



Doctoral education in Resource Recovery

Handbook 2024



UNIVERSITY
OF BORÅS

Welcome to your doctoral education at the University of Borås!

This handbook will help and guide you during your doctoral studies here at the university. It is a supplement to the general *Doctoral student handbook* that is available on www.hb.se and it is customized to suit the local conditions of the doctoral programme in Resource Recovery.

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1. Governance of the doctoral education

The university's operations are managed by its Governing Board. This board is responsible for the university's affairs and for ensuring that its tasks are fulfilled. The Vice-Chancellor is the Governing Board's immediate subordinate executive for the operations. See Figure 1 on next page.

Education and research are organised within four faculties:

- Faculty of Textiles, Engineering and Business (A1)
- Faculty of Caring Science, Work Life and Social Welfare (A2)
- Faculty of Librarianship, Information, Education and IT (A3)
- Faculty of Police Work (A4)

A Dean of Faculty is responsible for each faculty. The faculties are organised in departments led by a Head of Department. The work within the departments is led by one or more Director of Studies.

In addition to university management there are two special boards, responsible for quality in research and education. They are consequently also responsible for quality in the university's doctoral education.

- The Research and Education Board (*Forsknings- och utbildningsnämnden*, **FoU**)
- Artistic Research and Education Board (*Nämnden för konstnärlig forskning och utbildning*, **KFU**)

FoU has delegated responsibility concerning the doctoral education to five different Research Education Committee's (*Forskarutbildningsutskott*, **FUU**).

- FUU-B&I (Library and Information Sciences)
- FUU-MIV (Human Perspective in Care)
- FUU-TM (Textile Management)
- FUU-TT (Textile Technology)
- FUU-RR (Resource Recovery)

The committees' role is to have the operational responsibility as well as the responsibility for the quality assurance for each doctoral programme.

KFU is responsible for the doctoral program in Textiles and Fashion Design (D).

