

Course of Study Mechanical Engineering and Management (Study Cohort w20)

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 | UE 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 A: 12 CP) (part 2) | | | | | |
| 8 | Computer Aided Design and Computation | VL 2 | Selection from a catalog | | | | | |
| 9 | Computer Aided Design and Computation | UE 2 | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | Selected Topics of Mechanical Engineering and Management (Alternative A: 12 CP) (part 1) | | Nonlinear Dynamics | | Digital Signal Processing and Digital Filters | | | |
| 14 | Selection from a catalog | | Nonlinear Dynamics | IV 4 | Digital Signal Processing and Digital Filters | VL 3 | | |
| 15 | | | | | Digital Signal Processing and Digital Filters | HÜ 2 | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | High-Order FEM | | Control Systems Theory and Design | | | |
| 20 | | | High-Order FEM | VL 3 | Control Systems Theory and Design | VL 2 | | |
| 21 | | | High-Order FEM | HÜ 1 | Control Systems Theory and Design | UE 2 | | |
| 22 | | | | | | | | |
| 23 | | | | | | | | |
| 24 | | | | | | | | |
| 25 | | | Applied Design Methodology in Mechatronics | | Laser Systems and Metallic Materials | | | |
| 26 | | | Applied Design Methodology in Mechatronics | VL 2 | Laser Systems and Process Technologies | VL 2 | | |
| 27 | | | Applied Design Methodology in Mechatronics | PBL 3 | 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.

