

DEPUIS 1973®



Bouebdelli Education Group



# Civil Engineering Study Plan



### CIVIL ENGINEERING Year 1 Semester 1

Code	UNIT	Modules	Semester Credit Hours			COEFFICIENT		ECTS Credits	
			IC	PW	SSH	Module	Unit	Module	Unit
U1.1	<i>Mathematics 1</i>	Engineering Mathematics	42	0	35	3	5	3	5
		Probability & Statistics	21	0	21	2		2	
U1.2	<i>Materials science</i>	Materials Science	21	0	21	2	6,5	2	6,5
		Measurement & Instruments	21	0	21	2		2	
		Thermal effect	42	0	35	2,5		2,5	
U1.3	<i>Mechanics 1</i>	Solid Mechanics	21	0	21	2	6,5	2	6,5
		Construction General Process	42	0	35	2,5		2,5	
		Fluid Mechanics	42	0	35	2		2	
U1.4	<i>Computer &amp; Technologies</i>	Algorithm & C Programming	42	0	35	3	5	3	5
		Computer Aided Drawing CAD 1	0	42	21	2		2	
U1.5	<i>Languages &amp; Soft Skills</i>	English I	21	0	21	1,5	5	1,5	5
		Project Management	21	0	21	2		2	
		Personnel Development	21	0	21	1,5		1,5	
U1.6	<i>Projects</i>	Mini Project	0	21	21	2	2	2	2
<b>SUB TOTAL</b>			<b>357</b>	<b>63</b>	<b>364</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>
<b>Total Semester Workload</b>			<b>784</b>						

One semester of study length is 14 weeks and 1 week for exams

The Student Self Study Hours SSH are estimated as follows: Module with weekly hours  $\geq 3$  SSH=2.5Hrs; Module with weekly hours  $< 3$  SSH=1.5Hr

The average Workload/ week =  $784H/14= 56$  Hours

The Total Semester ECTS Credits = 30

IC: Integrated Course (Classroom course & guided work) PW: Practical Workshop (in Lab) SSH: Self Study Hours



### CIVIL ENGINEERING Year 1 Semester 2

Code	UNIT	Modules	Semester Credit Hours			COEFFICIENT		ECTS Credits	
			IC	PW	SSH	Module	Unit	Module	Unit
U2.1	<i>Mathematics 2</i>	Numerical Analysis	0	21	21	2	4	2	4
		Operational Research	21	0	21	2		2	
U2.2	<i>Mechanics 2</i>	Continuum Mechanics	21	0	21	2	5	2	5
		Resistance Of Material ROM	42	0	35	3		3	
U2.3	<i>Languages &amp; Soft Skills</i>	Communication Techniques	21	0	21	1,5	3	1,5	3
		English II	21	0	21	1,5		1,5	
U2.4	<i>Technical Science</i>	Hydraulic & Hydrology	42	0	35	2,5	5	2,5	5
		Topography	30	12	35	2,5		2,5	
U2.5	<i>Project</i>	Mini Project	0	21	21	2	2	2	2
U2.6	<i>Computer &amp; Material Sciences</i>	Computer Aided Drawing CAD 2	0	42	35	2	7	2	7
		Concrete & Material Technology	21	21	35	3		3	
		Geology et Geophysics	42	0	35	2		2	
U2.7	<i>Procurement &amp; BIM</i>	Public Procurement Process	21	0	21	2	4	2	4
		Building Information Modeling BIM 1	0	21	21	2		2	
<b>SUB TOTAL</b>			<b>282</b>	<b>138</b>	<b>378</b>	<b>30</b>	<b>30</b>	<b>28</b>	<b>30</b>
<b>Total Semester Workload</b>			<b>798</b>						

One semester of study length is 14 weeks and 1 week for exams

The Student Self Study Hours SSH are estimated as follows: Module with weekly hours  $\geq 3$  SSH=2.5Hrs; Module with weekly hours  $< 3$  SSH=1.5Hr

The average Workload/ week =  $777H/14 = 55.5$  Hours

The Total Semester ECTS Credits = 30

IC: Integrated Course (Classroom course & guided work) PW: Practical Workshop (in Lab) SSH: Self Study Hours



### CIVIL ENGINEERING Year 2 Semester 1

Code	UNIT	Modules	Semester Credit Hours			COEFFICIENT		ECTS Credits	
			IC	PW	SSH	Module	Unit	Module	Unit
U3.1	<i>Mechanics 3</i>	Soil Mechanics 1	42	0	35	3	8	3	8
		Diagnosis & Rehabilitation of Buildings	21	0	21	2		2	
		Theory of Structure 1	42	21	35	3		3	
U3.2	<i>Building Technique</i>	Urbanism	21	0	21	1,5	5,5	1,5	5,5
		Building Information Modeling BIM 2	0	21	21	2		2	
		Building Physics	21	0	21	2		2	
U3.3	<i>Public Works 1</i>	Economic Evaluation of Constructions	21	0	21	2	7	2	7
		Worksite Organization	21	0	21	2		2	
		Road Engineering 1	42	0	35	3		3	
U3.4	<i>Languages &amp; Soft Skills</i>	English TOEIC 1	21	0	21	1,5	3	1,5	3
		Corporate Management	21	0	21	1,5		1,5	
U3.5	<i>Project Management</i>	Reinforced Concrete 1	42	0	35	3	4,5	3	4,5
		Building Simulation (Arche)	0	42	35	1,5		1,5	
U3.6	<i>Project</i>	Annual Project 1	0	21	21	2	2	2	2
<b>SUB TOTAL</b>			<b>315</b>	<b>105</b>	<b>364</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>
<b>Total Semester Workload</b>			<b>784</b>						

