

PROGRAM OF STUDY FOR A BACHELOR OF SCIENCE IN CIVIL ENGINEERING AND SUSTAINABLE DESIGN					
MAJOR REQUIREMENTS					
AUB COURSE CODE	AUB MED COURSE CODE	COURSE NAME	PREREQUISITE	ECTS	GRADES
CIVE 200	CESD 100	Introduction to Civil Engineering Design	Counted as <i>Understanding Ourselves: Societies and Individuals</i> in General Education Program	0*	
CIVE 201	CESD 101	Engineering Drawings and 3D BIM		6	
CIVE 210	CESD 110	Introduction to Solid Mechanics	Prerequisite: MATH 100	8	
CIVE 202	CESD 180	Engineered Systems and Sustainability		6	
CIVE 311	CESD 211	Cornerstone Structural Analysis and Design	Prerequisites: MATH 100, CESD 110	8	
CIVE 340	CESD 240	Fluid Mechanics and Hydraulics	Prerequisites: MATH 100, PHYS 100, CESD 110	6	
CIVE 301	CESD 270	Remote Sensing and Digital Mapping	Prerequisite: CESD 101	6	
CIVE 302	CESD 271	Data Science for Engineers	Prerequisites: CSEN 101, MATH 100, STAT 101	6	
CIVE 370	CESD 281	Sustainable Construction Materials and Technology	Prerequisite: CESD 110	6	
CIVE 413	CESD 312	Reinforced Concrete Design	Prerequisites: CESD 211, CESD 281	6	
CIVE 412	CESD 313	Steel Design	Prerequisite: CESD 211	6	
CIVE 421	CESD 320	Engineering Project Management and Economics		6	
CIVE 430	CESD 330	Geotechnical Engineering and Design	Prerequisites: CESD 110, GEOL 227	6	
CIVE 541	CESD 341	Engineering Hydrology	Prerequisites: CESD 240, MATH 101	6	
CIVE 460	CESD 360	Transportation Engineering and Design	Prerequisites: STAT 101, CSEN 101, CESD 270	6	
CIVE 400	CESD 400	Approved Experience	Prerequisite: Completion of a minimum of 160 ECTS.	0	
CIVE 616	CESD 417	Earthquake Engineering	Prerequisite: CESD 211	6	
CIVE 550	CESD 450	Environmental Engineering and Design	Prerequisite: CESD 240	6	
CIVE 401	CESD 482	Capstone Sustainability Project	Prerequisite: Completion of a minimum of 180 ECTS. Counted as <i>Understanding Our Role in the World: Our Engagement</i> in General Education Program	0**	
	Elective	CESD Elective		6	
	Elective	CESD Elective		6	
	Elective	CESD Elective		6	
				Total Credits:	118 ECTS
REQUIRED BASIC MATH & SCIENCE COURSES					
MATH 202	MATH 101	Differential Equations	Prerequisite: MATH 100	6	
	MATH 203	Numerical Computing	Prerequisites: CMPS 100 and MATH 100. Prerequisite or Co-requisite: MATH 201. Students cannot receive credit for both MATH 203 and CMPS 351	6	
MATH 251					
	STAT 101	Introduction to Probability and Random Variables (Applied Probability and Statistics for Engineers)	Prerequisite: MATH 100. Students who complete STAT 101 cannot receive credit for STAT 100	6	
STAT 230					
CHEM 202	CHEM 101	Introduction to Environmental Chemistry		6	
	CHEM 101L	Introduction to Environmental Chemistry Lab		4	
PHYS 210	PHYS 100	Introductory Physics II		6	
	PHYS 100L	Introductory Physics II Lab		2	
				Total Credits:	36 ECTS
GENERAL EDUCATION REQUIREMENTS					
UNDERSTANDING OUR COMMUNICATION					
AUB COURSE CODE	COURSE	COURSE NAME	NOTE	ECTS	GRADE
ENGL 203	ENGL 100	Academic English	English Communication I	6	
ENGL 206	ENGL 102	Technical English	English Communication II	6	
	TBD		Foreign Language in Arabic or Greek	6	
	TBD		Writing in the Discipline (fulfilled through an ILA-Designated Course)	0	
				CREDITS	18 ECTS
UNDERSTANDING THE WORLD					
AUB COURSE CODE	COURSE	COURSE NAME	NOTE	ECTS	GRADE
BIOL 210	BIOL 101	Human Biology	The Earth and Planetary Systems Or The Living World	6	
	CSEN 101	Introduction to Programming	Quantitative Reasoning	6	
	GEOL 227	Climate and Earth Sciences for Engineers	The Earth And Planetary Systems Or The Living World Or Quantitative Reasoning	6	
MATH 201	MATH 100	Calculus and Analytic Geometry III	The Earth And Planetary Systems Or The Living World Or Quantitative Reasoning	6	
				CREDITS	24 ECTS
UNDERSTANDING OURSELVES (to include 6 ECTS in Greek Studies) AT LEAST TWO FROM EACH CATEGORY					
AUB COURSE CODE	COURSE	COURSE NAME	NOTE	ECTS	GRADE
	TBD		Cultures and Histories	6	
	TBD		Cultures and Histories	6	
	TBD		Cultures and Histories or Societies and Individuals	6	
CIVE 200	CESD 100	Introduction to Civil Engineering Design	Societies and Individuals	6*	
	TBD		Societies and Individuals	6	
				CREDITS	30 ECTS
UNDERSTANDING OUR ROLE IN THE WORLD					
AUB COURSE CODE	COURSE	COURSE NAME	NOTE	ECTS	GRADE
INDE 410	INDE 330	Engineering Ethics	Our Values	6	
CIVE 401	CESD 482	Capstone Sustainability Project	Our Engagement	6**	
				CREDITS	12 ECTS
GENERAL EDUCATION FREE ELECTIVE					
AUB COURSE CODE	COURSE	COURSE NAME	NOTE	ECTS	GRADE
	TBD		Any General Education course	6	
THEMATIC REQUIREMENTS					
		First-Year Student Experience (0 ECTS Requirement)			
		Beirut Residency (0 ECTS Requirement)			
		Social Inequalities (6 ECTS fulfilled through courses designated by ILA as such)			
		History of Ideas (6 ECTS fulfilled through courses designated by ILA as such)			
				TOTAL LIBERAL ARTS CREDITS	90
				TOTAL CREDITS FOR GRADUATION	244 ECTS