

SÜLEYMAN DEMİREL UNIVERSITY
ENGINEERING FACULTY
DEPARTMENT OF ENVIRONMENTAL ENGINEERING

ABOUT:

The department of Environmental Engineering at Süleyman Demirel University was established in the educational year of 1993-1994, with first graduates in 1997. Although a relatively new department, the freshman- and sophomore-level basic engineering and science courses are offered by high quality academicians from other related engineering departments with more than 20 years of history in our university. The department offers Bachelor (BS), Master of Science (MS) and Doctor of Philosophy (PhD) in Environmental Engineering and Science degrees.

The four-year curriculum leading to the Bachelor of Environmental Engineering enables the graduates to enter professional practice as an engineer or to continue his or her studies in programs leading to advanced degrees in the following broad fields of specialization: water and wastewater engineering, air pollution control, solid and hazardous waste management, hydraulics, and environmental fluid mechanics. The graduates of the BS curriculum may function in broad environmental engineering and science areas including planning and design, construction, research and development, operations and maintenance.

The MS degree is intended for incoming students with a strong background in the sciences or engineering and prepares them for advanced education or careers in research, practice or management in the field of environmental engineering and science.

The scholarly focus of the department is the interplay between humankind and the physical, chemical, and biological processes, and other species that regulate the function of both natural and engineered environments.

LABORATORIES:

- Water and waste water Analysis Laboratory
- Process Laboratory
- Microbiology and Molecular Biology Laboratory

- Air Pollution Laboratory
- Solid Waste Laboratory
- Sensitive Analytical Measurements Laboratory
- Basic Operations Laboratory

MAIN EQUIPMENT AND APPARATUS IN THE LABORATORIES:

- Incubator (0-50°C) (Velp)
- Water Distillation Apparatus (Nüve)
- Orbital Incubator (Gallenkamp)
- Thermo digester (Selecta)
- COD heater (Selecta)
- Magnetic Shaker (Selecta)
- Etuve (20-250°C) (Nüve)
- Kjheldal Nitrogen Distillation Unit (Selecta)
- Jar Test Apparatus (Velp)
- Balance (Precisa)
- pH Meter (Portable, Laboratory scale) (Hanna, Jenway)
- Redox meter (WTW)
- Oxygen meter (Schott)
- Peristaltic Pump (Selecta)
- Centrifuge (Hettich)
- Moisture Analyzer (Sartorius)
- Ion Analyzer (Orion)
- Ion Exchange Columns (Anionic, Cationic)
- High-temp. oven (Nüve)
- Spectrofotometer (Hach)
- Gas Chromatography (Unicam 610)

**COURSES OFFERED AT THE DEPARTMENT OF
ENVIRONMENTAL ENGINEERING**

1. SEMESTER	
Course	Credit
Mathematics 1	4
Physics 1	3.5
Chemistry 1	2.5
Chemistry 1 Lab	1
Technical Drawing	3.5
Introduction to Environmental Engineering	2
The History of Ataturk's Principles 1	2
Turkish Language 1	2
Foreign Language 1 (English)	4
Physical Training and Arts 1	0

2. SEMESTER	
Course	Credit
Mathematics 2	4
Physics 2	2.5
Chemistry 2	3
Chemistry 2 Lab	1
Computer Programming	2.5
Statics and Dynamics	4
Basic Information Technologies	3
The History of Ataturk's Principles 2	2
Turkish Language 2	2
Foreign Language 2 (English)	4
Physical Training and Arts 2	0

3. SEMESTER	
Course	Credit
Mathematics 3	3.5
Environmental Engineering Chemistry 1	3.5
Environmental Engineering Chemistry 1 Lab	1
Numerical Calculation	2.5
Geology	2.5
Fluid Mechanics	2.5
Strength of Materials	3.5

4. SEMESTER	
Course	Credit
Environmental Engineering Chemistry 2	2.5
Environmental Engineering Chemistry 2 Lab	1
Statistics in Engineering	2
Materials in Civil Engineering	2.5
Hydraulics	2.5
Microbiology	2.5
Machinery	2
Topography	3
Summer-term Practice in Topography	0

5. SEMESTER	
Course	Credit
Physical Unit Operations	3
Water Supply	3
Hydrology	2.5
Ecology	3
Structure Statics	4
Soil Mechanics	3
Marine Discharge	2.5

6. SEMESTER	
Course	Credit
Chemical Unit Operations	3.5
Sewage Collection Systems	2.5
Water Quality Control	2.5
Drinking Water Treatment	3.5
Concrete and Steel Structures	3.5
Project: Water Supply and Sewage Collection	1.5
Biological Unit Operations	3

7. SEMESTER	
Course	Credit
Industrial Pollution Control	3.5
Solid Wastes	3.5
Air Pollution and Control	2.5
Environmental Economics	3
Wastewater Treatment	4
Elective: Hazardous Waste Management	2
Elective: Environmental Health	2
Elective: Soil Pollution	2
Elective: Anaerobic Treatment	2
Elective: Environmental Technical Terms in English	2

8. SEMESTER	
Course	Credit
Environmental Law	2
Environmental Modeling	2.5
Planning of Environmental Resources	2.5
Seminar	1
Graduation Thesis	2
Wastewater Sludges	2
Elective: Land Treatment of Wastewaters	2
Elective: Groundwater Pollution	2
Elective: Construction Cost Analysis and Management	2
Elective: Pollution of Surface Waters	2
Elective: Environmental Meteorology	2
Elective: Operation of Treatment Plants	2
Elective: Treatment Plant Hydraulics	2
Elective: Pump Stations and Pipelines	2
Elective: Noise Control	2