

**DEPARTMENT OF CIVIL ENGINEERING  
UNDERGRADUATE INDICATIVE CURRICULUM**

UNDERGRADUATE INDICATIVE CURRICULUM				
ID	Code	Title	Week Hours	ECTS
<b>1<sup>st</sup> Semester</b>				
1	GE0100	Mathematics I (Compulsory)	5	6
2	GE0700	Engineering Mechanics I (Compulsory)	5	6
3	GE0900	Statistics (Compulsory)	3	6
4	TE0100	Construction Materials I (Compulsory)	4	6
5	TE0200	Technical Drawing (Compulsory)	4	6
			<b>Total:</b>	30
<b>2<sup>nd</sup> Semester</b>				
1	GE0400	Mathematics II (Compulsory)	5	6
2	GE1600	Applied Informatics for Civil Engineering (Compulsory)	3	6
3	TE0400	Construction Materials II (Compulsory)	4	6
4	TE4400	Strength of Materials and Structural Elements I (Compulsory)	5	6
5	TZ2400	Urban and Regional Planning and Development (Compulsory)	3	6
			<b>Total:</b>	30
<b>3<sup>rd</sup> Semester</b>				
1	GE0800	Mathematics III (Compulsory)	4	4
2	GE1100	Numerical Analysis (Compulsory)	4	4
3	TF0200	Geodesy I (Compulsory)	4	4
4	TF0300	Engineering Geology I (Compulsory)	5	6
5	TE4500	Strength of Materials and Structural Elements II (Compulsory)	5	6
6	TY0400	Fluid Mechanics (Compulsory)	5	6
			<b>Total:</b>	30
<b>4<sup>th</sup> Semester</b>				
1	TF0400	Geodesy II (Compulsory)	4	6
2	TE0500	Building Construction I (Compulsory)	5	6
3	TE0600	Structural Analysis I (Compulsory)	6	6
4	TZ0400	Transportation Engineering (Compulsory)	4	6
5	TY0100	Hydraulics (Compulsory)	4	6
			<b>Total:</b>	30
<b>5<sup>th</sup> Semester</b>				
1	TF0500	Soil Mechanics I (Compulsory)	5	5
2	TE0700	Building Construction II (Compulsory)	5	5
3	TE0800	Structural Analysis II (Compulsory)	6	5
4	TZ0200	Road Engineering I (Compulsory)	4	5
5	TY0200	Groundwater Hydraulics and Hydrology (Compulsory)	5	5
6	TY2200	Water Supply and Sewerage Systems (Compulsory)	4	5
			<b>Total:</b>	30
<b>6<sup>th</sup> Semester</b>				
1	TF0700	Soil Mechanics II (Compulsory)	5	5
2	TE1000	Reinforced Concrete I (Compulsory)	5	5
3	TE1100	Metal Structures I (Compulsory)	5	5
4	TE1800	Dynamics of Structures I (Compulsory)	4	5
5	TZ0500	Road Engineering II (Compulsory)	4	5
6	TY2300	Environmental Engineering (Compulsory)	5	5
			<b>Total:</b>	30
<b>7<sup>th</sup> Semester</b>				
1	TE1400	Reinforced Concrete II (Compulsory)	5	5
2	TE1500	Metal Structures II (Compulsory)	4	5
3	TZ2200	Construction Management (Compulsory)	5	5
4	TZ3000	Transportation Planning (Compulsory)	3	4
5	TY1500	Coastal and Harbour Engineering (Compulsory)	5	5
6		Elective Course 1		3
7		Elective Course 2		3
			<b>Total:</b>	30
<b>DSE</b>				
1	TE1300	Theory of Disks and Plates (Compulsory Specialization Course)	3	3
2	TE2000	Numerical Methods in Structural Analysis I (Compulsory Specialization Course)	3	3
<b>DHEE</b>				
1	TY0600	Engineering Hydrology (Compulsory Specialization Course)	3	3
2	TY4700	Environmental Impact Assessment (Compulsory Specialization Course)	3	3
<b>DGE</b>				
1	TF2400	Deep Foundations (Compulsory Specialization Course)	3	3
2	TF2500	Engineering Seismology and Earthquake Engineering (Compulsory Specialization Course)	3	3
<b>DTPM</b>				
1	TZ0300	Construction Equipment and Methods (Compulsory Specialization Course)	3	3
2	TZ0700	Design and Construction of Road Pavements and Laboratory Testing (Compulsory Specialization Course)	3	3

