Digital Transformation

Module code:	Workload:	Semester:
MDTF	150 h	(WiSe) Sem.
Credits:	**Duration:**	**Frequency:**
5	1 Sem.	Each winter term
Independent study:	**Class size:**	**Contact hours:**
90 h		4 SWS / 60 h
Module-No.:	**Exam.-No.:**	**Percentage of final score:**
7960	9999	PEM: 4,39; HI: 5,55
Language of instruction	**Vers. BPO/MPO min.:**	**Internal: Code/Status**
english	MPO-2017	649 / aktiv

Type of course:

Seminaristic lecture: 2 SWS/ 30 h, Exercise: 2 SWS/ 30 h

Learning outcomes/Competencies:

The course enables students to identify, analyze and develop digital concepts for work organizations within companies. The digital transformation will cause a disruptive change of established business models and will generate new forms of value creation. Therefore, the students will know and understand the challenge of a digitization transformation of a company or the society in general. For this purpose, the technical and organizational principles of digital systems are introduced, which can support or even execute the work organization of a company. The participants of the course will be further enabled to discuss the drivers of a digital transformation as well as to actively develop relevant influencing factors.

The competence to analyze and develop specific work organizations and technical solutions for the digital transformation is achieved through the method of use case teaching and

experiments. Thus, the students are able to develop, evaluate and deploy a methodology and standards for the synthesis and validation of the digital transformation.

Content/subject aim:

The digital transformation will cause disruptive business model innovations. Companies as well as employees have to be prepared. Therefore, responsible persons in production have to query established principles of value chains and production processes and, if necessary, they have to adapt them to the new "jobs" of the customers. The digital transformation is, as the name implies, a change of the company's work organization that needs to be actively develop in regards to the business goals. For this, necessary IT-related actions in connection with change management have to be initiated, which require a certain systematics. As part of the course, the students will acquire competencies for the digital transformation as a result of the discussion of use cases. The method of use case teaching and short practical assignments ensures the attainment of knowledge, skills and abilities to design and implement appropriate organizational and technical solutions. Thus, the course focusses on the empowerment of the participants to efficiently use relevant methods, procedures and tools of the digital transformation in order to create value added.

Teaching methods:

Use Case Teaching and presentation

Prerequisites for participation:

Assessment methods / First Examinator / Second Examinator:

written draft and colloquium / Prof. Tackenberg / Prof. Glatzel

Requirements to get the credit points:

passed examination

This module is used in the following degree program: (in semester-no.)

(WiSe) M.Sc. Production Engineering and Management (WP)

(WiSe) M.Sc. Wirtschaftsingenieur der Holzindustrie (WP)

Weight of grade for final grade:

5/114: M.Sc. Production Engineering and Management

5/90: M.Sc. Wirtschaftsingenieur der Holzindustrie

Responsibility for module / Teacher of the submodule:

Prof. Dr.-Ing. Dipl.-Wirt.-Ing. B.A. Sven Tackenberg

Other information / literature:

- Selected journal articles or book chapters