

Syllabus for doctoral studies in the subject of
HISTORY OF SCIENCE, TECHNOLOGY AND THE ENVIRONMENT
at the School of Architecture and the Built Environment, KTH
(Replaces syllabus for doctoral studies in the subject HISTORY of TECHNOLOGY)

This syllabus complements the KTH general regulations and guidelines for doctoral studies with specific instructions for the subject area.

1 Description of subject and goals for the programme

In the doctoral subject of History of science, technology and the environment, the processes of technical, scientific and environmental change are studied from a historical perspective. One focus is the examination of the social and **cultural** driving forces behind such changes. Another is the study of social and cultural implications. The subject falls into the areas of humanistic and social sciences.

History of science, technology and the environment will give students a good overview of current research in the field and a sound theoretical and methodological training. The main objective of the **doctoral programme** is to provide a basis for further independent scientific research in the area.

2 Ongoing research

History of science, technology and the environment is a broad historical subject that has elements from several related humanities and social science disciplines. The **Division of History of Science and Technology** conducts research in the history of technology, industrial **heritage**, environmental history and history of science, and the doctoral programme provides opportunities for advanced studies in these areas.

3 Structure of the programme

The doctoral programme consists of courses, seminars and thesis work. Coursework may consist of lectures, literature studies and problem-solving, as well as active participation in seminars and conferences. Courses may be studied within the **Division** or in collaboration with other Swedish or foreign research institutions.

Doctoral studies are conducted under the direction of a main supervisor, usually together with one or more assistant supervisors, in accordance with an individual study plan approved by the doctoral programme officer. The student's individual study plan will be adapted to prior knowledge and the area of specialization of thesis work. The doctoral student's progress should be assessed at least once a year in connection with the review of the individual study plan carried out by the student and the main supervisor.

The doctoral student must actively participate in higher seminars in the **Division**. Her own thesis shall be continuously presented at such seminars. Furthermore, the student is expected to participate in other seminars within and outside the **Division** that are relevant to the thesis. The student must also participate in national and international conferences in the subject area.

4 Obligatory and recommended courses

A licentiate degree consists of courses of 45 ECTS and a dissertation part of 75 ECTS, equal

to 120 ECTS. A doctor's degree consists of courses of 90 ECTS and a thesis part of 150 ECTS, giving a total of 240 ECTS.

The coursework for both licentiate and doctoral degrees consists of obligatory and optional courses. The optional courses must be chosen in consultation with the main supervisor and be entered in the individual study plan. They are designed to provide broader knowledge, mainly related to the work of the dissertation/thesis. The courses will be studied in accordance with the agreement between students and the main supervisor as entered in the individual study plan.

Obligatory courses

Obligatory courses will consist of 30 ECTS for a licentiate degree and 45 ECTS for a doctor's degree. The obligatory courses and their credits are as follows:

Theory and method in historical research, part 1 (F1N5505) (required for licentiate)	7.5 ECTS	
Theory and method in historical research, part 2 (F1N5506)	7.5 ECTS	
Perspectives on Science, Technology, and Landscape in Time and Space (FAK3101) (required for licentiate)		15 ECTS
Introduction to the research process (F1N5503) (required for licentiate)	7.5 ECTS	
Communicating research (F1N5504)	7.5 ECTS	

If a student intends to teach during studies at doctoral level, a higher education teacher training course of at least 3 ECTS is required. This course is also recommended for those who do not teach.

Optional courses

Besides the obligatory courses, doctoral students shall study optional courses at doctoral level in the **Division** or at another higher education institution, or individual study courses produced in collaboration with the supervisor.

Courses within the following subject areas are recommended for students of History of science, technology and the environment:

Industrial heritage studies

Environmental history

History of science

History of ideas

Economic history

Ethnology

Science and technology studies (STS)

Theory of science

Gender studies

By agreement with the main supervisor and with the approval of the **Division's** admissions committee, credit may be granted in the individual study plan for courses completed at undergraduate level up to a maximum of 15 ECTS. Courses from undergraduate level may only be counted if they relate to relevant subject areas for the doctoral studies and they are not required as prior knowledge.

5 Dissertation/thesis

The purpose of the dissertation/thesis is for the student to develop the ability to make independent contributions to research and the capacity for scientific cooperation, within and outside their own subject area. The dissertation/thesis should be based on independent research. A student's contribution to a dissertation/thesis with several authors must be clearly distinguishable.

A dissertation/thesis can either be written as a collection of scientific articles or as a monograph. In the former, there should be a special written summary. Whether the dissertation/thesis is a monograph or a compilation dissertation/thesis, international publication of results is desirable during the programme. The dissertation/thesis is normally written in English.

A dissertation/thesis, whether it is presented as a monograph or a compilation of scientific articles, is to be of such quality that it could be the basis of a minimum of two (for the licentiate degree) and at least four (for a doctor's degree) normal articles published in internationally recognized journals with peer review.

6 Eligibility and selection

6.1 Basic and special eligibility and prior knowledge

Students are eligible for admission to the doctoral programme in History of science, technology and the environment if they have completed studies of at least 240 ECTS or the equivalent knowledge and have proven their ability to write a long essay in the subject area.

Graduate students are expected to read and write scientific English and speak English fluently.

6.2 Rules for selection

Admission to studies at the doctoral level is decided by the school director at the School of Architecture and the Built Environment after preparation by the programme council for History of science, technology and the environment and the proposed main supervisor.

In addition to examining candidates' eligibility, the capacity for independent judgement and critical analysis and the potential for carrying out doctoral studies successfully and within the stipulated time will be the basis for selection. Of great interest in this assessment are previous study results in courses of an advanced nature in undergraduate education or independently conducted scientific studies.

7 Examinations and tests in the programme

7.1 Licentiate and doctorate

The licentiate degree consists of coursework of 45 ECTS and a dissertation of 75 ECTS. The dissertation is to be presented and defended in accordance with KTH rules.

The doctor's degree consists of courses of 90 ECTS and a thesis of 150 ECTS. The thesis is to

be presented and defended in accordance with KTH rules. Coursework and thesis work included in a licentiate degree may be credited towards a doctorate.

7.2 Tests included in the programme

Courses at the doctoral level will include a written examination. In some cases this may be replaced by an oral examination. The design of the examination in every case is to be such that the examiner can be satisfied that the student has assimilated the entire contents of the course.