



## SWEDISH UNIVERSITY OF AGRICULTURAL SCIENCES

Department of Forest Biomaterials and Technology

### Syllabus

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#### **Sustainable Wood Supply Analysis**

#### ***Analys av hållbar virkesförsörjning***

15.0 Credits

Code: SV0045

Finalized by: Ordföranden för programnämnden för utbildning inom skog (PN-S), 2023-12-22

Valid from: Autumn semester 2025 (2025-09-01)

Level within study regulation: Second cycle

Grading scale: TH Four-grade scale, digits

Main field of study with advanced study: SBV Forestry Science - A1F Second cycle, has second-cycle course/s as entry requirements

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#### **Programme board**

PN-S The programme board for education in forestry

#### **Language**

ENG English

#### **Forestry science sub-area**

Work processes 15 credits

#### **Entry requirements**

The equivalent of

120 credits

10 credits forestry science at second-cycle level within wood science/wood technology

20 credits forestry science at second-cycle level within forest technology, including industrial supply planning and/or operations control

7,5 credits forestry science at second-cycle level within remote sensing and/or inventory

5 credits within geographic information systems (GIS)

and English 6.

## Objectives

The course intends to advance student ability to develop sustainable and competitive supply strategies for the forest sector in industrial wood supply. This includes understanding the complexity of the supply chain, its large number of supply alternatives and mastering methods to handle uncertainties and unforeseen events.

On completion of the course, the student should be able to:

- develop long term regional forest scenarios and analyze corresponding trends for wood supply
- analyze effects of uncertainty, e.g. changing climate or policy, on wood availability
- model effects of the scenarios on mill-specific supply security and competitiveness
- analyze effects of supply system development on competitiveness
- apply relevant supply scenarios for case studies of mill-specific sustainability and competitiveness
- develop and critically evaluate supply strategies for case studies to meet significant risks for both changing supply and demand conditions.

## Content

*Content:*

The course focuses on analysis of future forest industry supply scenarios and how to respond to these with supply strategies that secure long-term raw material availability and competitiveness. This takes place through packages of exercises and theory, which also train the students' ability to evaluate the sustainability of supply strategies for a forest sector in constant development.

*Implementation:*

The course is divided into three parts. Initially, the course focuses on methods for simulating future supply scenarios (part 1) and analyzes of the industry's supply security and competitiveness (part 2). These methods are then applied in case studies (part 3) which form a large part of the course where the students independently analyze different path choices in supply for both existing and new industries. In the case studies, supply scenarios, supply security and competitiveness are analyzed over time in a joint forum for strategic response to changes in external factors.

The course is structured around practical exercises combined with literature seminars. Case studies are carried out in stages with periodic changes in conditions and coordination in the course's common group forum.

The course focuses on the following general competencies: Critical thinking, problem solving, oral communication, written communication, cooperation, time management.

The following elements are mandatory: Exercises, case studies and seminars.

Cooperation with the surrounding society takes place through working life/vocational connections in program/course development together with an external program council of employer representatives, as well as through guest lectures and exercise materials from the forestry industry.

**Examination formats**

Passed oral and written reports. Passed participation in compulsory components.

**Jointly responsible department**

260 Department of Forest Resource Management