Doctoral programme — Architecture

Programme description (KTHARK)

Programme name

Architecture (Arkitektur)

Subject area

The subject of architecture at postgraduate level manages, develops and communicates the knowledge of architecture. The subject treats the concepts and theories of architecture and their relationship to the planning and design of the built environment. Postgraduate studies in architecture at KTH includes five areas of specialisation: architectural design, architectural technology, history and theory of architecture, critical studies in architecture, and urban design.

The doctoral programme’s overall purpose and learning outcomes

The overall objectives for postgraduate studies in the subject of architecture correspond to the objectives for KTH postgraduate courses. These are set out below:

The purpose of KTH postgraduate studies is to educate competent researchers who can contribute to the sustainable development of society.

The goal of KTH postgraduate studies is that doctoral students can become independent researchers able to produce excellent research. After completing their studies, doctoral students should 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 their 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 the needs of new knowledge, and understand how to initiate and direct research projects.

Education at postgraduate 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.

These goals expired on 2014-12-09 according to the President’s decision, reference number V-2014-0374. As before, the objectives of the education at postgraduate level are consistent with the objectives specified for the doctoral degree in the Higher Education Ordinance, Appendix 2 Degree Ordinance.
Postgraduate education in architecture should give students a good overview of the area as well as sound schooling in theory and methodology. The main purpose of the programme is to provide a basis for continued independent activities as a researcher, a critic, an investigator, a teacher and as a practicing architect in the profession of architecture. It also aims to develop the researcher’s capacity for interdisciplinary cooperation. After completing their studies, a doctoral student should be able to independently formulate and solve research assignments and to communicate research results to the scientific community and to other clients, stakeholders, and to the general public.

The doctoral programme’s size and recruitment

Each specialisation can support between 4-8 students, up to a total of 30 students in the programme. Currently the aim is to annually admit up to 5 doctoral students, with a study period of 5 years, this allows a total number of around 25 students. At present, there are approximately 20 active students in the subject.

The groups relevant to the recruitment of doctoral students are primarily architects, but also art historians, historians of ideas, urban planners and others.

The programme will recruit students both through calls for doctoral positions and through scholarship funding. Admission will be preceded by compulsory interviews. The objective is for the majority of PhD students to be admitted through calls for doctoral positions.

Currently, eight employees can act as main supervisor and assistant supervisor, and four more can serve as assistant supervisor. The objective for the near future is to have at least ten persons who might act as main supervisor. Some of the employees that currently serve as assistant supervisors are expected to become main supervisors within a year.

Funding

The programme has a mixed financing of doctoral students; faculty funding for postgraduate positions by the department, school or centrally from KTH (e.g. excellence posts), co-financing between KTH and the research council, research council funding alone, and scholarships. The Department of Architecture has also begun to support externally employed doctoral students who are embedded in industry. This has been successful, but is still under development.

For economic reasons, all postgraduate students in recent years have been funded through central faculty funding (excellence posts), research council funds, scholarships, or have been accepted as externally employed doctoral students.

Courses

The courses within the doctoral programme are all offered within a third-cycle subject and are therefore presented in the study plan for the subject.

Quality enhancement activities

For the doctoral programme in architecture there should be a programme coordinator and a programme council in which representatives from each specialisation are included. The main task for those responsible for the programme, the coordinator and the specialisation representatives, is to ensure that: the syllabus for the subject at postgraduate level is up to date; that the range of courses is in accordance with the study plan; that developments within the PhD programme are followed; and to initiate measures necessary to develop the programme. A review of courses offered should be made at least once a year.

The programme director appoints a person to represent the subject at doctoral level at the Doctoral Studies Council at the School of Architecture and the Built Environment. The appointed person is responsible for information on changes concerning the doctoral programme, and should communicate this information with the programme director and the responsible person for each specialisation.