The Student Self Study Hours SSH are estimated as follows: Module with weekly hours  $\geq 3$  SSH=2.5Hrs; Module with weekly hours  $< 3$  SSH=1.5Hr

The average Workload/ week =  $784H/14= 56$  Hours

The Total Semester ECTS Credits = 30

IC: Integrated Course (Classroom course & guided work) PW: Practical Workshop (in Lab) SSH: Self Study Hours



### CIVIL ENGINEERING Year 2 Semester 2

Code	UNIT	Modules	Semester Credit Hours			COEFFICIENT		ECTS Credits	
			IC	PW	SSH	Module	Unit	Module	Unit
U4.1	<i>Mechanics 4</i>	Soil Mechanics 2	42	21	35	3	8	3	8
		Building Information Modeling BIM 3	0	21	21	2		2	
		Theory of Structures 2	42	0	35	3		3	
U3.2	<i>Building Technique</i>	Reinforced Concrete 2	42	0	35	3	8	3	8
		Building Projects and Metallic Construction MC (Robot Software)	0	21	35	2		2	
		Metallic Construction CM 1	42	0	35	3		3	
U4.3	<i>Public Works 2</i>	Road Engineering 2	42	0	35	3	8	3	8
		Urban Hydraulics	42	0	35	3		3	
		Road Project Design	0	42	35	2		2	
U4.4	<i>Project Project</i>	Annual Project 2	0	21	21	2	2	2	2
U4.5	<i>ManagemLanguages &amp; Soft Skills</i>	English TOEIC 2	21	0	21	2	4	2	4
		Business Start Up	21	0	21	2		2	
<b>SUB TOTAL</b>			<b>294</b>	<b>126</b>	<b>364</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>
<b>Total Semester Workload</b>			<b>784</b>						

The Student Self Study Hours SSH are estimated as follows: Module with weekly hours  $\geq 3$  SSH=2.5Hrs; Module with weekly hours  $< 3$  SSH=1.5Hr

The average Workload/ week =  $784H/14= 56$  Hours

The Total Semester ECTS Credits = 30

IC: Integrated Course (Classroom course & guided work) PW: Practical Workshop (in Lab) SSH: Self Study Hours





### CIVIL ENGINEERING Year 3 Semester 1

Code	UNIT	Modules	Semester Credit Hours			COEFFICIENT		ECTS Credits	
			IC	PW	SSH	Module	Unit	Module	Unit
U5.1	<i>Mechanics</i>	Earthwork	21	21	35	3	9	3	9
		Structure Dynamics	42	0	35	3		3	
		Finite Element Method FEM	21	21	35	3		3	
U5.2	<i>Sciences &amp; Technology</i>	Prestressed Concrete	42	0	35	3	8	3	8
		Case Study (CAD)	21	21	35	2		2	
		Metallic Construction 2	42	0	35	3		3	
U5.3	<i>Public Works 3</i>	Roads & Various Networks RVN	21	0	21	2	6	2	6
		Bridges Engineering	42	21	35	4		4	
U5.4	<i>BIM &amp; Applications</i>	Building Information Modeling BIM 4	0	42	35	3	7	3	7
		Lean Start-Up	21	0	21	2		2	
		Land Law	21	0	21	2		2	
<b>SUB TOTAL</b>			<b>294</b>	<b>126</b>	<b>343</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>
<b>Total Semester Workload</b>			<b>763</b>						

One semester of study length is 14 weeks and 1 week for exams

The Student Self Study Hours SSH are estimated as follows: Module with weekly hours  $\geq 3$  SSH=2.5Hrs; Module with weekly hours  $< 3$  SSH=1.5Hr

The average Workload/ week =  $763H/14 = 54.5$  Hours

The Total Semester ECTS Credits = 30

IC: Integrated Course (Classroom course & guided work) PW: Practical Workshop (in Lab) SSH: Self Study Hours



### CIVIL ENGINEERING Year 3 Semester 2

Code	UNIT	Credit Hours	IC	Project	COEF	ECTS Credit
U6.1	<i>Graduation Research Project (4-6 months)</i>	450	-	450	-	30
U6.2	<i>Internship 1 (1-2 months)</i>	-	-	-	-	-
U6.3	<i>Internship 2 (1-2 months)</i>	-	-	-	-	-
<b>Total Semester Workload</b>		<b>450</b>	<b>0</b>	<b>450</b>	<b>0</b>	<b>30</b>

The Total Semester ECTS Credits = 30