

<b>Faculty</b>	<b>Engineering in Foreign Languages</b>
<b>Field</b>	<b>Civil engineering</b>
<b>Specialization</b>	<b>Civil engineering</b>
<b>Study period</b>	<b>4 years</b>
<b>Education form</b>	<b>Civil Engineer</b> <b>Full-time instruction in ENGLISH</b>
<b>Code</b>	<b>U02.07.ICV.IZ.L16</b>

## **STUDY PROGRAMME**

Notations:

- C- course
- S- seminar
- L- laboratory
- P- project
- IS- individual study
- TH- total hours per week
- CR- ECTS credits
- EC – elective course
- E- exam
- Co- 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÷65 – course number

# 1<sup>st</sup> Year (2018-19)

## 1<sup>st</sup> Semester – 30 ECTS (14 weeks)

No.	Name of the course	Course Code	C	S	L	P	IS	TH	CR	Exam form
1	Linear algebra and Analytical geometry	1.DF.OB01	2	2			2	6	5	E
2	Mathematical Analysis I	1.DF.OB02	2	2			2	6	5	E
3	Descriptive geometry	1.DF.OB03	2	2			2	6	5	E
4	Chemistry	1.DF.OB04	1		1		2	4	4	E
5	Computer science	1.DF.OB05	1		2		2	5	3	Co
6	Surveying	1.DD.OB06	2		1		2	5	4	E
7	Humanity course I	1.DC.OB07	1	1				2	1	Co
8	Foreign language I	1.DC.OB08		2				2	1	Co
9	Physical education I	1.DC.OB09		1				1		
10	Introduction in Civil Engineering	1.DD.OB10	2	1				3	2	Co
<b>TOTAL Contact hours/week =28</b>			<b>13</b>	<b>11</b>	<b>4</b>	<b>0</b>	<b>12</b>	<b>40</b>	<b>30</b>	<b>5E+4Co</b>
10	Romanian language for foreign students I	1.DC.FC01		2			1	3	2	Co
11	Foreign language-supplement I	1.DC.FC02		2			1	3	2	Co
12	Mathematics- supplement I	1.DF.FC03		3			1	4	3	Co
13	Psihologia educatiei	1.PP.FC04	2	2			1	5	5	E

## 2<sup>nd</sup> Semester – 30 ECTS (14 weeks + 2 weeks)

1	Differential and with partial derivates equations	2.DF.OB11	2	2			2	6	5	E
2	Mathematical Analysis II	2.DF.OB12	2	2			2	6	5	E
3	Physics I	2.DF.OB13	2	1	1		2	6	3	Co
4	Mechanics I	2.DD.OB14	2	2			2	6	5	E
5	Civil engineering materials	2.DD.OB15	2		2		2	6	5	E
6	Engineering graphics	2.DF.OB16			2		2	4	2	Co
7 (EC I)	Humanity course II	2.DC.OP01	1	1				2	1	Co
	Ethics and Academical Integrity	2.DC. OP02								
8	Foreign language II	2.DC.OB18		2				2	1	Co
9	Physical education II	2.DC.OB19		2				2	1	P/F
<b>TOTAL Contact hours/week = 28</b>			<b>11</b>	<b>12</b>	<b>5</b>	<b>0</b>	<b>12</b>	<b>40</b>	<b>28</b>	<b>4E+4Co+P/F</b>
10	Surveying practice	2.DD.OB20	2 weeks x 30 hours / week						<b>2</b>	<b>Co</b>
<b>TOTAL Credits</b>									<b>30</b>	<b>4E+5Co+P/F</b>
11	Romanian language for foreign students II	2.DC.FC05		2			1	3	2	Co
12	Culture and civilization I	2.DC.FC06	2				1	3	2	Co
13	Foreign language-supplement II	2.DC.FC07		2			1	3	2	Co
14	Mathematics- supplement II	2.DF.FC08		3			1	4	3	Co
15	Pedagogie I Fundamentele pedagogiei - Teoria si metodologia curriculum-ului	2.PP.FC09	2	1		1	1	5	5	E

