# Course of Study Mechanical Engineering and Management (Study Cohort w19)

Sample course plan A  Master Mechanical Engineering and Management (IMPMEM)
Specialisation Mechatronics, Specialisation Product Development and Production

Legend

| | | | |
|---|---|---|---|
| Core Qualification Compulsory | Specialisation Compulsory | Focus Compulsory | Thesis Compulsory |
| Core Qualification Elective Compulsory | Specialisation Elective Compulsory | Focus Elective Compulsory | Interdisciplinary complement |

| LP | Semester 1 | Form | Hrs/wk | Semester 2 | Form | Hrs/wk | Semester 3 | Form | Hrs/wk | Semester 4 | Form | Hrs/wk |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Robotics** | | | **Fibre-polymer-composites** | | | **Research Project IMPMEM** | | | **Master Thesis** | | |
| 2 | Robotics: Modelling and Control | VL | 3 | Design with fibre-polymer-composites | VL | 2 | | | | | | |
| 3 | Robotics: Modelling and Control | GÜ | 2 | Structure and properties of fibre-polymer-composites | VL | 2 | | | | | | |
| 4 | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | |
| 7 | **Computer Aided Design and Computation** | | | **Selected Topics of Mechanical Engineering and Management (Alternative B: 6 CP) (part 2)** | | | | | | | | |
| 8 | Computer Aided Design and Computation | VL | 2 | Selection from a catalog | | | | | | | | |
| 9 | Computer Aided Design and Computation | GÜ | 2 | | | | | | | | | |
| 10 | | | | **Nonlinear Dynamics** | | | | | | | | |
| 11 | | | | Nonlinear Dynamics | IV | 4 | | | | | | |
| 12 | | | | | | | | | | | | |
| 13 | **Marketing and Communication** | | | | | | **Digital Signal Processing and Digital Filters** | | | | | |
| 14 | Business-to-Business Marketing | VL | 2 | | | | Digital Signal Processing and Digital Filters | VL | 3 | | | |
| 15 | Intercultural Management and Communication | VL | 2 | | | | Digital Signal Processing and Digital Filters | HÜ | 2 | | | |
| 16 | Case Studies of Marketing and Communication | GÜ | 2 | **High-Order FEM** | | | | | | | | |
| 17 | | | | High-Order FEM | VL | 3 | | | | | | |
| 18 | | | | High-Order FEM | HÜ | 1 | | | | | | |
| 19 | **Selected Topics of Mechanical Engineering and Management (Alternative B: 6 CP) (part 1)** | | | | | | **Control Systems Theory and Design** | | | | | |
| 20 | Selection from a catalog | | | | | | Control Systems Theory and Design | VL | 2 | | | |
| 21 | | | | | | | Control Systems Theory and Design | GÜ | 2 | | | |
| 22 | | | | **AdditiveProduction** | | | | | | | | |
| 23 | | | | Additive Production | VL | 2 | | | | | | |
| 24 | | | | Additive Production | SE | 2 | | | | | | |
| 25 | | | | | | | **Laser Systems and Metallic Materials** | | | | | |
| 26 | | | | | | | Laser Systems and Process Technologies | VL | 2 | | | |
| 27 | | | | | | | Structural Metallic Materials | VL | 2 | | | |
| 28 | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | |

Business & Management (from catalogue) - 6LP

Non-technical Courses for Master (from catalogue) - 6LP

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.