

Plan de învățământ
Inginerie civilă / Civil engineering

Nr.	Name of the course	Course Code	Type	Electiveness	Hour of activities per week						Credits				Exam form		
					Course	Seminary	Laboratory	Project	Individual study	Total	Exam	Colloquy	Project	Total			
1	Linear algebra and Analytical geometry/ Algebră liniară, geometrie analitică și diferențială	U02.07.ICV.IZ.L16.1.DF.OB01	DF	OB	2	2			3	7	5			5	E		
2	Analysis I / Analiză matematică I	U02.07.ICV.IZ.L16.1.DF.OB02	DF	OB	2	2			2	6	5			5	E		
3	Descriptive geometry / Geometrie descriptivă	U02.07.ICV.IZ.L16.1.DF.OB03	DF	OB	2	2			2	6	5			5	E		
4	Chemistry / Chimie	U02.07.ICV.IZ.L16.1.DF.OB04	DF	OB	1		1		2	4	4			4	E		
5	Computer science / Informatică aplicată	U02.07.ICV.IZ.L16.1.DF.OB05	DF	OB	1		2		2	5		3		3	C		
6	Surveying / Topografie	U02.07.ICV.IZ.L16.1.DD.OB06	DD	OB	2		1		2	5	4			4	E		
7	Foreign language I / Limbi moderne I	U02.07.ICV.IZ.L16.1.DC.OP07	DC	OP		2				2		1		1	C		
8	Physical education / Educație fizică și sport	U02.07.ICV.IZ.L16.1.DC.OB08	DC	OB		1				1					P/F		
9	Introduction in Civil Engineering / Curs general de construcții	U02.07.ICV.IZ.L16.1.DD.OB9	DD	OB	2	2				4		3		3	C		
Facultative course																	
11	Romanian language for foreign students I / Limba română pentru studenți străni I	U02.07.ICV.IZ.L16.1.DC.FC01	DC	FC		2			1	3		2		2	C		
12	Foreign language-supplement I / Limbi moderne I	U02.07.ICV.IZ.L16.1.DC.FC02	DC	FC		2			1	3		2		2	C		
13	Mathematics- supplement I	U02.07.ICV.IZ.L16.1.DF.FC03	DC	FC	3				1	4		3		3	C		
14	Psihologia educatiei	U02.07.ICV.IZ.L16.1.PP.FC04	PP	FC	2	2			1	5	5			5	E		
Total compulsory courses (OB and OP)			Total contact hours			27		12	11	4	0	13	40	23	7	30	5E+3C+1P/F
Total facultative courses (FC)			Total contact hours			11		5	6	0	0	4	15	5	7	12	1E+3C

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Inginerie civilă / Civil engineering

