

Exclosure to Subject Specific Regulations
from 18.07.2018
for Master-Programme
Mechanical Engineering and Management
at TUHH
Programme Director: Prof. Nikola Bursac
Total: 120 CP
Number of Specialisations to choose: 2

TUHH

Course Scheme Master Mechanical Engineering and Management (IMP MEM)

Consolidated Version
for Study Cohort: WiSe21/22
en_head_sda
and Approval of Chair from:
04.05.2022
Replaces Version from: 17.03.2021
Out of Force on: 30.09.2024

1. Specializations of the study course IMP MEM are divided into two sections. Students have to choose one specialization of the first section ("I Management") and one specialization of the second section ("II Materials", "II Mechatronics" or "II Product Development and Production").
 2. NIT students cannot choose from the first section ("I Management"), they choose instead two specializations from the second section ("II Materials", "II Mechatronics" or "II Product Development and Production").
 3. Students who already had the module "Vibration Theory (GES)" in their bachelor study course are not allowed to enroll for the module mentioned above.
- Information regarding the lectures are available in the TUHH modul manuals as well as in the course catalogue.

Re-com. Term	Module						Examination			Course Work		
	Module Name (German / English)	Language	ModuleResponsability	Institute	C/EC (1)	CM/OM (2)	CP (4)	Grade	Examination Form(3)	Compulsory	Course Work Type	Bonus (in %)
Core Qualification Compulsory Courses: 42 LP Optional Courses: 12 LP												
1	Computer Aided Design and Computation / Computer Aided Design and Computation	EN	Dr. Lippert	M-16	C	CM	6	Y	KL			
1	Robotik / Robotics	EN	Dr. Gomse	M-23	C	CM	6	Y	KL			
1	Marketing und Kommunikation / Marketing and Communication	EN	Prof. Lüthje	W-3	EC	CM	6	Y	FFA			
1-2	Ausgewählte Themen des Mechanical Engineering and Management (Alternative A: 12 LP) / Selected Topics of Mechanical Engineering and Management (Alternative A: 12 CP)	DE / EN	Prof. Krause	M-17	EC	OM	12	Selection out of Catalogue below				
1-2	Ausgewählte Themen des Mechanical Engineering and Management (Alternative B: 6 LP) / Selected Topics of Mechanical Engineering and Management (Alternative B: 6 CP)	DE / EN	Prof. Krause	M-17	EC	OM	6	Selection out of Catalogue below				
2	Aufbau und Eigenschaften der Faser-Kunststoff-Verbunde / Structure and properties of fibre-polymer-composites	DE / EN	Prof. Fiedler	M-11	C	CM	6	Y	KL			
2	Industriepraktikum MEM / Internship MEM		NN	Not defined	EC	CM	6	N	SA lt. FPrO			
3	Studienarbeit IMP MEM / Research Project IMP MEM		Dozenten des Studiengangs	SD-M	C	CM	12	Y	STA			

Module							Examination			Course Work		
Re-com. Term	Module Name (German / English)	Language	ModuleResponsability	Institute	C/EC (1)	CM/OM (2)	CP (4)	Grade	Examination Form(3)	Compulsory	Course Work Type	Bonus (in %)
	1-3	Nichttechnische Angebote im Master / Non-technical Courses for Master	DE / EN	Richter	0-TUHH	C	OM	6	Selection out of seperatly published Catalogue			
	1-3	Betrieb & Management / Business & Management	DE / EN	Prof. Meyer	W-1	C	OM	6	Selection out of seperatly published Catalogue			
Specialisation Management Compulsory Courses: 0 LP Optional Courses: 18 LP												
	1	Technologiemanagement / Technology Management	EN	Prof. Herstatt	W-7	EC	CM	6	Y	KL		
	2	Gütermobilität und Logistiksysteme / Mobility of Goods and Logistics Systems	EN	Prof. Flämig	W-8	EC	CM	6	Y	KL	Y	EX 0
											Y	ÜA 0
	2	International Production Management and Enterprise Resource Planning: CERMEDES AG / International Production Management and Enterprise Resource Planning: CERMEDES AG	EN	Prof. Ringle	W-9	EC	CM	6	Y	SA	Y	RE 0
											Y	SA 0
	2	Marketing (Vertrieb und Services / Innovationsmarketing) / Marketing (Sales and Services / Innovation Marketing)	EN	Prof. Lüthje	W-3	EC	CM	6	Y	FFA		
	2	Quantitative Forschungsmethoden / Quantitative Research Methods	EN	Prof. Ringle	W-9	EC	CM	6	Y	SA		
	2	Technology Entrepreneurship / Technology Entrepreneurship	EN	Prof. Ihl	W-11	EC	CM	6	Y	FFA		
	2	Volkswirtschaftslehre / Economics	EN	Prof. Heinrich	W-5	EC	CM	6	Y	KL	Y	RE 33
											Y	ÜA 5
	3	Advanced Topics in Management, Organization, and Human Resource Management / Advanced Topics in Management, Organization, and Human Resource Management	EN	Prof. Ringle	W-9	EC	CM	6	Y	FFA	Y	RE 20
	3	Applied Statistics / Applied Statistics (lt. letzter PO Angewandte Statistik für Ingenieure)	DE / EN	Prof. Morlock	M-3	EC	CM	6	Y	KL		
	3	Entrepreneurial Finance / Entrepreneurial Finance	EN	Prof. Ihl	W-11	EC	CM	6	Y	FFA	Y	GD 20
	3	Produktplanung / Product Planning	EN	Prof. Herstatt	W-7	EC	CM	6	Y	KL	Y	FFST 20
Specialisation Mechatronics Compulsory Courses: 0 LP Optional Courses: 18 LP												
	1	Technische Schwingungslehre / Vibration Theory	DE / EN	Prof. Hoffmann	M-14	EC	CM	6	Y	KL		
	2	Nichtlineare Dynamik / Nonlinear Dynamics	DE / EN	Prof. Hoffmann	M-14	EC	CM	6	Y	KL		
	3	Digitale Signalverarbeitung und Digitale Filter / Digital Signal Processing and Digital Filters	EN	Prof. Bauch	E-8	EC	CM	6	Y	KL		
	3	Entwurf Integrierter Schaltungen / Integrated Circuit Design	EN	Prof. Kuhl	E-9	EC	CM	6	Y	KL		
	3	Mikrosystemtechnik / Microsystem Engineering	EN	Dr. Kusserow	E-7	EC	CM	6	Y	KL	N	RE 10
	3	Prozessautomatisierungstechnik / Industrial Process Automation	EN	Prof. Schlaefer	E-1	EC	CM	6	Y	KL	N	ÜA 10

