# Course of Study Environmental Engineering (Study Cohort w14)

Sample course plan C Master Environmental Engineering (IMPEE)
Specialisation Biotechnology

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 | **Waste Treatment Technologies** | | | **Wastewater Systems and Reuse (part 2)** | | | **Project Work Biotechnology** | | | **Master Thesis** | | |
| 2 | Biological Waste Treatment | POL | 3 | Wastewater Systems - Collection, Treatment and Reuse | VL | 2 | Project Work Biotechnology | PS | 2 | | | |
| 3 | Waste and Environmental Chemistry | PR | 2 | Wastewater Systems - Collection, Treatment and Reuse | HÜ | 1 | | | | | | |
| 4 | | | | **Geochemical Engineering** | | | | | | | | |
| 5 | | | | Geochemical Engineering | VL | 2 | | | | | | |
| 6 | | | | Contaminated Sites and Landfilling | VL | 2 | | | | | | |
| 7 | **Environmental Protection and Management** | | | Contaminated Sites and Landfilling | HÜ | 1 | | | | | | |
| 8 | Health, Safety and Environmental Management | VL | 2 | | | | | | | | | |
| 9 | Exercise Health, Safety and Environmental Management | UE | 1 | | | | | | | | | |
| 10 | Integrated Pollution Control | VL | 2 | **Technical Microbiology** | | | | | | | | |
| 11 | | | | Applied Molecular Biology | VL | 2 | | | | | | |
| 12 | | | | Technical Microbiology | VL | 2 | | | | | | |
| 13 | **Practical Course in Water and Wastewater Technology** | | | Technical Microbiology | HÜ | 1 | **Selected Topics in Environmental Engineering (part 2)** | | | | | |
| 14 | Practical Course in Water and Wastewater Technology I | PR | 2 | | | | Selection from a catalog | | | | | |
| 15 | Practicle Course of Wastewater Technology II | PR | 3 | | | | | | | | | |
| 16 | | | | **Selected Topics in Environmental Engineering (part 1)** | | | **Biocatalysis** | | | | | |
| 17 | | | | Selection from a catalog | | | Technical Biocatalysis | VL | 2 | | | |
| 18 | | | | | | | Biocatalysis and Enzyme Technology | VL | 2 | | | |
| 19 | **Special areas of environmental protection** | | | **Bioprocess and Biosystems Engineering** | | | | | | | | |
| 20 | Environmental Analysis | VL | 2 | Bioreactor Design and Operation | VL | 2 | | | | | | |
| 21 | Fluid Mechanics and Hydraulics | VL | 3 | Bioreactor Design and Operation | PR | 1 | | | | | | |
| 22 | | | | Biosystems Engineering | VL | 2 | **Bioresources and Biorefineries** | | | | | |
| 23 | | | | Biosystems Engineering | POL | 1 | Bioresource Management | VL | 2 | | | |
| 24 | | | | | | | Bioresource Management | UE | 1 | | | |
| 25 | **Wastewater Systems and Reuse (part 1)** | | | | | | Biorefinery Technology | VL | 2 | | | |
| 26 | Sustainable Water Management | POL | 2 | | | | Biorefinery Technologie | UE | 1 | | | |
| 27 | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | |
| | 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.