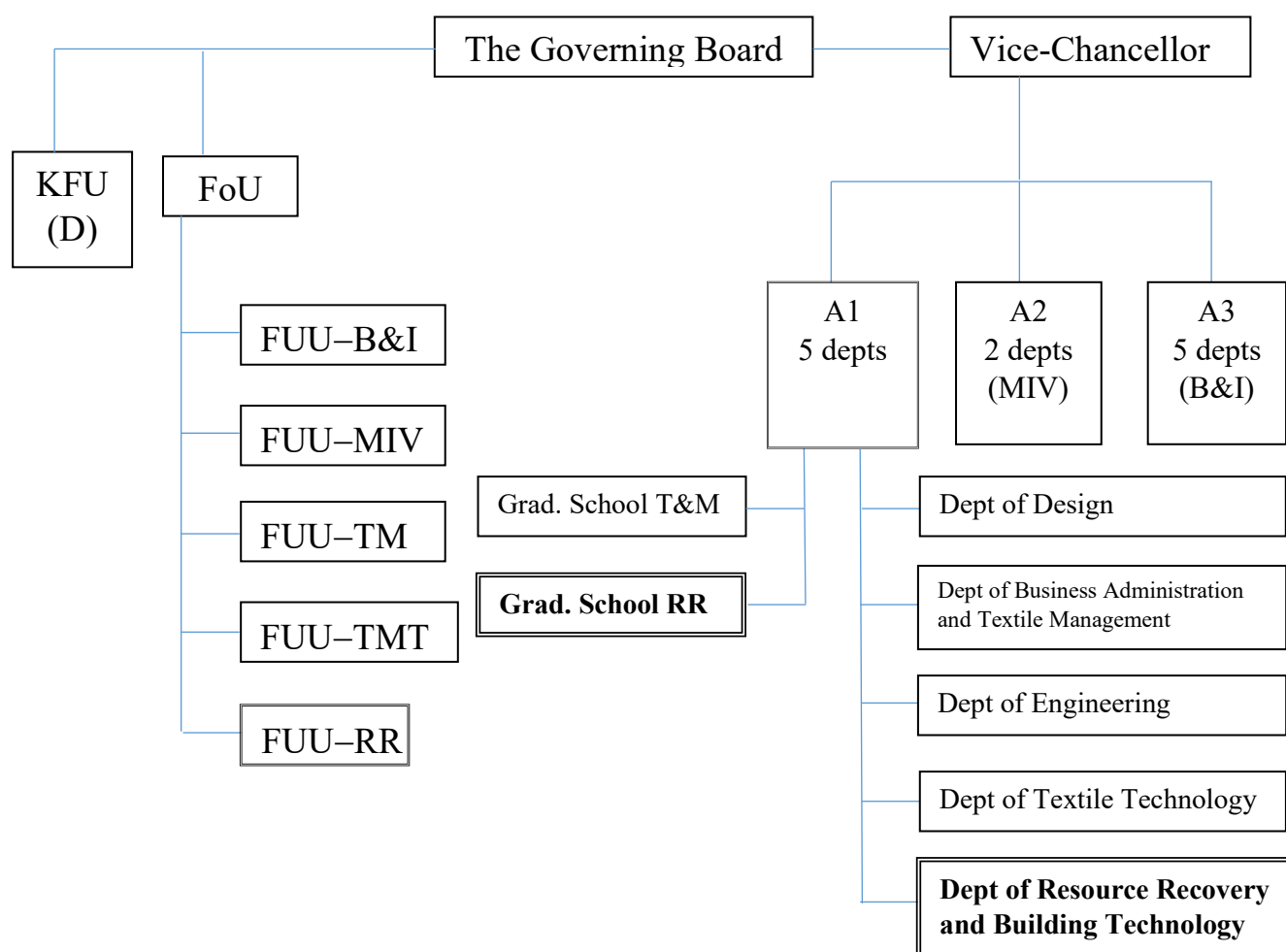


Figure 1: Organisational structure.

From 2021-01-01 the university has an additional faculty: Faculty of Police Work (A4).

Graduate Schools

There are two Graduate Schools in Faculty A1, each led by a Director and a Director of Studies:

- Graduate School in Textiles and Fashion (GS-T&M) with three doctoral programmes: Textiles and Fashion Design (D), Textile Management (TM) and Textile Technology (TT).
- Graduate School in Resource Recovery (GS-RR) with one doctoral programme: Resource Recovery (RR).

The Graduate Schools have the responsibility for the strategic development of the different doctoral programmes. In cooperation with the Faculty and the Departments the Graduate Schools also work for strengthening the research environment.

Besides the organisation described in the figure there is the Professional Services. This unit deals with administrative support, IT support, human resources, finance and communication. The Library (biblioteket@hb.se) is also organised within the Professional Services.

Director of Studies for the doctoral programme

Within each area with doctoral degree rights there is a Director of Studies that you can turn to with issues related to your programme. The Director of Studies are responsible for ensuring that your studies are followed up on at least once a year and will also participate in the follow-up meetings.

Research administration

The Faculty Support Office serves the Faculty with a Research Officer who is dedicated to each doctoral programme. The Research Officer function as an administrative support to doctoral students and to the faculty staff in all kinds of different matters regarding the doctoral education.

Contact information

Below you will find contact information to various persons in the university's staff that you may need to contact during your education:

Research Area Representative	Mohammad Taherzadeh	mohammad.taherzadeh@hb.se
Director of Studies	Tomas Wahnström (until sept 2024) Päivi Ylittervo (from sept 2024)	tomas.wahnstrom@hb.se paivi.ylittervo@hb.se
Research Officer	Carina Kauppi	carina.kauppi@hb.se

Head of Department	Kamran Rousta	kamran.rousta@hb.se
Deputy Heads of Department	Ilona Sárvári Horváth Kimmo Kurkinen	ilona.sarvari_horvath@hb.se kimmo.kurkinen@hb.se
Laboratory Contact Laboratory Manager	Jonas Hansson Kamran Rousta	jonas.hansson@hb.se kamran.rousta@hb.se

Kamran Rousta is the immediate superior for the PhD students. If you have questions regarding your work environment or your teaching, you should contact him.

2. Financing and employment

Employment as a doctoral student

Employment as a doctoral student is a temporary position but with the benefits and responsibilities that come with being an employee, i.e. a staff member. Employment means, among other things compensation in the form of vacation, work injury insurance, parental leave, pension, and unemployment insurance (if you have joined an *A-kassa*, or unemployment insurance fund, within the appropriate timeframe). You are also entitled to sick pay and access to occupational health services (Previa). The vacation days are by default scheduled starting from the week after Midsummer. Number of vacation days up to 29 years: 28 days; from 30 years onwards: 31 days; from 40 years onwards: 35 days. If you want vacation at a different time, contact your nearest superior (no later than May 10 each year).

For more information regarding collective agreements and contractual terms please contact the Human Resources department (HR).

Salary structure for employed doctoral students

The doctoral student salary is decided by the university in accordance with negotiations with the unions. The doctoral agreement describes the salary levels used and how the salary increases when you reach one, two, and three years of full-time studies (see table below). The Head of Department decides on the new salary after discussing with the Principal Supervisor.

Table 1: Salary levels according to the doctoral agreement

Salary structure for doctoral studentships ¹	2024
Starting salary	SEK 30,700
When at least one (1) year full-time studies, or equivalent, has been completed.	SEK 31,700
When at least two (2) years full-time studies, or equivalent, have been completed.	SEK 33,800
When at least three (3) years full-time studies, or equivalent, have been completed.	SEK 34,800
Complete doctorate	SEK 36,200

¹ Excerpt from: "Lokalt villkorsavtal vid Högskolan i Borås" dnr 1141-22

An individual assessment to supplement the lowest salary indicated in **Table 1** may be carried out, in exceptional cases due to:

- achieved results in the doctoral programme
- relevant professional/research experience
- the scope and nature of teaching hours
- market reasons
- educational background

Externally employed doctoral students

An externally employed doctoral student is employed at a company, municipality, or other public authority/organisation but, at the same time, is performing doctoral studies at the University of Borås at least on a half-time basis in the context of the external employment. As such, you receive your entire salary from your employer. There are very limited possibilities for an externally employed doctoral student to do teaching at the university. The research project is selected in consultation with your employer. Experimental work may sometimes be completely or partially carried out at the place of employment. If the funding expires during the study period, the University of Borås has no responsibility to ensure that you receive alternative funding.

