a third-party agreement clarifying how the students may use the data, and whether the thesis should be confidential. A template third-party agreement is available on the study pages at KUnet under ‘Master’s Thesis’.

Submission
Students must be submitted in Digital Exam. The exact procedure for submission is described on the study pages in KUnet.

If the thesis is not submitted in time, it will not be assessed. In such cases, the students will have used their first exam attempt and must enter a new contract. The new contract must include a revised problem statement within the same subject area.

About the second and third exam attempts
Students who fail to submit their theses by the stipulated deadline must register for a second exam attempt (and, if needed, a third attempt) under the rules described in section 4.2.5 of the Curricula’s Common Part.

The student cannot use second and third attempt if the maximum study time is exceeded. In that case, the student is withdrawn from the university regardless of whether all attempts have been used.

Type of Examination and Other Regulations
The master’s thesis is a project with a subsequent oral defense.

Formal requirements
Theses may be written individually or by two students in collaboration. If written by one student, the thesis must be no longer than 60 standard pages (144,000 keystrokes in total); with two students the limit is 90 pages (216,000 keystrokes in total).

A standard page is defined as 2400 keystrokes including spaces. See section 4.5 of the Curricula’s Common
Part for an overview of what is included in the keystroke count.

If two students co-write their thesis, it must be clearly stated which student wrote which part, enabling their contributions to be assessed individually. The foreword/introduction and table of contents should clearly identify with which parts each author contributed. Solely the introduction and conclusion, as well as any potential sub-conclusions, may be written collectively. Please note that no more than 20% of the thesis may be co-written.

Students co-writing their thesis defend it individually, and the authors may not be present at the co-author’s oral defense.

Assessment
The master’s thesis is assessed according to the 7-point grading scale, with external grading. The summary is included in the assessment of the thesis.

The summary should summarize the main points of the thesis and stipulate how the student arrived at these points. The summary must be written in another language than Danish, even if the thesis is not in Danish. The summary may be in English, German or French. Swedish and Norwegian do not count as foreign languages, cf. the Examination Order (Eksamensbekendtgørelsen).

Writing and spelling skills are part of the overall assessment of the thesis. However, the academic content will be weighed more heavily, cf. the Examination Order (Eksamensbekendtgørelsen). The Study Board might grant an exemption from this rule in case of impairment, cf. the Examination Order (Eksamensbekendtgørelsen).

Language
Danish or English
6.2.5 Master’s Thesis in Finance

The master’s thesis in finance comprises 30 ECTS and must be placed on the second year of the master’s programme. The student must have passed 60 ECTS in the program before writing the Master’s Thesis.

Content

The Master’s thesis must demonstrate competence to work with academic theories and methods within a specific topic based on key areas of financial economic theory and applied financial economics. The Master’s thesis must be written on the basis of the core courses and other teaching activities (including those that are merited from other degree programs), which are included in the bachelor’s and master’s programs in economics, with focus on finance courses/seminars within the finance track.

Intended Learning Outcome

In the master’s thesis, the student is expected to be able to:

Knowledge:

- Explain and relate critically to relevant theoretical and / or empirical issues within the core areas of the Finance track.
- Explain and discuss new research-based knowledge of advanced financial theory and methodology within the core areas of the Finance track.

Skills:

- Identify and describe a relevant, defined research question and carry out an independent scientific analysis within one or more core areas of the Finance track.
- Apply relevant theories in a well-informed manner and critically reflect upon the applied theories, methods and empirical data that form the basis for the analysis.
- Design strategies for solutions related to the specific research question.
- Carry out a written and an oral reporting of research questions, method, analysis and conclusions on an academic level.

Competencies:

- Structure and initiate theoretical and/or empirical analyses within one or more core areas of the Finance track.
- Independently formulate an analytical solution to a financial economics problem, if needed, by combining advanced financial economic theory, data, and statistical and econometric methods.
- Remain analytically self-correcting towards the applied theories, methods and own empirical work.
- Independently be able to achieve academic development and specialization through the answering of the research question.

Students whose master’s thesis and oral defense exam meet the specified requirements in an excellent way (that is, with no or only a few minor weaknesses) are awarded the highest mark possible (12).

The other sections regarding Registration, Submission, 2nd and 3rd test attempts, Type of Examination and Other Regulations + Assessment are identical to the text in the preceding section (6.2.4 Thesis).
6.2.6 Seminars

Seminars are courses with class teaching and a focus on written presentation. The assignment may be written in English or Danish. If the language of the seminar is in English, all students must write in English. It is recommended (but not a requirement) that students have participated in the corresponding course if such exists. The students make an agreement with the lecturer of the seminar concerning the topic of their individual seminar assignment.

