



Programme syllabus

Faculty of Technology

Skogsbruk för grön hållbar utveckling, masterprogram, 120 högskolepoäng

Forestry for Green Sustainable Development, Master Programme, 120 credits

Level

Second Level

Date of Ratification

Approved by Faculty of Technology 2023-09-08

The programme syllabus is valid from autumn semester 2024

Prerequisites

To be admitted to the Forestry for Green Sustainable Development master's program, the following prerequisites are required:

- General entry requirements for second-cycle studies
- Specific entry requirements: a minimum of 60 credits in one of the following subject areas (according to the Swedish Higher Education Authority's subject list): Natural Sciences or Engineering or Law and Social Sciences

The requirement for specific eligibility as mentioned above can also be fulfilled by those who have equivalent knowledge through a foreign degree or other means.

- Specific entry requirements: English B/English 6

The English language requirement is considered fulfilled for those who have a bachelor's degree of 180 credits from a Swedish institution or 120 credits of completed studies at Linnæus University (LNU). English requirements can also be met through other specified means, as outlined on antagning.se or universityadmissions.se. For admission to the courses included in the program, the specific eligibility requirements stated in each individual course syllabus apply.

Description of Programme

The purpose of the Forestry for Green Sustainable Development master's program is to provide students with the opportunity to delve into issues related to the development of sustainable forestry for the future. The program focuses on how various strategies and forest management systems can provide ecosystem services to society. The program takes a thematic approach, where students are expected to gain a comprehensive understanding of the entire forest value chain, from forest production to forest products

and values, as well as deepening their knowledge of ecosystem services, the climate benefits of forests, digitalization in forestry, and forest damage. Completion of the program leads to a master's degree that can be used for an academic or professional career in the field of forestry and wood technology offered by the program's specialization.

Objectives

General degree objectives in accordance with the Higher Education Ordinance

Knowledge and understanding

For a Degree of Master of Science (120 credits) the student shall

- demonstrate knowledge and understanding in the main field of study, including both broad knowledge of the field and a considerable degree of specialised knowledge in certain areas of the field as well as insight into current research and development work, and
- demonstrate specialised methodological knowledge in the main field of study.

Competence and skills

For a Degree of Master of Science (120 credits) the student shall

- demonstrate the ability to critically and systematically integrate knowledge and analyse, assess and deal with complex phenomena, issues and situations even with limited information
- demonstrate the ability to identify and formulate issues critically, autonomously and creatively as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames and so contribute to the formation of knowledge as well as the ability to evaluate this work
- demonstrate the ability in speech and writing both nationally and internationally to report clearly and discuss his or her conclusions and the knowledge and arguments on which they are based in dialogue with different audiences, and
- demonstrate the skills required for participation in research and development work or autonomous employment in some other qualified capacity.

Judgement and approach

For a Degree of Master of Science (120 credits) the student shall

- demonstrate the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues and also to demonstrate awareness of ethical aspects of research and development work
- demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and
- demonstrate the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning.

Content

Program Overview

The program comprises a total of 120 credits with a duration of 2 years of full-time studies.

The program begins with 75 credits of program-specific courses. Additionally, students have the opportunity to specialize or broaden their studies through elective courses of up to 15 credits. Finally, an independent project of at least 30 credits is completed.

Program courses are primarily offered part-time, with two courses running concurrently each term. Changes to the program's course selection can be made in consultation with the program coordinator.

The program is offered as distance education, utilizing a hybrid approach that combines distance learning with physical meetings on campus in Växjö or another location several times per semester. The program is conducted in English, but some components or courses may also be examined in Swedish.

Courses in the Program

Year 1

- Basic Course in Forest Management, 15 credits* (G1N) This course provides fundamental knowledge about forest ecology, forest estimation, forest management, production, and forest management towards different goals.