Semestrul: 2

Nr.	Name of the course	Course Code	Type	Electiveness	Hour of activities per week						Credits				Exam form		
					Course	Seminary	Laboratory	Project	Individual study	Total	Exam	Colloquy	Project	Total			
1	Differential and with partial derivatives equations / Ecuatii diferențiale	U02.07.ICV.IZ.L16.2.DF.OB10	DF	OB	2	2			2	6	5			5	E		
2	Analysis II / Analiză matematică II	U02.07.ICV.IZ.L16.2.DF.OB11	DF	OB	2	2			2	6	5			5	E		
3	Physics I / Fizică I	U02.07.ICV.IZ.L16.2.DF.OB12	DF	OB	2	1	1		2	6		3		3	C		
4	Mechanics I / Mecanică I	U02.07.ICV.IZ.L16.2.DD.OB13	DD	OB	2	2			2	6	5			5	E		
5	Civil engineering materials / Materiale de construcții	U02.07.ICV.IZ.L16.2.DD.OB14	DD	OB	2		2		2	6	5			5	E		
6	Engineering graphics / Desen tehnic și infografică	U02.07.ICV.IZ.L16.2.DF.OB15	DF	OB			2		2	4		2		2	C		
7 (EC I)	Ethics and academic integrity / Etică și integritate academică	U02.07.ICV.IZ.L16.2.DC.OP01	DC	OP	1				1	2		1		1	C		
	Communications skills / Comunicare	U02.07.ICV.IZ.L16.2.DC.OP02	DC	OP													
8	Foreign language II / Limbi moderne II	U02.07.ICV.IZ.L16.2.DC.OP16	DC	OP		2				2		1		1	C		
9	Physical education I Educație fizică și sport	U02.07.ICV.IZ.L16.2.DC.OB17	DC	OB		2				2		1		1	P/F		
10	Surveying practice / Practică topografică	U02.07.ICV.IZ.L16.2.DD.OB18	DD	OB	2 weeks x 30 hours / week							2		2	C		
Facultative course																	
11	Romanian language for foreign students II / Limba română pentru studenți străni	U02.07.ICV.IZ.L16.2.DC.FC05	DC	FC		2			1	3		2		2	C		
12	Culture and civilization II / Discipline socio-umaniste	U02.07.ICV.IZ.L16.2.DC.FC06	DC	FC	2				1	3		2		2	C		
13	Foreign language-supplement II / Limbi moderne	U02.07.ICV.IZ.L16.2.DC.FC07	DC	FC		2			1	3		2		2	C		
14	Mathematics- supplement II	U02.07.ICV.IZ.L16.2.DF.FC08	DF	FC		3			1	4		3		3	C		
15	Pedagogie I Fundamentele pedagogiei - Teoria și metodologia curriculum-ului	U02.07.ICV.IZ.L16.2.PP.FC09	PP	FC	2	1		1	1	5	5			5	E		
Total compulsory disciplines (OB and OP)			Total contact hours			27		11	11	5	0	13	40	20	10	30	4E+5C+1P/F
Total discipline facultative (FC)			Total contact hours			13		4	8	0	1	5	18	5	9	14	4C+1E

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Semestrul: 3

Nr.	Name of the course	Course Code	Type	Electiveness	Hour of activities per week						Credits				Exam form		
					Course	Seminary	Laboratory	Project	Individual study	Total	Exam	Colloquy	Project	Total			
1	Physics II / Fizică II	U02.07.ICV.IZ.L16.3.DF.OB19	DF	OB	2	1	1		2	6	5			5	E		
2	Computer aid drawing / Desen tehnic si infografica	U02.07.ICV.IZ.L16.3.DF.OB20	DF	OB	2		2		2	6		5		5	C		
3	Mechanics II / Mecanică II	U02.07.ICV.IZ.L16.3.DD.OB21	DD	OB	3	3			2	8	6			6	E		
4	Strength of materials I / Rezistența materialelor I	U02.07.ICV.IZ.L16.3.DD.OB22	DD	OB	3	1	1		3	8	6			6	E		
5	Engineering geology / Geologia inginerescă	U02.07.ICV.IZ.L16.3.DD.OB23	DD	OB	1		1		2	4	4			4	E		
6 (EC II)	Architecture / Elemente de arhitectură și sistematizare	U02.07.ICV.IZ.L16.3.DD.OP03	DD	OP	2				2	4		2		2	C		
	Urban planning / Urbanism și amenajarea teritoriului	U02.07.ICV.IZ.L16.3.DD.OP04	DD	OP													
7	Foreign language III / Limbi moderne III	U02.07.ICV.IZ.L16.3.DC.OP24	DC	OP		2			1	3		1		1	C		
8	Physical education / Educație fizică și sport	U02.07.ICV.IZ.L16.3.DC.OB25	DC	OB		2				2				1	P/F		
Facultative course																	
9	Romanian language for foreign students III / Limba română pentru studenți străni	U02.07.ICV.IZ.L16.3.DC.FC10	DC	FC		2			1	3		2		2	C		
10	Construction history I	U02.07.ICV.IZ.L16.3.DC.FC11	DC	FC	2				1	3		2		2	C		
11	Pedagogie II:	U02.07.ICV.IZ.L16.3.PP.FC12	PP	FC	2	1		1	1	5	5			5	E		
	- Teoria si metodologia instruirii																
	- Teoria si metodologia evaluarii																
Total compulsory disciplines (OB and OP)			Total contact hours			27		13	9	5	0	14	41	21	8	30	4E+3C+1P/F
Total discipline facultative (FC)			Total contact hours			8		4	3	0	1	3	11	5	4	9	2C+1E