Purpose
The purpose of seminars on the Master’s Programme in Economics is for students to identify and clarify a problem employing the theories and methods acquired during their Bachelor’s and Master’s Programmes in Economics. Participation in an economic seminar involves preparation of a written presentation, constructive discussion of other students’ presentations and active participation.

Intended Learning Outcome

Knowledge
• Specialized knowledge of a specific research theme within one or more of the core areas of the study programme.
• In-depth knowledge of academic discussions from relevant scientific literature. Knowledge of core methods, concepts and issues related to the research theme.

Skills
• Independently and critically select, define and analyze a subtopic within one or more of the core areas of the study programme.
• Independently and critically identify literature relevant to the selected sub-topic
• Independently assess the relevance and the reliability of the chosen theory, methodology and empirical data.
• Communicate the research results in an academic style.
• Evaluate and independently discuss the academic projects of fellow students as well as one’s own. Offer professional feedback on the academic projects of fellow students.

Competencies
• Synthesize research-based contributions to knowledge.
• Planning and preparing advanced academic assignments within predetermined time frames and contribute to the formation of knowledge.
• Remain analytically self-correcting towards the applied theories, methods and own empirical work.

Students who see seminar paper meet the specified requirements in an excellent way (that is, with no or only a few minor weaknesses) are awarded the highest mark possible (12).
**Type of instruction**
During the economic seminars the participating students prepare a paper about a previously agreed topic and present it to their fellow students and the lecturer. The participating students take turns in the role of opponents of other students’ presentations.

**Formal Requirements**
As a requirement for the examination, students must:

a) Attend the agreement meeting at the beginning of the seminar
b) Attend the classes of the seminar
c) Submit their commitment paper
d) Submit a pre-presentation (in case of such a requirement)
e) Present their own seminar paper
f) Oppose another students’ seminar paper
g) Submit the final seminar paper

The seminar paper in the master’s programme, the written presentation must consist of a maximum of: 15 standard pages (360000 keystrokes in total) and 8 pages of appendices (19200 keystrokes in total). A standard page is defined as 2,400 keystrokes including spaces. See section 4.5 of the Curricula’s Common Part for an overview of what is included in the keystroke count.

If two or more students co-write an assignment, the number of standard pages is increased correspondingly. E.g. if two students co-write then the written presentation must consist of a maximum of 30 standard pages (72000 keystrokes) and 16 pages of appendices (38400 keystrokes).

If two students co-write an assignment, it must be clearly stated which student wrote which part, enabling their contributions to be individually assessed. The foreword/introduction and table of contents should clearly identify, with which parts each author contributed. The introduction and conclusion, as well as any potential sub-conclusions, may be written collectively. Please note that no more than 20 % of the assignment may be co-written.

**Registration and submission**
Students register for seminars online in the Self Service – please consult paragraph 4.2 and 4.2.2.
The assignment must be submitted online in Digital Exam.

**Type of Examination**
The grade for participation in a seminar is awarded solely based on the written presentation. In the assessment of an economic seminar paper, the clarity and linguistic accuracy take precedence. Seminars is assessed externally, according to the 7-point grading scale. Writing and spelling skills are part of the overall assessment of the thesis. However, the academic content will be weighed more heavily, cf. the
Examination Order (Eksamensbekendtgørelsen). The Study Board might grant an exemption from this rule in case of impairment, cf. the Examination Order (Eksamensbekendtgørelsen).

**Re-exam**

If a seminar is offered again, the student can register again.

If a seminar is not offered again, the student can write re-exam paper within the same subject area as in the seminar. See section 6.2.4: "Re-exam paper in elective courses and seminars".

Re-exam papers in seminars are assessed externally, according to the 7-point grading scale.
6.2.7 Co-curricular Written Assignments
A co-curricular assignment substitutes ECTS in the group of elective courses in economics.

Purpose and Description of Objectives
Co-curricular written assignments are available for students who want to enhance their knowledge and competences in a particular course. Students are allowed to write a maximum of two assignments of this kind during their master’s programme.

The rules for deadlines are posted on the study pages at KUnet.

Intended Learning Outcome
The students should demonstrate their mastery of the following:

Knowledge:

- Critically and independently reflect upon and discuss the economic theory and method within the chosen area of study.