	Module						Examination			Course Work		
Re-com. Term	Module Name (German / English)	Language	ModuleResponsability	Institute	C/EC (1)	CM/OM (2)	CP (4)	Grade	Examination Form(3)	Compulsory	Course Work Type	Bonus (in %)
3	Theorie und Entwurf regelungstechnischer Systeme / Control Systems Theory and Design	EN	Prof. Werner	E-14	EC	CM	6	Y	KL			
3-4	Entwurf Digitaler Schaltungen / Digital Circuit Design	EN	Prof. Kuhl	E-9	EC	CM	6	Y	MP			
Specialisation Product Development and Production Compulsory Courses: 0 LP Optional Courses: 18 LP												
2	Additive Production / AdditiveProduction	EN	Prof. Emmelmann	T-2	EC	CM	6	Y	KL			
2	Boundary-Elemente-Methoden / Boundary Element Methods	EN	Prof. von Estorff	M-16	EC	CM	6	Y	KL	N	MT	20
2	High-Order FEM / High-Order FEM	EN	Prof. Düster	M-10	EC	CM	6	Y	KL	N	RE	10
2	Praktische Entwicklungsmethodik in der Mechatronik / Applied Design Methodology in Mechatronics	EN	Prof. Kern	M-4	EC	CM	6	Y	FFA			
3	3D Printing Labor / 3D Printing Laboratory	EN	Prof. Emmelmann	T-2	EC	CM	6	N	SA			
3	Lasersysteme und Metallische Konstruktionswerkstoffe / Laser Systems and Metallic Materials	EN	Prof. Emmelmann	T-2	EC	CM	6	Y	KL			
Specialisation Materials Compulsory Courses: 0 LP Optional Courses: 18 LP												
1	Kontinuumsmechanik / Continuum Mechanics	DE	Prof. Cyron	M-15	EC	CM	6	Y	KL			
1	Moderne Funktionsmaterialien / Advanced Functional Materials	DE	Prof. Huber	M-22	EC	CM	6	Y	RE			
2	Mechanische Eigenschaften / Mechanical Properties	DE / EN	Dr. Lilleodden	M-9	EC	CM	6	Y	KL			
2	Verarbeitung von Faser-Kunststoff-Verbunde / Processing of fibre-polymer-composites	DE / EN	Prof. Fiedler	M-11	EC	CM	6	Y	KL			
2-3	Grenzflächen und grenzflächenbestimmte Materialien / Interfaces and interface-dominated Materials	DE / EN	Prof. Huber	M-22	EC	CM	6	Y	KL			
3	Werkstoffmodellierung / Materials Modeling	DE	Prof. Cyron	M-15	EC	CM	6	Y	KL			
Thesis Compulsory Courses: 30 LP Optional Courses: 0 LP												
4	Masterarbeit / Master Thesis		Professoren der TUHH	0-TUHH	C	CM	30	Y	AB			

Selected Topics of Mechanical Engineering and Management (Alternative A: 12 CP)

