

Undergraduate programme - COMPUTER SCIENCE - study mode: full-time

Applicable from the academic year 2025/26

	Course Name	code	hrs.		1st YR		2nd YR		3rd YR		4th Y	ECTS credit
			lect	class/lab	1	2	3	3	5	6	7	
1	Calculus	AM	30	30	EZ							5
2	Foundations of Java Programming	PPJ	30	60	EZ							6
3	Computer Techniques and Architecture	TAK	30	0	E							4
4	Introduction to Management	WDZ	30T	30	Z							3
5	Introduction to Information Systems	WSI	16	30	EZ							5
6	History and Culture of Japan	HKJ	30	0	Z							2
7	English	ANG	0	60	Z							3
8	Occupational Health and Safety	BHP	4	0	Z							0
9	Linear Algebra with Geometry	ALG	30	30		EZ						5
10	Discrete Mathematics	MAD	30	30		EZ						5
11	Relational Databases	RBD	30	30		EZ						5
12	Fundamentals of Python programming	PPY	30	30		Z						4
13	Object Oriented-Programming and Graphical User Interface	GUI	30	30		Z						4
14	Operating Systems	SOP	30	15+15int		Z						4
15	English	ANG	0	60		Z						3
16	Algorithms and Data Structures	ASD	30	30			EZ					5
17	Statistical Data Analysis	SAD	30	30			EZ					5
18	Database Systems	SBD	30	30			EZ					5
19	Digital Systems and Foundations of Electronics	SYC	30	30			Z					4
20	Universal Programming Techniques	UTP	30	30			Z					4
21	Computer Networks and Network Programming in Java	SKJ	30	30			EZ					5
22	English	ANG	0	60			Z					3
23	Artificial Intelligence Tools	NAI	30	30				EZ				5
24	Information Systems Security	BSI	30	30				EZ				5
25	Physical Education	WF	0	30				Z				0
26	Information Systems Design	PRI	30	30				EZ				5
27	Legal Foundations of Business	PPB	16int	0				Z				2
28	Human-Computer Interaction	ICK	30	30				Z				4
29	Foreign Language	LEK	0	60				Z				3
Elective courses												
O	Foundations of Computer Simulations *	PSM	30	30				EZ				4
O	Database Applications	APBD	30	30				EZ				4
O	Embedded Systems *	SWB	30	30				EZ				4
O	Distributed Programming Technologies	TPO	30	30				EZ				4
30	Project 1 (for each specialization)	PRO1	30	30					Z			7
31	Specialization-specific course 1	/	30	30					EZ			5
32	Computer Graphics	GRK	30	30					EZ			6
33	Software Engineering	BYT	30	30					EZ			5
43	Multimedia	MUL	30	30					Z			5
35	Foreign Language	LEK	0	60					Z			3
36	Physical Education	WF	0	30					Z			0
37	Project 2 (for each specialization)	PRO2	30	30						Z		7
38	Specialization-specific course 2	/	30	30						EZ		5
39	Modeling and analysis of information systems	MAS	30	30						EZ		5
40	Foreign Language	LEK	0	60						Z		3
Elective courses												
O	Knowledge Engineering Methods **	MIW	30	30						EZ		4
O	Business Process Engineering **	IPB	30	30						EZ		4
O	Security Testing of IT Systems ***	TBS	30	30						EZ		4
O	Basics of Bioinformatics ***	PBIO	30	30						EZ		4
41	Project 3 (for each specialization)	PRO3	30	30							Z	9
42	Internship		160h								Z	6
43	IT Project Management	ZPR	30	30							EZ	4
44	Foreign Language	LEK	0	30							Z	3
Elective courses												
O	Automata and Grammars	AUG	30	30							EZ	4
O	Machine learning operations and system architectures	ASI	30	30							EZ	4
O	Content Management Systems	CMS	30	30							EZ	4
Specialization-specific courses												
A1	Internet Technologies (specialization A)	TIN	30	30						EZ		5
B1	Advanced Computer Networks (specialization B, H)	ZSK	30	30						EZ		5
D1	Machine Learning Foundations (specialization D)	PUM	30	30						EZ		5
E1	Multimedia Projects Realization (specialization E)	RPM	30	30						EZ		5
F1	Intelligent Control Systems (specialization F)	ISS	30	30						EZ		5
J1	Participatory Game Design (specialization J)	PAPG	30	30						EZ		5
K1	Cyber Incident Analysis (specialization K)	AIC	30	30						EZ		5
A2	Database Administration (specialization A)	ABD	30	30							EZ	5
B2	Advanced Operating Systems (specialization B)	ZSO	30	30							EZ	5
D2	Machine Learning Deployment and AutoML (specialization D)	SUML	30	30							EZ	5
E2	Artificial Intelligence and Virtual Reality (specialization E)	SIWR	30	30							EZ	5
F2	Machine Vision (specialization F)	WMA	30	30							EZ	5
H2	Mobile Programming (specialization H)	PRM	30	30							EZ	5
J2	Unity - Design Patterns and Programming Practices (spec. J)	UWP	30	30							EZ	5
K2	Digital Forensics (specialization K)	KCY	30	30							EZ	5

T - course conducted remotely using teleconferencing platform

ECTS required:

210

The student is required to complete 6 elective courses