IT-Systems in Production Management

Module code:	Workload:	Semester:
MERP	150 h	(WiSe) Sem.
Credits:	**Duration:**	**Frequency:**
5	1 Sem.	each winter term
Independent study:	**Class size:**	**Contact hours:**
90 h	20	4 SWS / 60 h
Module-No.:	**Exam.-No.:**	**Percentage of final score:**
7917	5190	PEM: 4,39
Language of instruction:	**Vers. BPO/MPO min.:**	**Internal: Code/Status**
english	MPO-2017	631 / aktiv

Type of course:

Seminaristic lecture: 2 hours per week / 30 h Practical part: 2 hours per week / 30 h

Learning outcomes/Competencies:

• Students learn fundamentals of enterprise resource planning (ERP) and the importance of integrated information systems

• Students earn basic knowledge of working with ERP systems

• Students understand different process modeling methods

• Students are able to implement operations using ERP systems (e.g. customizing)

• Students are able to compare and appraise different ERP systems

• Students know about ERP introduction strategies and modifications

Content/subject aim:

1. Introduction to ERP-Systems

2. Data Management

3. Production Management: MRP, MRP2, ERP, APS

4. ERP and Business Process Implementation

5. Technical Information Systems: CIM, EDM

6. SCM - Supply Chain Management

7. CRM - Customer Relationship Management

8. Lifecycle Management

9. Selection of ERP Systems

The students have to draw up a composition related to IT-Systems in Production Management. Contents are:

- Historical development and definition of the terms used

- Application areas and the advantages or benefits

- Concrete example

- Future development

Teaching methods:

Seminaristic lecture; composition with presentation

Prerequisites for participation:

Knowledge of production plannning and control and computer sciences

Assessment methods / First Examinator / Second Examinator:

Composition with Presentation / Prof. Hartweg / Prof. Deuter

Requirements to get the credit points:

Composition with Colloquium

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

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

Weight of grade for final grade:

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

Responsibility for module / Teacher of the submodule:

Prof. Dr.-Ing. Dipl.-Wirt. Ing. Elmar Hartweg

Other information / literature:

• Gulyassy, F.; et al.: Materials Planning with SAP. SAP Press 2009

• Ivanov, D.; et al.: Global Supply Chain and Operations Management. Springer 2017.

• Kurbel, K.; et al.: Enterprise Resource Planning and SCM. Springer 2013.

• Muir, N.; et al.: Discover SAP. SAP Press 2010

• Kenaroglu, B.: ERP Systems Selection Process: A Roadmap for ERP Systems Selection. VDM, Saarbrücken 2009.

• Pearlson, K.; Saunders, C.: Managing and Using Information Systems: A Strategic Approach (Wiley Series in Probability and Statistics). John Wiley & Sons, Hoboken 2009.