As an externally employed doctoral student you do not have access to occupational health service (Falck), but as a student you always have the possibility to get in touch with the Student Health Care.

As an externally employed doctoral student, we expect you to follow the same vacation schedule as doctoral students employed at the university, with the exception that in case of deviation from the standard vacation, please contact the Director of Studies.

Insurances

Depending on your type of financing you have different situation concerning insurances.

Since a doctoral program is more than 12 months all doctoral students will be registered (folkbokförda) in Sweden. In connection with this you receive a social security number (personnummer). As registered in Sweden you are entitled to healthcare in hospitals and health centers.

As a student you have a personal injury insurance during your time at the university and when you are travelling to and from the university. As a student you can use the services from the Student Health Care. If you are employed at the university, you are also entitled to the occupational health services through the company Falck.

If you have an employment as a doctoral student you are entitled to sickness leave, parental leave, and temporary parental leave. If you are financed by a scholarship there is a collective insurance signed by the university and Kammarkollegiet covering sickness leave, parental leave, and temporary parental leave. If you are an externally employed doctoral student (samverkansdoktorand) your external company is responsible for this.

During your studies, you will be participating in a couple of scientific conferences. If you are employed as a doctoral student, you are insured by the government's official travel insurance provided by Kammarkollegiet. If you are financed by a scholarship or externally employed, you need to get a special insurance (Student OUT) by contacting the Research Officer.

Teaching and other departmental duties

If you are employed as a doctoral student by the University of Borås you may do teaching, other projects, administration, or trustee assignments within labor unions and student organizations in parallel to your doctoral education. The other projects should not be a part of your doctoral project. The duties may not comprise more than 20 % of full-time, as an average over the whole study period. The PhD-program will be prolonged accordingly.

These duties are planned by the Head of Department in dialog with the PhD-student and her/his supervisors.

If you are an externally employed doctoral student you may also do teaching, other projects, administration or trustee assignments within labor unions and student organizations in parallel to your doctoral education. The extent of these departmental duties is in this case limited by Swedish law. The Head of Department can give more details. The doctoral student also needs an acceptance from his/her employer to prolong the studies accordingly. The same exception connected to supervision of master's degree projects also holds for externally employed doctoral students.

The following principles shall generally apply (exceptions may be made in consultation with the respective doctoral candidate). Excerpt from "Riktlinjer och principer för tjänsteplanering vid A1" (dnr 839-23).

- Teaching is planned with content within the doctoral candidate's subject area and is done in consultation with the doctoral candidate.
- If the teaching is outside the doctoral candidate's subject area, additional time may be needed for competence development.
- Should not include course responsibility or responsibilities as an examiner.
- A plan for the doctoral candidate's teaching commitment is made for an extended period and, if possible, for the entire doctoral period.
- Doctoral candidates should, if possible, participate in the university's common activities such as staff meetings. No specific time is allocated for this, as it is included in the doctoral employment regardless of whether the doctoral candidate has institutional duties or not.

Costs for courses and conferences

All doctoral students in Resource Recovery are entitled to compensation for costs connected to participation in courses and conferences. That includes conference and course fees, travel expenses and accommodation.

You have the possibility to get up to 30.000 SEK during your study period. This will probably cover one or two courses and one or two conferences.

It is your own responsibility to plan your course and conference participation so that you end up within the money limit. First you must try to get funding from different external grants.

Some examples:

- University of Gothenburg has a website with different links: (http://www.gu.se/english/research/scholarships/current_scholarships/).
- You may also contact our Grants and Innovation Office: gio@hb.se

A condition for compensation for costs for a course is that the course is accepted to be a part of your doctoral degree. A condition for compensation for costs for a conference is that you have an accepted contribution.

If you have an employment as a PhD-student you can do your travel arrangements and booking accommodation via the university's travel agency Egencia. See the university's webpage <https://www.hb.se/en/staff/my-employment/work-travel/book-your-work-travel/>. If you do not have an employment as a PhD-student, the research officer will assist you.

Financing by scholarships

Scholarships are not salaries but tax-free stipends which should cover the students' living costs during the period of their studies.

Before the admission of an applicant with scholarship funding, the university will ensure that this funding is at an acceptable level. Your funding is guaranteed to be at least equal to the amount given to employed doctoral students at the university after tax reductions. There should also be a gradual increase in the scholarship at the same rate as the salary structure for employed doctoral students, which is regulated under local collective agreements. If funding expires during the study period for reasons that are beyond your control, the university has the responsibility to ensure that financing of your studies is guaranteed during the remaining study period.

