

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

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

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                                                       | <b>Robotics</b>                                                                                 |             | <b>Fibre-polymer-composites</b>                                                                 |             | <b>Research Project IMPMEM</b>                       |             | <b>Master Thesis</b> |             |
| 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                                                       | <b>Computer Aided Design and Computation</b>                                                    |             | <b>Selected Topics of Mechanical Engineering and Management (Alternative A: 12 CP) (part 2)</b> |             |                                                      |             |                      |             |
| 8                                                       | Computer Aided Design and Computation                                                           | VL 2        | Selection from a catalog                                                                        |             |                                                      |             |                      |             |
| 9                                                       | Computer Aided Design and Computation                                                           | UE 2        |                                                                                                 |             |                                                      |             |                      |             |
| 10                                                      |                                                                                                 |             |                                                                                                 |             |                                                      |             |                      |             |
| 11                                                      |                                                                                                 |             |                                                                                                 |             |                                                      |             |                      |             |
| 12                                                      |                                                                                                 |             |                                                                                                 |             |                                                      |             |                      |             |
| 13                                                      | <b>Selected Topics of Mechanical Engineering and Management (Alternative A: 12 CP) (part 1)</b> |             | <b>Technology Entrepreneurship</b>                                                              |             | <b>Corporate Entrepreneurship &amp; Growth</b>       |             |                      |             |
| 14                                                      | Selection from a catalog                                                                        |             | Entrepreneurship                                                                                | VL 2        | Corporate Entrepreneurship in the Digital Age        | SE 3        |                      |             |
| 15                                                      |                                                                                                 |             | Creation of Business Opportunities                                                              | PBL 3       | Entrepreneurial Finance                              | SE 2        |                      |             |
| 16                                                      |                                                                                                 |             |                                                                                                 |             |                                                      |             |                      |             |
| 17                                                      |                                                                                                 |             |                                                                                                 |             |                                                      |             |                      |             |
| 18                                                      |                                                                                                 |             |                                                                                                 |             |                                                      |             |                      |             |
| 19                                                      | <b>Technology Management</b>                                                                    |             | <b>Nonlinear Dynamics</b>                                                                       |             | <b>Digital Signal Processing and Digital Filters</b> |             |                      |             |
| 20                                                      | Technology Management                                                                           | PBL 3       | Nonlinear Dynamics                                                                              | IV 4        | Digital Signal Processing and Digital Filters        | VL 3        |                      |             |
| 21                                                      | Technology Management Seminar                                                                   | PBL 2       |                                                                                                 |             | Digital Signal Processing and Digital Filters        | HÜ 2        |                      |             |
| 22                                                      |                                                                                                 |             |                                                                                                 |             |                                                      |             |                      |             |
| 23                                                      |                                                                                                 |             |                                                                                                 |             |                                                      |             |                      |             |
| 24                                                      |                                                                                                 |             |                                                                                                 |             |                                                      |             |                      |             |
| 25                                                      |                                                                                                 |             |                                                                                                 |             | <b>Control Systems Theory and Design</b>             |             |                      |             |
| 26                                                      |                                                                                                 |             |                                                                                                 |             | Control Systems Theory and Design                    | VL 2        |                      |             |
| 27                                                      |                                                                                                 |             |                                                                                                 |             | Control Systems Theory and Design                    | UE 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.

