## **Module 5221 Sustainable Management**

1	Module Number 5221	Study Programme IM (MBA)	Semester 2	Offered in  ☐ WS区 SS	<b>Duration</b> 1 semester	Module Type Compulsory	Workload (h) 240	ECTS Points 8
2	Courses		Teaching and Learning Forms		Contact Time		Self-Study Time	Language
					(SWS)	(h)	(h)	
	<ul><li>a) Sustainable Technology Management</li></ul>		Lecture, cases		2	30	30	English
	b) Sustainability Assessment		Lecture, lab		2	30	30	English
	c) Sustainable Supply Chain Management		Lecture, cases		2	30	30	English
	d) Business Simulation		Gamification, simulation		1	15	45	English

## 3 Learning Outcomes and Competences

Once the module has been successfully completed, the students

#### **Knowledge and Understanding**

- understand and know sustainable management concepts driven by technology (Sustainable Technology Management)
- understand the principles and importance of LCA, TCO and GGE for assessing activities concerning the sustainability (Sustainability Assessment)
- know methods and tools for establishing a sustainable supply chain (Sustainable Supply Chain Management)
- know how to make decisions based on analyzing the business environment (Business Simulation)

## Use, Application and Generation of Knowledge

#### Use and Transfer

• apply methods and tools for managing operations worldwide in a sustainable way

## Scientific Innovation

• analyse environmental impacts and problems and develop solutions

## **Communication and Cooperation**

present contents and discuss them within the peer group

## Scientific Self-Conception/ Professionalism

• take different perspectives and points of view on a given situation, weigh them up against each other and make an assessment how and in which steps an implementation could lead to an increase in the sustainability of a company

# Methods

Presentation of the lecturers, discussions, real life case studies, group work, presentations of participants, exchange of
experience, PC supported simulation

## 4 Contents

The module covers the following four courses:

- Sustainable Technology Management
- Sustainability Assessment
- Sustainable Supply Chain Management: Concept of sustainability and how this is influencing supply chain management
- Business Simulation: Derivation and development of business solutions in changing economic environment, especially with respect to sustainability

This module supplies the student with different tools and methods which are important for the specialization "Sustainable Technology and Production"

## 5 Participation Requirements

recommended: Participants should have successfully passed the modules "Operations" as well as "Production and Technology", and should be able to prepare professional presentations

## 6 Examination Forms and Prerequisites for Awarding ECTS Points

- Sustainable Technology Management, Sustainability Assessment: Written exam graded; Mid-terms (written, graded) will be obligatory
- Sustainable Supply Chain Management: Project work graded
- Business Simulation: Certificate of attendance non-graded (Class attendance of more than 80 %)



# Module 5221 Sustainable Management

7	Further Use of Module This module is part of the specialization "Sustainable Production and Technology" and lays the foundation for the module "Master's Thesis"
8	Module Manager Prof. Dr. Ralf Wörner
9	Literature Please see the specific course descriptions
10	Last Updated 25.10.2019