A student who holds a scholarship should not be required to undertake any duties normally undertaken by a doctoral student who is employed by the university. If the holder of a scholarship carries out such duties the scholarship can later be considered as an income and therefore be taxed.

A scholarship is not a salary and therefore lacks regulated holiday leave. A reasonable holiday leave is approximately five weeks per year, and this should be regulated in the Individual Study Plan.

A scholarship holder who has no other source of income lacks social security to a certain extent. These doctoral students are not eligible for unemployment benefits, social benefits e.g. parental leave or sickness leave, and the scholarship does not qualify for pension credits. However, as a scholarship student there is a collective insurance signed between the university and Kammarkollegiet concerning sickness insurance and parental insurance. The insurance will apply if your scholarship expires due to a long-term absence from the studies in case of illness or parental leave. The insurance does not entitle you to compensation if you are entitled to a corresponding compensation from any other insurance.

The insurance covers the following three situations:

- Illness
- Parental leave
- Temporary parental leave

The application form for compensation can be found on Kammarkollegiet's website.

An application must be signed by both you as doctoral student as well as the Head of Department. Further information about the insurance can be found on this site:

<https://www.kammarkollegiet.se/engelska/start/all-services/insurance-for-foreign-visitors/student-insurance>

As a doctoral student financed by scholarship, you do not have access to occupational health service (Falck), but as a student you always have the possibility to get in touch with the Student Health Care.

3. Study planning and follow-up

The two most important documents for you as a doctoral student are the General Study Plan and your Individual Study Plan. These two documents together regulate the programme and should be seen as tools for you to reach the learning outcomes of the education. Both documents must be established by the university in accordance with chapter 6, §26-29 of the Higher Education Ordinance (*Högskoleförordningen*) to ensure the quality of your education.

General Study Plan

For each subject in which doctoral education is conducted, there is a General Study Plan (*General Syllabus*) that describes the content of the programme, its aims and learning outcomes, admission requirements, structure, and otherwise regulate how the programme is conducted. The boards (FoU and KFU) are the bodies that decide on and establish the General Study Plan.

When a doctoral student is admitted to the doctoral education, the admission is based on the latest version of the General Study Plan. If the General Study Plan is revised during the student's study period, he or she will have the possibility to be transferred to the newest version.

Individual Study Plan

The Individual Study Plan (ISP) is an agreement between you as a student, all your supervisors, and your examiner on the content of your doctoral education. The purpose of the study plan is to be a document that systematizes your education activities and follows your progression through the programme.

Starting from January 2024, a new digital tool for the ISP will be implemented. The digital ISP is an integrated part of Ladok and will be available in both the staff and student interfaces. This digital tool will be gradually implemented starting with PhD-students admitted 2024.

The ISP is established by the Research Education Committee for Resource Recovery for each doctoral student. The first version (a template can be found on the university's website) shall be established within three months from the start of the studies and a new updated version annually until the end of the studies.

The doctoral student writes an outline of the ISP with the help of the Research Officer, the Principal Supervisor, and the Director of Studies. This outline is discussed between the doctoral student, the Supervisors, the Examiner, and the Director of Studies at annual ISP-meetings. After this meeting the doctoral student updates the ISP and hands the ISP to the Research Officer who collects the

signatures from the Supervisor(s), the Examiner and the Director of Studies and presents the ISP to the Research Education Committee for Resource Recovery for the establishment.

If the doctoral student has teaching or other department duties, these should be followed-up in the ISP.

The most important part of the ISP is the section Thesis Activities. Here you register your activities that are completed and plan your coming activities. This is done in cooperation with your supervisors.

Presentation by the doctoral student at the ISP meeting

The Graduate School wants the doctoral student to present the status of her/his PhD-work orally at the ISP-meeting. The presentation should take around 10 min and should complement the written information in the ISP-document. The presentation should include:

- an overview of the scientific work
- a presentation of *three most important* activities that you have accomplished during the last year and how they connect to the different learning outcomes (see below).
- a short summary of the published and planned articles
- a presentation of the finished and planned courses
- a presentation of attended conferences
- a description of future work

Learning Outcomes Matrix

In the Higher Education Ordinance, it is stated which learning outcomes you as a doctoral student should accomplish during your studies. These learning outcomes are also stated in the General Study Plan.

The learning outcomes are presented in three categories: *Knowledge and understanding*, *Competence and skills* and *Judgement and approach*. Altogether there are ten learning outcomes.

To be awarded a doctoral degree you need to pass all courses that are stated in the General Study Plan as well as successfully defend your thesis. This should correspond to fulfilling the learning outcomes.

We want you to follow your progression towards the learning outcomes during your studies by a continuous self-assessment. This is done by a Learning Outcomes Matrix.

In the Learning Outcomes Matrix, you have all the learning outcomes in the columns, and you note different activities in the rows and indicate in what way you couple these activities to specific learning outcomes. An activity could be a specific course, designing an experiment, analysing experimental data, writing an article, orally presenting your results etc.

