Faculty: Engineering





Site:

Campus Karthause

University of Applied Sciences

| Degree Title: | |
|----------------------------------|--|
| Mechanical Engineering | |
| Academic Title: | Prerequisites for Admission: |
| Bachelor of Engineering (B.Eng.) | The general examinations required for entrance into universities or institutes of higher education (Allgemeine Hochschulreife or Fachhochschulreife), or a recognised equivalent preparatory qualification Industrial placement (min. 16 weeks) |

Aim of the Course:

The aim of the Bachelor Degree course is to teach students interdisciplinary skills, such as communication/cooperation skills, and methodical and (independent) learning skills, in addition to the traditional, professional core skills of a mechanical engineer. Engineers often have to work in internationally manned development teams, understand problems from other specialist areas, and be able to work these out productively as part of a team. They will be prepared for these tasks on the course.

Structure of the Course/Curriculum:

| 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 (8c) | Techn, Wahlpflichtmodl (4c) |
| Naturwissenschaftliche Grundlagen (5c) | Naturwissenschaftliche Grundlagen (5c) | Grundlagen der Elektrotechnik (4c) | Automatisierungs- und Antriebstechnik (3c) | Fertigungsautomatisierung (4c) | Industrial Engineering (4c) |
| Werkstoffkunde I und Fertigungstechnik (7c) | Techn. Kommunikation und Konstruktionslehre (3c) | Thermodynamik (5c) | Projekt- und Qualitäts- management (6c) | Automatisierungs- und Antriebstechnik (3c) | Mess- und Regelungstechnik (4c) |
| Techn. Kommunikation und Konstruktionslehre (3c) | Maschinenelemente (4c) | Maschinenelemente (6c) | Nicht-Technisches Wahlpflichtmodul I (4c) | Fluidenergiemaschinen (2c) | |
| Technisches Englisch (2c) Datenverarbeitung (3c) Technisches Englisch (2c) Arbeitsmethoden (4c) | | Datenverarbeitung (3c) | Thermische Fluidtechnik (4c) | Industrial Engineering (2c) | Bachelor-Thesis (12c) |
| | | | Energie- und Umwelttechnik (6c) | Mess- und Regelungs- technik (4c) | |
| | | | | Thermische Fluidtechnik (4c) | 90 |
| | | - | | Energiesysteme- und Umwelttechnik (2c) | |

'Bachelor of Engineering' in Mechanical Engineering

Semester 1

Mathematics I (8c); Technical Mechanics I (5c); Principles of Natural Sciences (5c); Materials I & 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 (5c); Principles of Electrical Engineering (4c); Thermodynamics (5c); Machine Parts (6c); Data Processing (3c)

Semester 4

CAD-FEM (4c); Factory Automation (3c); Automation & Actuation Systems (3c); Project Management & Quality Management (6c); Non-Technical, Elective Module I (4c); Thermal Fluid Engineering (4c); Power & Environmental Engineering (6c) Semester 5

CAD-FEM (3c); Business Admin. & International Principles (6c); Factory Automation (4c); Automation & Actuation Systems (3c); Fluid Power Machines (2c); Industrial Engineering (2c); Measuring & Control Systems (4c); Thermal Fluid Engineering (4c); Power & Environmental Engineering (2c)

Semester 6

Fluid Power Machines (6c); Technical, Elective Module (4c); Industrial Engineering (4c); Measuring & Control Systems (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:

- Legal basis: regulations governing the examination on the B.Eng. Mechanical Engineering degree
- Module examinations, thesis & final oral examination

Additional Information

- 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