Skills:

- Apply relevant theories and methods on a selected area of study.
- Be able to independently summarize and analyze a topic in a well-structured written report.

Competencies:

- Independently identify and select relevant theories to examine a chosen area of study.
- Independently select, analyze and apply academic literature relevant to a specific problem statement.

Registration, Submission and Supervision
Students register by submitting a registration form to the study administration (available on the study pages at KUnet).

Students should enter into supervision agreements with one of the full-time lecturers at the Department of Economics or an affiliated part-time lecturer, a PhD-student or a post doc. In case of unusual circumstances, students can have an external supervisor. No actual supervision is provided for co-curricular written assignments, but the supervisor is expected to assist with literature suggestions and the structuring of contents and time use.

Assignments prescribed to up to 5 ECTS must be submitted no later than two months after the registration date while assignments prescribed to 5.5 ECTS or more must be submitted no later than four months after the registration date.
The assignment must be submitted in Digital Exam.
**Formal requirements**
The length of co-curricular written assignments depends on the prescribed number of ECTS. The requirements for the number of pages for co-curricular written assignments are as follows:

- 0–5 ECTS = 1–1.5 standard pages
- 1 ECTS = 2–3 standard pages
- 2.5 ECTS = 5–7.5 standard pages
- 5 ECTS = 10–15 standard pages
- 7.5 ECTS = 20–25 standard pages

If the assignment is prescribed to another number of ECTS than those listed above, the page number is calculated based on the number of pages for a 1 ECTS assignment.

A standard page is defined as 2,400 keystrokes including spaces. See section 4.5 of the Curricula’s Common Part for an overview of what is included in the keystroke count.

The assignment may be written by up to two students. If two students co-write the assignment, they must do so in a way that their individual contributions can be individually assessed. The foreword/introduction and table of contents must all clearly identify with which paragraphs each author contributed. The introduction and conclusion, as well as any sub-conclusions and/or summaries, may be written collectively. However, no more than 20 % of the assignment may be co-written. For assignments written by two students, the number of pages is multiplied by 1.5.

**Type of Examination**
The supervisor assesses assignments prescribed to up to 5 ECTS with a Pass/Fail grade. Assignments prescribed to 5.5 ECTS or more are assessed externally and graded according to the 7-point grading scale.

**About the second and third exam attempts**
Same as for ordinary examination.
6.2.8 Re-exam Paper in Elective Courses and Seminars
A re-exam paper substitutes 7.5 ECTS in the group of elective courses or seminars.

Purpose and Description of Objectives
A re-exam paper can only be written by students who have been enrolled in an elective course or a seminar and did not pass it. The re-exam paper is an option if an elective course or seminar is not offered on a regular basis and either canceled or postponed.
Students are not allowed to co-write a re-exam paper.

Intended Learning Outcome
The students should demonstrate their mastery of the following:

Knowledge
- Critically and independently reflect upon and discuss the economic theory and method within the chosen area of study.
- Demonstrate knowledge of advanced aspects of a chosen subject within economic theory and its applications, including knowledge of theories and/or methods related to the subject.

Skills
- Select and apply relevant theories and methods on a selected area of study.
- Be able to independently summarize and analyze a topic in a well-structured written report.

Competencies
- Independently select, analyze and apply academic literature relevant to a specific problem statement.

Registration, Submission and Supervision
Registration for a re-exam paper in a seminar takes place in Self-Service at KUnet during the re-exam registration period.
If an elective course or seminar is canceled or postponed, the student will be contacted by the study administration and offered to write a re-exam paper.
In other special circumstances, the student may apply for an exemption to write a re-exam paper.
The re-exam paper can only be written individually.

The re-exam paper is initiated at the beginning of the semester (1 September (autumn) or 1 February (spring)).
The assignment must be submitted in Digital Exam and the student has 4 months to write it.

In principle, the examiner is the teacher on the seminar/elective course. The Head of Studies can appoint a different examiner. No actual supervision is provided for re-exam paper, but the examiner is expected to assist with literature suggestions and the structuring of contents and time use.
**Type of Examination**
Re-exam papers are assessed in the same way as the elective or seminar in which it is written.

**Formal requirements**
The length of re-exam paper is 20–25 standard pages.
A standard page is defined as 2,400 keystrokes including spaces. See section 4.5 of the Curricula’s Common Part for an overview of what is included in the keystroke count.

**About the third exam attempt**
Same as for second exam attempt.