

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 respective semester.

Bachelor Courses

Code	Title of the Course	ECTS	Semester	Course Type	Study Program	Language	Lecturer
60031	Energetische Projektstudien (Selected case studies of energy technologies)	5	WS / SS	WF	EUT, UVT, WIM	e	Adam/Riegebauer
21011	Erneuerbare Energien und energieeffiziente Technologien (Renewable energies and energy efficiency)	5	SS	PF, WF	EUT, MPE, MPT, UVT, WIM	d / e (X)	Adam/Riegebauer
60011	Biofluid Dynamics	5	WS / SS	WF	EUT, MPE, MPT, UVT	e	Benim
	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
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
60721		5	WS / SS	WF	EUT, MPE, MPT, UVT, WIM	d / e (X)	Deckert, Wrede
60621	Informatik III Weiterführende JAVA Programmierung	5	WS / SS	WF	EUT, MPE, MPT, UVT, WIM	d / e (X)	Eckgold
60051	WEB-Programmierung und -Sicherheit (WEB-Programming and Security)	5	SS	WF	EUT, MPE, MPT, UVT, WIM	d / e (X)	Eckgold
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
60251	Dynamik (Dynamics)	5	SS	WF	EUT, UVT, WIM	d / e (X)	Jahr
60261	Festigkeitslehre (Strength of Materials)	5	WS / SS	WF	EUT, UVT	d / e (X)	Jahr
60291	Konstruktion von Maschinen (Design of Machines)	5	SS	WF	MPT, EUT, UVT	d / e (X)	Jahr
60301	Maschinenelemente (Machine Elements)	5	WS	WF	EUT, UVT	d / e (X)	Jahr
60311	Mechanik Computerorientiert (Mechanics Computeroriented)	5	WS	WF	MPE, MPT, WIM	d / e (X)	Jahr
60431	Produktentwicklungsstudien (Product Development Studies)	5	WS / SS	WF	MPE, MPT, WIM	d / e (X)	Jahr
60681	Energiewirtschaftliche Projektstudien (Selected topics in energy economics)	5	WS / SS	WF	EUT, UVT, WIM	e	Schaube
	Konvexe Optimierung	5	SS	WF	EUT, MPE, MPT, UVT, WIM	d / e (X)	Stuhlsatz
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
10411	Technical English (Technisches 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
11301	Computational Fluid Dynamics (CFD) (if this course is chosen, the corresponding Practical Training must be chosen, too)	6	SS	PF	SET, ME	e	Benim
11302	Computational Fluid Dynamics (CFD) Practical Training						
40021	Turbulent Flows	6	WS / SS	WF	ME	e	Benim
40181	Two-Phase Flows	6	WS / SS	WF	ME	e	Benim
	Turbulent Combustion	6	WS	WF	ME	e	Benim
21001	Heating and Cooling – Renewable Energies, Combustion, Heat and Mass Transfer	6	SS	PF	SET, IWI	e	Benim
17001	Innovation and Technology Management (if this course is chosen, the corresponding Practical Training must be chosen, too)	6	SS	PF	IWI	e	Deckert
17002	Innovation and Technology Management Practical Training						
40311	Behavioral Economics	6	WS	WF	IWI	e	Deckert
27021	Operations Management (if this course is chosen, the corresponding Practical Training must be chosen, too)	6	WS	PF	IWI	e	Deckert
27022	Operations Management Practical Training						
40271	Applied Simulation in Process Technology (Angewandte verfahrenstechnische Simulation)	6	WS / SS	WF	SET	d / e (X)	Fleiger
40151	Automation with Microcontrollers	6	WS	WF	SET, IWI, ME	d / e (X)	Grote
40091	Polymer Technology	6	WS	WF	SET, IWI, ME	e	Heinemann
40031	Innovative Product Development	6	WS	WF	ME, IWI	e	Jahr
12001	Simulation of Mechanical Systems (if this course is chosen, the corresponding Practical Training must be chosen, too)	6	WS	PF	ME	e	Jahr
12002	Simulation of Mechanical Systems Practical Training						
40231	Heterogeneous Catalysis	6	WS / SS	WF	SET, IWI	d / e (X)	Kaluza
11201	Computer-Based Measurement Technology (if this course is chosen, the corresponding Practical Training must be chosen, too)	6	SS	PF	SET, ME	e	Kameier
11202	Computer-Based Measurement Technology Practical Training						
40071	Low Noise Design	6	WS	WF	SET, IWI, ME	e	Kameier
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	Finite Element Method (FEM) (if this course is chosen, the corresponding Practical Training must be chosen, too)	6	WS	PF	SET, ME	e	Ruess
12102	Finite Element Method (FEM) Practical Training						
11401	Engineering Mathematics (if this course is chosen, the corresponding Practical Training must be chosen, too)	6	SS	PF	SET, ME	e	Ruess
11402	Engineering Mathematics Practical Training						
40221	Software Lab	6	WS / SS	WF	SET, IWI, ME	e	Ruess
40191	Energy Storage and Flexibility Options	6	WS / SS	PF	SET, IWI, ME	e	Schaube
40171	Pollutant Sensors in Ambient Air Control and Automobiles (Schadstoff-Sensoren in der Luftreinhaltung und bei Automobilen)	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
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 MPE = Product Development MPT = Production Technology UVT = Environmental and Process Technology WIM = Industrial Engineering SET = Simulation and Experimental Technology IWI = International Industrial Engineering ME = Mechanical Engineering