The Learning Outcomes Matrix is introduced during your first ISP meeting, and you continuously develop it together with your Principal Supervisor. The Learning Outcomes Matrix is discussed with the Director of Studies in connection with your yearly ISP meeting.

4. Supervision – your supervisors and examiner

Supervisors

In conjunction with your admission, the Research Education Committee will appoint at least two supervisors: a Principal Supervisor and additional second supervisors. The Principal Supervisor will have the main responsibility for guidance and advice within the framework of the doctoral programme. The Principal Supervisor is also responsible for ensuring that the doctoral student receives sufficient supervision. The Second Supervisors take part in the supervision of the doctoral student.

The Principal Supervisor is responsible for ensuring that you get started with your research work and that you together construct your Individual Study Plan. Other responsibilities include ensuring that you receive qualified supervision making it is possible for you to follow your Individual Study Plan.

According to the Faculty's guidelines and principles each doctoral student has the right to 100 hours of supervision per year (when study pace is 100 %). Those hours will be distributed on your Principal Supervisor, Second Supervisor(s), and in some cases your Examiner.

Examiner

The Examiner has an overall responsibility for your doctoral education and ensures that it fulfils the quality requirements of the research task and other elements. The Examiner will approve the Individual Study Plan and play a part in the study follow-up. The Examiner will also preview the licentiate essay and the doctoral dissertation. The Examiner approves the licentiate essay and its presentation. The Examiner decides, after consulting the Principal Supervisor, which non-compulsory courses that could be included in your doctoral degree.

Changing supervisors

If problems arise with the supervision, a recommendation is that you as a first step discuss this with one or more of your supervisors or with the Director of Studies. If the supervision for some reason does not work, you always have the right to change supervisors. Requests for a change of supervisor are done in writing to the Director of Studies and the Research Education Committee. The decision to appoint a new supervisor must be taken by the Research Education Committee.

5. Courses, seminars, and lab work

Courses

For the doctorate degree, courses shall comprise of 60 credits and the dissertation 180 credits. Out of the 60 credits, 25 consist of mandatory courses, and the other 35 is selectable. 1,5 credit corresponds to one week's full-time study. For the licentiate degree there are 30 credits courses, and the research work is 90 credits. Out of the 30 credits 17.5 are mandatory.

All courses must be reported in Ladok (system for course registration) by the Research Officer. A course examiner must be appointed to all courses by the Research Education Committee. The course examiner is responsible for the examination, and that the results are being recorded in Ladok.

The following courses are mandatory for the Resource Recovery doctoral degree (exceptions may be made by the Examiner on special request and on consultation with the Principal Supervisor):

- Introduction to resource recovery, minimum of 5 credits.
- Relevant methodology courses covering a minimum of 7,5 credits.
- Course in theory of science, minimum of 5 credits.
- Course in research ethics, minimum of 2,5 credits.
- Courses within the areas of information retrieval, verbal and written presentation and teaching and learning in higher education, minimum total 5 credits.

In addition to subject specific courses given by the different research groups, university-wide courses are offered. These courses cover areas as theory of science, scientific methods, research ethics, academic writing, information seeking and sustainability.

Table 2: Mandatory courses.

Mandatory courses according to the General Study Plan		Possible courses			
Introduction to resource recovery	5 Credits	Resource Recovery I FRRRR01 Resource Recovery II (non-compulsory) FRRRR02	5 Credits 5 credits	PhD-course at Faculty of Textiles, Engineering and Business	Fall 2024 Fall 2024
Relevant methodology course	7.5 Credits	Applied Statistical Design of Experiments FRRST03	7,5 Credits	PhD-course at Faculty of Textiles, Engineering and Business	Fall 2024
Course in theory of science	5 Credits	Theory of Science I FBIVE01	5 Credits	Univ joint course	Spring 2024 Fall 2024
Course in research ethics	2.5 Credits	Research Ethics FBIFE02	2.5 Credits	Univ joint course	Fall 2024
Courses in information retrieval and verbal and written presentation and teaching and learning in higher education	5 Credits	Academic Writing FRROV12	5 Credits	Univ joint course	Fall 2024
		Research Seminar FRROV09	1 Credit	PhD-course at Faculty of Textiles, Engineering and Business	Continuous admission
		Information Seeking for PhD-students. FBIID01	2.5 Credits	Univ joint course	Spring 2024
		Introduction to Teaching and Learning in Higher Education C2HI00	3 Credits	Univ joint course	Spring 2024
		Introduction to Student Learning in Higher Education CINS1U	3 Credits	Univ joint course	Fall 2024

You can find the courses on the university web site under:

<https://www.hb.se/en/Research/Doctoral-education/Course-catalog/>

You and your Supervisor should together decide and plan for the course work. The course work should be planned in the Individual Study Plan for the upcoming year.

The following courses are not offered on a regular basis, but they may be given on request.