## 2<sup>nd</sup> Year (2019-20)

### 3<sup>rd</sup> Semester – 30 ECTS (14 weeks)

No.	Name of the course	Course Code	C	S	L	P	IS	TH	CR	Exam form
1	Physics II	3.DF.OB21	2	1	1		1	5	5	E
2	Computer aid drawing	3.DF.OB22	2		2		2	6	5	Co
3	Mechanics II	3.DD.OB23	3	3			2	8	6	E
4	Strength of materials I	3.DD.OB24	3	1	1		3	8	6	E
5	Engineering geology	3.DD.OB25	2		1		2	5	5	E
6 (ECII)	Architecture	3.DD.OP03	2				2	4	2	Co
	Urban planning	3.DD.OP04								
7	Foreign language III	3.DC.OB26		2				2	1	Co
8	Physical education III	3.DC.OB27		2				2		
<b>TOTAL Contact hours/week = 28</b>			<b>14</b>	<b>9</b>	<b>5</b>	<b>0</b>	<b>12</b>	<b>40</b>	<b>30</b>	<b>4E+3Co</b>
9	Romanian language for foreign students III	3.DC.FC10.		2			1	3	2	Co
10	Construction history I	3.DC.FC11	2				1	3	2	Co
11	Pedagogie II: - Teoria si metodologia instruirii - Teoria si metodologia evaluarii	3.PP.FC12	2	1		1	1	5	5	E

### 4<sup>th</sup> Semester – 30 ECTS (14 weeks)

1	Structural analysis I	4.DD.OB28	3	2			3	8	6	E
2	Hydraulics	4.DD.OB29	2		2		3	7	6	E
3	Strength of materials II	4.DD.OB30	3	2	1		2	8	6	E
4	Reinforced concrete I	4.DD.OB31	2		1		2	5	6	E
5	Foreign language IV	4.DC.OB32		2				2	1	Co
6	Physical education IV	4.DC.OB33		2				2	1	P/F
7 (EC III)	Environmental engineering	4.DD.OP05	2	1			1	4	2	Co
	Construction machines	4.DD.OP06								
8 (EC IV)	Sanitary engineering	4.DD.OP07	2	1			1	4	2	Co
	Enterprise economic and law	4.DD.OP08								
<b>TOTAL Contact hours/week = 28</b>			<b>14</b>	<b>10</b>	<b>4</b>	<b>0</b>	<b>12</b>	<b>40</b>	<b>30</b>	<b>4E+3Co+P/F</b>
9	Romanian language for foreign students IV	4.DC.FC13		2			1	3	2	Co
10	Construction history II	4.DC.FC14	2				1	3	2	Co
11	Didactica specialitatii	4.PP.FC15	2	2			1	5	5	E

### 3<sup>rd</sup> Year (2020-21)

#### 5<sup>th</sup> Semester – 30 ECTS (14 weeks)

No.	Name of the course	Course Code	C	S	L	P	IS	TH	CR	Exam form
1	Soil mechanics	5.DD.OB34	2		2		2	6	6	E
2	Structural analysis II	5.DD.OB35	2	1	2		3	8	6	E
3	Reinforced concrete II	5.DD.OB36	2		3		2	7	5	E
4	Finite Element Method introduction	5.DD.OB37	2		2		2	6	3	Co
5	Building design I	5.DD.OB38	2		1		2	5	4	E
6	Introduction to Theory of Elasticity, Plates and Shells	5.DD.OB39	1		1		1	3	2	Co
7 (EC V)	Masonry structures	5.DS.OP09	2		2		1	5	4	E
	Timber structures	5.DS.OP10								
<b>TOTAL Contact hours/week = 27</b>			<b>13</b>	<b>1</b>	<b>13</b>	<b>0</b>	<b>13</b>	<b>40</b>	<b>30</b>	<b>5E+2Co</b>
8	Elasticity and plasticity I	5.DD.FC16	2	1			1	4	3	Co
9	Statistics I	5.DD.FC17	2	1			1	4	3	Co
10	Practica pedagogica	5.PP.FC18				3		3	3	Co

