

# CIVIL ENGINEERING



▶▶ LEVELS OF ACHIEVEMENT ■■■■■■■■ 1 = BEGINNER ■■■■■■■■ 2 = INTERMEDIATE ■■■■■■■■ 3 = ADVANCED

▶▶ CORE CREDITS 35 ▶▶ MANDATORY PROGRAM CREDITS 147 ▶▶ ELECTIVE CREDITS 18

COURSE NAME	CREDITS	COURSE TYPE	CORE COMPETENCIES										SPECIFIC COMPETENCIES										REQUIREMENTS			
			Written Communication	Oral Communication	Critical Thinking	Quantitative Reasoning	Information Literacy	Citizenship	Innovative Thinking	A- Science Knowledge Application	B- Experiment Planning and Conducting	C- Process and System Design	D- Multidisciplinary Teamwork	E- Engineering Problem-Solving	F- Ethical and Professional Responsibility	G- Effective Communication	H- Engineering Solution Impact Assessment	I- Continuous and Independent Learning	J- Contemporary Knowledge	K- Use of Modern Engineering Tools						
<b>▶▶ TERM 1 CRD 18</b>																										
Language Comprehension and Production I	4	CORE	1																				HU24 Leveling of language or have approved Language PDN (level definition test)			
Basic Math	3	CORE																						MA393 Leveling Math or have approved Maths PDN (level definition test)		
Chemistry	4	PROGRAM			1	1	1																	MA393 Leveling Math or have approved Maths PDN (level definition test)		
Computer-aided Drawing	4	PROGRAM																					1	MA393 Leveling Math or have approved Maths PDN (level definition test)		
Introduction to Civil Engineering	2	PROGRAM	1	1																				Does not have requirements		
<b>▶▶ TERM 2 CRD 19</b>																										
Language Comprehension and Production II	4	CORE	2		1																			HU03 Language Comprehension and Production I		
Creativity Workshop	3	CORE																						Does not have requirements		
Calculus I	6	CORE				1																		MA420 Basic Mathematics		
Geology	3	PROGRAM																						MA465 Chemistry		
Topography	4	PROGRAM	1	1																				C1161 Computer-aided Drawing and MA420 Basic Mathematics		
<b>▶▶ TERM 3 CRD 19</b>																										
Academic Research Seminar I	2	CORE	1		1		1																	HU03 Language Comprehension and Production I		
Calculus II	6	PROGRAM					2																	MA262 Calculus I		
Physics 1	4	CORE			1	1																		MA262 Calculus I and MA95 Leveling of Physics or have approved Physics PDN (level definition test)		
Statistics	4	CORE					2																	MA262 Calculus I		
Construction Materials	3	PROGRAM																					2	C1160 Introduction to Civil Engineering and MA420 Basic Math and MA465 Chemistry		
<b>▶▶ TERM 4 CRD 22</b>																										
Management Economics (Engineering)	3	PROGRAM																						MA262 Calculus I		
Differential equations and linear algebra	6	PROGRAM					2																	MA263 Calculus II		
Physics 2	6	PROGRAM					2	2																MA466 Physics I		
Statics	4	PROGRAM																						MA466 Physics I		
Concrete Technology	3	PROGRAM					2																	C1164 Construction Materials		
<b>▶▶ TERM 5 CRD 23</b>																										
Business Management	3	PROGRAM																						EF40 Management Economics (Engineering)		
Dynamics	3	PROGRAM																						MA263 Calculus II and C1119 Statics		
Installations	3	PROGRAM	2	2																				C1165 Concrete Technology		
Ethics and Citizenship	2	PROGRAM																						HU24 Leveling of language or have approved Language PDN (level definition test)		
Strength of Materials	5	PROGRAM																						MA263 Calculus II and C1119 Statics		
Strength of Soils	4	PROGRAM					2																	MA263 Calculus II and C1119 Statics		
<b>▶▶ TERM 6 CRD 22</b>																										
Building Modeling	2	PROGRAM																						C1165 Concrete Technology		
Geotechnical Engineering	4	PROGRAM																						C181 Strength of Soils		
Fluid Mechanics	4	PROGRAM																						C195 Dynamics and MA264 Differential equations and linear algebra		
Structural Analysis I	4	PROGRAM																						C1168 Strength of Materials		
Introduction to Computational Methods	3	PROGRAM																						C195 Dynamics and MA264 Differential equations and linear algebra		
Highway Engineering	3	PROGRAM	2	2																				C181 Strength of Soils and C1163 Topography		
<b>▶▶ TERM 7 CRD 20</b>																										
Financial Management	3	PROGRAM																						AD214 Business Management		
Costs and Budgeting	3	PROGRAM																						2	C1165 Concrete Technology	
Stream Hydraulics	3	PROGRAM																							C1170 Fluid Mechanics	
Structural Analysis II	3	PROGRAM																							C110 Structural Analysis I and C1171 Introduction to Computational Methods	
Behavior and Design of Concrete Structures	4	PROGRAM																							C110 Structural Analysis I	
Construction	3	PROGRAM																							Simultaneously with C1173 Costs and Budgeting	
<b>▶▶ TERM 8 CRD 21</b>																										
Academic Research Seminar II (Engineering)	3	PROGRAM	2	2																					C110 Structural Analysis I	
Hydrology	3	PROGRAM																							C1174 Stream Hydraulics	
Traffic Engineering and Urban Road Design	3	PROGRAM																							C1172 Highway Engineering and C1169 Geotechnical Engineering	
Environmental Engineering	3	PROGRAM																							C1169 Geotechnical Engineering	
Earthquake-Resistant Engineering	4	PROGRAM																							C1177 Structural Analysis II and C1178 Behavior and Design of Concrete Structures	
Project Planning and Control	3	PROGRAM	2	2																					C1173 Costs and Budgeting	
<b>▶▶ TERM 9 CRD 18</b>																										
Hydraulic Resources Engineering	3	PROGRAM																							C1180 Hydrology	
Productivity in Construction	3	PROGRAM																							2	C1184 Project Planning and Control
Thesis Project I	5	PROGRAM																								HU61 English 5 and IN210 Academic Research Seminar II (Engineering)
Elective	3	ELECTIVE																							-	
Elective	3	ELECTIVE																							-	
Elective	3	ELECTIVE																							-	
<b>▶▶ TERM 10 CRD 17</b>																										
Building	4	PROGRAM																							C1183 Earthquake-Resistant Engineering	
Project Construction Management	3	PROGRAM																							C1184 Project Planning and Control	
Thesis Project II	5	PROGRAM																								C1186 Thesis Project I
Elective	3	ELECTIVE																							-	
Elective	3	ELECTIVE																							-	
Elective	3	ELECTIVE																							-	