

№	Learning Components	Prerequisites	Semesters							
			I	II	III	IV	V	VI	VII	VIII
Compulsory Free Component - 19 Credits										
1	Practical Aspects of using the Georgian Language		4							
2	English B2.1		5							
3	English B2.2	<i>English B2.1</i>		5						
4	English Language (Professional)	<i>English B2.2</i>			5					
Compulsory Component of the Main Field of Study - 161 Credits										
1	Digital Literacy		5							
2	Programming Fundamentals		5							
3	Foundations of Linear Algebra and Analytic Geometry		5							
4	Computer Architecture and Organization		5							
5	Fundamentals of Web Technologies		5							
6	Object-Oriented Programming	<i>Programming Fundamentals</i>		5						
7	Calculus I	<i>Foundations of Linear Algebra and Analytic Geometry</i>		5						

8	Operating Systems	<i>Computer Architecture and Organization</i>		5						
9	Database Management Fundamentals	<i>Digital Literacy</i>		5						
10	Web Programming (Client-Side)	<i>Fundamentals of Web Technologies; Programming Fundamentals</i>		5						
11	Programming in Python	<i>Object-Oriented Programming</i>			5					
12	Calculus 2	<i>Calculus 1</i>			6					
13	Computer Networks	<i>Operating Systems</i>			4					
14	Database Management System – MS SQL Server	<i>Database Management Fundamentals</i>			5					
15	Web Programming (Server-Side)	<i>Web Programming (Client-Side); Database Management Fundamentals</i>			5					
16	Programming on the JVM Platform	<i>Object-Oriented Programming; English B2.2</i>				6				
17	Algorithms and Data Structures	<i>Programming in Python; Calculus 2; English B2.2</i>				5				
18	Probability Theory and Mathematical Statistics	<i>Programming in Python; Calculus 2</i>				5				
19	Fundamentals of System Administration	<i>Operating Systems</i>				5				
20	Fundamentals of Data Science with Python	<i>Probability Theory and Mathematical Statistics; English B2.2</i>					6			
21	Discrete Mathematics	<i>Probability Theory and Mathematical Statistics</i>					5			
22	Fundamentals of IT Project Management	<i>Practical Aspects of using the Georgian Language; English B2.2</i>					4			
23	Cybersecurity	<i>Computer Networks</i>					5			
24	Artificial Intelligence	<i>Fundamentals of Data Science with Python; Discrete Mathematics</i>						6		
25	Human-Computer Interaction	<i>Digital Literacy; English B2.2</i>						4		

26	Software Engineering	<i>Fundamentals of Data Science with Python</i>						5			
27	Machine Learning	<i>Artificial Intelligence</i>							5		
28	Professional Ethics	<i>Cybersecurity; Artificial Intelligence; English Language B2.2</i>							4		
29	Specialization Project	<i>Completion of all compulsory course credits by the end of the 6th semester</i>							6		
30	Bachelor's Thesis	<i>All compulsory courses in the main field of study (excluding Specialization Project)</i>								15	
<i>Elective component of the main field of study - 35 ECTS</i>							5	5	10	10	5
1	General Physics						5				
2	Computer Graphics Tools (Photoshop)						5				
3	Non-Relational Databases	<i>Database Management System – MS SQL Server; English B2.2</i>					5				
4	Programming on the Arduino Platform	<i>Programming Fundamentals</i>					5				
5	Professional Career Development	<i>English B2.2</i>						5			
6	3D Graphics (ArchiCAD)							5			
7	Front-End Technologies	<i>Web Programming (Client-Side); English B2.2</i>						5			
8	Fundamentals of IoT (Internet of Things)							5			
9	3D Graphics (AutoCAD)								5		
10	Fundamentals of Systems Programming	<i>Object-Oriented Programming; Fundamentals of System Administration; English B2.2</i>							4		
11	Back-End Technologies	<i>Web Programming (Server-Side); English B2.2</i>							6		
12	Programming on the .NET Platform I	<i>Object-Oriented Programming</i>							5		

13	Application Development on the JVM Platform	<i>Programming on the JVM Platform; Database Management System – MS SQL Server; English B2.2</i>						6			
14	Optimization Models	<i>Foundations of Linear Algebra and Analytic Geometry</i>						4			
15	DevOps	<i>Fundamentals of Systems Programming</i>						4			
16	Cloud-Based Technologies	<i>Database Management System – MS SQL Server; English B2.2</i>							5		
17	Fundamentals of Information Security	<i>Computer Networks English B2.2</i>							4		
18	Mobile Application Development	<i>Programming on the JVM Platform; English B2.2</i>							6		
19	Programming on the .NET Platform II	<i>Programming on the .NET Platform I; Database Management System – MS SQL Server</i>							5		
20	Computer Game Programming	<i>Web Programming (Client-Side); English B2.2</i>							5		
21	Analytical Geometry	<i>Foundations of Linear Algebra and Analytic Geometry</i>							5		
22	Mathematical Modeling	<i>Calculus 2</i>								5	
23	Blockchain-Based Technologies	<i>Database Management System – MS SQL Server; English B2.2</i>								5	
24	Applied Programming	<i>Calculus 2; Object-Oriented Programming</i>								5	
25	Neural Networks	<i>Artificial Intelligence</i>								5	
<i>Free Elective component aimed at developing general transferable skills, within which the student is given the opportunity to choose courses from any educational program of the corresponding level offered at the university, in compliance with the prerequisites for course enrollment – 25 ECTS.</i>								5	5	5	10
Semester-wise Distribution of Credits			34	30	30	26	30	30	30	30	

Note:

1. It is mandatory to confirm English language proficiency at the B2.2 level or to achieve this level within the program. The student confirms their level of English language proficiency in accordance with the “Rule for Determining the Language Competence of a Student at European University.”
2. Within the program, the student begins studying English at the level confirmed in accordance with the “Rule for Determining the Language Competence of a Student at European University.” If a student is unable to confirm English language proficiency at the B1 level, they begin English language studies from the corresponding level confirmed by this rule (English A1 / English A2 / English B1.1 / English B1.2). In order to reach the B2.1 level, the student completes the required lower-level English courses (English A1 / English A2 / English B1.1 / English B1.2) using the free elective credits provided by the program.
3. If the student confirms English language proficiency at the B2 level in accordance with the “Rule for Determining the Language Competence of a Student at European University,” they are exempt from taking the English language component. The credits allocated for English (10 credits) are instead fulfilled through elective courses within the main field of study or through free elective credits. If the student confirms a higher level than the program’s defined entry level (B2.1), the remaining credit volume is also fulfilled by elective courses within the main field of study or free elective credits.
4. In those academic courses where English language proficiency at the B2.2 level is indicated as a prerequisite, English-language textbooks are used as mandatory literature.
5. The free elective component credits, within which the student is given the opportunity to choose courses from any educational program of the corresponding level offered at the university, may be fulfilled through elective courses from the main field of study in the Bachelor's program in computer science.