№	Learning Components	Prerequisites	Semesters							
			I	II	III	IV	V	VI	VII	VIII
Compulsory Free Component - 19 Credits										
1	Academic Writing		4							
2	English B2.1		5							
3	English B2.2	*English B2.1*		5						
4	English Language (Professional)	*English B2.2*			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	*Programming Fundamentals*		5						
7	Calculus 1	*Foundations of Linear Algebra and Analytic Geometry*		5						
8	Operating Systems	*Computer Architecture and Organization*		5						
9	Database Management Fundamentals	*Digital Literacy*		5						
10	Web Programming (Client-Side)	*Fundamentals of Web Technologies;* *Programming Fundamentals*		5						

11	Programming in Python	*Object-Oriented Programming*			5					
12	Calculus 2	*Calculus 1*			6					
13	Computer Networks	*Operating Systems*			4					
14	Database Management System – MS SQL Server	*Database Management Fundamentals*			5					
15	Web Programming (Server-Side)	*Web Programming (Client-Side);* *Database Management Fundamentals*			5					
16	Programming on the JVM Platform	*Object-Oriented Programming*				6				
17	Algorithms and Data Structures	*Programming in Python;* *Calculus 2*				5				
18	Probability Theory and Mathematical Statistics	*Programming in Python;* *Calculus 2*				5				
19	Fundamentals of System Administration	*Operating Systems*				5				
20	Fundamentals of Data Science with Python	*Probability Theory and Mathematical Statistics*					6			
21	Discrete Mathematics	*Probability Theory and Mathematical Statistics*					5			
22	Fundamentals of IT Project Management	*Academic Writing*					4			
23	Cybersecurity	*Computer Networks*					5			
24	Artificial Intelligence	*Fundamentals of Data Science with Python;* *Discrete Mathematics*						6		
25	Human-Computer Interaction	*Digital Literacy*						4		
26	Software Engineering	*Fundamentals of Data Science with Python*						5		
27	Machine Learning	*Artificial Intelligence*							5	
28	Professional Ethics	*Cybersecurity;* *Artificial Intelligence*							4	
29	Specialization Project	*Mandatory Courses for Semesters I-VI*							6	

30	Bachelor's Thesis	*All compulsory courses in the main field of study (excluding Specialization Project)*								15
Elective component of the main field of study - 35 ECTS						**5**	**5**	**10**	**10**	**5**
1	General Physics					5				
2	Non-Relational Databases	*Database Management System – MS SQL Server*				5				
3	Programming on the Arduino Platform	*Programming Fundamentals*				5				
4	Professional Career Development						5			
5	Front-End Technologies	*Web Programming (Client-Side)*					5			
6	Fundamentals of IoT (Internet of Things)						5			
7	Fundamentals of System Programming	*Object-Oriented Programming;* *Fundamentals of System Administration*						4		
8	Back-End Technologies	*Web Programming (Server-Side)*						6		
9	Programming on the .NET Platform I	*Object-Oriented Programming*						5		
10	Application Development on the JVM Platform	*Programming on the JVM Platform;* *Database Management System – MS SQL Server*						6		
11	DevOps	*Fundamentals of System Programming*						4		
12	Cloud-Based Technologies	*Database Management System – MS SQL Server*							5	
13	Fundamentals of Information Security	*Computer Networks*							4	
14	Mobile Application Development	*Programming on the JVM Platform*							6	
15	Programming on the .NET Platform II	*Programming on the .NET Platform I;* *Database Management System – MS SQL Server*							5	

16	Fundamentals of Differential Equations	*Calculus 2*							5	
17	Mathematical Modeling	*Calculus 2*								5
18	Blockchain-Based Technologies	*Database Management System – MS SQL Server*								5
19	Applied Programming	*Calculus 2;* *Object-Oriented Programming*								5
20	Neural Networks	*Artificial Intelligence*								5
Free elective component is 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							**5**	**5**	**5**	**10**
Semester-wise Distribution of Credits			**34**	**30**	**30**	**26**	**30**	**30**	**30**	**30**
Total			**240**							

Note:

1. *It is mandatory to confirm or achieve the level of English language proficiency at B2.2 within the framework of the program. The student confirms the level of English language proficiency in accordance with the "Rules for Determining the Language Competence of a Student of the European University".*
2. *In case the student confirms the level of English language proficiency at B2.2 in accordance with the "Rules for Determining the Language Competence of a Student of the European University", he/she is exempted from mastering the English language component and acquires the credits intended for the English language (10 credits) through elective courses of the main field of study or through credits determined for the free component.*
3. *The credits of the optional free component, within the framework of which the student is given the opportunity to choose courses from any educational program of the relevant level operating at the university, can be acquired through elective courses of the main field of study of Bachelor's programme in Computer Science.*