Course of Study General Engineering Science (English program) (Study Cohort w14)

Sample course plan A Bachelor General Engineering Science (English program) (GESBS)
Specialisation Mechanical Engineering, Focus Product Development and Production

Semester 1

Course	Form	Hrs/wk
Chemistry (GES)		
Chemistry I	VL	2
Chemistry II	VL	2
Chemistry I	HÜ	1
Chemistry II	HÜ	1
Linear Algebra		
Linear Algebra	VL	4
Linear Algebra	HÜ	2
Linear Algebra	UE	2
Electrical Engineering I		
Electrical Engineering I	VL	3
Electrical Engineering I	UE	2
Mechanics I (GES)		
Mechanics I	VL	2
Mechanics I	HÜ	3
Physics for Engineers (GES) (part 1)		
Physics for Engineers	VL	2
Physics for Engineers	UE	1

Semester 2

Course	Form	Hrs/wk
Physics for Engineers (GES) (part 2)		
Physics-Lab for ET/IIW-Engineers	PR	1
Fundamentals of Mechanical Engineering Design		
Fundamentals of Mechanical Engineering Design	VL	2
Fundamentals of Mechanical Engineering Design	HÜ	2
Technical Thermodynamics I		
Technical Thermodynamics I	VL	2
Technical Thermodynamics I	HÜ	1
Technical Thermodynamics I	UE	1
Mathematical Analysis		
Mathematical Analysis	VL	4
Mathematical Analysis	HÜ	2
Mathematical Analysis	UE	2
Electrical Engineering II		
Electrical Engineering II	VL	3
Electrical Engineering II	UE	2
Mechanics II (GES)		
Mechanics II	VL	2
Mechanics II	HÜ	2

Semester 3

Course	Form	Hrs/wk
Technical Thermodynamics II		
Technical Thermodynamics II	VL	2
Technical Thermodynamics II	HÜ	1
Technical Thermodynamics II	UE	1
Computer Engineering		
Computer Engineering	VL	3
Computer Engineering	UE	1
Mathematics III		
Analysis III	VL	2
Analysis III	UE	1
Analysis III	HÜ	1
Differential Equations 1	VL	2
Differential Equations 1	UE	1
Differential Equations 1	HÜ	1
Mechanics III (GES)		
Mechanics III	HÜ	1
Mechanics III	UE	2
Mechanics III	VL	3
Mechanical Engineering: Design (part 1)		
Embodiment Design and 3D-CAD	VL	2
Mechanical Design Project I	TT	3
Fundamentals of Materials Science (part 1)		
Fundamentals of Materials Science I	VL	2
Physical and Chemical Basics of Materials Science	VL	2

Semester 4

Course	Form	Hrs/wk
Mechanical Engineering: Design (part 2)		
Team Project Design Methodology	POL	2
Mechanical Design Project II	TT	3
Fundamentals of Materials Science (part 2)		
Fundamentals of Materials Science II	VL	2
Advanced Mechanical Engineering Design (part 2)		
Advanced Mechanical Engineering Design II	VL	2
Advanced Mechanical Engineering Design II	HÜ	2
Signals and Systems		
Signals and Systems	VL	3
Signals and Systems	HÜ	1
Fluid Dynamics		
Fluid Mechanics	VL	3
Fluid Mechanics	HÜ	1
Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)		
Mechanics IV	VL	3
Mechanics IV	UE	2
Mechanics IV	HÜ	1
Electrical Machines		
Electrical Machines	VL	3
Electrical Machines	HÜ	2

Semester 5

Course	Form	Hrs/wk
Introduction to Control Systems		
Introduction to Control Systems	VL	2
Introduction to Control Systems	UE	2
Measurement Technology for Mechanical and Process Engineers		
Measurement Technology for Mechanical and Process Engineers	VL	2
Measurement Technology for Mechanical and Process Engineers	HÜ	1
Practical Course: Measurement and Control Systems	PR	2
Advanced Mechanical Design Project		
Advanced Mechanical Design Project	TT	4
Production Technology		
Forming and Cutting Technology	VL	2
Forming and Cutting Technology	HÜ	1
Fundamentals of Machine Tools	VL	3
Material Science Laboratory		
Companion Lecture for Materials Science Laboratory	VL	2
Material Science Laboratory	PR	4

Semester 6

Course	Form	Hrs/wk
Foundations of Management		
Introduction to Management	VL	4
Project Entrepreneurship	POL	2
Integrated Product Development and Lightweight Design		
Integrated Product Development I	VL	2
Development of Lightweight Design Products	VL	2
CAE-Team Project	POL	2
Bachelor Thesis		

34			**Advanced Mechanical Engineering Design (part 1)**
35		**Programming in C**	Advanced Mechanical Engineering Design I VL 2
36		Programming in C VL 1	
		Programming in C PR 1	Advanced Mechanical Engineering Design I HÜ 2

Nontechnical Complementary Courses for Bachelors (from catalogue) - 6LP

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.