

Doctoral programme details

Adopted by the faculty council/education committee: 23 Apr 2013

Revised: 13 Jun 2018

The programme's Swedish name (and English translation)

State also whether the programme has specialisations.

Industriell ekonomi och organisation (Eng. Industrial Economics and Management)

Short description of subject area and content

State the third-cycle subjects included in the programme. General syllabuses for included subjects are to be appended to the programme details.

The Industrial Economics and Management doctoral programme brings into focus issues regarding development and organisation of efficient industrial operations (technology-based businesses) and how to create the right conditions for innovation, development and sustainable growth in industrial applications. The programme is multidisciplinary and is characterised by a diversity of approaches, perspectives and analysis levels.

The programme includes two third-cycle subject areas:

1. Industriell ekonomi och organisation (Eng. Industrial Economics and Management).
2. Nationalekonomi (Eng. Economics).

The Industrial Economics and Management third-cycle subject area covers acquisition of the theoretical and practical knowledge for managing innovation, production and marketing in established and emerging industries. At the centre are the development of efficient industrial operations (technology-based businesses) and how to create the right conditions for innovation, development and growth. The subject is characterised by a diversity of approaches at different analysis levels. The natural starting point is the organisation (company/department/project) and its operations. However, the subject also includes studies of, for example: sector structures and conversion processes that, temporally and spatially, cut across several organisations; and, work processes and working conditions from an employee perspective.

Viewed globally, the Economics third-cycle subject area is a well-defined social science subject. However, there are also strong links to engineering science, mathematics and industrial economics and management. For example, economic production theory has historically developed and fed from engineering science. Similarly, financial mathematics now plays a decisive role in the rapidly growing part of the economy that is usually called financial economics. There are also significant interfaces between: optimisation and economic analyses of equilibrium conditions on various markets; and, for example, technical development and opportunities for establishing new markets. The globalisation of various markets is continuing, as also that of many modern price and tariff systems and modern information and communication technologies.

Programme organisation

Programme council (state the constituent functions, not the people), programme director, student representation, etc.

The programme is led by a programme director (DA). A DA shall fulfil KTH's requirements to serve as a principal supervisor and should himself/herself be active as a researcher and principal supervisor.

Formally, the programme is administratively under the head of the School of Industrial Engineering and Management (ITM) and the director of third-cycle education (FA). To a great extent, it also shares administrative processes with other doctoral programmes at ITM. Consequently, the DA is a member of ITM's third-cycle education committee.

All principal and assistant supervisors linked to the programme are in the supervisor assembly, which is also the council for the programme. The supervisor assembly is the academic arena for collegial discussion of issues related to supervision, research quality, final seminars, doctoral students' progress, monitoring of study plans, third-cycle courses, etc. The supervisor assembly meets twice a semester and, if necessary, can also be convened in the interim. From the constituent third-cycle subject areas, representatives chosen by the doctoral students (doctoral student programme representatives – PADs) are also called to the assembly.

Courses

Course offerings

Describe the programme's course offerings, which subject areas are to be covered and how relevant course offerings are ensured.

The programme does not have subject-wide course offerings. The array of compulsory courses differs between the two third-cycle subject areas and is thus regulated in the two general syllabuses.

Quality assurance and monitoring of the programme's courses

State how the programme's courses are monitored and how their quality is assured.

There is a course evaluation after each third-cycle course. The course coordinator is responsible for it being carried out.

Support (other than courses) for goal attainment in the subjects

Organised activities other than courses, e.g. seminar series and workshops.

At programme level, the administrative processes are evaluated once a year. The programme director (DA) arranges this. Administrative processes that the programme shares with other third-cycle courses at ITM are evaluated once a year by ITM's third-cycle education committee. If necessary, the committee can also initiate more wide-ranging overhauls of programme content and programme structure.

During his/her programme, each doctoral student shall, besides participating in internal working seminars in the division and/or research group, present his/her research at a minimum of three official programme seminars:

1. Thesis plan (after around 1 year of studies).
2. Midway/licentiate seminar (around halfway).
3. Final seminar (when it is assessed there are 6 – 12 months to the public defence).

Via announcement to all department employees, all doctoral students and researchers linked to the programme are invited to participate in these seminars. At each seminar, the manuscript is reviewed by an expert, external reviewer/opponent who is not involved in the doctoral student's work. The seminar is chaired by someone from the programme's supervisor assembly (but not the doctoral student's principal or assistant supervisor). The invitees shall have received copies of written documentary input at least one week before the seminar. At midway/licentiate seminars, the reviewer/opponent should preferably have decent qualifications.

Results from these seminars can be used, in the supervisor assembly, as input for discussion related to the quality assurance of research.

Final seminar

Before finalising the doctoral thesis, the doctoral student shall present his/her manuscript at a final seminar. This final seminar is part of the quality review of the doctoral programme and aims to ensure that the doctoral thesis is of a high scientific quality.

The final seminar uses what is judged to be the next last version of the thesis manuscript. This means that the entire thesis is available. The seminar is held when the principal supervisor assesses that there is 6 – 12 months' work before the public defence. An external, independent reviewer who has not previously been involved in the doctoral student's thesis work is invited to the seminar. The reviewer should, preferably, have decent qualifications.

The final seminar shall be announced via communications to all supervisors and doctoral students in the programme.

The seminar is to be chaired by someone from the programme's supervisor assembly (but not the doctoral student's principal or assistant supervisor).

Additionally, KTH's and the School of Industrial Engineering and Management's quality assurance procedures apply to the public defence of doctoral theses.

Description of continuous, systematic quality improvement

Describe the regular evaluation and development activities.

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