Real Estate and Construction Management

Study plan for third-cycle subject

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

Subject title

Real Estate and Construction Management (Fastigheter och byggande)

Subject description and programme outcomes

Scientific field

The subject area of Real Estate and Construction Management covers legal, financial and management issues related to property management, property development and construction.

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

The doctoral programme consists of coursework which must include at least 90 ECTS and a thesis of 150 ECTS. For a licentiate degree, at least 45 ECTS of coursework shall be included and a licentiate dissertation of 75 ECTS.

The Director of Third Cycle Education shall establish and at least once a year review the individual study plan. This review will be prepared by the supervisors and the doctoral student.

Doctoral students will participate in regular seminars organized within the doctoral programme with the aim of broadening students' knowledge and create a stimulating intellectual environment.

The aim is also for doctoral students to annually participate in international conferences and in national networks, thus enabling contacts with companies in the industry and gaining knowledge of current issues and development trends in the sector.

Compulsory and recommended courses

Courses with the following scope and content are obligatory:

1. IN5114 Theory of Science and Research Methodology, Social Science (7.5 ECTS). This course can also be credited from a master's programme in which such a course is included.
2. **AI3002 Quantitative methods with real estate applications (7.5 ECTS).** The core of the course will be applied regression analysis and statistical hypothesis testing. The course Quantitative Methods with Real Estate Applications covers this area. Other courses covering this area may be studied, either at KTH or in doctoral programmes in Economics at Stockholm University and the Stockholm School of Economics.

3. **1F5412 Qualitative research methods in scientific dissertations (7.5 ECTS).** Case studies, interviews or questionnaires are used in many studies. This course will provide the knowledge to conduct such studies in a professional manner. The course Qualitative Research Methods in Scientific Dissertations covers this area.

4. **AI3102 Economics, Organization and Incentives - Introduction Course 7.5 hp.** There are several key questions in this subject area, including the relationship between public and private sectors and industrial organizations; e.g. what is done within a company or purchased at a market; why a market has a certain structure. Issues of incentives and information are crucial in all these contexts as well as project management. This course aims to convey the theoretical base established by economists such as Ronald Coase and Oliver Williamson. The course will replace the current course that the department provides, “Economics, organization and incentives”.

The total course component includes, as mentioned above, 90 ECTS and the obligatory courses thus includes 30 ECTS. All these courses are core study courses.

The course Scientific theory and research methodology plus at least one of the other mandatory courses are obligatory for a licentiate degree.

The choice of non-obligatory courses is governed by the dissertation/thesis content and is made in connection with the establishment of an individual study plan for the doctoral student. The following key study courses are listed below.

The courses are generally studied within the framework of the doctoral programme regular courses. It is recommended that doctoral students read one or more core study courses at other institutions/universities.

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

### Compulsory courses

- **AI3002 Quantitative Methods with Real Estate Applications 7.5 hp.** Or equivalent
- **1F5412 Qualitative research methods in scientific dissertations 7.5 hp.** Or equivalent
- **AI3102 Economics, Organization and Incentives- Introduction Course 7.5 hp.** Or equivalent
- **1N5114 Theory of Science and Research Methodology, Social Science 7.5 hp.** Or equivalent

### Recommended courses

- **1F5308 Real Estate Appraisal 7.5 hp.**
- **AI3006 Construction Management and Economics 7.5 hp.**
- **1F5406 Distributive Justice and Land Development 7.5 hp.**
- **AI3001 Housing Economics 7.5 hp.**
- **1F5404 History of Enclosure, Land Tenure, Taxation.. 7.5 hp.**
- **1F5408 Real Estate Theory 7.5 hp.**
- **1N5350 Property Studies - Research Front, Minor Course 7.5 hp.**
- **1F5320 Topics in Housing and Real Estate Economics 7.5 hp.** Recommended seminar course in which participation and presentation is required
- **1N5302 Theories and Methods for Management of Real Estate 7.5 hp.**
- **1N5307 Application of Game Theory in Real Estate Economics 7.5 hp.**
- **1F5314 Microeconomic Theory 7.5 hp.**

### Thesis

The dissertation/thesis may be either a monograph or a compilation dissertation/thesis.

Quality control during the thesis process: If a licentiate dissertation is not submitted, an intermediate seminar shall be presented. It is important for quality that there is an active supervisory group, in which the assistant supervisor takes much responsibility.

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With regard to quality control in the later stages, the following applies:

- **Monographs**: A seminar with a special examiner should be carried out about 6 months prior to the viva voce.
- **Compilation thesis**: If the articles are already accepted, only a seminar discussion of other articles for the dissertation is required.

A compilation thesis should in terms of content correspond to four articles of sufficient quality for publication in good international journals with peer review in the area in question. For a licentiate dissertation the corresponding requirement is two articles.

The quality of theses and dissertations in the form of monographs are assessed by the practice that has developed, and in common with other Swedish institutions that conduct research studies in this area.

**Entry requirements and selection**

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

Eligibility for admission to doctoral studies at KTH is described in the general regulations and no further formal rules apply to the doctoral programme. Examples of an appropriate educational background are a master's degree, master of engineering degree in the relevant field or a degree in architecture, or an equivalent degree in economics or law from other universities. The selection of students is based on the applicant's qualifications, which are assessed in the background of the current project's area of specialisation.

**Selection rules and procedures**

**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.

**The programme’s examinations**

Doctoral courses include examinations, which may be written or oral. Examinations shall be designed so that examiners can be satisfied that the student has assimilated the full course content.