At least once a term the programme director should meet with the Programme Council. The purpose of these meetings is to follow up and coordinate past and future activities and courses in the PhD programme. In cooperation with the programme council the programme director makes considerations concerning recruitment, implementation, throughput and systematic quality enhancement.
Within the framework of the doctoral programme there is a college of supervisors. The supervisors meet at least once per school year for a faculty meeting about the programme, and at least once per school year for a faculty meeting in regard of the various specialisations. The purpose of these faculty meetings is to create a forum for exchange and to discuss their experiences of tutoring situations.

For each PhD student there are at least two supervisors. At least one of the two supervisors must have undergone KTH's supervisor training or equivalent training. As a rule, the main supervisor should have completed such training.

The main supervisor is responsible for ensuring that the doctoral student has a valid study plan.

The current publication norm within the subject of architecture differs from other KTH subjects. Dissertations are often monographs, although not exclusively. The doctoral student is often the sole author of submitted papers and articles. Besides articles in scientific journals postgraduate students publish chapters in books and in non-peer-reviewed fora, such as journals, exhibition catalogues, newspapers, etc. Compared to many other subjects, scientific conferences are a more important form of publication. They are often preceded by a peer-review process or peer-reviewed in connection to publications of selected proceedings. Publications as part of the third task can include participation in exhibitions, production of computer programmes, etc. Materials published in non-peer-reviewed fora are subject to internal seminar readings.

The programme's educational environment will be followed up by evaluations of the programme's courses, seminars, supervisor courses and general organisation.

National and international network

Since 2011, KTH Architecture has collaborated with the other three schools of architecture in Sweden (Chalmers, Lund and Umeå) in the National Graduate School ResArc, funded by FORMAS until the end of 2017. Many courses are taught within the National Graduate School framework, which means that some courses offered in the programme are common to all architectural schools. This ensures a good quality and renders a critical mass for the courses despite a comparatively small admission to the doctoral programme across the four universities. The goal is to extend this cooperation and various possibilities are being investigated.

KTH Architecture is also involved in an EU/Marie Curie cooperation called InnoChain, where at least two PhD students will study at KTH. Within this programme there will be a high degree of activities within courses and exchanges, which are expected to contribute with opportunities for all doctoral students.

An Erasmus exchange at postgraduate level was established in 2008 with the School of Architecture at the University of Sheffield. There are opportunities to strengthen the links with the Nordic Academy of Architecture, which is an organisation for architectural schools in the Nordic region. There is also a close cooperation on postgraduate level with the Bartlett School of Architecture at the University College London, the School of Architecture in Oslo, Delft University of Technology, Georgia Institute of Technology in Atlanta, and the University of Bath. We strive to increase the international contacts and to formalise cooperation in the form of joint courses, and so forth.

The above is enumerated and defined in appendix 3.

Further instructions for registration

Appendixes

Appendix 1: Study plan for third-cycle subject Architecture (ARKITEKT).

Appendix 2: List containing names and subject areas of supervisors within the programme

Appendix 3: Presentation of the programme’s national and international network
Doctoral programme — Architecture

Appendix 1: Study plan for third-cycle subject Architecture (ARKITEKT).

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

Subject title
Architecture (Arkitektur)

Subject description and programme outcomes

Scientific field
The subject of architecture at postgraduate level manages, develops and communicates the knowledge of architecture. The subject treats the concepts and theories of architecture and their relationship to the planning and design of the built environment. Postgraduate studies in architecture at KTH contain five areas of specialisation: architectural design, architectural technology, history and theory of architecture, critical studies in architecture, and urban design.

Description of possible specialisation

1. Common for all specialisations
2. Architectural design
3. History and theory of architecture
4. Architectural technology
5. Critical studies in architecture
6. Urban design

Specification of how the programme outcomes are to be achieved
The programme outcomes are achieved through courses according to the individual study plan, participation at seminars, participation in national and international conferences and through supervision.

Common for all specialisations

Description of the specialisation
Common information for all five specialisations.

Current research
For information on current research, visit http://www.arch.kth.se/forskning/

Programme structure
Postgraduate studies consist of coursework and a dissertation or thesis part. The coursework may consist of lectures, literature studies and problem-solving, as well as active participation in seminars and conferences. The five areas of specialisation within the subject of architecture at postgraduate level have different specifications relating to course requirements.
Courses may be studied within the department or in cooperation with other national and international research institutes. The main part of the knowledge content of courses shall generally be acquired during the introductory part of postgraduate studies. This course part may also involve participation in research activities, which will prepare the student for independent work as a researcher.