Course					Examination			
Course Name (German / English)	Course Form LV(5)	Language (6)	SWS (7)	Sem. LV	CP (4)	Grade	Examination Form(3)	Additional information
Ermüdung und Schadenstoleranz / Fatigue & Damage Tolerance	VL	EN	2	WiSe	3	Y	MP	

Course					Examination			
Course Name (German / English)	Course Form LV(5)	Language (6)	SWS (7)	Sem. LV	CP (4)	Grade	Examination Form(3)	Additional information
Forschungsseminar für Fortgeschrittene / Advanced Research Seminar	SE	EN	2	WiSe/SoSe	2	Y	SA	
Generationsübergreifende Blechkonstruktion / GSD - Generational Sheet-Metal Development	VL	DE	3	WiSe	3	Y	MP	
Interkulturelles Management und Kommunikation (MEM) / Intercultural Management and Communication (MEM)	VL	EN	2	WiSe	2	Y	SA	
Internationales Recht für Ingenieure / International Law for Engineers	VL	EN	2	WiSe	2	Y	KL	
Internationales Recht für Ingenieure / International Law for Engineers	SE	EN	2	SoSe	2	Y	SA	
Investition und Finanzierung / Corporate Finance	VL	EN	2	WiSe	2	Y	KL	
Leichtbaupraktikum / Lightweight Design Practical Course	PBL	DE/EN	3	SoSe	3	Y	MP	
Methodenbasiertes Projektmanagement / Project Management Methods	VL	EN	1	SoSe	2	Y	KL	
Personalmanagement und Organisationsentwicklung / Human Resource Management and Organization Design	VL	EN	2	SoSe	2	Y	KL	
Rechnungswesen / Accounting	VL	EN	2	WiSe	2	Y	SA	
Rechnungswesen / Accounting	HÜ	EN	2	WiSe	2	Y	SA	
Strukturmechanik von Faserverbunden / Structural Mechanics of Fibre Reinforced Composites	VL	EN	2	WiSe	3	Y	MP	

Selected Topics of Mechanical Engineering and Management (Alternative B: 6 CP)

Course					Examination			
Course Name (German / English)	Course Form LV(5)	Language (6)	SWS (7)	Sem. LV	CP (4)	Grade	Examination Form(3)	Additional information
Ermüdung und Schadenstoleranz / Fatigue & Damage Tolerance	VL	EN	2	WiSe	3	Y	MP	
Forschungsseminar für Fortgeschrittene / Advanced Research Seminar	SE	EN	2	WiSe/SoSe	2	Y	SA	
Generationsübergreifende Blechkonstruktion / GSD - Generational Sheet-Metal Development	VL	DE	3	WiSe	3	Y	MP	
Interkulturelles Management und Kommunikation (MEM) / Intercultural Management and Communication (MEM)	VL	EN	2	WiSe	2	Y	SA	
Internationales Recht für Ingenieure / International Law for Engineers	VL	EN	2	WiSe	2	Y	KL	
Internationales Recht für Ingenieure / International Law for Engineers	SE	EN	2	SoSe	2	Y	SA	
Investition und Finanzierung / Corporate Finance	VL	EN	2	WiSe	2	Y	KL	
Leichtbaupraktikum / Lightweight Design Practical Course	PBL	DE/EN	3	SoSe	3	Y	MP	
Methodenbasiertes Projektmanagement / Project Management Methods	VL	EN	1	SoSe	2	Y	KL	

Course					Examination			
Course Name (German / English)	Course Form LV(5)	Language (6)	SWS (7)	Sem. LV	CP (4)	Grade	Examination Form(3)	Additional information
Personalmanagement und Organisationsentwicklung / Human Resource Management and Organization Design	VL	EN	2	SoSe	2	Y	KL	
Rechnungswesen / Accounting	VL	EN	2	WiSe	2	Y	SA	
Rechnungswesen / Accounting	HÜ	EN	2	WiSe	2	Y	SA	
Strukturmechanik von Faserverbunden / Structural Mechanics of Fibre Reinforced Composites	VL	EN	2	WiSe	3	Y	MP	

Explanation:

¹C=Compulsory, EC=Elective Compulsory

²CM=Compulsory Defined Module, OM=Optional Defined Module

³MT=Midterm, KL=Written exam, SA=Written elaboration, FFST=Subject theoretical and practical work, FFA=Subject theoretical and practical work, MP=Oral exam, RE=Presentation, STA=Study work, GD=Group discussion, AB=Thesis, UA=Exercises, EX=Participation in excursions, SA lt. FPRO=Written elaboration (accord. to Internship Regulations)

⁴CP=Credit Points

⁵VL=Lecture, SE=Seminar, GÜ=Recitation Section (small), PBL=Project-/problem-based Learning, PR=Practical Course, PS=Project Seminar, HÜ=Recitation Section (large), IV=Integrated Lecture

⁶DE=German, EN=English, DE/EN=German and English

⁷SWS=Contact hours