Programme description: Doctoral Programme in Information and Communication Technology

Programme name in English
Information and Communication Technology

Indicate the third-cycle subjects included in the programme.
Information and communication technology

Programme organisation
Describe the programme council (indicate which functions are included, not persons), the programme director and indicate in particular how student representation is ensured.

The programme director is the head of the programme, which belongs to the School of Electrical Engineering and Computer Science (EECS) at KTH. The programme has a programme council, consisting of the programme director, the school’s director of third-cycle education, doctoral student representatives and representatives from the specialisations included in the programme.

The programme director is, together with the other directors of third-cycle education and doctoral programme directors, part of EECS’ council for third-cycle education. Student representatives hold meetings with the EECS Doctoral Programme Executive Committee.

The programme council usually meets once or twice per semester during the academic year.

Courses
Range of courses offered
Describe the range of courses in the programme in general and the subject areas to be covered. Current courses are listed [write where].

The programme provides courses in its constituent research specialisations. All courses offered by the programme are described in their course syllabi, and include compulsory and optional courses.

Compulsory courses are essential for third-cycle studies. These courses are general and relevant for all doctoral students in the programme. These include "The Art of Doctoral Research" and "The Sustainable Scientist".

Optional courses relate to the specific research specialisations.

Some of these courses are offered regularly on an annual or biennial basis. They are designed to provide basic knowledge as well as cutting-edge expertise in a given specialisation.

Some courses aim to treat new developments or trends in a specialisation in depth. Such courses are usually taught by an interested faculty member.
Quality assurance and monitoring of programme courses

State how the programme’s courses are monitored and how quality assurance of the courses is carried out.

The course coordinator must implement a course evaluation, requesting student views on the course, in connection with each course offering. The course evaluation must be discussed, and the course analysis must be compiled and published according to KTH’s general guidelines. The EECS standard form for third-cycle course analysis is normally used.

Other programme content and support for the programme’s doctoral students

Organised activities other than courses, such as seminar series and workshops.

The programme organises a doctoral workshop every two years, with invited speakers. In addition, an annual seminar is organised for newly admitted doctoral students, providing information on, for example, the organisation of the programme and courses. Furthermore, the programme provides financial support to the doctoral section, to organise additional activities for the programme’s doctoral students.

Description of the continuous, systematic quality-enhancement activities of the programme

Describe the regular monitoring, analysis, evaluation and development activities. This can be done, e.g., through course analyses, programme analyses or the means for ensuring a relevant range of courses offered.

The programme conducts the following quality-assurance activities:

**Range of courses offered:** An inventory of needs and proposals for desired courses are collected and discussed at the programme council. Courses recommended to be funded are then sent to the director of third-cycle education for final decision.

**Individual Study Plan (ISP):** Each individual study plan must be revised at least once per year in consultation between the supervisor and the doctoral student.

**Annual follow-up of studies:** Each student writes an annual progress statement to be discussed with two senior researchers who are not the student’s supervisors. The aim is to evaluate the doctoral student’s development, focusing on the quality and quantity of research progress and supervision, and to identify and resolve any problems or conflicts. **Surveys:** The programme organises surveys on course quality or student life of doctoral students. The results of these surveys are discussed at the programme council and later presented in meetings with doctoral students and senior researchers.

**Stage seminars:** All doctoral students in the programme, including fellows and externally employed doctoral students, are expected to make degree progress in accordance with KTH’s salary grades for doctoral student employment, and give seminars at 30, 50 and 80 per cent degree progress. Projected seminar dates must be documented in the ISP.