

# MSc thesis project in textile engineering Examensarbete i textilteknik

30 credits30 högskolepoäng

Ladok Code: AT2ET2 Version: 1.0 Established by: Committee for Education in Technology 2018-10-12 Valid from: Autumn 2018

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. 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 theses 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.

## Learning Outcomes

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

1. 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,

2. 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 written, visual and oral peer presentations, give and receive feedback in a constructive manner,

3. 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, Start up seminar, visual and oral presentation Corresponding to learning outcomes 1.1, 1.3, 2.1-2.2, 2.5, 3.2 1.0 credit Grading scale UG

Assignment 2, Mid-term seminar, visual and oral presentation Corresponding to learning outcomes 1.1-1.3, 2.1-2.5, 3.1-3.2 14 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.

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# 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.