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Semestrul: 4

Nr.	Name of the course	Course Code	Type	Electiveness	Hour of activities per week						Credits				Exam form		
					Course	Seminary	Laboratory	Project	Individual study	Total	Exam	Colloquy	Project	Total			
1	Structural analysis I / Statica și stabilitatea construcțiilor I	U02.07.ICV.IZ.L16.4.DD.OB26	DD	OB	3	2			4	9	6			6	E		
2	Strength of materials II / Rezistența materialelor II	U02.07.ICV.IZ.L16.4.DD.OB27	DD	OB	3	2	1		3	9	6			6	E		
3	Reinforced and prestressed concrete I / Beton armat și precomprimat I	U02.07.ICV.IZ.L16.4.DD.OB28	DD	OB	2		1		2	5	5			5	E		
4	Hydraulics / Hidraulică	U02.07.ICV.IZ.L16.4.DD.OB29	DD	OB	2		2		1	5	4			4	E		
5	Building services / Instalatii pentru constructii	U02.07.ICV.IZ.L16.4.DD.OB30	DD	OB	1	1			1	3		2		2	C		
6 (EC III)	Environmental engineering / Ingineria mediului	U02.07.ICV.IZ.L16.4.DD.OP05	DD	OP	2	1			1	4		2		2	C		
	Sanitary engineering / Constructii hidroedilitare	U02.07.ICV.IZ.L16.4.DD.OP06	DD	OP													
	Construction machines / Mașini și instalatii pentru construcții	U02.07.ICV.IZ.L16.4.DD.OP07	DD	OP													
7	Transport engineering / Căi de comunicații	U02.07.ICV.IZ.L16.8.DD.OB31	DD	OB	1	1			1	3		2		2	C		
8	Foreign language IV / Limbi moderne IV	U02.07.ICV.IZ.L16.4.DC.OP32	DC	OP		1				1		1		1	C		
9	Physical education II / Educație fizică și sport	U02.07.ICV.IZ.L16.4.DC.OB33	DC	OB		2				2					P/F		
10	Practical stage I / Practică de domeniu	U02.07.ICV.IZ.L16.4.DD.OB34	DD	OB	2 weeks x 30 hours / week							2		2	C		
Facultative course																	
9	Romanian language for foreign students IV / Limba română pentru studenți străni	U02.07.ICV.IZ.L16.4.DC.FC13	DC	FC		2			1	3		2		2	C		
10	Construction history II	U02.07.ICV.IZ.L16.4.DC.FC14	DC	FC	2				1	3		2		2	C		
11	Didactica specialitatii	U02.07.ICV.IZ.L16.4.PP.FC15	PP	FC	2	2			1	5	4			4	E		
12	Energy from renewable resources I (wind, waves, tidal, currents)	U02.07.ICV.IZ.L16.4.DD.FC16	DD	FC	2		2		4	8	6			6	E		
13	Energy from renewable resources II (solar, hydrothermal, biomass, osmotic, OTEC)	U02.07.ICV.IZ.L16.4.DD.FC17	DD	FC	2		2		4	8	6			6	E		
14	Effects of climate changes	U02.07.ICV.IZ.L16.4.DC.FC18	DC	FC	2		2		4	8	6			6	E		
Total compulsory disciplines (OB and OP)			Total contact hours			28		14	10	4	0	13	41	21	9	30	4E+5C+1P/F
Total discipline facultative (FC)			Total contact hours			20		10	4	6	0	15	35	22	4	26	2C+4E

Universitatea Tehnică de Construcții București
Facultatea de Inginerie în Limbi Străine

Ciclul de studii: Licență
Domeniul de studii: Inginerie civilă
Forma de învățământ: Învățământ cu frecvență
Cod program: U02.07.ICV.IZ.L16

