

## Data Structure for Production Technology

<b>Module code:</b>	<b>Workload:</b>	<b>Semester:</b>
MITM	150 h	(WiSe) Sem.
<b>Credits:</b>	<b>Duration:</b>	<b>Frequency:</b>
5	1 Sem.	Each winter term
<b>Independent study:</b>	<b>Class size:</b>	<b>Contact hours:</b>
90 h		60 h
<b>Module-No.:</b>	<b>Exam.-No.:</b>	<b>Percentage of final score:</b>
7916	5260	PEM: 4,39; PuM, HI: 5,55
<b>Language of instruction:</b>	<b>Vers. BPO/MPO min.:</b>	<b>Internal: Code/Status</b>
english	MPO-2017	613 / aktiv

### Type of course:

- Seminaristic lecture: 2 hours per week / 30 h Practical part: 2 hours per week / 30 h;
- E-Learning platform ILIAS: Learning modules, online tests, submission of tasks;
- PC tutorials using relevant IT-Systems

### Learning outcomes/Competencies:

The students understand the concept of Product Lifecycle Management (PLM) and are able to manage selected scenarios in a real world environment. They can apply PLM concepts in practice.

### Content/subject aim:

- Introduction to Product Lifecycle Management
- Data Structures and Data Management
- Details on PLM process: Requirements Engineering
- Details on PLM process: Release and Change Management
- Details on PLM process: Variant Management

- Tutorials using a PLM tool

**Teaching methods:**

- Seminaristic lecture with computer, charts, moderation material;
- PC tutorials using relevant IT systems

**Prerequisites for participation:**

None

**Assessment methods / First Examiner / Second Examiner:**

Oral examination and submission of scientific paper / Prof. Deuter / M.Sc. Otte

**Requirements to get the credit points:**

Passed examination of this part of the course

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

(WiSe) M.Sc. Produktion und Management (WP)

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

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

**Weight of grade for final grade:**

5/90: M.Sc. Produktion und Management

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

5/90: M.Sc. Wirtschaftsingenieur der Holzindustrie

**Responsibility for module / Teacher of the submodule:**

Prof. Dr. rer. nat. Dipl.-Ing. Andreas Deuter

**Other information / literature:**

Recommended literature:

- Saaksvuori, A., Immonen, A.: Product Lifecycle Management, Springer, 2008.
- Stark, J.: Product Lifecycle Management (Volume 1), Springer, 2015
- Pohl, K., Rupp, C.: Requirements Engineering Fundamentals, Rocky Nook, 2 edition, 2015.
- Kosman, M., Requirements Management: How to Ensure You Achieve What You Need

from Your Projects, Routledge, 2016.

- VDI 2206, Design methodology for mechatronic systems, 2004.