



Program description

Dnr: V-2021-0824 3.2.3

Doctoral program

Established: 2021-12-10

Revised:

## Program description doctoral program Biotechnology

### Program name

Biotechnology

### Third-cycle subjects that are part of the program

Biotechnology

### Program organisation

The program is led by the program director (PA) who is part of the school's Quality Council for third-cycle education together with the school's other PAs, director of third-cycle education (FA), all deputy directors of third-cycle education (deputy FA), teacher and supervisor representatives, student representatives from the school's Doctoral Council and all coordinators within the school administration for third-cycle education. PA leads the Program Council for the doctoral program.

### Courses

#### *Course offerings*

The school offers courses and learning activities at the doctoral level in the subject's various disciplines. The course part of the third-cycle education is for the most part individually adapted to the doctoral student's need for knowledge and the specific research project. Courses at the doctoral level are intended to provide specialisation and breadth within areas central to the program. To these courses can be added a limited number of higher education credits for courses at the first and second cycle, as well as with third-cycle courses outside of KTH.

The program offers courses and other learning activities that aim to meet the degree objectives. The doctoral program also strives to offer an environment akin to a graduate school with interactive and socially inclusive elements where compulsory participation in higher seminar courses is an important part.

Furthermore, it is encouraged as a recommended learning activity that doctoral students actively participate in scientific exchange with academia, companies, and the surrounding society by presenting their own research results in various ways.

Further information on compulsory and recommended elements can be found in the general study syllabus for the third-cycle subject.

#### *Quality assurance and follow-up of the program's courses*

In accordance with KTH's regulations, the program applies regular review of doctoral courses through course evaluations and course analyses. PA / vice FA is responsible for ensuring, in consultation with the Program Council, that course plans follow KTH's regulations, that new courses are established when needed, and that courses that are no longer given are discontinued, and that information about any changes in the regulations is communicated to the course coordinators.

## **Other program content and support for the program's doctoral students**

The individual study plan is an important tool for monitoring the doctoral student's progression towards goal fulfilment. All individual study plans are available in an electronic support system (ISP system) which is connected to Ladok where PA / vice FA / FA has access to information for regular follow-up of the doctoral students' activities, and how these lead to progression towards meeting the degree goals. Supervisors and doctoral students are responsible for updating the individual study plan when necessary, but at least once a year.

Progression towards goal fulfilment is also evaluated through compulsory half-time control which takes the form of an open half-time seminar with two independent reviewers and a subsequent meeting where the doctoral student, supervisors, reviewers, and PA participate in a forward-looking discussion about the doctoral student's progress and further path towards the intended degree. Furthermore, it is recommended that doctoral students hold mid-year seminars as an additional part of ensuring progression towards the degree objectives.

See the general study syllabus for the subject for more detailed information about half-time seminars and mid-year seminars.

## **Description of the program's continuous, systematic quality work**

The third-cycle education undergoes an annual quality evaluation where the content of the education and follow-up of quality-assurance measures are evaluated and discussed. Within the framework of quality assurance, special consideration is given to the third-cycle education's environment, resources, quality, design, implementation, and results, as well as how follow-up of proposed measures is carried out and how feedback is given to parties concerned. Furthermore, the doctoral program places great emphasis on the doctoral student's perspective, as well as issues relating to sustainable development, equality, diversity, equal treatment, and work life.

Examples of concrete quality-assurance measures:

- The degree objectives for the third-cycle education are clearly described in the subject's general study syllabus and in the student's individual study plan. Progression towards the degree objectives is followed up regularly through, e.g., follow-up of individual study plans, half-time control and, where applicable, mid-year seminars. The compulsory learning activities constitute important support for goal fulfilment.
- The Program Council for the doctoral program in Biotechnology meets regularly during term-time. The council is led by PA. Council members include representatives of teachers, supervisors, Doctoral Council, and administrative support. The Program Council is advisory to PA and handles current issues concerning the program's implementation and quality development.
- The Quality Council for third-cycle education meets regularly during term-time. The council operates at the school level and is led by FA. The council members include all deputy FAs and PAs, as well as representatives for teachers, supervisors, Doctoral Council, and administrative support. The Quality Council is advisory to FA and the head of school and handles issues concerning all third-cycle education at the school.
- The requirements for qualifying as principal supervisor and co-supervisor are described in KTH's guideline for third-cycle education.
- PA regularly arranges supervisor seminars / colleges for dissemination of information and discussion on current third-cycle education issues.
- The school offers, and follows up, competence development for supervisors.

- Doctoral students and supervisors are encouraged to engage in interdisciplinary collaborations as well as participation in international collaborations with possibilities of shorter stays abroad.
- The quality of the theses is ensured through internal review, as well as during the thesis defence/licentiate seminar by an independent grading committee.
- Recruitment of new doctoral students is preceded by the establishment of a new study place through the process "Green Light" used at the school. The process means that all study resources are examined by FA and the head of department before a call for doctoral student recruitment can be initiated. FA and the head of department provide recommend a decision to the head of school on whether a study place can be established. The head of the school decides on the establishment of a study place, after which a call for recruitment can be made. Also those who wish to host a scholarship-funded doctoral student need to apply for a study place established through the Green Light process.