

## Module Overview B. Sc. Mechatronics (9 Semesters)

Degree Programme Guidelines as per 01.10.2014, Version 01.10.2016

The degree programme consists of 180 Credit Points (CP) in total:

- ▶ **Mandatory Area:** 127 CP ■
- ▶ **Mandatory Laboratories:** 14 CP ■
- ▶ **Optional Subject Area:** 15 CP ■
- ▶ **Studium Generale:** 12 CP ■
- ▶ **Bachelor's Thesis:** 12 CP ■

**Language of Tuition:**  
**GERMAN**  
*Certificates required*



This leads to the following *possible* part-time semester course schedule:

1. Semester	2. Semester	3. Semester	4. Semester	5. Semester	6. Semester	7. Semester	8. Semester	9. Semester
Mathematics I (8 CP)	Mathematics II (8 CP)	Introductory Project (Projectweek) (2 CP)	Electrical Engineering and Information Technology Lab I B (2 CP)	Mathematics III (8 CP)	Mathematics IV (8 CP)	Technical Thermodynamics I (6 CP)	Computer Aided Design (4 CP)	Materials Technology for Mechatronics (3 CP)
Engineering Mechanics I (Statics) (6 CP)	Engineering Mechanics II (Elastostatics) (6 CP)	Engineering Mechanics III (Dynamics) (6 CP)	Hydromechanics (4 CP)	Deterministic Signals and Systems (7 CP)	Programming in Automatic Control (C/C++) (2 CP)	Mechanical Components and System Behaviour for Mechatronics (4 CP)	Laboratory Course Control of Mechatronic Systems (4 CP)	Bachelor's Thesis (12 CP)
Logic Design (6 CP)	General Informatics I (5 CP)	Electrical Engineering and Information Technology I (7 CP)	Electrical Engineering and Information Technology II (7 CP)	Electronics (4 CP)		Electrical Machines and Drives (5 CP)	Actuators for Mechatronic Systems Lab (4 CP)	
Mentoring (1 CP)		Electrical Engineering and Information Technology Lab I A (2 CP)	Measuring Technique (4 CP)		Optional Subject Area - ETiT/MB* (5 CP)	System Dynamics and Automatic Control Systems I (6 CP)	Optional Subject Area - ETiT/MB* (5 CP)	Optional Subject Area - ETiT/MB* (5 CP)
		General Studies** (3 CP)	Measuring Technique Lab (2 CP)		General Studies** (6 CP)		General Studies** (3 CP)	
20 CP	20 CP	20 CP	19 CP	19 CP	21 CP	21 CP	20 CP	20 CP

\* At least 5 CP from the department Electrical Engineering and Information Technology and at least 5 CP from the department Mechanical Engineering.

\*\* All modules from the departments 1, 2, 3, 15 and the Language Resource Center (Sprachenzentrum) as well as particular modules from the departments