



Programme description

Reference number: V-2023-0866 3.2.3

Doctoral Programme

Valid from: 28/11/2023

Revised as of:

Programme description: Doctoral Programme in Vehicle, Maritime and Aerospace Engineering

Programme name in English

Vehicle, Maritime and Aerospace Engineering

Indicate the third-cycle subjects included in the programme.

Vehicle and Maritime Engineering and Aerospace Engineering

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 council consists of the programme director, faculty representatives from the various research groups included in the programme and at least one student representative from the programme. Changes in official course syllabi, general syllabi (one each for Vehicle and Maritime Engineering and Aerospace Engineering) and proposals for new courses are discussed in the programme council.

Courses

Range of courses offered

Programme course offerings consist of both more theoretical and experimental courses in the areas represented by the research groups. The courses have application-specific content related to different craft types and topics as well as more general courses in, e.g., sustainable development.

Current courses are listed at:

Subject area Vehicle and Maritime Engineering, School of Engineering Sciences intra-web:
<https://intra.kth.se/en/sci/phd/kurser-pa-forskarniv/courses-within-the-doctoral-program-in-vehicle-and-maritime-engineering-1.1106472>

Subject area Aerospace Engineering, School of Engineering Sciences intra-web:
<https://intra.kth.se/en/sci/phd/kurser-pa-forskarniv/courses-within-the-doctoral-program-in-aerospace-engineering-1.1106473>

Appendix 1: Current list of courses

Quality assurance and monitoring of programme courses

Doctoral programme courses are evaluated fully in accordance with the principles that apply to first- and second-cycle courses.

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

Seminar series and workshops are organised on a regular basis in the different research groups. In addition to seminar series, summer schools and workshops in the different application areas,

additional workshops on research skills - such as reviewing articles, chairing a conference session and how to apply for a research project - are also held. Doctoral students are informed about these activities both through research group meetings and by e-mail.

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

Regular monitoring and evaluation work takes place partly through KTH's central dialogues regarding quality and programmes. Doctoral programme courses are fully evaluated in accordance with the principles that apply to first- and second-cycle courses indicated above. Dialogues are also conducted within the programme council and with other supervisors to ensure relevant course offerings.

Most doctoral and licentiate theses in the programme are compilation theses. The doctoral programme explicitly requires that all scientific articles making up the doctoral theses must be publishable in reputable international journals.

Several research students are part of different centres, e.g., ECO2, SMARC, WASP. These networks promote the scientific breadth and diversity of the programme. The centres also provide doctoral students in the programme with contact points with other environments at and beyond KTH, as well as regularly organising third-cycle courses available to research students in the programme. Through these centres, and in general, the educational environment has strong international elements, with doctoral students, postdocs and senior researchers both visiting KTH and departing from KTH to visit institutions abroad. Extensive industrial contacts are also an important feature of the educational environment.

The Odqvist Laboratory for Experimental Mechanics includes much of the programme's experimental resources. These resources are used in first-, second- and third-cycle education as well as in experimental research. The Laboratory, which is partly shared with the third-cycle programmes in Solid Mechanics and Engineering Mechanics, performs very well in international comparisons.