

Master study programme "Computer Systems" 90 ECTS, full time studies, duration - 1 year and 5 months

Study Course	Name of the responsible academic staff member	Block	ECTS	Planning		
				1st year		2nd year
				Semester		
				1	2	3
Study courses, providing the in-depth understanding of the latest achievements in the industry's theory and practice						
Compulsory study courses						
Machine Learning Algorithms	A.Bondarenko	A	6	6		
NoSQL Database Technologies	J.Čaiko	A	6	6		
Latvian for Foreigners/ Business English	S.Plota/ T.Lapaine	A	3	3		
Elective study courses						
Big Data Architectures	J.Čaiko	B	6			
Data Warehouses	A.Bondarenko	B	6			
Cloud computing	J.Čaiko	B	3			
Blockchain Technology	V.Gopejenko	B	3			
Introduction to Quantum Computing	J.R.Kalniņš	B	3			
Study courses on research work, innovation work, project work and management						
Compulsory study courses						
Computer Experiments and Modelling Technologies	V.Gopejenko	A	6		9	
Philosophy of Science Development and Approaches to Research	O.Pozdnakova	A	3			
Professional specialization study courses						
Information Security Management						
Computer Security Principles and Technologies	A.Berežņojs	C1	3			
WEB Application Security Fundamentals	A.Berežņojs	C1	3			
Security of Computer Networks	A.Berežņojs	C1	3			
Secure Development and DevSecOps	A.Berežņojs	C1	3			
Data Engineering						
Databases and SQL	J.Čaiko	C2	3			
Business Intelligence	V.Gopejenko	C2	3			
Data Engineering	A.Bondarenko	C2	3			
Scalable and Reliable Systems Design	R.Djakons	C2	3			
Machine Learning Engineering						
Data Analysis	V.Gopejenko	C3	3			
Natural Language Processing using Deep Learning	A.Bondarenko	C3	3			
Image Analysis Using Deep Learning	R.Djakons	C3	3			
Advanced Topics in Deep Learning	A.Bondarenko	C3	3			
Elective study courses (Without Specialization)						
Project Quality Management	A.Mrochko	C0	6			
High-level analytics and knowledge technologies	V.Gopejenko	C0	6			
Software Risk Analysis	A.Mrochko	C0	6			
Business Management*	V.Riashchenko	*	9			
Environment, Labour and Civil Protection*	V.Djakona	*	3			
Qualification traineeship	V.Gopejenko	T	9			9
Master's thesis		M	30		9	21
Total:			90	30	30	30

*if this study course has not been mastered at previous levels