



# GENERAL CURRICULUM FOR EDUCATION AT RESEARCH LEVEL IN STRATEGIC SUSTAINABLE DEVELOPMENT

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## 1 Subject field

The subject field *strategic sustainable development* focuses on methodological support to businesses, municipalities and other organizations that want to work strategically with sustainable development, i.e., to contribute to society's transition to sustainability in a way that strengthens their own organization. The studies include, e.g., definitions of sustainability and how sustainability aspects can be integrated into methodology for strategic planning, needs identification, criteria formulation, ideation, concept generation, concept evaluation, business model development, procurement and communications. It is especially important to bring in strategic sustainability thinking in such early phases of innovation processes (e.g. in processes for product-service development, energy system development and regional development). Here are the greatest opportunities to create solutions that contribute to sustainable development and strengthen the organization. It is important to already in these early phases being able to model, simulate and consider in a coordinated way, e.g., technical, business economic and socio-ecological implications of different solutions so that the best alternatives from a strategic sustainability perspective can be identified and developed further in later phases. Graduates in this subject field have the ability to integrate sustainability science with innovation methodology and from such a foundation coordinate collaboration between various disciplines (such as engineering, economics, natural sciences and social sciences) and between various sectors of society (such as business, energy, transportation, health, education and governance) for the benefit of sustainable development. The graduate can also in herself/himself represent a competence combination of this foundation of sustainability integrated innovation methodology and some specialist discipline.

## 2 Outline of the education

Education which is concluded with a licentiate's degree comprises a net time period of study of at least two years (at least 120 credits) and consists of courses that together award at least 30 credits and a dissertation that awards at least 60 credits. Education which is concluded with a doctor's degree comprises a net time period of studies of at least four years (at least 240 credits) and consists of courses that together award at least 50 credits and a dissertation of at least 150 credits. The distribution of credits will be evident from the individual study plan.

The education also includes active participation in research meetings and seminars at BTH. The research student should also participate in international conferences in the subject field. It is recommended that the research student spends some time at a foreign seat of learning or



research institute. The research student should also be given the opportunity to contribute to the acquisition of research funds as part of the course work in the research education.

### **3 Eligibility and selection**

#### **3.1 Basic eligibility**

According to the Swedish Higher Education Ordinance, Chap 7, 39 § ([Admission rules for educations at Blekinge Institute of Technology](#) refers to the Swedish Higher Education Ordinance).

#### **3.2 Selection**

According to [the Swedish Higher Education Ordinance, Chap 7, 41 §](#) and local guiding principles in the [Admission rules for educations at Blekinge Institute of Technology](#).

The basis for selection among the eligible applicants is the degree of capacity for profiting by the research education, together with the accessibility to supervision and other resources as regards the planned direction of the dissertation.

Admission to the research education takes place continuously.

### **4 Examinations that form part of the education**

The education consists of courses and a scientific study. Examinations within the education are assessed with the grades pass/fail. Course grades and the licentiate's dissertation grade are determined by a specially appointed [examiner](#). The doctor's dissertation grade is determined by a specially appointed [examination committee](#).

#### **4.1 Courses**

The main purpose of the course part is to provide support for the dissertation work and to enable that the goals of the research education in other respects are reached. Courses or course parts from masters- or undergraduate programs may be included if the research student needs to supplement her/his previous knowledge. At least 15 credits of strategic sustainable development or the equivalent shall be included if this has not been included in previous education. The research student is encouraged to take courses also at other seats of learning, nationally and internationally. The choice of courses should be characterized by flexibility as regards the research student's previous knowledge and the direction of the dissertation work and will be determined in consultation between the research student, the supervisor(s) and the examiner. The examination form is determined by the examiner in consultation with the supervisor(s).

#### **4.2 Scientific work**

The scientific study in the form of a dissertation will be designed as an integrated, coherent scientific study (monograph) or as a summary – a comprehensive summary – of scientific articles (compilation dissertation), which the research student has composed alone or jointly with other persons.



