

UNDERGRADUATE PROGRAMME

UNDERGRADUATE PROGRAMME OF ENVIRONMENTAL ENGINEERING

CODE	CORE / SPECIALTY	COURSE	Hours		Total Hours	ECTS
			Th	Lab		
1st Semester						
200101	CORE	Mathematics I	5		5	5
200102	CORE	Physics	4		4	5
200103	CORE	Structural Analysis	4		4	5
200104	CORE	Computer Aided Engineering Drawing	2	2	4	5
200105	CORE	Informatics-Computer Modeling Applications for Engineers	2	2	4	5
200106	CORE	Biology-Ecology	4		4	5
Total					25	30
2nd Semester						
200201	CORE	Mathematics II	4		4	5
200202	CORE	Strength of Materials	2	2	4	5
200203	CORE	Atmospheric Chemistry	4		4	5
200204	CORE	Thermodynamics	4		4	5
200205	CORE	Environmental Engineering Geology	4	2	4	5
200206	CORE	Environmental Chemistry	3	2	5	5
Total					25	30
3rd Semester						
200301	CORE	Hydraulic of Closed Pipes	2	2	4	5
200302	CORE	Soil Mechanics	2	2	4	5
200303	CORE	Atmospheric Pollution	5		5	5
200304	CORE	Project Management I	4		4	5
200305	CORE	Probability and Numerical Methods	4		4	5
200306	CORE	Environmental and Public Works Legislation	4		4	5
Total					25	30
4th Semester						
200401	SPECIALTY	Analytical Decision Making Methods	4		4	5
200402	CORE	Geodesy	2	3	5	5
200403	SPECIALTY	Earthquake Engineering	4		4	5
200404	CORE	Open Channel Hydraulics	2	2	4	5
200405	CORE	Environmental Data Processing and Analysis	4		4	5
200406	CORE	Physical Unit Operations	2	2	4	5
Total					25	30

CODE	CORE / SPECIALTY	COURSE	Hours		Total Hours	ECTS
			Th	Lab		
5th Semester						
200501	SPECIALTY	Photogrammetry - Remote Sensing	4		4	5
200502	SPECIALTY	Technology and Management of Solid Waste	4		4	5
200503	CORE	Reinforced Concrete I	2	2	4	5
200504	CORE	Chemical and Biochemical Unit Processes	2	2	4	5
200505	SPECIALTY	Research Methods	4		4	5
200506	SPECIALTY	Water and Sewage Systems	2	3	5	5
			Total		25	30
6th Semester						
200601	SPECIALTY	Project Management II	4		4	5
200602	SPECIALTY	Climate Change and Effects on Constructions	4		4	5
200603	SPECIALTY	Geographical Information System	2	2	4	5
200604	CORE	Hydrology	4		4	5
200605	SPECIALTY	Heat and Mass Transfer	5		5	5
200606	SPECIALTY	Energy Design of Buildings	4		4	5
			Total		25	30
7th Semester						
200701	SPECIALTY	Smart Cities	4		4	5
200702	CORE	Coastal Engineering	5		5	5
200703	SPECIALTY	Pollution and Pollution Control Technologies I	4		4	5
200704	SPECIALTY	Wastewater Management and Treatment Technologies	4		4	5
	SPECIALTY	Elective 1 st	4		4	5
	SPECIALTY	Elective 2 nd	4		4	5
			Total		25	30
8th Semester						
200801	SPECIALTY	Physical Oceanography	4		4	5
200802	SPECIALTY	Environmental Impact Projects	4		4	5
200803	SPECIALTY	Pollution and Pollution Control Technologies I	5		5	5
200804	SPECIALTY	Business Administration and Entrepreneurship	4		4	5
200805	SPECIALTY	Renewable Energy Sources	4		4	5
	SPECIALTY	Elective 3 rd	4		4	5
			Total		25	30

CODE	CORE / SPECIALTY	COURSE	Hours		Total Hours	ECTS
			Th	Lab		
9th Semester						
200901	SPECIALTY	Groundwater Hydraulics and Hydrogeology	5		5	5
200902	SPECIALTY	Reinforced Concrete II	4		4	5
200903	SPECIALTY	Water Resources Management	4		4	5
	SPECIALTY	Elective 4 th	4		4	5
	SPECIALTY	Elective 5 th	4		4	5
	SPECIALTY	Elective 6 th	4		4	5
			Total		25	30
TOTAL HOURS (1st + 2nd + 3rd ++ 9th + 10th semester)			225			
10th Semester						
		Dissertation				30
			TOTAL ECTS (1st + 2nd + 3rd ++ 9th + 10th semester)			300

ELECTIVE COURSES

ELECTIVE COURSES					
SECTOR OF STRUCTURED ENVIRONMENT AND MANAGEMENT		Hours		Total Hours	Semester
		Th	Lab		
7th Semester (Elective 2 from 6 courses)					
200705	Risk Management	4		4	7 th
200706	Energy Systems Design	4		4	7 th
200707	Architecture of Physical and Structure Environment	4		4	7 th
200708	Inspection, Maintenance and Rehabilitation of Stuctures	4		4	7 th
200709	Environmental Informatics	4		4	7 th
200710	Project Planning and Management Software Applications	4		4	7 th
8th Semester (Elective 1 from 3 courses)					
200806	Art and Technology	4		4	8 th
200807	Mathematics III	4		4	8 th
200808	Health and Safety at Work	4		4	8 th

9 th Semester (Elective 3 from 7 courses)					
200904	Building Materials and Indoor Environmental Quality	4		4	9 th
200905	Natural Disaster Management	4		4	9 th
200905	Natural Hazards	4		4	9 th
200907	Quality Management and Assurance	4		4	9 th
200908	Sustainable Development	4		4	9 th
200909	Environmental Road Construction	4		4	9 th
200910	Spatial and Urban Planning	4		4	9 th

ELECTIVE COURSES

ELECTIVE COURSES					
CODE	SECTOR OF HYDRAULIC AND GEO-ENVIRONMENTAL ENGINEERING COURSE	Hours		Total Hours	Semester
		Th	Lab		
7 th Semester (Elective 2 from 6 courses)					
200711	Foundations - Restraints	4		4	7 th
200712	Land reclamation	4		4	7 th
200713	Treatment and Management of Toxic and Hazardous Waste	4		4	7 th
200714	Industrial Wastewater Treatment	4		4	7 th
200715	Hydrodynamic Projects-Dams	4		4	7 th
200716	Watercourses Management	4		4	7 th
8 th Semester (Elective 1 from 3 courses)					
200809	Ecotoxicology	4		4	8 th
200810	Environmental Geotechnical Engineering	4		4	8 th
200811	Geotechnical Projects	4		4	8 th
9 th Semester (Elective 3 from 8 courses)					
200911	Experimental Fluid Mechanics	4		4	9 th
200912	Environmental Management of Ports and Coastal Areas	4		4	9 th
200913	Environmental Microbiology and Biotechnology	4		4	9 th

200914	Numerical Methods and Mathematical Models in Hydraulic Projects	4		4	9 th
200915	Rocks Mechanics Laboratory	4		4	9 th
200916	Unsteady Flows	4		4	9 th
200917	Aquatic Ecosystems	4		4	9 th
200918	Natural Artificial Ecosystems	4		4	9 th

Th: Theory

Lab: Laboratory