

## Aufbau Studium Mechanical Engineering B.Sc.

Semester 1	Introductory Mathematics (8/8)	Statics and Strength of Materials (5/4)	Chemistry of Materials (5/4)	Business Economics and Project Management (5/4)	Programming (5/4)	Introduction to ME (3/3)	Year 1 Fundamentals
Semester 2	Applied Mathematics (7/8)	Advanced Strength of Materials (5/4)	Fundamentals of Physics (5/4)	Metallic Materials and Testing (5/4)	Cross Cultural Management (5/4)	Engineering Drawing and Design (5/4)	
Semester 3	Thermodynamics (5/4)	Dynamics (5/4)	Fundamentals of Electrical Engineering (5/4)	Non-metallic Materials (5/4)	Drive Systems (5/4)	Advanced Engineering Design (5/4)	Year 2 Specific basics
<b>Übergang: erstes Jahr - 10CP</b>							
Semester 4	Focus Field Subject 1 (5/x)	Focus Field Subject 2 (5/x)	Numerical Mathematics (5/4)	Systems Theory and Controls (5/4)	Manufacturing Technology (5/4)	Product Design (5/4)	
<b>Übergang: erstes Jahr komplett</b>							
Semester 5	Focus Field Subject 3 (5/x)	Focus Field Subject 4 (5/x)	Controls (5/4)	Modelling and Simulation (5/4)	Production and Quality Management (5/4)	Interdisziplinäre Group Project (5/1)	Year 3/4 Profile development
Semester 6	Internship Semester / Semester abroad (30/-)						
Semester 7	Elective (5/x)	Technology- and Innovation- Management (5/3)	Entrepreneurship Block (2/2)	Colloq. (3/-)	Bachelor Thesis (12/-)		
	Focus Field Design	Focus Field Process Engineering	Focus Field Technical Sales	Focus Field Machinery and Systems	Focus Field Simulation and Validation	Focus Field Bionics	
Subject 1	CAD / CAM	Fluid Mechanics	Global Economy and Trade	Cylindrical Gears	Multibody Dynamics	Biomimetic Science	
Subject 2	Material Testing and Failure Analysis	Fund. of Process Engineering	Technical Investment Planning and Purchasing	Agricultural and Construction Machinery	Machine Diagnostics	Zoological Physics	
Subject 3	Advanced Product Design	Design of Plants	Production and Logistics	Material Handling Equipment	Applied Strength of Materials	Bioinspiration	
Subject 4	FEM	Control of Plants	Fundamentals of Law, Investment and Financing	Mobile Hydraulics	FEM	Bionic Design	

Legende:

(CP/SWS)

CP: Kreditpunkte

SWS: wöchentliche Stunden