

NATIONAL UNIVERSITY OF CIVIL ENGINEERING (NUCE)**List of Subjects for Exchange Students - Undergraduate Level**
Major: Environmental Engineering Technology

| No. | Name of subjects | Code | NUCE Credit | Teaching Languages | Description |
|-------------------------------------|---|--------|-------------|--------------------|---|
| <i>Semester 1 (Fall Semester)</i> | | | | | |
| 1 | Urban and Industrial sewer network | 081033 | 3 | English | This course instructs students to design a drainage and sewerage networks from determination of wastewater discharge criteria, plant capacity, proper sewers' diameters and proper pipe depths. |
| 2 | Urban and Industrial Water Supply | 081021 | 3 | English | This course instructs students to design a water supply networks from determination of water demand, economic diameters, proper pressures in pipelines, water pumping stations and other related devices in the network |
| 3 | Protection of Water resource | 081029 | 2 | English | This course provides basic knowledge in water resource distribution, water pollution process, methods of water pollution evaluation, determination of pollutants, self-clean capability of water bodies, pollution estimation, integrated water protection. |
| <i>Semester 2 (Spring Semester)</i> | | | | | |
| 4 | Hydraulics Machines | 082013 | 2 | English | This course provides structures, specification and operating principles of Centrifugal pumps, piston pumps, compressors and blowers, agitators. |
| 5 | Water intake and Pumping station | 081014 | 2 | English | Introduce principles for students to design the water intake, water and wastewater pumping stations, help students understand the structures and operating principles of these waterworks. |
| 6 | Microorganism | 081056 | 2 | English | Introduction of different types of microorganisms and the biological processes in water and wastewater treatment. |
| 7 | Water Supply & drainage systems for buildings | 081011 | 3 | English | Students study systems of water supply and water drains in a building. Analysis and design pipelines, tanks and valves. |
| 8 | Waste-water Treatment | 081035 | 4 | English | Quantity and characteristics of wastewater, level of treatment, treatment processes, wastewater treatment technologies, sludge treatment techniques, economic-technical norms, O&M, and related lab assignments. |