Postgraduate studies are carried out under the guidance of a main supervisor together with at least one assistant supervisor, in accordance with the individual study plan. A doctoral student's progress shall be judged at least once per year in conjunction with a review of the individual study plan, which shall be carried out by the student and the main supervisor. The study plan is ratified by the Director of Third Cycle Education.

It is assumed that doctoral students have an interest and capacity to participate in undergraduate education, although this may not prolong their research studies by more than 20%. Doctoral students who teach at undergraduate level for advanced level shall have completed an introductory course in teaching methodology for universities. Doctoral students should be encouraged to undertake part of their education at postgraduate level at a university abroad.

A licentiate degree may be taken as a part of a doctoral degree. The licentiate degree consists of coursework of 45-60 ECTS, of which 30 ECTS are obligatory, and a dissertation part of 60-75 ECTS, so that the total amounts to 120 ECTS.

A doctoral degree consists of coursework of 60-90 ECTS, of which 45 ECTS are obligatory, and a thesis part of 150-180 ECTS, so that the total amounts to 240 ECTS.

Active participation in research seminars at the department is included in the programme, which involves regularly producing original texts. This takes place in accordance with the course requirements for obligatory courses. Doctoral students should also participate in national and international conferences as well as research networks within the subject area.

Compulsory and recommended courses

Courses will be studied in accordance with the agreement drawn up between the doctoral student and the main supervisor in the individual study plan.

For a doctoral degree, the compulsory courses (37.5 ECTS) listed below are required. In addition, the compulsory course (7.5 ECTS) for the specialisation is also required.

For a licentiate degree, compulsory courses consisting of 30 ECTS are required, including the compulsory course specific to the specialisation.

The courses listed as recommended can be selected by students within all specialisations, these courses can count for 15-45 ECTS of the total course requirements.

Compulsory courses

- 1A5033 Higher Seminars in Architecture, Part 2 7.5 hp.
- 1A5032 Higher Seminars in Architecture, Part 1 7.5 hp.

Compulsory in-depth courses

- 1A5031 Concepts and Theories in Architecture 7.5 hp.

Compulsory research proficiency courses

- 1A5034 Knowledge Communication in Architectural Research 7.5 hp.
- 1A5035 Scientific Theory and Research Methodology in Architecture 7.5 hp.

Recommended courses

- 1A5041 Individual Literature Course: Architecture 2.5 hp.
- 1A5039 Critical Studies in Architecture 7.5 hp.
- 1A5049 Individual Project Course: Architecture 10.0 hp.
- 1A5040 Theories in Urban Morphology 7.5 hp.
• 1A5050 Individual Project Course: Architecture 15.0 hp.
• 1A5046 Individual Seminar Course: Architecture 7.5 hp.
• 1A5047 Individual Project Course: Architecture 5.0 hp.
• 1A5042 Individual Literature Course: Architecture 5.0 hp.
• 1A5043 Individual Literature Course: Architecture 7.5 hp.
• 1A5045 Individual Seminar Course: Architecture 5.0 hp.
• 1A5044 Individual Seminar Course: Architecture 2.5 hp.
• 1A5051 Philosophies in Architecture 7.5 hp.
• 1A5048 Individual Project Course: Architecture 7.5 hp.

Thesis
Dissertation or thesis work is an obligatory part of postgraduate studies. The course aims to develop the capacity of students to make independent contributions to research as well as to cooperate in the generation of scientific knowledge within and outside the student's own subject area. The dissertation or thesis may be written as a monograph or as a compilation of scientific articles.

The dissertation or thesis must contain new research results, which the student has produced individually or in cooperation with others through theoretical or empirical research work. For a doctoral degree the main scientific results should comply with the quality requirements for the publication of at least four articles in internationally recognized journals that are peer reviewed (and for the licentiate degree, at least two articles). The dissertation or thesis work should be presented once a term at a seminar and at least twice a term to the main supervisor or supervisor group. Before an application is made for a viva voce, a final public seminar shall be held with an external faculty examiner.

