Course Specifications
Valid as from the academic year 2017-2018

Process Technology in Textiles (E064220)

Course

Course offerings and teaching methods in academic year 2019-2020

A (semester 2)
- English
- Lecture: 30.0 h
- Practicum: 30.0 h

B (semester 2)
- Dutch
- Practicum: 30.0 h
- Guided self-study: 30.0 h

Lecturers in academic year 2019-2020

Van Langenhove, Lieva
TW11 lecturer-in-charge

Offered in the following programmes in 2019-2020

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<td>Master of Science in Sustainable Materials Engineering</td>
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<tr>
<td>Master of Science in Materials Engineering</td>
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Teaching languages

Dutch, English

Keywords

Spinning, weaving, non-wovens, knitting, tufting.

Position of the course

The course unit deals with technological aspects of production processes to convert raw material, i.e. fibres, into one-, two- or three-dimensional textile structures, namely yarns, flat materials and materials with a certain thickness. This includes preparations for spinning, spinning itself, weaving, knitting, production of non-wovens, tufting.

Contents

- Production of yarns: Theory of one-dimensional textile structures, Preparations for spinning, Spinning techniques
- Production of fabrics: Woven structures, Preparations for weaving, Principles of weaving, Different methods for weft insertion
- Knitting: Knitted structures, Weft knits, Warp knits
- Non-wovens: Raw materials, Production of non-wovens, Fixation of the structure, Finishing processes
- Tufting: Tufted structures, Processes

Initial competences

Knowledge of textile fibres, have an understanding of mechanical principles of machines, knowledge of mechanics of materials.

Final competences

1. Understand concepts and principles of textile processes: spinning; weaving; knitting; non-wovens; tufting
2. Obtain insight in 1, 2 and 3-dimensional textile structure principles and their mechanical processing.

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

(Approved)
Teaching methods
Guided self-study, lecture, practicum

Extra information on the teaching methods
lecture, practical, guided study, excursions

Learning materials and price
Syllabus, CD-ROM.

References

Course content-related study coaching

Evaluation methods
end-of-term evaluation and continuous assessment

Examination methods in case of periodic evaluation during the first examination period
Oral examination

Examination methods in case of periodic evaluation during the second examination period
Oral examination

Examination methods in case of permanent evaluation
Report

Possibilities of retake in case of permanent evaluation
examination during the second examination period is possible in modified form

Extra information on the examination methods

Calculation of the examination mark
18 point PE1, 2 points report
20 points PE2