Students with at least 15 credits in forest science, forest management, or equivalent may replace the course Basic Course in Forest Management, 15 credits, with elective courses. These students are also offered the opportunity to take the course Forest Climate Mitigation and Adaptation, 15 credits, in Year 1 instead of Year 2.

- Forest Ecosystem Services, 15 credits* (A1N) The purpose of this course is to provide knowledge about the ecosystem services of the forest and how they are influenced by forestry and various forest management strategies.
- Digitalization in Forestry, 15 credits* (A1F) This course covers knowledge about damages to growing forests, wood, and wood-based products, and how to mitigate these damages. Additionally, the course addresses how climate change affects forest damage.
- Forest Damage in Sustainable Forestry for a Circular Bioeconomy, 15 credits* (A1F) This course covers knowledge about damages to growing forests, wood, and wood-based products, and how to mitigate these damages. Additionally, the course addresses how climate change affects forest damage.

Year 2

- Forest Climate Mitigation and Adaptation, 15 credits* (A1N) This course addresses climate change and its impact on forests and forestry, forest climate benefits, and adaptations in a changing climate.
- Elective Courses, 15 credits
- Independent Project, 30 credits* (A2E)

*= course in the main field of study.

For each course in the program, there is a course syllabus that specifies the details of that course. Information about when the courses are offered can be found on LNU's student website.

At least 30 credits of relevant courses will be offered during the elective semester. Decisions regarding the course offerings are made well in advance of each semester. The course offerings may change during the course of the program. The current course offerings can be found on LNU's student website. Students may also choose courses other than those offered at LNU.

Societal Relevance

The educational program is closely linked to the forestry sector. Companies, organizations, and government agencies participate in the program's courses and modules through lectures, field trips, and company visits. Thesis projects can be carried out in collaboration with companies, organizations, or government agencies. The program's program council includes representatives from the forestry sector.

Internationalization

The educational program has both a regional and national as well as an international perspective. The program will be attended by a heterogeneous group of students, including both national and international students, enriching the perspectives and discussions in the program's courses. The engagement of successful foreign researchers as guest lecturers ensures global relevance. Study visits abroad may be part of the educational program.

Sustainable Social Development

The program provides theoretical knowledge for the analysis and reflection on the subject in relation to human society. Development work in education should be based on people's participation, knowledge, and understanding. Throughout the program, issues related to sustainable development, gender, and diversity are continuously raised and discussed. The concept of sustainability encompasses environmental, economic, social, ethical, and cultural aspects, as well as human safety and health. The ability to critically examine possibilities and limitations aims to contribute to the development of an equitable and sustainable society. This work is supported by the methods used in education. Clear connections exist to the following goals in Agenda 2030: combating climate change, ecosystems and biodiversity, good health and well-being, gender equality, and sustainable consumption and production.

Quality Development

The program has a program council, an advisory body, which continuously monitors and discusses the quality and development of the program. The program council includes representatives from the program's students and teachers, as well as external representatives from the forestry sector.

An annual evaluation of the program is conducted, and summaries of various assessments are available at the institution.

Degree Certificate

After completing studies that meet the requirements specified in the Higher Education Ordinance's degree regulations and in Linnaeus University's local degree regulations, students can apply for a degree. Those who complete the Forestry for Green Sustainable Development master's program can obtain the following degrees:

Filosofie masterexamen med inriktning mot skogsbruk för grön hållbar utveckling
Huvudområde: skogs- och träteknik

Degree of Master of Science with specialization in forestry for green sustainable development
Main field of study: Forest and Wood Engineering

The degree certificate is bilingual (Swedish/English). It is accompanied by a Diploma Supplement in English.

Other Information

- The program includes mandatory elements such as study trips and fieldwork, which may involve costs for the student.
- The program is conducted using a hybrid approach, which means that physical multi-day meetings occur several times per semester in Växjö or another location.

In the event of any discrepancies between the Swedish and English versions of this education plan, the Swedish version takes precedence.