Dissertations or theses at KTH should normally be written in English. Should the subject matter motivate the dissertation or thesis being written in another language, the student may apply for dispensation by contacting the Director of Third Cycle Education.

Seminars and conferences
An active participation, presenting research papers at research seminars within the Department is part of the education programme. This takes place in accordance with the course plans for the compulsory courses. The PhD student shall also participate in national and international conferences and research networks within in the research field.

Architectural design

Description of the specialisation
The area of specialisation architectural design studies how built structures are given form. The subject area manages, develops and communicates knowledge in the fields of basic design, sustainable design, design processes and advanced design. A key area is research that addresses the production of ideas, creativity, utilization and quality assessments of architectural projects. In terms of methodology, the area focuses on design theory, artistic design methods, innovation, aesthetics and methods drawn from the humanities.

Current research
For information on current research, visit http://www.arch.kth.se/forskning/

Programme structure
See common for all specialisations.

Compulsory and recommended courses
For a licentiate and a doctoral degree, the compulsory course specific to the specialisation (listed below) is required.

In addition to the compulsory courses within the programme and specialisation, students are recommended to carry out individually in-depth courses which are offered within the specialisation or outside the specialisation, for example culture studies, art- and science history, aesthetics and philosophy, consisting of 15-45 ECTS.
Compulsory in-depth courses

- 1A5036 Foundation Course in Architectural Design 7.5 hp.

Thesis
See common for all specialisations.

**History and theory of architecture**

**Description of the specialisation**
The area of specialisation dedicated to the history and theory of architecture manages, develops and communicates the knowledge of architecture and its history and theory. The subject area shares a primary methodological connection with the humanities, although this does not exclude links to research perspectives from engineering, art or sociology. The history and theory of architecture studies architecture and building as a historic process, and also its application in relation to context and typology, rebuilding and extension, restoration and preservation.

**Current research**
For information on current research, visit http://www.arch.kth.se/forskning/

**Programme structure**
See common for all specialisations.

**Compulsory and recommended courses**
For a licentiate and a doctoral degree, the compulsory course specific to the specialisation (listed below) is required.

In addition to the compulsory courses within the programme and specialisation, students are recommended to carry out individually in-depth courses which are offered within the specialisation or outside the specialisation, for example culture studies, art- and science history, aesthetics and philosophy, consisting of 15-45 ECTS.

**Compulsory in-depth courses**

- 1A5037 Architectural Historiography 7.5 hp.

Thesis
See common for all specialisations.

**Architectural technology**

**Description of the specialisation**
The area of specialisation architectural technology investigates design and production technologies under development and their significance for existing practices in architecture and engineering; the significance of the sustainability perspective; the relationships between different disciplines which produce architecture with a focus on architects and other disciplines. Research methods are interdisciplinary, such as research by design, realization of full-scale projects through connections with practicing consultants and technical and humanistic analyses of the culture of building.

**Current research**
For information on current research, visit http://www.arch.kth.se/forskning/

**Programme structure**
See common for all specialisations.
Compulsory and recommended courses
For a licentiate and a doctoral degree, the compulsory course specific to the specialisation (listed below) is required.

In addition to the compulsory courses within the programme and specialisation, students are recommended to carry out individually in-depth courses which are offered within the specialisation or outside the specialisation, for example culture studies, art- and science history, aesthetics and philosophy, consisting of 15-45 ECTS.

Compulsory in-depth courses
• 1A5038 Foundation Course in Architectural Technology 7.5 hp.

Thesis
See common for all specialisations.

Critical studies in architecture

Description of the specialisation
Critical studies in architecture examines the history, theories and discourses of architecture. Architecture is considered here as a profession, a discipline and a cultural expression. Important issues treated are architectural meaning and representation, the influence of different ideologies and power structures on architecture, and in reverse, how it may reproduce ideological systems and power structures. Research methods are interdisciplinary and relate to broad humanist fields such as critical studies of culture as well as artistic methods of representation. Current research in this area combines advanced history and theory with experimental artistic methods and the development of feminist architectural criticism for practice and education.

