

Syllabus for doctoral studies in the subject of Real Estate and Construction Management

The doctoral subject of Real Estate and Construction Management is part of the doctoral programme, "The Built Environment and Society: Management, Economics and Law"

1 Subject description and goals of the programme

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

The overall goals are consistent with the objectives for KTH doctoral studies, as set out in the box below.

The purpose of KTH doctoral studies is to provide society with competent researchers who can contribute to its sustainable development.

The goal of KTH doctoral studies is for doctoral students to become independent and excellent researchers. After completing their studies, doctoral graduates will be able to:

- describe and explain theories and empirical results in the field in question
- formulate specific research issues in the field in question
- use scientific method and develop new knowledge through their own scientific studies
- critically analyze and evaluate the methods and results from own and others' scientific studies
- present and discuss research findings in the scientific community
- present research in an educational way outside the scientific community and in educational contexts
- assess the ethical aspects of research within the field in question and act on these
- identify needs for new knowledge, and understand how to initiate and direct research projects

Education at doctoral level shall also strive to ensure that students after graduation are able to:

- participate in interdisciplinary collaboration within the field in question
- analyze the role of research in sustainable development.

2 General structure of the programme

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 doctoral officer 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.

3 Eligibility and selection

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 specialization.

4 Courses

Courses with the following scope and content are obligatory:

1 Scientific theory and research methodology (7.5 ECTS). This course can also be credited from a master's programme in which such a course is included.

2 Quantitative methods (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 Qualitative Methods (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 New course to be developed in autumn 2010, (7.5 ECTS). 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 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 recommended:

Housing Economics	7.5 ECTS
Property valuation	7.5 ECTS
Theories and Methods for Management of Real Estate	7.5 ECTS
Applications of game theory in real estate economics	7.5 ECTS
Microeconomic theory	7.5 ECTS
History of Enclosure, Land Tenure, Taxation,..	7.5 ECTS
Distributive Justice and Land Development	7.5 ECTS
Real Estate Theory	7.5 ECTS
Managing Construction Projects	7.5 ECTS
Communication in Construction	7.5 ECTS
Knowledge Management in Construction	7.5 ECTS
Research frontier	(7.5 ECTS or 15 ECTS)

The following seminar course is also recommended, in which the requirement is participation and presentation: Topics in Housing and Real Estate Economics¹ 7.5 ECTS.

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.

5 Dissertation/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.

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.

¹ The name of the course shall be changed to “Topics in Real Estate and Construction Management”.

6 Eligibility requirements

The KTH general eligibility requirements for admission to doctoral level apply.

7 Examination

The courses at doctoral level shall include examinations, which may be written or oral. The examination shall be designed so that examiners can be satisfied that the student has assimilated the full course content.