



The University Of Georgia

Program name:	Civil Engineering
Study Level:	Undergraduate
Program leader:	Saeid Sahmani
Study language:	English
Qualification:	Bachelor of Civil Engineering 0732.1.2
Program capacity:	240
Program permission:	English language B1 level (70%) and other legislative requirements, namely citizens of Georgia should successfully pass Unified National Entrance Examinations. Foreign high-school graduates who received complete general education abroad or its equivalent and the last two years of complete general education had studied abroad or students who lived abroad for the last two or more years and who are currently studying abroad in higher educational institutions recognized by the legislation of the host countries will be able to enter the program without passing Uniform National Entrance Examinations according to Order №224/N of the Minister of Education and Science of Georgia (December 29, 2011).
Program goals:	The aim is to provide students with a broad and thorough education in Civil Engineering fundamentals, applications, and design that prepares them for the practice of civil engineering at the professional level with the confidence and skills necessary to meet the technical and social challenges of the future . The curriculum incorporates all four main technical areas of study in Civil Engineering including structural analysis and design, materials and construction, water and environment, as well as management and engineering economics.
Methods for Attaining Learning Outcomes:	• Lecture - Seminar • Working with the book • Demonstration • Discussions • Practical lessons • Laboratory exercises • Interactive lessons • Team work • Setting problems and solving them • Verbal and oral method • Critical analysis • Problem-solving tasks
Learning outcomes:	Outcomes The graduate will have an ability to: • identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics. • apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors. • communicate effectively with a range of audiences. • recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts. • function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives. • develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions. • acquire and apply new knowledge as needed, using appropriate learning strategies.
Date of approval:	05-04-2022
Approval protocol number:	
Date of program update:	
Update protocol number:	
Program details:	The student can be guided by the proposed curriculum and individually draw up his/her personal curriculum, taking into account the special needs of subjects. In the last semester of study, the student chooses a topic of Capstone project from the proposed areas. The Capstone project is carried out in groups, which contributes to the development of filed knowledge and teamwork skills. The program provides for an optional course internship, which will help the student, if necessary, to better formulate himself when choosing a topic for a Capstone project.

Teaching Process Characteristics:	The length for undergraduate studies is defined as 4 years or 8 semesters. In order to obtain a bachelor's degree, a student must complete 240 credits, which includes the following distribution of credits:
	Program Core: 204 ECTS Program Elective: 18 ECTS Free Elective: 18 ECTS
	The program electives are conditionally divided into two groups: The subjects presented by the first group should be elected for the

Program Core

Code	Subject	ECTS	Semester
MATH1115E	Calculus I	6	1
MATH1123E	Linear Algebra and Analytical Geometry	6	1
CENG1032	General Chemistry for Engineers	6	1
CENG1031	Civil Engineering Drawing (CAD)	6	1
MATH1166E	Calculus II	6	2
PHYS2003E	Physics I	6	2
EENG2215E	Statics and Dynamics	6	2
PHYS2004E	Physics II	6	3
CENG1001	Engineering Surveying	6	3
CENG1002	Strength of Materials 1 + Lab	9	3
MATH2004E	Probability and Statistics	6	3
EENG1218E	Building Materials	6	3
CENG1003	Structural Analysis 1	6	4
CENG1004	Strength of Materials 2 + Lab	9	4
CENG1005	Fluid Mechanics	3	4
EENG2005E	Engineering Mathematics	6	4
CENG1006	Engineering Geology	3	4
CENG1007	Structural Analysis 2	6	5
CENG1008	Transportation Engineering	6	5
CENG1009	Concrete Technology + Lab	9	5
CENG1010	Environmental Engineering	6	5
CENG1034	Structural Steel Design 1	6	6
CENG1035	Reinforced Concrete Structure Design 1	6	6
CENG1033	Soil Mechanics + Lab	9	6
CENG1011	Water Engineering	6	6
CENG1036	Practice in Civil Engineering	6	7
CENG1012	Design of Hydraulic Structures	6	7
CENG1013	Principles of Foundation Engineering	6	7
CENG1014	Construction Management	6	7
CENG1015	Capstone Project	6	8
CENG1016	Road Construction	6	8
CENG1017	Engineering Economics	6	8
CENG1018	Principles of Earthquake Engineering	6	8
	Total ECTS to be taken:	204	

Program Elective

Code	Subject	ECTS	
HIST1118E	Civilizations and Developments of Humankind	6	
KART1220E	Academic Writing	6	
CENG1019	Mechanical Vibrations	3	
CENG1020	Safety on Construction Sites	3	
CENG1021	Loading Analysis	3	
CENG1022	Basics of Electro-Mechanical Systems	6	
CENG1023	Remote Sensing	3	
CENG1024	Introduction to Architecture	3	
CENG1025	Structural Steel Design 2	6	
CENG1026	Urban and Regional Planning	6	
CENG1027	Reinforced Concrete Structure Design 2	6	
CENG1028	Solid Waste Management	6	
CENG1029	Civil Engineering Laws, Contracts and Ethics	6	
CENG1030	Pavement Materials and Design	6	

Total ECTS to be taken: 69

[Matrix Of Prerequisites](#)

Point	GPA	The university assessment	The general assessment in Georgia	
97-100	4,00	A+	A	Excellent
94-96	3,75	A		
91-93	3,50	A-		
87-90	3,25	B+	B	Very good
84-86	3,00	B		
81-83	2,75	B-		
77-80	2,50	C+	C	good
74-76	2,25	C		
71-73	2,00	C-		
67-70	1,75	D+	D	Satisfactory
64-66	1,50	D		
61-63	1,25	D-		
51-60	1,00	E	E	Sufficient
Not passed				
41-50		FX	FX	Insufficient
<40		F	F	Failed