



Study Plan

B.Sc. Environmental Engineering

Faculty of Building Services, Hydro and Environmental Engineering

Study plan for reference only; may be subject to change.

Semester 1

| Name of subject | ECTS |
|-------------------------------------|------|
| HES - Work Environment Protection | 2 |
| Mathematics - Algebra with Geometry | 6 |
| Mathematics - Calculus I | 6 |
| Physics I | 6 |
| Environment Protection | 3 |
| Descriptive Geometry | 3 |
| Technical Drawing | 2 |
| Surveying | 2 |
| Physical Education - Sport | 0 |

Semester 2

| Name of subject | ECTS |
|--|------|
| Mathematics - Calculus II | 6 |
| Physics II | 5 |
| Chemistry | 6 |
| Biology and Ecology | 3 |
| Information Technology | 3 |
| Strength of Materials and Structural Mechanics | 4 |
| Material Engineering | 3 |
| Physical Education - Sport | 0 |

Semester 3

| Name of subject | ECTS |
|--------------------------------------|------|
| Foreign Language | 4 |
| HES - Basis of Law and Economics | 2 |
| Mathematics - Calculus III | 3 |
| Biology and Ecology (lab.) | 3 |
| Informatics I - AutoCAD | 3 |
| Thermodynamics | 4 |
| Fluid Mechanics | 4 |
| Civil Engineering and Constructions | 4 |
| Statistics in Environmental Sciences | 3 |
| Physical Education - Sport | 0 |

Semester 4

| Name of subject | ECTS |
|---|------|
| Foreign language | 4 |
| HES - Economics and Law in Environmental Eng. | 3 |
| Informatics II - MATLAB | 3 |
| Fluid Mechanics (lab.) | 2 |
| Hydrology | 5 |
| GIS | 3 |
| Meteorology | 5 |
| Soil Protection | 5 |

Semester 5

| Name of subject | ECTS |
|--|------|
| Foreign language | 4 |
| Engineering Hydrology and Hydrogeology | 4 |
| Environmental Chemistry | 4 |
| Environmental Biology | 4 |
| Air Pollution Control | 5 |
| Solid Waste Management | 4 |
| Energy Systems and Environment | 5 |

Semester 6

| Name of subject | ECTS |
|--|------|
| CAD of heating and water supply systems | 3 |
| Meteorological Measurements and Remote Sensing | 3 |
| Air Pollution Dispersion Modelling | 5 |
| Water Resources Protection | 6 |
| Municipal and Industrial Wastewater Treatment | 5 |
| Elective courses (2) * | 8 |

* Elective courses semester 6:

- Biotechnology
- Hydrology of urban areas
- Environmental Protection Management in Urban Areas
- Energy Audit of Buildings and Industry
- Building Heating Systems I
- Indoor Air Engineering I

Semester 7

| Name of subject | ECTS |
|---------------------------------------|------|
| Integrated Water Resources Management | 5 |
| Renewable Energy Systems | 4 |
| Environmental Impact Assessment | 6 |
| Technical Documentation | 2 |
| Internship (before 7th semester) | 5 |
| Elective courses (2) | 8 |

* Elective courses semester 7:

- Ecotoxicology
- Water and wastewater management in industry
- Remote Sensing Image Processing
- Rationalization of Heat Energy Use
- Building Heating Systems II
- Indoor Air Engineering II

Semester 8

| Name of subject | ECTS |
|-------------------------|-------------|
| Diploma seminar | 1 |
| BSc Eng diploma | 15 |
| Professional Internship | 14 |