

Faculty:
Engineering



Site:
Campus Karthause

Degree Title: Product Development and Design					
Academic Title: Bachelor of Engineering (B.Eng.)			Prerequisites for Admission: <ul style="list-style-type: none"> The general examinations required for entrance into universities or institutes of higher education (<i>Allgemeine Hochschulreife</i> or <i>Fachhochschulreife</i>), or a recognised equivalent preparatory qualification Industrial placement (min. 16 weeks) 		
Aim of the Course: The aim of the Bachelor course is to provide students with interdisciplinary qualifications, such as communication/cooperation skills, methodical and (independent) learning skills in addition to the traditional, professional skills of an engineer. Engineers have to work in interdisciplinary, often internationally manned development teams and understand problems from other specialist areas, and be able to work these out productively as part of a team. Students will be prepared for these tasks on the course.					
Structure of the Course/Curriculum:					
„Bachelor of Engineering“ Product Development and Design					
1. Semester	2. Semester	3. Semester	4. Semester	5. Semester	6. Semester
Mathematik I (8c)	Mathematik II (4c)	Mathematik III (4c)	CAD-FEM (4c)	CAD-FEM (3c)	Fluidenergiemaschinen (6c)
Technische Mechanik I (5c)	Technische Mechanik II (5c)	Technische Mechanik III (4c)	Fertigungsautomatisierung (3c)	Betriebsw. und internationale Grundlagen (6c)	Technisches Wahlpflichtmodul (4c)
Naturwissenschaftliche Grundlagen (5c)	Naturwissenschaftliche Grundlagen (5c)	Grundlagen der Elektrotechnik (4c)	Automatisierungs- und Antriebstechnik (3c)	Fertigungsautomatisierung (4c)	Mess- und Regelungstechnik (4c)
Werkstoffkunde und Fertigungstechnik (7c)	Techn. Kommunikation und Konstruktionslehre (3c)	Maschinenelemente (6c)	Projekt- und Qualitätsmanagement (6c)	Automatisierungs- und Antriebstechnik (3c)	Werkstoffkunde II (4c)
Techn. Kommunikation und Konstruktionslehre (3c)	Maschinenelemente (4c)	Thermodynamik (5c)	Nicht-Technisches Wahlpflichtmodul (4c)	Fluidenergiemaschinen (2c)	Bachelor-Thesis (12c)
Technisches Englisch (2c)	Datenverarbeitung (3c)	Strömungslehre (4c)	Produktentwicklung (3c)	Produktentwicklung (3c)	
	Technisches Englisch (2c)	Datenverarbeitung (3c)	Maschinendynamik und Antriebselemente (2c)	Maschinendynamik und Antriebselemente (3c)	
	Arbeitsmethoden (4c)		Angewandte Mechanik (5c)	Mess- und Regelungstechnik (6c)	
‘Bachelor of Engineering’ in Product Development & Design					
Semester 1 Mathematics I (8c); Technical Mechanics I (5c); Principles of Natural Sciences (5c); Materials & Product Engineering (7c); Technical Communication & Design (3c); Technical English (2c)					
Semester 2 Mathematics II (4c); Technical Mechanics II (5c); Principles of Natural Sciences (5c); Technical Communication & Design (3c); Machine Parts (4c); Data Processing (3c); Technical English (2c); Working Methods (4c)					
Semester 3 Mathematics III (4c); Technical Mechanics III (4c); Principles of Electrical Engineering (4c); Machine Parts (6c); Thermodynamics (5c); Fluid Dynamics (4c); Data Processing (3c)					
Semester 4 CAD-FEM (4c); Factory Automation (3c); Automation & Actuation Systems (3c); Project Management & Quality Management (6c); Non-Technical, Elective Module (4c); Product Development (3c); Dynamics of Machines & Actuators (2c); Applied Mechanics (5c)					
Semester 5 CAD-FEM (3c); Business Admin. & International Principles (6c); Factory Automation (4c); Automation & Actuation Systems (3c); Fluid Power Machines (2c); Product Development (3c); Dynamics of Machines & Actuators (3c); Measuring & Control Systems (6c)					
Semester 6 Fluid Power Machines (6c); Technical, Elective Module (4c); Measuring & Control Systems (4c); Materials Science II (4c); Bachelor Thesis (12c)					

Employability/Professional Activities: Graduates will be able to turn new, academic insights into improved processes and products, which also serve to maintain the quality of life and solve global problems. They will be in a position to develop products that use fewer resources and are capable of being recycled, and to apply the latest, energy-saving production processes.	
Final Examination/Examination Regulations: <ul style="list-style-type: none">• Legal basis: regulations governing the examination on the B.Eng. Product Development and Design degree• Module examinations, thesis & final oral examination	Additional Information <ul style="list-style-type: none">• Modular, accredited degree course• Further information can be found at www.fh-koblenz.de/maschinenbau/
Admission to Postgraduate Studies Successful completion of the BA Degree qualifies a student for acceptance onto a Master Degree Course.	
The Faculty's ECTS-/International Student Advisor Prof. Dr. Andreas Kurz, e-mail: kurz@fh-koblenz.de	