**Study schedule MSc. ENTER (from October 2024)**

| **Modules** | **1st term**L/E/S/P | **2nd term**L/E/S/P | **3rd term**L/E/S/P | **4th term**L/E/S/P | **CP** |
| --- | --- | --- | --- | --- | --- |
| **Compulsory modules** |
| Revitalization and Recultivation of Landscape | 2/2/0/0TUKE |  |  |  | 6 |
| Mineralurgy | 3/2/0/0TUKE |  |  |  | 6 |
| Mathematics I | 2/2/0/0TUKE |  |  |  | 6 |
| Environmental Sampling | 0/1/0/0TUKE |  |  |  | 1 |
| Semestral Project | 0/0/2/0TUKE |  |  |  | 1 |
| **Elective modules**: Students must choose at least **10 CP** to achieve 30 CP in total. |
| Material Evaluation of Technological Processes | 2/2/0/0TUKE |  |  |  | 5 |
| Gas Cleaning Technologies | 2/2/0/0TUKE |  |  |  | 5 |
| Technical Mineralogy | 2/2/0/0TUKE |  |  |  | 5 |
| **Compulsory modules** |
| Current Issues in Enabling Tech-nologies for Circular Economy |  | LUTOnline Teaching |  |  | 5 |
| Knowledge Discovery and Process Data Analysis |  | LUTOnline Teaching |  |  | 5 |
| Process Intensification |  | LUTBlended Teaching |  |  | 5 |
| Academic Entrepreneurship |  | LUTBlended Teaching |  |  | 6 |
| Start-ups and venture formation |  | LUTBlended Teaching |  |  | 6 |
| **Elective modules**: Students must choose at least **3 CP** to achieve 30 CP in total. |
| Simulation, Laboratory Course |  | LUTOnline Teaching |  |  | 5 |
| Advanced Course in Life Cycle Assessment |  | LUTBlended Teaching |  |  | 8 |
| Integration of Product's Design, Sustainable Production and Material Selection |  | LUTBlended Teaching |  |  | 5 |
| Bioeconomy |  | LUTBlended Teaching |  |  | 5 |
| Development of New Sustainable Products and Solutions |  | LUTBlended Teaching |  |  | 5 |
| Power-to-X processes |  | LUTOnline Teaching |  |  | 5 |
| Fluid Dynamics in Chemical Engineering |  | LUTContact Teaching |  |  | 5 |
|  |
| **Compulsory modules** |
| Training in Particle Technology  |  |  | 1/2/0/0TUBAF |  | 4 |
| Training in Endurance and Design |  |  | 1/2/0/1TUBAF |  | 6 |
| Conception of Process Equipment |  |  | 2/1/0/0TUBAF |  | 5 |
| Sustainable Engineering |  |  | 2/1/0/0TUBAF |  | 4 |
| Project - Process Design Mineral Processing / Recycling |  |  | 0/0/2/8TUBAF |  | 5 |
| **Elective modules**: Students must choose at least **6 CP** to achieve 30 CP in total. |
| Maintenance Engineering \* |  |  | 2/1/0/0TUBAF |  | 4 |
| Process Development in Mechanical Process Engineering \* |  |  | 2/0/1/0 TUBAF |  | 4 |
| Recycling - Secondary Raw Materials \* |  |  | 3/0/1/0TUBAF |  | 6 |
| Master Thesis (Mechanical and Process Engineering) |  |  |  | 22 Wo(TUKE/ *LUT / TUBAF*) | 30 |

**Legend - Teaching Methods:**

L= Lecture

Ü= Exercise

S= Seminar

P= Practical application