**DEPARTMENT OF CIVIL ENGINEERING  
UNDERGRADUATE INDICATIVE CURRICULUM**

<b>8<sup>th</sup> Semester</b>				
1	TF1100	Foundations- Retaining Walls & Geotechnical Structures (Compulsory)	5	5
2	TE1900	Reinforced Concrete III	5	6
3	TΣ4300	Project Management	4	5
4		Elective Course 1 (Compulsory Specialization Course)		4
5		Elective Course 2 (Compulsory Specialization Course)		4
6		Elective Course 3 or Internship for Civil Engineers		3
7		Elective Course 4		3
			<b>Total:</b>	<b>30</b>
<b>DSE</b>				
1	TE1200	Special Topics in Building Construction	3	3
2	TE2100	Theory of Shells	3	3
3	TE2200	Composite Buildings and Bridges	3	3
4	TE2300	Prestressed Concrete (Compulsory Specialization Course)	3	4
5	TE2400	Dynamics of Structures II (Compulsory Specialization Course)	3	4
6	TE2500	Numerical Methods in Structural Analysis II	3	3
7	TE2900	Special Topics in Construction Materials	3	3
8	TE3500	Fire Protection of Building Structures	3	3
9	TE4000	Prefabricated Concrete Structures	3	3
10	TE4800	Programming Techniques and Use of Specialized Software in Structural Design	3	3
11	TE5100	Structural Aluminium	3	3
<b>DHEE</b>				
1	TY1100	Hydraulics of Groundwater Flows	3	3
2	TY1600	Numerical Methods in Hydraulics and Hydraulic Engineering	3	3
3	TY2000	Design and Construction of Ports (Compulsory Specialization Course)	3	4
4	TY2500	Hydraulics of Open Channels and Rivers	3	3
5	TY4300	Groundwater Resources Exploitation and Protection	3	3
6	TY4400	Environmental and Energy Policy in the European Union	3	3
7	TY4600	Design of Water Supply and Sewerage Systems (Compulsory Specialization Course)	3	4
8	TY5000	Coastal Protection Works and Coasts	3	3
<b>DGE</b>				
1	TF0600	Laboratory and Field Tests in Soil Mechanics (Compulsory Specialization Course)	3	4
2	TF0900	Photogrammetry - Geoinformation Systems	3	3
3	TF1200	Engineering Surveying	3	3
4	TF1800	Rock Mechanics I (Compulsory Specialization Course)	3	4
5	TF2900	Special Topics in Computer-aided Drafting	3	3
6	TF3700	Geotechnical Earthquake Engineering	3	3
<b>DTPM</b>				
1	FE1400	Basic Principles of Economic Theory and Policy	3	3
2	TΣ0600	Traffic Control	3	3
3	TΣ1000	Elements of Law and Engineering Legislation	3	3
4	TΣ1200	Railway Infrastructure (Compulsory Specialization Course)	3	4
5	TΣ2100	Transportation Systems (Compulsory Specialization Course)	3	4
6	TΣ3200	Airport Design and Construction	3	3
7	TΣ3400	Management of Construction Companies	3	3
8	TΣ4400	Management Information Systems for Engineering Projects	3	3
<b>ALL DIVISIONS</b>				
1	ΠΑ0100	Internship for Civil Engineers	3	3

**DEPARTMENT OF CIVIL ENGINEERING  
UNDERGRADUATE INDICATIVE CURRICULUM**

<b>9<sup>th</sup> Semester</b>				
1		Elective Course 1 (Compulsory Specialization Course)		5
2		Elective Course 2 (Compulsory Specialization Course)		5
3		Elective Course 3		4
4		Elective Course 4		4
5		Elective Course 5		4
6		Elective Course 6		4
7		Elective Course 7		4
			<b>Total:</b>	30
<b>DSE</b>				
1	TE0300	Environmental Architectural Design of Buildings	3	4
2	TE1700	Energy-Saving Design in Buildings	3	4
3	TE2600	Concrete Bridges	3	4
4	TE2800	Antiseismic Technology and Behaviour of Concrete (Compulsory Specialization Course)	3	5
5	TE3000	Steel Bridges	3	4
6	TE3100	Seismic Analysis and other Specifics of Metal Structures Design (Compulsory Specialization Course)	3	5
7	TE3700	Behaviour and properties of reinforced concrete	3	4
8	TE3800	Masonry Structures	3	4
9	TE3900	Experimental Structural Engineering	3	4
10	TE4100	Restoration of Concrete and Masonry Buildings	3	4
11	TE4200	Timber Structures	3	4
12	TE4300	Elastoplastic Analysis of Structures	3	4
13	TE4700	Engineering Performance of Materials	3	4
<b>DHEE</b>				
1	TFY002	Natural Hazards : Analysis and Management of Risk	3	4
2	TFY003	Design and Construction of Dams	3	4
3	TY0300	Hydrometry and Hydraulic Models	3	4
4	TY1700	Water Resources Management (Compulsory Specialization Course)	3	5
5	TY2700	Coastal Oceanography	3	4
6	TY3200	Geothermal Energy	3	4
7	TY3300	Unsteady Flows	3	4
8	TY4000	Design and Construction of Irrigation and Drainage Systems (Compulsory Specialization Course)	3	5
9	TY4100	Environmental Chemistry, Microbiology and Biochemistry	3	4
10	TY4200	Waste Treatment Technology	3	4
11	TY4500	Marine Structures	3	4
12	TY4900	Water Quality Mathematical Models for Ecosystems	3	4
13	TY5100	Water and Wastewater Treatment	3	4
<b>DGE</b>				
1	TF1500	Special Topics in Rock Mechanics and Engineering Geology	3	4
2	TF1700	Deep Excavations and Earth Retaining Structures (Compulsory Specialization Course)	3	5
3	TF2100	Geomatics	3	4
4	TF2200	Environmental Engineering Geology	3	4
5	TF2300	Soil Mechanics III	3	4
6	TF2600	Environmental Geotechnical Engineering	3	4
7	TF3500	Photointerpretation - Remote Sensing	3	4
8	TF3600	Special Issues of Photogrammetry	3	4
9	TF3800	Numerical Methods in Geotechnical Engineering (Compulsory Specialization Course)	3	5
10	TF3900	Landslides - Fills - Soil Improvement Methods	3	4
11	TFY002	Natural Hazards : Analysis and Management of Risk	3	4
12	TFY003	Design and Construction of Dams	3	4
<b>DTPM</b>				
1	TZ1400	Investment Evaluation	3	4
2	TZ1500	Management of Construction Sites (Compulsory Specialization Course)	3	5
3	TZ1800	Transportation Economics	3	4
4	TZ1900	Public Transportation (Compulsory Specialization Course)	3	5
5	TZ3300	Transport and Environment	3	4
6	TZ3500	Management of Road Operation and Maintenance	3	4
7	TZ3900	Regional Development II	3	4
8	TZ4100	Road Safety	3	4
<b>10<sup>th</sup> Semester</b>				
		Diploma Thesis		30
			<b>Total:</b>	30