- Ash and Deposit Formation and Corrosion in Utility Boilers (5 credits)
- Biofuels and Biological Treatments of Wastes (5 credits)
- Biomass Recalcitrance (5 credits)
- Bioplastics and Biocomposites (5 credits)
- Bioreactor Hydrodynamics and Gas-Liquid Mass Transfer (5 credits)
- Biotechnology Processes and Applications (5 credits)
- Combustion Technology (5 credits)
- Fungal Biotechnology (5 credits)
- Mass Spectrometry (5 credits)
- Membrane Bioreactors (5 credits)
- Methanogenesis (5 credits)
- Polymers in Medical Applications and Tissue Engineering (5 credits)
- Polymeric Fibres and Nanofibres in Medical and Tissue Engineering Applications (5 credits)
- Process Modeling using Aspen Plus (3 credits)

An additional type of course is the individual reading course. This is a course that you design together with one of your supervisors, or another teacher, and is intended to increase your knowledge within a specific subject coupled to your individual research project. It is your Examiner who decides whether a specific reading course could be a part of your degree.

[Courses from undergraduate studies or other universities/organisations](#)

Relevant courses from undergraduate programmes can be credited towards the doctoral education. A maximum of 30 credits in the doctoral programme may be obtained before research studies are begun within the framework of completed undergraduate studies. However, it is the Examiner who decides how many and which undergraduate study credits may be counted.

Courses from other universities or from an education provider outside the university may be subject to credit transfer. According to the Higher Education Ordinance, credit transfer may be possible: *"if the knowledge and skills that the student claims to have are of such kind and scope that they mainly correspond to the education for which they are meant to be creditable. A student may also be credited with the corresponding knowledge and skills that have been acquired in professional activity."* (HF 6 kap, 7 §).

[Seminars](#)

As a doctoral student it is important to present and discuss research problems and results within the research society. One important arena for doing this is the research seminar. Four main types of seminars are held within the doctoral programme:

1. Seminars will be organised on a regular basis within the different research groups.

2. Within the course *Research Seminar* the doctoral student will have presentations that will be discussed within the course participants.
3. A Midway Seminar shall be conducted when the doctoral student has done half of the work required for the doctoral degree. This is if the student is planning for a doctoral degree and not for licentiate degree. The Midway Seminar is an occasion for the doctoral student to discuss his or her results, but also an occasion to discuss planned projects with a group of researchers and other doctoral students. The Midway Seminar is organised by the Principal Supervisor and includes 20-30 minutes presentation followed by 30 minutes of discussion.
4. A Final Seminar, at which the dissertation is examined and discussed in its entity, must be held in good time prior to the planned date for public defense of thesis.

Lab work

Most doctoral students in Resource Recovery will perform the main part of their work in the laboratories belonging to the research environment of Resource Recovery. These laboratories are organised within seven different labs: Analysis lab, Chemical Engineering lab, Fungi and Yeast lab, Biogas lab, Genetic lab, Polymer lab, Energy lab and Building Technology Lab. Before the doctoral student starts working in the labs, she/he needs to get access. In order to get that the doctoral student need to participate in a course in safety regulations. When the doctoral student later will set up a specific experiment, she/he needs to write a risk assessment for the specific experiment and then send the signed document to the lab technicians. The laboratories are managed by the lab technicians.

6. Student support, rights, and obligations

Student influence is an important opportunity for you as a doctoral student to improve the doctoral programme. The right to be represented in the bodies that directly or indirectly affect the doctoral education is statutory.

Doctoral students are represented in both FoU and the Research Education Committees. In FoU there are two students represented of which one usually is a doctoral student. The Research Education Committee has two student representatives. In summer 2023 the current term expires, and two new students will be elected. The same goes for the student representative in FoU.

Board or Committee	Doctoral student	Term
FoU	Ida Ljungberg	2023-09-01 - ongoing
FUU RR	Sabrina Kopf	2023-07-01 - 2024-06-30
FUU RR	Kanishka Wijayarathna	2023-07-01 - 2024-06-30

Course evaluation

According to the university's local regulation all courses should be continuously evaluated after its completion. You should be informed of the result through access to the course report after each course and before you begin each course.

Follow-up dialogues

Regardless of if you are employed by the University of Borås or not, each doctoral student once a year has a follow-up dialogue with the Director of Studies and the Head of Department or Deputy Head of Department. In those dialogues you will have the chance to discuss your work environment, supervision, administrative support etc. If you for some reason would not be satisfied with the supervision, the follow-up dialogue is a good forum to discuss such matters.

Individual Program Evaluation

When a doctoral student has defended the thesis and completed the doctoral education, he or she will fill in an Individual Program Evaluation. These evaluations are being considered in the further development of the doctoral programme.

Student Union

The Student Union (<http://studentkareniboras.se/en>) actively works with ensuring the quality of your education and your student time at campus. They do this through having student representatives in the university's different councils and committees. Ensuring the quality of your education is one of the core functions as a student union. The Student Union also works with study social activities directed towards their members. In addition, they arrange discounts for members. Being a member of the Student Union is voluntary.

