

curriculum.

| MODULES / COURSES | SEMESTER CREDIT UNITS ECTS-Credits | | | | | |
|---|--------------------------------------|----------------|----------------|----------------|----------------|----------------|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| A1. MATHEMATICS / NATURAL SCIENCES | | | | | | |
| Mathematics / Statistics | 6 12 | 4 8 | | | | |
| Physics | | 3 5 | | | | |
| General & Inorganic Chemistry | | | 4 4 | 3 3 | | |
| Organic Chemistry | | | 2 2 | | | |
| Polymer Chemistry | | | | 1 1 | | |
| A2. ENGINEERING SCIENCES & APPLICATIONS | | | | | | |
| Engineering Mechanics | 2 4 | 2 4 | | | | |
| Materials Technology | 2 4 | | | | | |
| Maschine Elements | | 2 4 | | | | |
| Electrical Engineering | 3 5 | 2 4 | | | | |
| Measurement, Control & Feedback Systems | | | 4 5 | | | |
| Fluid Dynamics | | | 3 3 | | | |
| Thermodynamics / Heat & Mass Transfer | | | 3 3 | 2 2 | | |
| Thermodynamic Machinery & Processes | | | | 3 3 | | |
| B1. FUNDAMENTALS OF PROCESS ENGINEERING | | | | | | |
| Mechanical Process Engineering | | | 4 4 | | | |
| Thermal Process Engineering | | | | 5 5 | | |
| Chemical Process Engineering | | | | | 3 3 | |
| Chemical Processes in Industry | | | | | 1 1 | |
| Microbiology | | | | | | 2 2 |
| Biological Process Engineering | | | | | | 3 3 |
| Apparatus Engineering | | | | | 2 2 | |
| Plant & Process Technology | | | | | 2 2 | 2 3 |
| Safety Engineering / Fire Prevention | | | | | | 1 1 |
| Process Simulation | | | | | | 3 5 |
| B2. FOCAL SUBJECTS OF ENVIRONMENTAL TECHNOLOGY | | | | | | |
| Substance & Energy Balances incl. Ecosystems | | | | 2 2 | | |
| Environmental Management | | | | 1 1 | | |
| Waste & Mass Flow Management | | | | 3 3 | | |
| Waste Water Technology | | | | | 2 2 | |
| Cleaning of Exhaust Air & Emission Certificates | | | | | 2 2 | |
| Alternative Power Engineering | | | | | 2 2 | |
| Environmental Law | | | | | | 2 2 |
| Environmental Measurement Techniques | | | | | | 3 3 |
| B3. FOCAL SUBJECTS OF CONTROL ENGINEERING | | | | | | |
| Electronics | | | | 3 3 | | |
| Digital Technology | | | | 3 3 | | |
| Advanced Measurement, Control & Feedback Systems | | | | | 3 3 | |
| Basics in Automatic Engineering | | | | | 3 3 | |
| Electronic Process Technology | | | | | | 2 2 |
| Real-time Data Processing | | | | | | 3 3 |
| C. BACHELOR'S THESES / R&D | | | | | | |
| Current Research Projects | | | | | | 1 1 |
| Selected Aspects of Industrial Production | | | | | | 1 1 |
| Bachelor's Theses & Tutorial | | | | | 1 6 | 1 7 |
| D. ECONOMIC & LEGAL ASPECTS OF ENGINEERING | | | | | | |
| Project Management | | | | 1 1 | | |
| Controlling | | | | 2 2 | | |
| Human Ressource Management | | | | 1 1 | | |
| Quality Management | | | | 1 1 | | |
| Organization & Marketing | | | | | 2 2 | |
| Simulating Marketing Strategies | | | | | 2 2 | |
| Economic Law | | | | | 2 2 | |
| E. FOREIGN LANGUAGE & SOCIAL SKILLS | | | | | | |
| English | 2 3 | 2 3 | 2 3 | | | |
| Orientation Lecture | 1 1 | | | | | |
| Problem-solving Techniques / Organization | 1 1 | | | | | |
| Rhetoric & Presentation Skills | | 1 1 | | | | |
| Training of Personality | | 1 1 | | | | |
| Training of Teamwork | | | 1 1 | | | |
| Moderation / Conflict Management | | | 1 1 | | | |
| F. INTERNSHIP | | | | | | |
| Internship | | | 4 | 5 | 4 | 2 |
| NUMBER OF SEMESTER CREDIT UNITS | 17 30 | 17 30 | 24 30 | 25 30 | 21 30 | 19 30 |