Course Specifications
Valid as from the academic year 2016-2017

Functional Textile Materials (E064200)

Course size (nominal values; actual values may depend on programme)

Credits 6.0  Study time 180 h  Contact hrs 60.0 h

Course offerings and teaching methods in academic year 2019-2020

A (semester 2)  Dutch  guided self-study 30.0 h
                project 30.0 h
B (semester 2)  English  project 30.0 h
                lecture 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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<td>B</td>
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<tr>
<td>Master of Science in Materials Engineering</td>
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Teaching languages

Dutch, English

Keywords

functional textiles, smart textiles

Position of the course

The aim is to provide a basic understanding of how textile structures function; the course also allows the students to become familiar with the latest developments in the field of intelligent materials. In this framework guest speakers will be invited.

Contents

• Definition of functional and intelligent materials
• Functions of textile materials
• Active materials
• Intelligent structures
• Textronics
• Conversion of impulses
• Innovation methodology

Initial competences

textile material and structures

Final competences

1. Know the concepts : functional textiles, smart textiles and their components.
2. Obtain insight in the conceptual design of intelligent and functional textile materials and structures and their basic materials.

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

Teaching methods

Guided self-study, lecture, project

(Approved)
Learning materials and price

syllabus

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 points PE1, 2 points report
20 points PE2