Plan de învățământ

Inginerie civilă / Civil engineering

Semestrul: 5

Nr.	Name of the course	Course Code	Type	Electiveness	Hour of activities per week						Credits				Exam form		
					Course	Seminary	Laboratory	Project	Individual study	Total	Exam	Colloquy	Project	Total			
1	Soil mechanics / Geotehnică	U02.07.ICV.IZ.L16.5.DD.OB35	DD	OB	3		2		2	7	5			5	F		
2	Structural analysis II / Statica și stabilitatea construcțiilor II	U02.07.ICV.IZ.L16.5.DD.OB36	DD	OB	2	1	2		3	8	6			6	F		
3	Reinforced and prestressed concrete II / Beton armat și precomprimat II	U02.07.ICV.IZ.L16.5.DD.OB37	DD	OB	2		3		3	8	6			6	F		
4	Finite Element Method / Metoda elementului finit	U02.07.ICV.IZ.L16.5.DD.OB38	DD	OB	2		1		1	4		3		3	C		
5	Building design I / Constructii civile I	U02.07.ICV.IZ.L16.5.DS.OB39	DS	OB	2		1		2	5	4			4	E		
6	Introduction to Theory of Elasticity, Plates and Shells / Elemente de teoria elasticității	U02.07.ICV.IZ.L16.5.DD.OB40	DD	OB	1		1		1	3		2		2	C		
7	Timber structures / Constructii din lemn	U02.07.ICV.IZ.L16.5.DD.OB41	DD	OB	2		2		1	5	4			4	E		
Facultative course																	
8	Elasticity and plasticity I	U02.07.ICV.IZ.L16.5.DD.FC19	DD	FC	2	1			1	4		3		3	C		
9	Geographic Information Systems and Remote Sensing	U02.07.ICV.IZ.L16.5.DD.FC20	DD	FC	2		2		4	8	6			6	E		
10	Pollution / Depollution (water, air, soil)	U02.07.ICV.IZ.L16.5.DC.FC21	DC	FC	2		2		4		6			6	E		
11	Sustainable Built Environment	U02.07.ICV.IZ.L16.5.DD.FC22	DD	FC	2	2			4	8	6			6	E		
12	Complemente de statica	U02.07.ICV.IZ.L16.5.DD.FC23	DD	FC	1	1			1	3		3		2	C		
13	Statistics I	U02.07.ICV.IZ.L16.5.DD.FC24	DD	FC	2	1			1	4		3		3	C		
14	Instruire asistată de calculator	U02.07.ICV.IZ.L16.5.DD.FC25	PP	FC	1	1			1	3	3			3	E		
15	Practica pedagogica	U02.07.ICV.IZ.L16.5.PP.FC26	PP	FC						3		3		3	C		
Total compulsory disciplines (OB and OP)					27		14	1	12	0	13	40	25	5	30	5E+2C	
Total discipline facultative (FC)					22		12	6	4	0	16	33	21	12	0	32	4E+4C

Rector: Prof. dr. ing. Radu Văcăreanu

Decan: Șef lucr. dr. ing. Daniela Țăpuși

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Inginerie civilă / Civil engineering

