

# MSc thesis project in textile engineering Examensarbete i textilteknik

30 credits 30 högskolepoäng

Ladok Code: AT2ET2

Version: 3.0

Established by: Committee for Education in Technology 2019-10-11

Valid from: Autumn 2019

Education Cycle: Second cycle

Main Field of Study (Progressive Specialisation): Textile Engineering (A2E)

Disciplinary Domain: Technology

Prerequisites: Earned at least 52.5 credits from the Master Programme in Textile Engineering or equivalent.

Subject Area: Textile Technology

Grading Scale: Seven-degree grading scale (A-F)

#### Content

Ultimately the thesis project validates the quality of the student knowledge, skills and judgmental abilities. This means that students who master their tools acquired before and during the programme to such a degree that the thesis project touches the science frontier in a specific textile engineering domain. A student who is able to synthesize knowledge, understanding, skills, abilities and judgement during the thesis course can be called a Master of Textile Engineering. The thesis project should address the scientific aspects of a professional textile engineering issue or problem. In order to assure proper scientific level the project is preferably conducted in the proximity of research areas where the University of Borås is enrolled. Alternatively enterprises, institutes or other academic organizations with research focus can host this programme's these project. The thesis project course runs in parallel with the methodology course that involves a comprehensive review paper that covers the context of their thesis subject and present their project plan.

## **Learning Outcomes**

The thesis project is the final part of the master's programme. The examinee should be able to:

## Knowledge and understanding

- 1.1 demonstrate comprehensive textile technological knowledge regarding materials, constructions, processes, and advanced textile applications orally, visually and in writing,
- 1.2 demonstrate in writing, visually and orally acquired comprehensive and in-depth knowledge of at least one specialized textile technology topic to touch the research frontier,
- 1.3 problematize sustainability aspects of textile technological materials, processes and products,

#### Skills and abilities

- 2.1 apply comprehensive textile technological knowledge regarding materials, constructions, processes, and advanced textile applications
- 2.2 integrate knowledge and critically analyze textile technological problems by scientific methods,
- 2.3 independently plan and execute complex textile technological R & D projects within set time limits and quickly acquire necessary knowledge,
- 2.4 consider aspects of both society and individuals when designing new materials, processes and products with a sustainability perspective,
- 2.5 communicate scientific messages orally, visually and in writing to textile technology scholars as well as laymen, and
- 2.6 scrutinize oral, visual and written peer presentations, give and receive feedback in a constructive manner,

## Judgment and approach

3.1 consider ethical aspects of textile technological issues crucial to society, in particular aspects of research and development,

and

3.2 take on a meta perspective on individual learing process, identify and mitigate knowledge gaps.

## Forms of Teaching

Both individual and groupwise supervision is applied.

The language of instruction is English.

#### **Forms of Examination**

The course is examined by the following means:

Assignment 1, Mid-term seminar, visual and oral presentation Corresponding to learning outcomes 1.1-1.3, 2.1-2.5, 3.1-3.2 14.5 credit Grading scale UG

Assignment 2, Oral and written mid-term peer review Corresponding to learning outcomes 1.1, 1.3, 2.1-2.2, 2.5-2.6 0.5 credits
Grading scale UG

Assignment 3, Final seminar, visual and oral presentation Corresponding to learning outcomes 1.1-1.3, 2.1-2.5, 3.1-3.2 0.5 credit

Grading scale: A-F

Assignment 4, Oral and written peer review Corresponding to learning outcomes 1.1, 1.3, 2.1-2.2, 2.5-2.6, 3.1 0.5 credit Grading scale: A-F

Assignment 5, Thesis report Corresponding to learning outcomes 1.1-1.3, 2.1-2.5, 3.1-3.2

14 credits Grading scale: A-F

Students must pass each examination step in order to achieve a minimum overall grade of E. The final grade is determined by the weighted grade of all A-F examination steps.

Student rights and obligations at examination are in accordance with guidelines and rules for The University of Borås.

If the student has received a decision/recommendation regarding special pedagogical support from the University of Borås due to disability or special needs, the examiner has the right to make accommodations when it comes to examination. The examiner must, based on the objectives of the course syllabus, determine whether the examination can be adapted in accordance with the decision/recommendation.

Student rights and obligations at examination are in accordance with guidelines and rules for the University of Borås.

## **Literature and Other Teaching Materials**

Relevant literature is governed by the nature of the project and chosen together with the supervisor.

### **Student Influence and Evaluation**

The course is evaluated in accordance with the regulations for post course assessments at the University of Borås. The written evaluation report is published and made available to participating and future students in accordance with mentioned standard procedures, to provide basis for course and programme development work. The course manager is responsible to manage and conduct the post course assessment procedures.

#### **Miscellaneous**

The course is primarily a programme course for the Master's Degree Programme in Textile Engineering.

This syllabus is a translation from the Swedish original.