Current research
For information on current research, visit http://www.arch.kth.se/forskning/

Programme structure
See common for all specialisations.

Compulsory and recommended courses
For a licentiate and a doctoral degree, the compulsory course specific to the specialisation (listed below) is required.

In addition to the compulsory courses within the programme and specialisation, students are recommended to carry out individually in-depth courses which are offered within the specialisation or outside the specialisation, for example culture studies, art- and science history, aesthetics and philosophy, consisting of 15-45 ECTS.

Compulsory in-depth courses
• 1A5039 Critical Studies in Architecture 7.5 hp.

Thesis
See common for all specialisations.
Urban design

Description of the specialisation
Urban design investigates how the physical form of a city contributes to the form and structure of life in the city. The subject area manages, develops and communicates knowledge about the form of the city in terms of both real buildings and representations. The development of new methods and technologies for describing and analyzing built forms is given priority, in particular with respect to the performance dimension. Methodologically the area has a close relationship to the general development of society and social sciences, which does not exclude perspectives from technology, art, history and design.

Current research
For information on current research, visit http://www.arch.kth.se/forskning/

Programme structure
See common for all specialisations.

Compulsory and recommended courses
For a licentiate and a doctoral degree, the compulsory course specific to the specialisation (listed below) is required.

This course consists of an individual reading part of 4 credits that is reported in a paper and active participation in a seminar series of 6 workshops covering 3 credits.

In addition to the compulsory courses within the programme and specialisation, students are recommended to carry out individually in-depth courses which are offered within the specialisation or outside the specialisation, for example culture studies, art- and science history, aesthetics and philosophy, consisting of 15-45 ECTS.

Compulsory in-depth courses
- 1A5040 Theories in Urban Morphology 7.5 hp.

Thesis
See common for all specialisations.

Entry requirements and selection

General and special admission requirements and prior knowledge
The general KTH eligibility requirements for applications to postgraduate courses will be applied.

Doctoral students are expected to be able to read and write scientific English and to speak English fluently.

Selection rules and procedures
Admission to postgraduate studies is decided by the school director at the School of Architecture and the Built Environment following advice from the programme council for postgraduate education in architecture. The selection of applicants for postgraduate studies is generally carried out by the department in conjunction with admissions. The Director of Third Cycle Education at the school will appoint supervisors and in relevant cases will carry out the examination of eligibility. In addition to applicants being examined for eligibility, the degree of maturity and capacity for independent judgment and critical analysis is put forward as a basis for selection. Of great significance in this assessment is the experience and competence of architectural design as well as previous study results in advanced undergraduate studies or independently executed scientific work.

In cases where doctoral posts are advertised, a number of applicants will be interviewed by prospective supervisors together with other representatives of the subject area and/or the director of studies. Contact is normally made with teachers that the applicant has previously studied with.
The programme’s degrees and examinations

Degree of Licentiate and Degree of Doctor (PhD)

A licentiate degree may be taken as a part of a doctoral degree. The licentiate degree consists of coursework of 45-60 ECTS, of which 30 ECTS are obligatory, and a dissertation part of 60-75 ECTS, so that the total amounts to 120 ECTS.

A doctoral degree consists of coursework of 60-90 ECTS, of which 45 ECTS are obligatory, and a thesis part of 150-180 ECTS, so that the total amounts to 240 ECTS.

The programme’s examinations

Examinations should be included in postgraduate courses, which may be in written or oral form.

Examinations should be designed so that examiners may be satisfied that the student has assimilated the entire contents of the course.
Doctoral programme — Architecture

Appendix 2: List containing names and subject areas of supervisors within the programme

The programme description was approved by Fakultetsnämnden (Faculty Board) November 30, 2010. Valid from Spring 11.
Doctoral programme — Architecture

Appendix 3: Presentation of the programme’s national and international network

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