Nr.	Name of the course	Course Code	Type	Electiveness	Hour of activities per week						Credits				Exam form								
					Course	Seminary	Laboratory	Project	Individual study	Total	Exam	Colloquy	Project	Total									
1	Reinforced concrete structures I / Structuri din beton armat și precomprimat I	U02.07.ICV.IZ.L16.6.DS.OB42	DS	OB	3				2	5	4			4	E								
2	Reinforced concrete structures I – Pr. / Structuri din beton armat și precomprimat I	U02.07.ICV.IZ.L16.6.DS.OB43	DS	OB				2	2	4			2	2	P								
3	Building design II / Constructii civile II	U02.07.ICV.IZ.L16.6.DS.OB44	DS	OB	2			2	2	6	4			4	E								
4	Foundation engineering / Fundații	U02.07.ICV.IZ.L16.6.DD.OB45	DD	OB	2				1	3	3			3	E								
5	Foundation engineering – Pr. / Fundații	U02.07.ICV.IZ.L16.6.DD.OB46	DD	OB				2	1	3			2	2	P								
6	Steel structures I / Construcții metalice I	U02.07.ICV.IZ.L16.6.DD.OB47	DD	OB	2		2		2	6	4			4	E								
7	Dynamics and Earthquake engineering / Dinamica și elemente de inginerie seismică	U02.07.ICV.IZ.L16.6.DD.OB48	DD	OB	3		2		3	8	5			5	E								
8	Computer methods in civil engineering / Proiectare asistată de calculator	U02.07.ICV.IZ.L16.6.DS.OB49	DS	OB	2		2		1	5		2		2	C								
9	Practical stage / Practică de specialitate	U02.07.ICV.IZ.L16.6.DS.OB50	DS	OB	3 weeks x 40 hours / week							4		4	C								
Facultative course																							
11	Elasticity and plasticity II	U02.07.ICV.IZ.L16.6.DD.FC27	DD	FC	2	1			1	4		3		3	C								
12	Statistics II	U02.07.ICV.IZ.L16.6.DD.FC28	DD	FC	2	1			1	4		3		3	C								
13	Managementul clasei de elevi	U02.07.ICV.IZ.L16.6.PP.FC29	PP	FC	1	1			1	3	3			3	E								
14	Practica pedagogica	U02.07.ICV.IZ.L16.6.PP.FC30	PP	FC				3		3		2		2	C								
15	DPPD – Examen absolvire Nivel I	U02.07.ICV.IZ.L16.6.PP.FC31	PP	FC							5			5	E								
16	Natural hazards in coastal regions	U02.07.ICV.IZ.L16.6.DD.FC32	DD	FC	2	2			4	8	6			6	E								
18	Sustainable buildings for tourism	U02.07.ICV.IZ.L16.6.DD.FC33	DD	FC	2	2			4	8	6			6	E								
19	Sustainable Transport Engineering for Coastal Region	U02.07.ICV.IZ.L16.6.DD.FC34	DD	FC	2	2			4	8	6			6	E								
20	Built facilities for aquaculture	U02.07.ICV.IZ.L16.6.DD.FC35	DD	FC	2	2			4	8	6			6	E								
Total compulsory disciplines (OB and OP)					Total contact hours						26		14	0	6	6	14	40	20	6	4	30	5E+2P+2C
Total discipline facultative (FC)					Total contact hours						27		13	11	0	3	19	46	32	8		40	6E+3C

Plan de învățământ

Inginerie civilă / Civil engineering

Semestrul: 7

Nr.	Name of the course	Course Code	Type	Electiveness	Hour of activities per week						Credits				Exam form			
					Course	Seminary	Laboratory	Project	Individual study	Total	Exam	Colloquy	Project	Total				
1	Steel structures II / Structuri metalice II	U02.07.ICV.IZ.L16.7.DS.OB51	DS	OB	3				2	5	5			5	E			
2	Steel structures II - Pr. / Structuri metalice II	U02.07.ICV.IZ.L16.7.DS.OB52	DS	OB				3	2	5			3	3	P			
3	Structural reliability and risk analysis / Siguranța structurilor și analiza riscurilor	U02.07.ICV.IZ.L16.7.DS.OB53	DS	OB	2		2		1	5				5	5			
4	Reinforced concrete structures II / Construcții din beton armat și precomprimat II	U02.07.ICV.IZ.L16.7.DS.OB54	DS	OB	2				1	3	3			3	E			
5	Reinforced concrete structures II - Pr. / / Construcții din beton armat și precomprimat II	U02.07.ICV.IZ.L16.7.DS.OB55	DS	OB				2	2	4			3	3	P			
6	Construction engineering I / Tehnologia lucrărilor de construcții I	U02.07.ICV.IZ.L16.7.DS.OB56	DS	OB	2		2		1	5	4			4	E			
7	Construction management / Management în construcții	U02.07.ICV.IZ.L16.7.DD.OB57	DD	OB	2		1		1	4		2		2	C			
8	Building Information Modelling (BIM) / - Building Information Modelling (BIM)	U02.07.ICV.IZ.L16.7.DS.OB58	DS	OB	1		2		1	4		2		2	C			
9 (EC IV)	Special foundation works / Fundatii in conditii speciale	U02.07.ICV.IZ.L16.7.DS.OP08	DS	OP	2		2		1	5		3		3	C			
	Underground works / Constructii subterane	U02.07.ICV.IZ.L16.7.DS.OP09																
Facultative course																		
10	Marketing / Economie generala	U02.07.ICV.IZ.L16.7.DC.FC36	DC	FC	2				1	3		2		2	C			
11	3D Computer aid drawing / Desen tehnic si infografica	U02.07.ICV.IZ.L16.7.DF.FC37	DF	FC		2			1	3		2		2	C			
Total compulsory disciplines (OB and OP)			Total contact hours			28		14	0	9	5	12	40	12	7	6	30	4E+3C+2P
Total discipline facultative (FC)			Total contact hours			4		2	2	0	0	2	6	0	4	4	4	2C