Within the Student Union there is organised a Doctoral Student Committee. The current president of the committee is **Vera Videl Kling** from Textile Management.

The Head of Department meeting students

The Head of Department invites all PhD-students within Resource Recovery to meetings four times a year and representatives from the Doctoral Student Committee every month.

Student Health Care

Students at the University of Borås have access to Student Health Care. The employees at Student Health Care understand students' lifestyles. They work with preventative health care and individual contact. They also offer support through discussions or certain treatments. The Student Health Care is a compliment to the district health care, and all visits are free of charge.

At the Student Health Care there is a nurse and social counsellors. There is also a Student Pastor at the university who supports students. They are located on the 5th floor of the L-corridor in the *Sandgården* building, Järnvägsgatan 5.

Career Counselling

As a doctoral student you can contact the Career Counselling if you have questions related to your future career. You can also book a one-to-one career guidance appointment. They can help you for example with CV and cover letter. Their e-mail address is: studievagledning@hb.se

Plagiarism

Cheating means giving oneself unfair advantages, trying to deceive others about your knowledge or performance, or breaking rules. Plagiarism is a form of cheating.

The University of Borås works to prevent and deter various forms of cheating. For both students and teaching staff, there is a website - in Swedish and English - available via Canvas. This website provides all the information you need about academic writing, citing sources, reference management, and disciplinary action in the event of cheating and plagiarism. When logged in on Canvas, go to this page: <https://hb.instructure.com/courses/3963>

The introduction of your thesis ("kappa") will, after it has been proofread, be sent for checking plagiarism. Further information can be found in section 7.

Appeals

If you are dissatisfied with a decision taken by the University of Borås, you have the right to appeal to The Higher Education Board of Appeals (*Överklagandemyndigheten*).

7. Defense of doctoral thesis

The requirements for the doctoral degree are stated in the General Study Plan.

Posting - *Spikning*

Before proceeding to the timeline for defense of doctoral thesis, here is some information about the concept of *Spikning* which you will encounter in the timeline.

All doctoral students are required to issue a public notification of their defense at least 15 workdays in advance. As a part of this you must also make your thesis publicly available. At the University of Borås we do this through a tradition known as *Spikning*, which is a ceremony managed by the University Library. At his occasion you will use a hammer to nail your thesis to a birch trunk in the Library. At the same time, it is made digitally available in DiVA.

The doctoral student should also present a *spikblad* (notification of submission of a doctoral thesis), i.e. a document including the title and abstract of the thesis as well as the time and place for the defense.

Guidelines and timeline for defense of doctoral thesis

1. 6 months prior to the defense

- The doctoral student should discuss with Supervisor(s), Examiner about date, time, and place for the defense. On finalizing, this should be informed to the Research Officer who will book the place for the defense and will take care of the necessary arrangements.
- Make sure that the planned date for defense falls within the dates approved by the university:

	From	Until
Autumn semester	20 th of August	22 nd of December
Spring semester	10 th of January	Thursday before Midsummer Eve

Thesis defense must not take place on public holidays or days that are associated with vacation (e.g. 1st of May).

- The selection of Opponent and Examining Committee should be discussed with the Supervisor(s). Supervisor(s) should inform the doctoral student, Examiner, Research Officer when it is finalized.
- The doctoral student prepares a list of publications and a preliminary abstract and forwards it to the Principal Supervisor and the Research Officer.
- The doctoral student should start obtaining the permission for attaching the articles from each publisher of the articles.
- According to the General Study Plan the doctoral student should give a final seminar “in good time before the dissertation”. When and how this will be done should be discussed with and decided by the Principal Supervisor.

2. 4 months prior to the defense

- The Principal Supervisor should fill in the application for the defense (*Announcement of public defense of thesis*, F10); which states title, date, place, time, Supervisor(s), Examiner,

Opponent (including e-mail address), Examining Committee members (including e-mail addresses) and Chairman for the dissertation (usually the Examiner). The application is completed by the Research Officer and forwarded to the Research Education Committee together with the list of publications and the preliminary abstract.

- Once the request has been assessed and approved by the committee, the decision is sent to the doctoral student and the Principal Supervisor by e-mail. The decision is simultaneously distributed to other parties concerned by the secretary of the committee.

