

Digital textile transformation Digital transformation inom textil

7.5 credits

Ladok Code: AT1DR1

Version: 1.0

Established by: Committee for Education in Technology 2025-10-10

Valid from: Spring 2026

Education Cycle: First cycle

Main Field of Study (Progressive Specialisation): Textile Technology (G1F)

Disciplinary Domain: Technology

Prerequisites: 25 credits within the main field of study

Subject Area: Textile Technology

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

Content

This course explores the changing landscape of digitalization in the textile industry, focusing on how emerging technologies are impacting and transforming the product development process, production processes and business operations in the textile industry. The course focuses on three core modules: digital tools for product development, automation in textile production and digital transformation in business and supply chains. Students gain insight into the digital textile transformation through theory, practical exercises and industry experiences.

Learning Outcomes

After completing the course, the student should be able to,

Knowledge and understanding

- 1.1 describe basic digital tools used in the development of textile products
- 1.2 describe the role of automation and digital systems in modern textile production
- 1.3 describe digital strategies and tools used in textile operations and supply chain management

Skills and abilities

- 2.1 use selected digital tools for the design and development of textile products
- 2.2 present assignments orally and in writing.

Critical assessment and evaluation

- 3.1 reflect on the advantages and limitations of digital tools in textile product development, production and in relation to business models
- 3.2 reflect on real-world case studies and industry insights to form well-grounded opinions about the digital transformation in the textile industry

Forms of Teaching

Lectures, workshops, and seminars

The language of instruction is English.

Forms of Examination

The course will be examined through the following examination elements:

Assignment 1

Learning outcomes: 1.1, 1.2, 2.1, 2.2, och 3.1

Credits: 3

Gradingscale: Fail (U) or Pass (G)

Assignment 2

Learning outcomes: 1.2, 1.3, 2.2, 3.1 och 3.2

Credits: 2

Gradingscale: Fail (U) or Pass (G)

Exam

Learning outcomes:

Credits: 2.5

Gradingscale: Seven-degree grading scale (A-F)

The result of the exam determines the final grade for the course, provided that all other parts of the course are passed.

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

Course literature is provided via HB's learning platform.

Student Influence and Evaluation

The course is evaluated in accordance with current guidelines for course evaluations at the University of Borås in which students' views are to be gathered. The course evaluation report is published and returned to participating and prospective students in accordance with the above-mentioned guidelines, and will be taken into consideration in the future development of courses and education programmes. Course coordinators are responsible for ensuring that the evaluations are conducted as described above.

Miscellaneous

This syllabus is a translation from the Swedish original.

The course is primarily aimed at students in the Textile Production and Innovation program.