#### 6<sup>th</sup> Semester – 30 ECTS (14 weeks + 3 weeks)

1	Reinforced concrete structures I	6.DS.OB40	3				2	5	3	E
2	Reinforced concrete structures I – Pr.	6.DS.OB41				2	2	4	2	P
3	Building design II	6.DS.OB42	2				2	4	2	E
4	Building design II – Pr.	6.DS.OB43				2	2	4	2	P
5	Foundation engineering	6.DD.OB44	2				1	3	3	E
6	Foundation engineering – Pr.	6.DD.OB45				2	1	3	2	P
7	Steel structures I	6.DD.OB46	2		2		1	5	4	E
8	Dynamics and Introduction in Earthquake engineering	6.DD.OB47	3		2		2	7	4	E
9	Computer methods in civil engineering	6.DS.OB48	2		2		1	5	3	Co
<b>TOTAL Contact hours/week = 26</b>			<b>14</b>	<b>0</b>	<b>6</b>	<b>6</b>	<b>14</b>	<b>40</b>	<b>25</b>	<b>5E+3P+1Co</b>
10	Practical stage	6.DD.OB49	3 weeks x 40 hours / week						<b>5</b>	<b>Co</b>
<b>TOTAL Credits</b>									<b>30</b>	<b>5E+3P+2Co</b>
11	Elasticity and plasticity II	6.DD.FC19	2	1			1	4	3	Co
12	Statistics II	6.DD.FC20	2	1			1	4	3	Co
13	Managementul clasei de elevi	6.PP.FC21	1	1			1	3	3	E
14	Practica pedagogica	6.PP.FC22				3		3	2	Co
15	DPPD – Examen absolvire Nivel I	6.PP.FC23							5	E

## 4<sup>th</sup> Year (2021-22)

### 7<sup>th</sup> Semester – 30 ECTS (14 weeks)

No.	Name of the course	Course Code	C	S	L	P	IS	TH	CR	Exam form
1	Steel structures II	7.DS.OB50	3				2	5	4	E
2	Steel structures II - Pr.	7.DS.OB51				3	2	5	3	P
3	Structural reliability and risk analysis	7.DS.OB52	2		2		2	6	5	E
4	Construction engineering I	7.DS.OB53	2		1		1	1	4	E
5	Reinforced concrete structures II	7.DS.OB54	2				2	4	3	E
6	Reinforced concrete structures II - Pr.	7.DS.OB55				2	2	4	3	P
7	Construction management I	7.DD.OB56	2		1		1	4	3	Co
8 (EC VI)	Special foundation works	7.DS.OP11	2		2		1	5	3	Co
	Underground works	7.DS.OP12								
9 (EC VII)	Composites and associated materials	7.DS.OP13	2				1	3	2	Co
	Traditional and modern finishing works for buildings	7.DS.OP14								
<b>TOTAL Contact hours/week = 26</b>			<b>15</b>	<b>0</b>	<b>6</b>	<b>5</b>	<b>14</b>	<b>40</b>	<b>30</b>	<b>4E+2P+3Co</b>
10	Marketing	7.DC.FC24	2				1	3	2	Co
11	3D Computer aid drawing	7.DC.FC25		2			1	3	2	Co

### 8<sup>th</sup> Semester – 30 ECTS (10 weeks + 4 weeks)

1	Construction engineering II	8.DS.OB57	2		3		1	6	4	E
2	Construction management II	8.DD.OB58	2		2		1	5	4	E
3	Building design III	8.DS.OB59	2				1	3	3	E
4	Building design III - Pr.	8.DS.OB60				3	2	5	2	P
5	Steel structures III	8.DS.OB61	2				1	3	3	E
6	Steel structures III - Pr.	8.DS.OB62				2	2	4	2	P
7 (EC VIII)	Diploma Project work (design of a reinforced concrete/steel/masonries/ wood etc. structure )	8.DS.OP15				3	3	6	4	Co
8 (EC IX)	Equipment for buildings TD nu lucrari	8.DD.OP16	2		1		1	4	1	Co
	Transport engineering	8.DD.OP17								
9	Building Information Modelling (BIM)	8.DD.OB63	1		2		1	4	2	Co
<b>TOTAL Contact hours/week = 27</b>			<b>11</b>	<b>0</b>	<b>8</b>	<b>8</b>	<b>13</b>	<b>40</b>	<b>25</b>	<b>4E+2P+3Co</b>
10	Diploma Project practical stage	8.DS.OB64	4 weeks x 30 hours / week						5	Co
<b>TOTAL Credits</b>									<b>30</b>	<b>4E+2P+3Co</b>
<b>Diploma Project Defence*)</b>		<b>8.DS.OB65</b>							<b>10</b>	<b>E</b>

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

FILS Dean,  
Prof. Alexandru Octavian Aldea

UTCB Rector,  
Prof. Radu Sorin Văcăreanu