№	Learning Components	Prerequisites	Hours	Distribution of Hours					Semesters							
				Contact Hours			Total Contact Hours	Independent work Hours	I	II	III	IV	V	VI	VII	VIII
				Lecture	Working in a Working Group / Practical Work	Midterm Exam/ Final Exam										
Compulsory Free Component - 19 Credits																
1	Academic Writing		100	15	15	5	35	65	4							
2	English B2.1		125		60	5	65	60	5							
3	English B2.2	*English B2.1*	125		60	5	65	60		5						
4	English Language (Professional)	*English B2.2*	125		45	5	50	75			5					
Compulsory Component of the Main Field of Study - 161 Credits																
1	Digital Literacy		125	14	31	5	50	75	5							
2	Programming Fundamentals		125	16	29	4	49	76	5							
3	Foundations of Linear Algebra and Analytic Geometry		125	15	45	5	65	60	5							
4	Computer Architecture and Organization		125	15	30	3	48	77	5							
5	Fundamentals of Web Technologies		125	14	31	5	50	75	5							
6	Object-Oriented Programming	*Programming Fundamentals*	125	15	30	5	50	75		5						
7	Calculus 1	*Foundations of Linear Algebra and Analytic Geometry*	125	15	45	5	65	60		5						
8	Operating Systems	*Computer Architecture and Organization*	125	15	30	3	48	77		5						
9	Database Management Fundamentals	*Digital Literacy*	125	15	30	4	49	76		5						

10	Web Programming (Client-Side)	*Fundamentals of Web Technologies; Programming Fundamentals*	125	14	31	5	50	75		5						
11	Programming in Python	*Object-Oriented Programming*	125	15	30	4	49	76			5					
12	Calculus 2	*Calculus 1*	150	15	45	5	65	85			6					
13	Computer Networks	*Operating Systems*	100	15	30	3	48	52			4					
14	Database Management System – MS SQL Server	*Database Management Fundamentals*	125	14	31	4	49	76			5					
15	Web Programming (Server-Side)	*Web Programming (Client-Side); Database Management Fundamentals*	125	14	31	4	49	76			5					
16	Programming on the JVM Platform	*Object-Oriented Programming*	150	14	31	4	49	101				6				
17	Algorithms and Data Structures	*Programming in Python; Calculus 2*	125	15	30	5	50	75				5				
18	Probability Theory and Mathematical Statistics	*Programming in Python; Calculus 2*	125	15	30	5	50	75				5				
19	Fundamentals of System Administration	*Operating Systems*	125	15	30	3	48	77				5				
20	Fundamentals of Data Science with Python	*Probability Theory and Mathematical Statistics*	150	15	30	4	49	101					6			
21	Discrete Mathematics	*Probability Theory and Mathematical Statistics*	125	15	30	5	50	75					5			
22	Fundamentals of IT Project Management	*Academic Writing*	100	14	16	4	34	66					4			
23	Cybersecurity	*Computer Networks*	125	15	30	4	49	76					5			
24	Artificial Intelligence	*Fundamentals of Data Science with Python; Discrete Mathematics*	150	15	30	5	50	100						6		
25	Human-Computer Interaction	*Digital Literacy*	100	15	15	4	34	66						4		
26	Software Engineering	*Fundamentals of Data Science with Python*	125	16	29	4	49	76						5		
27	Machine Learning	*Artificial Intelligence*	125	15	30	4	49	76							5	

28	Professional Ethics	*Cybersecurity; Artificial Intelligence*	100	15	15	4	34	66							4		
29	Specialization Project	*Mandatory Courses for Semesters I-VI*	150		40	1	41	109							6		
30	Bachelor's Thesis	*All compulsory courses in the main field of study (excluding Specialization Project)*	375		30	4	34	341									15
Elective component of the main field of study - 35 ECTS												**5**	**5**	**10**	**10**	**5**	
1	General Physics		125	15	30	5	50	75				5					
2	Non-Relational Databases	*Database Management System – MS SQL Server*	125	15	30	4	49	76				5					
3	Programming on the Arduino Platform	*Programming Fundamentals*	125	10	35	4	49	76				5					
4	Professional Career Development		125	15	30	5	50	75					5				
5	Front-End Technologies	*Web Programming (Client-Side)*	125	14	31	4	49	76					5				
6	Fundamentals of IoT (Internet of Things)		125	6	39	4	49	76					5				
7	Fundamentals of System Programming	*Object-Oriented Programming; Fundamentals of System Administration*	100	15	15	4	34	66						4			
8	Back-End Technologies	*Web Programming (Server-Side)*	150	14	31	4	49	101						6			
9	Programming on the .NET Platform I	*Object-Oriented Programming*	125	14	31	5	50	75						5			
10	Application Development on the JVM Platform	*Programming on the JVM Platform; Database Management System – MS SQL Server*	150	14	31	5	50	100						6			
11	DevOps	*Fundamentals of System Programming*	100	15	15	4	34	66						4			
12	Cloud-Based Technologies	*Database Management System – MS SQL Server*	125	15	30	4	49	76							5		

13	Fundamentals of Information Security	*Computer Networks*	100	16	14	3	33	67							4	
14	Mobile Application Development	*Programming on the JVM Platform*	150	14	31	5	50	100							6	
15	Programming on the .NET Platform II	*Programming on the .NET Platform I;* *Database Management System – MS SQL Server*	125	14	31	4	49	76							5	
16	Fundamentals of Differential Equations	*Calculus 2*	125	15	30	5	50	75							5	
17	Mathematical Modeling	*Calculus 2*	125	14	31	5	50	75								5
18	Blockchain-Based Technologies	*Database Management System – MS SQL Server*	125	15	30	4	49	76								5
19	Applied Programming	*Calculus 2;* *Object-Oriented Programming*	125	15	30	5	50	75								5
20	Neural Networks	*Artificial Intelligence*	125	15	30	4	49	76								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.*