

Module Handbook (<https://modhb.uni-kl.de/>)

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Notes on the module handbook of the department Mechanical and Process Engineering

Die hier dargestellten veröffentlichten Studiengang-, Modul- und Kursdaten des Fachbereichs Maschinenbau und Verfahrenstechnik ersetzen die Modulbeschreibungen im KIS und wurden mit Ausnahme folgender Studiengänge am 28.10.2020 verabschiedet.

Ausnahmen:

- BSc. Bio- und Chemieingenieurwissenschaften (Stand WS 20/21): https://www.mv.uni-kl.de/fileadmin/mv/Studium_Lehre/Modulhandbuecher/MH_BSc_BCI.pdf (https://www.mv.uni-kl.de/fileadmin/mv/Studium_Lehre/Modulhandbuecher/MH_BSc_BCI.pdf)
- BEd. Lehramt Metalltechnik (Stand WS 19/20): https://www.mv.uni-kl.de/fileadmin/mv/Studium_Lehre/Modulhandbuecher/MHB_Bachelor_Lehramt_Metalltechnik.pdf (https://www.mv.uni-kl.de/fileadmin/mv/Studium_Lehre/Modulhandbuecher/MHB_Bachelor_Lehramt_Metalltechnik.pdf)
- MSc. Bio- und Chemieingenieurwissenschaften (Stand WS 20/21): https://www.mv.uni-kl.de/fileadmin/mv/Studium_Lehre/Modulhandbuecher/MH_Msc_BCI.pdf (https://www.mv.uni-kl.de/fileadmin/mv/Studium_Lehre/Modulhandbuecher/MH_Msc_BCI.pdf)
- MEd. Lehramt Metalltechnik Werkstoffe und Fertigung (Stand WS 19/20): https://www.mv.uni-kl.de/fileadmin/mv/Studium_Lehre/Modulhandbuecher/MHB_Master_Lehramt_Metalltechnik_-_Werkstoffe_und_Fertigung.pdf (https://www.mv.uni-kl.de/fileadmin/mv/Studium_Lehre/Modulhandbuecher/MHB_Master_Lehramt_Metalltechnik_-_Werkstoffe_und_Fertigung.pdf)
- MEd. Lehramt Metalltechnik Maschinen- und Fahrzeugtechnik (Stand WS 19/20): https://www.mv.uni-kl.de/fileadmin/mv/Studium_Lehre/Modulhandbuecher/MHB_Master_Lehramt_Metalltechnik_-_Fahrzeugtechnik.pdf (https://www.mv.uni-kl.de/fileadmin/mv/Studium_Lehre/Modulhandbuecher/MHB_Master_Lehramt_Metalltechnik_-_Fahrzeugtechnik.pdf)
- MEd. Lehramt Metalltechnik Verfahrenstechnik (Stand WS 19/20): https://www.mv.uni-kl.de/fileadmin/mv/Studium_Lehre/Modulhandbuecher/MHB_Master_Lehramt_Metalltechnik_-_Verfahrenstechnik.pdf (https://www.mv.uni-kl.de/fileadmin/mv/Studium_Lehre/Modulhandbuecher/MHB_Master_Lehramt_Metalltechnik_-_Verfahrenstechnik.pdf)

Module MV-IMAD-117-M-7

Laboratory Machine Design (M, 3.0 LP)

Module Identification

Module Number	Module Name	CP (Effort)
MV-IMAD-117-M-7	<i>Laboratory Machine Design</i>	3.0 CP (90 h)
MV-KIMA-117-M-7	<i>Laboratory Machine Design</i>	3.0 CP (90 h)

Hint concerning Module MV-KIMA-117-M-7:
Number in examination regulations.

Basedata

CP, Effort	3.0 CP = 90 h
Position of the semester	1 Sem. in SuSe
Level	[7] Master (Advanced)
Language	[DE] German
Module Manager	Stephan, Nicole, Dr.-Ing. (WMA DEPT: MV) (/staff/279/) Teutsch, Roman, Prof. Dr.-Ing. (PROF DEPT: MV, GS) (/staff/327/)
Lecturers	Beck, Tilmann, Prof. Dr.-Ing. (PROF DEPT: MV) (/staff/303/) Geiß, Paul Ludwig, Prof. Dr.-Ing. (PROF DEPT: MV) (/staff/311/) Göbel, Jens-Christian, Prof. Dr.-Ing. (PROF DEPT: MV) (/staff/312/) Müller, Ralf, Prof. Dr.-Ing. (PROF DEPT: MV) (/staff/83/) Sauer, Bernd, Prof. Dr.-Ing. (PROF DEPT: MV) (/staff/323/) Stephan, Nicole, Dr.-Ing. (WMA DEPT: MV) (/staff/279/) Teutsch, Roman, Prof. Dr.-Ing. (PROF DEPT: MV, GS) (/staff/327/)
Area of study	[MV-iMAD] Mechanical and Automotive Design
Reference course of study	[MV-88.B78-SG] M.Sc. Production Engineering in Mechanical Engineering (/mhb/FB-MV/cos-578/)
Lifecycle-State	[NORM] Active

Courses

Type/SWS	Course Number	Choice in Module-Part	SL	PL	CP	Sem.
4L	MV-IMAD-86268-K-7	P	L-Schein	no	3.0	SuSe

- About **[MV-IMAD-86268-K-7]**: Title: "Laboratory Machine Design"; Presence-Time: 56 h; Self-Study: 34 h
- About **[MV-IMAD-86268-K-7]**: The study achievement **[L-Schein] proof of successful participation in the practical course / lab** must be obtained.

Evaluation of grades

The module is not graded (only study achievements)..

Contents

From **[MV-IMAD-86268-K-7] Laboratory Machine Design** (/mhb/courses/MV-IMAD-86268-K-7/):

Conducting of 10 experiments on various topics, e.g.:

- Modern testing techniques CAD/CAM coupling
- experimental stress analysis
- manufacturing of fiber-reinforced components
- application of adhesive bonding technology as a joining method
- computer-aided product development using topology optimization
- manufacturing of components using additive manufacturing
- etc.

Competencies / intended learning achievements

From [MV-IMAD-86268-K-7] Laboratory Machine Design (/mhb/courses/MV-IMAD-86268-K-7/):

Students will be able to

- mention and select different testing techniques/procedures
- plan, set up and carry out experiments
- perform and evaluate measurements and calculations
- present test results

Literature

From [MV-IMAD-86268-K-7] Laboratory Machine Design (/mhb/courses/MV-IMAD-86268-K-7/):

Accompanying documents (depending on the experiment)

Requirements for attendance (informal)

None

Requirements for attendance (formal)

None

References to Module / Module Number [MV-IMAD-117-M-7]

Course of Study	Section	Choice/Obligation
[MV-88.814-SG] M.Sc. Mechanical Engineering with a minor in Economics (/mhb/FB-MV/cos-560/)	Wahlpflichtmodule	[WP] Compulsory Elective
Module-Pool	Name	
[MV-ALL-MPOOL-6 (/mhb/modulepools/MV-ALL-MPOOL-6/)]	Wahlpflichtmodule allgemein	

References to Module / Module Number [MV-KIMA-117-M-7]

Course of Study	Section	Choice/Obligation
[MV-88.B78-SG] M.Sc. Production Engineering in Mechanical Engineering (/mhb/FB-MV/cos-578/)	Wahlpflichtmodule	[WP] Compulsory Elective