UNIVERSITY OF BORÅS

M.Sc. thesis project in textile engineering

Examensarbete i textilteknik

30 credits
30 högskolepoäng

Ladok Code: AT2ET1
Version: 2.0
Established by: Committee for Education in Technology 2015-12-28
Valid from: Spring 2016

Education Cycle: Second cycle
Main Field of Study (Progressive Specialisation): Textile Engineering (A2E)
Disciplinary Domain: Technology
Prerequisites: Bachelor's Degree in Textile Technology, 180 credits or equivalent degree and level B English ore quivalent skills. At least 52.5 credits in advanced level textile engineering and the course Scientific methodology and communication, 7.5 credits 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. 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 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 the project.

Learning Outcomes

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

1. Knowledge and understanding
1.1 apply comprehensive textile technological skills regarding materials, constructions and processes, and utilize these skills in unfamiliar advanced textile applications,
1.2 acquire in-depth knowledge of at least one specialized textile technology topic that touches the research frontier,
1.3 problematize sustainability aspects of textile technological materials, processes and products,

2. Skills and abilities
2.1 integrate knowledge and critically analyze textile technological problems by solid scientific means,
2.2 independently plan and execute complex textile technological R & D projects within set time limits and quickly acquire necessary skills,
2.3 consider aspects of both society and individuals when designing new materials, processes and products with a sustainability perspective,
2.4 communicate scientific messages orally, visually and in writing to textile technology scholars as well as laymen,
2.5 scrutinize written 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,
3.2 reflect upon individual knowledge and skills progression and acknowledge such gaps.

Forms of Teaching

Both individual and groupwise supervision is applied.
Teaching is in 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, 2.4, 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, 2.1-2.4, 3.1-3.2) 14.0 credit, Grading scale UG
Assignment 3, Final seminar, visual and oral presentation (Corresponding to learning outcomes 1.1-1.3, 2.1-2.4, 3.1-3.2) 0.5 credit,Grading scale: E7
Assignment 4, Oral and written peer review (Corresponding to learning outcomes 1.1, 1.3, 2.1, 2.4, 2.5, 3.1) 0.5 credit,Grading scale: E7
Assignment 5, Thesis report (Corresponding to learning outcomes 1.1-1.3, 2.1-2.4, 3.1-3.2) 14 credits, Grading scale: E7

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 E7 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 students' opinions are collected systematically and regularly through written course evaluations once the course is completed. One time per semester, student representatives, together with the Director of Studies and Programme Directors, evaluate completed courses. For addition materials, please refer to the University's policy on course evaluation and documents established by the Department Board, the Director of Studies and the Course Director.

Miscellaneous

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