

STUDIENINHALTE

MECHATRONICS BACHELOR

| SEM. | MODULE OVERVIEW | | | | | | ECTS | |
|------|----------------------------------|--|--|--|--|--|------|----|
| 1 | Maths 1: Analysis 1 5 | Maths 2: Linear Algebra 5 | Mechanics 1: CAD and Technical Drawing 5 | Computer Science 1: Basics and Programming 5 | Electronics 1: Electrical Eng. + Lab 5 | Mechatronics 1: Basics 5 | 30 | |
| 2 | Maths 3: Analysis 2 5 | Science 1: Fundamental of Physics 5 | Mechanics 2: Statics and Mechanics of Materials 5 | Computer Science 2: Object Oriented Programming 5 | Electronics 2: Analog Circuits + Lab 5 | Mechatronics 2: Metrology + Lab 5 | 30 | |
| 3 | Maths 4: Numerical Analysis 5 | Science 2: Electrodynamics 5 | Mechanics 3: Kinetics and Engineering Design 5 | Computer Science 3: Application Programming 5 | Electronics 3: Digital Circuits + Lab 5 | Mechatronics 3: Sensors and Control 5 | 30 | |
| 4 | Specialization Module 1 5 | Specialization Module 2 5 | Science 3: Materials 5 | Sustainability 1: Energy 5 | Mechatronics 4: Electric Drives 5 | Mechatronics 5: Modeling and Simulation 5 | 30 | |
| 5 | Specialization Module 3 5 | Specialization Module 4 5 | German B2 5 | Scientific Project 5 | Mechatronics 6: Microcontroller 5 | Mechatronics 7: Robotics 5 | 30 | |
| 6 | Company Internship | | | | | | 30 | 30 |
| 7 | Bachelor Thesis 15 | | | Elective 1 5 | Elective 2 5 | Sustainability 2 5 | 30 | |