The licentiate's dissertation will be defended orally at a public licentiate seminar. For additional information, please see the [Regulations for licentiate seminars](#) determined by the Faculty Board. The doctor's dissertation will be defended orally at a public disputation. For additional information, please see the [Regulations for disputations](#) determined by the Faculty Board

## **5 Degree**

The research student admitted to a doctor's degree has the possibility to pass a licentiate's degree after completion of a minimum of 120 credits of the education that is to be concluded with a doctor's degree.

### **5.1 Degree objectives**

Objectives according to [degree description](#) (the Higher Education Ordinance, Appendix 2 – Examination rules), also see appendix.

### **5.2 Degree denomination**

The research student who passes a licentiate's degree will receive the degree of Licentiate of Strategic Sustainable Development. The research student who passes a doctor's degree will receive the degree of Doctor (PhD) of Strategic Sustainable Development.



## APPENDIX

Objectives for the education at research level (the Degree Ordinance, [the Higher Education Ordinance appendix 2](#)):

### 1 Knowledge and understanding

For a degree of Licentiate 120 credits the doctoral candidate must

- demonstrate knowledge and understanding in the field of research, including current specialist knowledge in a defined part of the field and a deeper knowledge of scientific methods in general and of methods in the specific field of research in particular.

For a degree of Doctor 240 credits the doctoral candidate must

- demonstrate broad knowledge in and a systematic understanding of the field of research, together with deep and up-to-date specialist knowledge in a defined part of the field of research, and
- demonstrate familiarity with scholarly methods in general and with methods in the specific field of research in particular.

### 2 Skills and abilities

For a degree of Licentiate 120 credits the doctoral candidate must

- demonstrate an ability to identify and formulate issues, critically, independently and creatively, and proceeding with scientific precision; to plan a limited research project and other advanced tasks and to carry them out using appropriate methods within specified time limits, so as to contribute to the development of knowledge; and to evaluate this work;
- demonstrate an ability to clearly present and discuss research and research results in dialogue with the scholarly community and society in general, orally and in writing, in both national and international contexts; and
- demonstrate the skills required to independently participate in research and development work and to work independently in other advanced contexts.

For a degree of Doctor 240 credits the doctoral candidate must

- demonstrate an ability to engage in scholarly analysis and synthesis and in independent, critical examination and assessment of new and complex phenomena, issues and situations;
- demonstrate an ability to identify and formulate issues, critically, independently and creatively, and proceeding with scientific precision, and to plan and, using appropriate methods, conduct research and other advanced tasks within specified time limits, and to scrutinize and evaluate such work;
- demonstrate, in a dissertation, her/his ability to make a substantial contribution to the development of knowledge by her/his own research;
- demonstrate an ability to present and discuss research and research results with authority, in dialogue with the scholarly community and society in general, orally and in writing, in both national and international contexts;
- demonstrate an ability to identify the need of further knowledge, and



- demonstrate a potential to contribute to the development of society and support other people's learning, both in the field of research and education and in other advanced professional contexts.

### **3 Judgement and approach**

For a degree of Licentiate 120 credits the doctoral candidate must

- demonstrate an ability to make ethical assessments in her/his own research,
- demonstrate insight into the possibilities and limitations of science, its role in society and people's responsibility for how it is used; and
- demonstrate an ability to identify her/his need of further knowledge and to take responsibility for developing her/his knowledge.

For a degree of Doctor 240 credits the doctoral candidate must

- demonstrate intellectual independence and scholarly integrity and an ability to make ethical assessments relating to research; and
- demonstrate deeper insight into the potential and limitations of scholarship, its role in society and people's responsibility for how it is used.

### **4 Scholarly essay**

For a degree of Licentiate 120 credits the doctoral candidate must

- have received a passing grade on a scholarly essay (licentiate's dissertation) worth at least 60 credits.

For a degree of Doctor 240 credits the doctoral candidate must

- have received a passing grade on a scholarly dissertation (doctoral dissertation) worth at least 120 credits.