

# Course of Study Microelectronics and Microsystems (Study Cohort w17)

Sample course plan B Master Microelectronics and Microsystems (IMPMM)  
Specialisation Microelectronics Complements

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>Microsystem Engineering</b>                        |             | <b>Microsystem Design</b>                                     |             | <b>Project Work IMPMM</b>   |             | <b>Design of Highly Complex Integrated Systems and CAD Tools (part 2)</b> |   |      |
| 2   | Microsystem Engineering                               | VL 2        | Microsystem Design  | VL 2        |   |             |   | Design of Highly Complex Integrated Systems | VL 2 |
| 3   | Microsystem Engineering                               | UE 1        | Microsystem Design  | PR 3        |   |             |   |   |      |
| 4   | Microsystem Engineering                               | PBL 1       |   |             |   |             |   |   |      |
| 5   |   |             |   |             |   |             |   |   |      |
| 6   |   |             |   |             |   |             |   |   |      |
| 7   | <b>Microsystems Technology in Theory and Practice</b> |             | <b>Fundamentals of IC Design</b>                              |             |   |             |   | <b>Master Thesis</b>                        |      |
| 8   | Microsystems Technology                               | VL 2        | Fundamentals of IC Design                                     | VL 2        |   |             |   |   |      |
| 9   | Microsystems Technology                               | PBL 2       | Fundamentals of IC Design                                     | PR 2        |   |             |   |   |      |
| 10  |   |             |   |             |   |             |   |   |      |
| 11  |   |             |   |             |   |             |   |   |      |
| 12  |   |             |   |             |   |             |   |   |      |
| 13  | <b>CMOS Nanoelectronics with Practice</b>             |             | <b>Laboratory: Analog and Digital Circuit Design (part 1)</b> |             |   |             |   |   |      |
| 14  | CMOS Nanoelectronics                                  | VL 2        | Laboratory: Digital Circuit Design                            | PR 2        |   |             |   |   |      |
| 15  | CMOS Nanoelectronics                                  | UE 1        |   |             |   |             |   |   |      |
| 16  | CMOS Nanoelectronics                                  | PR 2        | <b>Semiconductor Seminar</b>                                  |             |   |             |   |   |      |
| 17  |   |             | Semiconductor Seminar   | SE 2        |   |             |   |   |      |
| 18  |   |             |   |             | <b>Laboratory: Analog and Digital Circuit Design (part 2)</b>             |             |   |   |      |
| 19  |   |             |   |             | Laboratory: Analog Circuit Design   | PR 2        |   |   |      |
| 20  | <b>Electronic Devices and Circuits</b>                |             |   |             |   |             |   |   |      |
| 21  | Circuit Design  | VL 2        |   |             | <b>Digital Signal Processing and Digital Filters</b>                      |             |   |   |      |
| 22  | Electronic Devices                                    | VL 2        |   |             | Digital Signal Processing and Digital Filters                             | VL 3        |   |   |      |
| 23  |   |             |   |             | Digital Signal Processing and Digital Filters                             | HÜ 1        |   |   |      |
| 24  |   |             |   |             |   |             |   |   |      |
| 25  | <b>Electronic Circuits for Medical Applications</b>   |             |   |             |   |             |   |   |      |
| 26  | Electronic Circuits for Medical Applications          | VL 2        |   |             | <b>Design of Highly Complex Integrated Systems and CAD Tools (part 1)</b> |             |   |   |      |
| 27  | Electronic Circuits for Medical Applications          | UE 1        |   |             | CAD Tools   | VL 2        |   |   |      |
| 28  | Electronic Circuits for Medical Applications          | PR 1        |   |             |   |             |   |   |      |
| 29  |   |             |   |             |   |             |   |   |      |
| 30  |   |             |   |             |   |             |   |   |      |
| 31  |   |             |   |             |   |             |   |   |      |
| 32  |   |             |   |             |   |             |   |   |      |
| 33  |   |             |   |             |   |             |   |   |      |
| Business & Management (from catalogue) - 6LP                                  |   |             |   |             |   |             |   |   |      |
| Nontechnical Elective Complementary 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.