List of the Courses taught in English at the Department of Mechanical and Process Engineering of the Duesseldorf University of Applied Sciences

Remarks:
1) The elective courses may not be opened every semester. The list of the elective courses will be announced at the beginning of the semester
2) Although the lectures are usually offered only in one of the two semesters of the year (winter or summer) the exams can be taken at the end of both semesters. Thus, it is possible to take the exams of the courses, the lectures of which were not offered in the respectivesemester.

Bachelor Courses

Code	Title of the Course	ECTS	Semester	Course Type	Study Program	Language	Lecturer
60031	Energietechnische Projektstudien (Selected case studies of energy technologies)	5	WS / SS	WF	EUT, UVT, WIM	e	Adam/Wohlfahrtstätter
21011	Erneuerbare Energien und energieeffizente Technologien (Renewable energies and energy efficiency)	5	SS	PF, WF	EUT, MPE, MPT, UVT, WIM	e	Adam/Wohlfahrtstätter
60011	Biofluid Dynamics	5	WS / SS	WF	EUT, MPE, MPT, UVT	e	Benim
60831	Projects in Energy Technology	5	WS / SS	WF	EUT, MPE, MPT, UVT, WIM	e	Benim
11021	Heat Transfer	5	WS	PF	EUT, UVT	e	Benim
60021	Selected Topics in Energy Technology	5	WS / SS	WF	EUT, MPE, MPT, UVT	e	Benim
21021	Technical Combustion	5	SS	PF	EUT	e	Benim
60981	Business and Technology in Space	5	SS	PF	EUT, MPE, MPT, UVT, WIM	e	Bosman
24021	Beschaffung & Supply Chain Management	4	SS	PF	WIM	d / e* (X)	Deckert
	Technology Management	5	WS / SS	WF	EUT, MPE, MPT, UVT, WIM	e	Deckert
60381	Verfahrenstechnik der Zementherstellung 1 (Process Engineering of Cement Production 1)	5	SS	WF	EUT, MPE, MPT, UVT	d / e (X)	Fleiger
60391	Verfahrenstechnik der Zementherstellung 2 (Process Engineering of Cement Production 2)	5	WS	WF	EUT, MPE, MPT, UVT	d / e (X)	Fleiger
60751	Applied Artificial Intelligence in Instrumentation and Control	5	SS	WF	EUT, MPE, MPT, UVT, WIM	e	Grote-Ramm
60881	Advanced Machine Learning	5	SS	WF	EUT, MPE, MPT, UVT, WIM	d / e (X)	Stuhlsatz
60781	Konvexe Optimierung	5	SS	WF	EUT, MPE, MPT, UVT, WIM	d / e (X)	Stuhlsatz
60681	Energiewirtschaftliche Projektstudien (Selected topics in energy economics)	5	WS	WF	EUT, UVT, WIM	e	Schaube
23021	Luftreinhaltung (Air Quality Control)	6	SS	PF	EUT, UVT	d / e* (X)	Weber
60341	Sondergebiete der Physik (Advanced Special Topics of Physics)	5	WS / SS	WF	EUT, MPE, MPT, UVT, WIM	d / e (X)	Weber
60351	Umwelttechnische Projektstudien (Selected Case Studies of Environmental Engineering)	5	WS / SS	WF	EUT, MPE, MPT, UVT, WIM	d / e (X)	Weber
60431	Innovative KFZ-Antriebe	5	WS / SS	WF	EUT, MPE, MPT, UVT, WIM	d / e (X)	Weber
60701	Elektromobilität (Electromobility)	5	WS / SS	WF	EUT, MPE, MPT, UVT, WIM	d / e (X)	Weber
60631	Machine Learning	5	SS / SS	WF	EUT, MPE, MPT, UVT, WIM	d / e (X)	Zielke
60131	Advanced Reading and Conversation Class	5	WS / SS	WF	EUT, MPE, MPT, UVT, WIM	e	Zupfer
60451	English for Engineers	5	WS / SS	WF	EUT, MPE, MPT, UVT, WIM	e	Zupfer
60611	English Business Communication	5	WS / SS	WF	EUT, MPE, MPT, UVT, WIM	e	Zupfer
	Business English Essentials	5	WS / SS	WF	EUT, MPE, MPT, UVT, WIM	e	Zupfer
10411	English (Englisch)	5	WS	PF	EUT, MPE, MPT, UVT, WIM	e	Zupfer