3. 3 months prior to the defense

- A complete draft of the thesis should be given to the Supervisors and the Examiner for review.
- The introduction of your thesis (“kappa”) will, after it has been proofread, be sent for checking plagiarism. Remove the reference list and send it to your Study Director but to a special e-mail-address: paivi.ylittervo.hb@analys.orkund.se
- The doctoral student contacts the Library concerning *Spikning* (notification of thesis defense). See [Thesis publication support - University of Borås \(hb.se\)](#).
- ISBN number for the thesis should be obtained from the Library.
- After the doctoral student has received a date for the Spikning from the Library they should contact the Communication Department who will prepare a ‘timetable’ which includes printing and interview. The doctoral student starts by filling in this form: [Printing of thesis - University of Borås \(hb.se\)](#)
- The following text should be printed on the cover of the thesis (reverse side):
“This thesis presents work that was done within the Swedish Centre for Resource Recovery (SCRR). Research and education performed within SCRR identifies new and improved methods to convert residuals into value-added products. SCRR covers technical, environmental and social aspects of sustainable resource recovery.”
- Appropriate cover photo for the thesis should be chosen by the doctoral student in consensus with the Principal Supervisor; this can for instance be a photo from Adobe Stock. Communication Department can help you in this matter, you can read more on this page: [Stock photos - University of Borås \(hb.se\)](#)
- The doctoral student should send chosen cover photo, recent photograph of themselves, title of the thesis, back cover text and ISBN information to the responsible person in the Communication Department. The cover page will be prepared (layout) through the Communication Department.
- The doctoral student should discuss number of copies (usually **100 copies**), number of pages including the articles that will be attached, with the Principal Supervisor. The doctoral student should then inform the Communication Department about the number of copies.

4. 2 months prior to the defense

- Information about printing house will be given to the doctoral student through the Communication Department; and the doctoral student should send the *spikblad*, the final version of the thesis and all the articles to the printing house in PDF-files.
- The thesis in PDF-format should also be sent to the Opponent and to the members of the Examining Committee.

- The doctoral student should contact the Library to publish the thesis online (cover page, *spikblad* and thesis); articles can be attached only if required permission is obtained from each publisher.
- A PDF-copy of the cover page should also be sent to the Research Officer (to the noticeboard).

5. 1 month prior to the defense

- Thesis is printed and delivered to the doctoral student.
- Printed copies of the thesis should be sent to Opponent, Examining Committee members (including the substitute), Supervisors, Examiner, Director of Studies, and Chairman of the defense – and to others selected by the doctoral student and the Supervisor(s).
- Three copies of the thesis should be given to the library (at latest five workdays before the *Spikning Ceremony*), three copies to the Research Officer and one copy to the Communication Department.
- *Spikning* will be done in Library at latest 15 workdays before the defense. At the *Spikning Ceremony* the doctoral student is expected to present an outline of the thesis for about 3–5 minutes.

6. 1 week prior to the defense

- The doctoral student and Research Officer should have a look at the lecture hall.
- If necessary, arrange microphone, keyboard, mouse, pointer etc.

7. 1 day prior to the defense

- The doctoral student is responsible for having the presentation both in the computer and on a USB.
- The Research Officer will make necessary arrangements in the defense place.

8. Thereafter

- After the thesis is graded by the Examining Committee the result will be registered in Ladok.
- The course module is approved by the Examiner. Form F8 is used. The sum of all course credits should equal to 60 credits. The courses listed in F8 is the courses that is included in the diploma.
- The doctoral student applies for the doctoral degree (see *Application of doctoral degree or licentiate degree*, F12).

9. Two months after defense or end of employment

- The account at **hb.se** will be closed.

Licentiate degree in Resource Recovery

The licentiate degree corresponds to two years of full-time study (120 credits), where 30 credits are courses, and 90 credits is a dissertation. The dissertation is defended at a public seminar led by a discussion leader (Moderator).

Guidelines and timeline for licentiate seminar

3 months prior to the seminar

- The licentiate student should discuss with Supervisors, Examiner and Director of Studies about seminar 'date', 'time' and 'place'. On finalizing, this should be informed to the Research Officer. The Research Officer will book the place for the seminar and will take care of the necessary arrangements.
- The Principal Supervisor should fill in the application for the seminar (*Announcement of licentiate seminar, F15*); which states title, date, place, time, Supervisors, Examiner and Moderator (including e-mail address). The application is completed by the Research Officer and forwarded to the Research Education Committee together with the list of publications and the preliminary abstract.
- The licentiate student should contact the Communication Department if they need help with the layout of the thesis cover and in contacting the printing house.
- The following text should be printed on the cover of the thesis (reverse side):
"This thesis presents work that was done within the Swedish Centre for Resource Recovery (SCRR). Research and education performed within SCRR identifies new and improved methods to convert residuals into value-added products. SCRR covers technical, environmental and social aspects of sustainable resource recovery."
- ISBN number for the thesis is obtained from the library.

6 weeks prior to the seminar

- The licentiate student gives the thesis to the printing house (usually **50 copies**).
- The licentiate student sends the entire thesis in PDF-format to the Moderator and to the Examiner.

3 weeks prior to the seminar

- Thesis is printed and delivered to the student.
- Printed copies of the thesis should be sent to the Moderator, Examiner, Director of Studies and others selected by the licentiate student and the Supervisors.
- Three copies of the thesis should be given to the Library, three copies to the Research Officer and one copy to the Communication Department.

Thereafter

- The thesis is graded by the Examiner.
- The course module is approved by the Examiner.
- The doctoral student applies for the licentiate degree (*see Application of doctoral degree or licentiate degree, F12*).