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Nr.	Name of the course	Course Code	Type	Electiveness	Hour of activities per week						Credits				Exam form
					Course	Seminary	Laboratory	Project	Individual study	Total	Exam	Colloquy	Project	Total	
1	Construction engineering II / Tehnologia lucrărilor de construcții II	U02.07.ICV.IZ.L16.8.DS.OB59	DS	OB	2		2		1	5	4			4	E
2	Project management / Management de proiect	U02.07.ICV.IZ.L16.8.DD.OB60	DD	OB	2		2		2	6	4			4	E
3	Masonry structures / Structuri din zidărie	U02.07.ICV.IZ.L16.8.DS.OB61	DS	OB	2			3	2	7	5			5	E
4	Enterprise economic and law / Legislație în construcții	U02.07.ICV.IZ.L16.8.DD.OB62	DD	OB	2	1			1	4		2		2	C
5 (EC V)	High performance energy efficient Buildings / Clădiri civile de înaltă performanță energetică	U02.07.ICV.IZ.L16.8.DS.OP10	DS	OP	2			2	2	6	5			5	E
	Steel structures III / Structuri metalice III	U02.07.ICV.IZ.L16.8.DS.OP11													
6 (EC VI)	Composites and associated materials / Materiale și elemente de construcții compozite	U02.07.ICV.IZ.L16.8.DS.OP12	DS	OP	2				1	3		2		2	C
	Traditional and modern finishing works for buildings / Finisaje tradiționale și moderne	U02.07.ICV.IZ.L16.8.DS.OP13													
7 (EC VII)	Diploma Project work (design of a reinforced concrete/steel/masonries/ wood etc. structure) / Elaborarea Proiectului de diplomă	U02.07.ICV.IZ.L16.8.DS.OP14	DS	OP				6	3	9		4		4	C
8	Diploma Project practical stage / Practică pentru Proiectul de diplomă	U02.07.ICV.IZ.L16.8.DS.OB63	DS	OB	4 weeks x 30 hours / week							4		4	C
Total compulsory disciplines (OB and OP)		Total contact hours	28		12	1	4	11	12	40	18	12		30	4E+4C
Soutenance du projet de diplôme*)		Total contact hours												10	1E

*) The total of 240 credits is compulsory for the Diploma Project defence

Rector: Prof. dr. ing. Radu Văcăreanu

Decan: Șef lucr. dr. ing. Daniela Țăpuși

Notations:

EC – elective course

E - exam

P - project

C - colloquy

P/F - Passed / Failed

Course code:

1÷8 – semester number

DF – fundamental course

DD – course within the domain

DC – complementary course

DS – specialty course

PP – psycho-pedagogic training course (only in Romanian)

OB – compulsory course

OP – elective course (is active only the one selected by the majority of students)

FC – facultative course (active only if requested by a sufficient number of students)

1÷63 – course number