

Quality Assurance and Textile Testing Kvalitetssäkring och textil provning

5 credits

Ladok Code: AT1KV1

Version: 1.0

Established by: Committee for Education in Technology 2025-02-28

Valid from: Autumn 2025

Education Cycle: First cycle

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

Disciplinary Domain: Technology

Prerequisites: Textile Basics (5 credits) and 5 credits from the textile introductory courses: Fibre and Yarn Technology,

Knitting Technology, Weaving Technology, Dyeing and Finishing, Textile Product Manufacturing

Subject Area: Textile Technology

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

Content

Textile quality assurance is included in all stages of textile value chains to ensure the quality of their processes and input materials as well as their intermediate and final products. This meets the expectations of all stakeholders for the desired level of quality. On a general level, it highlights how quality assurance work creates the conditions for improvement and innovation in the textile sector, and then addresses how standards, testing and inspections guide the fulfillment of the desired quality.

The course also covers the planning, implementation and analysis of textile testing and inspection of products. The student is introduced to textile testing techniques both theoretically and through practical application.

Learning Outcomes

After completing the course, the student will be able to:

Knowledge and understanding

- 1.1 Describe product and process quality assurance.
- 1.2 Explain the purpose, methodology and use of textile testing methods to check and control the quality of components and textile end products.
- 1.3 Summarise the overall relationship between standards, laws and practices related to textile products.
- 1.4 Explain the product development process and the importance of material and accessory choices for product quality.
- 1.6 Explain how the quality assurance work is linked to national and international sustainability goals.
- 1.7 Explain the key concepts used in all stages of the quality assurance process.

Competence and skills

- 2.1 Apply standardised methods for testing textile materials.
- 2.2 Selecting appropriate test methods as tools in quality management
- 2.3 Evaluate a defective product and identify possible sources of failure.

Judgement and approach

3.1 Discuss how test results are influenced by different aspects such as process and product characteristics.

Forms of Teaching

The teaching of the course consists of

- Lectures
- · Laboratory sessions
- Workshop

The language of instruction is English.

Forms of Examination

The course will be examined through the following examination elements:

Exam

Learning outcomes:

Credits: 5

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

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

Kadolph, S. (2007) Quality Assurance for Textiles and Apparel (2nd ed.). Fairchild Fashion Group. https://doi.org/10.5040/9781501391675

Saville, B P (1999) Physical Testing of Textiles, Woodhead Publishing Ltd.

Other material is available via the university'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 part of the range of introductory textile technology courses at the basic level.