Master Courses							
Code	Title of the Course	ECTS	Semester	Course Type	Study Program	Language	Lecturer
12001 12002	Simulation of Mechanical Systems (if this course is chosen, the corresponding Practical Traning must be chosen, too) Simulation of Mechanical Systems Practical Training	6	WS	PF	ME	e	Batos
11301 11302	Computational Fluid Dynamics (CFD) (if this course is chosen, the corresponding Practical Traning must be chosen, too) Computational Fluid Dynamics (CFD) Practical Training	6	SS	PF	SET, ME	e	Benim
40021	Turbulent Flows	6	WS / SS	WF	ME	e	Benim
40361	Turbulent Combustion	6	WS	WF	ME	e	Benim
	Heat and Mass Transfer in Two Phase Flows	6	SS	WF	SET	e	Benim
40341	Fatigue Strength of Components	6	WS	WF		d / e (X)	Bongartz
17001 17002	Innovation and Technology Management (if this course is chosen, the corresponding Practical Traning must be chosen, too) Innovation and Technology Management Practical Training	6	SS	PF	IWI	e	Deckert
40311	Behavioral Economics	6	WS	WF	IWI	e	Deckert
27021 27022	Operations Management (if this course is chosen, the corresponding Practical Traning must be chosen, too) Operations Management Practical Training	6	WS	PF	IWI	e	Deckert
40151	Automation with Microcontrollers	6	WS	WF	SET, IWI, ME	d / e (X)	Grote-Ramm
	Plain Bearing Technology – Design, Dimensioning and Testing	6	WS	WF	ME	e	Heckmann, Gabener
40091	Polymer Technology	6	WS	WF	SET, IWI, ME	e	Heinemann
40221	Heterogeneous Catalysis	6	WS / SS	WF	SET, IWI	d / e (X)	Kaluza
11201 11202	Signal Processing for Mechanical and Process Engineering (if this course is chosen, the corresponding Practical Traning must be chosen, too) Signal Processing for Mechanical and Process Engineering Practical Training	6	SS	PF	SET, ME	e	Kameier, Biedermann
40071	Low Noise Design	6	WS	WF	SET, IWI, ME	e	Kameier
40041	Control Theory	6	WS	WF		e	Kiel
17301	Life Cycle and Services Management	6	WS	PF	IWI	e	Niemann
40281	Digital Business Transformation in Industry 4.0	6	SS	WF	SET, IWI, ME	d / e (X)	Niemann
40201	Industrial Services Marketing & Business Development	6	SS	WF	SET, IWI, ME	e	Niemann
17201	International Technical Sales Management	6	SS	PF	IWI	e	Niemann
40321	Industrial Robots in Industry 4.0 Environments	6	WS	WF	SET, IWI, ME	e	Niemann
40211	Advanced Computational Methods	6	WS / SS	WF	SET, IWI, ME	e	Ruess
12101 12102	Finite Element Method (FEM) (if this course is chosen, the corresponding Practical Traning must be chosen, too) Finite Element Method (FEM) Practical Training	6	WS	PF	SET, ME	e	Ruess
11401 11402	Engineering Mathematics (if this course is chosen, the corresponding Practical Traning must be chosen, too) Engineering Mathematics Practical Training	6	SS	PF	SET, ME	e	Ruess
40221	Advanced Computational Methods	6	WS / SS	WF	SET, IWI, ME	e	Ruess
	Software Lab	6	WS / SS	WF			
40171	Pollutant Sensors in Ambient Air Control and Automobiles	6	WS / SS	WF	SET, IWI, ME	e	Weber
21021	Environment – Noise Protection, Measurement Technology Air	6	WS	PF	SET, IWI	d / e (X)	Weber/Biedermann
40291	Advanced English for Engineers	6	SS	WF	SET, IWI, ME	e	Zupfer
40131	Advanced Business English	6	WS / SS	WF	SET, IWI, ME	e	Zupfer
40081	Intercultural Competence	6	SS	WF	SET, IWI, ME	e	Zupfer
30031	Engineering Conferences	6	WS / SS	PF	SET, IWI, ME	e	Stuhlsatz/Neef/Biedermann
30011	Project R & D	6	WS/ SS	PF	SET, IWI, ME	d / e (X)	various

Key

Language:	d = German
	e = English
	d / e = The course is taught normally in german, but can be taught in english, as well, upon request.
	d / e* = The course is taught in german, but the written exam can be taken in english. Please contact the lecturer at the beginning of the semester, if you wish to do so.
	X : Course material (lecture notes etc.) sufficient for exam preparation is available in english.

Semester:	WS = Winter Semester
	SS = Summer Semester

Course Type:	PF = Compulsory
	WF = Elective

Study Program:	EUT = Energy and Environmental Technology
	UVT = Environmental and Process Technology
	MPE = Product Development
	MPT = Production Technology
	WIM = Industrial Engineering
	SET = Simulation and Experimental Technology
	ME = Mechanical Engineering
	IWI = International Industrial Engineering