Economics

Study plan for third-cycle subject

_The subject plan was approved by Fakultetsnämnden (Faculty Board) November 30, 2010. Valid from Spring 11._

**Subject title**

Economics (Nationalekonomi)

**Subject description and programme outcomes**

**Scientific field**

General regulations and guidelines for doctoral studies are found in the comprehensive KTH regulations for doctoral studies. This syllabus complements those regulations and guidelines for doctoral studies in the subject of economics with specific instructions for the subject area.

The doctoral subject of Economics is part of the doctoral programme, “The Built Environment and Society: Management, Economics and Law”.

<Comment: 2013-04-23 The Faculty Council decided to move the subject Economics from the doctoral programme of The Built Environment and Society: Management, Economics and Law to the doctoral programme of Industrial economics and management, School of Industrial Engineering and Management.>

The subject of economics has strong connections to engineering science, mathematics and industrial economics. Historically, for example, economic production theory was developed and nourished by engineering science and financial mathematics currently plays a key role in the rapidly growing part of economics known as financial economics. There are also significant interfaces between optimization theory and the economical analysis of equilibrium conditions in different markets, and, for example, between technological development and opportunities to establish new markets. Ongoing globalization of different markets requires, like many recent pricing and charging systems, modern information and communication technologies.

**Goal**
Doctoral studies in economics aim at providing students with in-depth knowledge of economic theory and good ability to apply economic theory. Students will also gain critical awareness, skills in research methodology and independent research experience, and after completing doctoral studies they will be well prepared for continued scientific activities.

Description of possible specialisation

The subject has no specialisations.

Specification of how the programme outcomes are to be achieved

The educational goals are achieved by following the individual study plan with the support of the supervisors; taking courses, attending seminars, participate in national and international conferences.

Current research

Programme structure

Doctoral studies consist of coursework and a thesis/dissertation part. Coursework may be in the form of lectures, literature studies and problem-solving, as well as active participation in seminars and conferences. Courses may be studied within the department or in collaboration with other national and international research institutions. Most of the coursework will be covered in the initial part of the programme.

Doctoral studies are conducted under the direction of a main supervisor, together with one or more assistant supervisors in accordance with an individual study plan approved by the doctoral programme officer. Students' individual study plans will be adapted to the area of specialisation of their dissertation/thesis. Students' progress will be assessed at least once a year in connection with a review of the individual study plan jointly carried out by the student and the main supervisor.

A licentiate degree may be taken as part of a doctor's degree or in conclusion of doctoral studies. Courses and dissertation work included in a licentiate degree may also be credited towards a doctor’s degree.

The doctoral studies programme consists of coursework of at least 90 ECTS and a thesis of 150 ECTS. A licentiate degree shall include at least 45 ECTS of coursework and a licentiate dissertation of 75 ECTS.

Compulsory and recommended courses

Compulsory courses totalling 30 ECTS, including courses in Scientific theory and research methodology, Quantitative methodology (econometrics) 7.5 ECTS, Qualitative methodology (7.5 ECTS) and a common introductory course for the doctoral programme (7.5 ECTS) - refer to the description of the doctoral programme for further details.

Other basic courses and advanced courses for 60 ECTS.

The courses aim to provide a breadth of theoretical knowledge in micro and macro theory, econometrics and scientific theory with the history of economic doctrines. The main part of the basic courses are shared with the doctoral programmes at the University of Stockholm and the Stockholm School of Economics.
The advanced courses provide specialisation in the subject areas and are established after consultation between the supervisor and the student. The programme has applied microeconomics as its primary area of specialisation. Areas of application are oriented towards engineering and community planning, and include transport economics, urban and regional economics and industrial economics.

Doctoral students who teach in education at first or second levels must have completed initial university teacher training.

**Compulsory courses**

- FAI3002 Quantitative Methods with Real Estate Applications 7.5 hp.
- F1N5114 Theory of Science and Research Methodology, Social Science 7.5 hp.
- FAI3102 Economics, Organization and Incentives- Introduction Course 7.5 hp.
- F1F5412 Qualitative Research Methods in Scientific Dissertations 7.5 hp.

**Thesis**

The student must write a dissertation/thesis defended in public at a viva voce. The dissertation/thesis must demonstrate the student's ability to independently examine a research problem of importance in the field of economics. The dissertation/thesis may be in the form of a single work or a compilation of several essays of sufficient quality for publication in good international journals with peer review. The student should generally begin dissertation/thesis work after the first year of study and thus carry out dissertation/thesis work in parallel with the remaining course studies.

**Teaching**

Teaching consists mainly of lectures, seminars and tutorials. During the programme, students must participate in scientific activities at the department through attending seminars, guest lectures, etc. Corresponding activities at other departments may also be included in the programme. Teaching and examinations at another department or university may be included with the consent of the main supervisor.

**Entry requirements and selection**

**General and special admission requirements and prior knowledge**

The KTH general eligibility requirements for admission to doctoral studies apply. Admission to the doctoral program requires that the applicant has a Master's degree in economics, econometrics, or statistics, or an equivalent degree to a Swedish Master of Science. The selection of doctoral students is based on the applicants' qualifications, which relevance will be judged in relation to the area of each specific research project.

**Selection rules and procedures**

Admission of students to doctoral studies is granted by the dean of the school. The basis for selection is the ability to assimilate doctoral studies. Selection is firstly made on the basis of documented materials supplied by the applicant. In addition, other bases for decision such as interviews with the candidates and contacts from previous educational programmes may be of importance. Students must be prepared to devote at least 50% of their time to doctoral studies. For the doctoral programme, only the number of
students that can be offered acceptable conditions in terms of supervision, funding and study conditions in general may be admitted.

**The programme’s degrees and examinations**

**Degree of Licentiate and Degree of Doctor (PhD)**

The doctoral studies programme consists of coursework of at least 90 ECTS and a thesis of 150 ECTS. A licentiate degree shall include at least 45 ECTS of coursework and a licentiate dissertation of 75 ECTS.

One stage of the doctoral programme of 120 ECTS may be concluded with a licentiate degree. Requirements for a licentiate degree are that the tests in phase one are passed and that a dissertation of 75 ECTS is passed. Obligatory courses for the licentiate degree comprise the course Scientific theory and research methodology, and at least one of the other obligatory courses.

**The programme’s examinations**

Examination takes place through written or oral exams or through presentations at seminars. Exams and tests are graded as pass or fail. The examination shall be designed so that examiners can be satisfied that a student has assimilated the full course content.

The grade of a thesis (pass/fail) is determined by an examining committee appointed by the school's Director of Third Cycle Education.