Latvia University of Life Sciences and Technologies

ITF Faculty of Information Technologies

Information Technologies for Sustainable Development (Qualification: Software Engineer)

Course code	*Course title*	*Credits (ECTS)*	*1st year*		*2nd year*		*3rd year*		*4th year*	
Semester			**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
General courses										
ValoP254	Professional English	6	✓							
Filz1018	Philosophy, Ethics, Aesthetics	4.5	✓							
KomZ2003	Business Communication	3		✓						
InfT4029	Project Management	3						✓		
Ekon4081	Economics and the Basics of Entrepreneurship	4.5				✓				
Citi4016	Labour and Civil Protection	3						✓		
VidZ3006	Ecology and Environmental Protection	3					✓			
Software engineering theoretical courses										
Citi1015	Fundamentals of Sustainable Development	3	✓							
EeTk2022	Computer Hardware	4.5		✓						
Mate1003	Mathematics	4.5		✓						
Mate1037	Mathematics II	4.5			✓					
Mate1038	Mathematics III	3				✓				
Mate2010	Discrete Mathematics	3				✓				
Mate4005	Numerical Methods	3					✓			
Fizi2017	Physics	3				✓				
Fizi3002	Optics and Magnetism	4.5					✓			
DatZ3019	Algorithms and Structures	6					✓			
Mate2033	Mathematical Statistics	3						✓		
DatZ2057	Software Engineering Methods I	3			✓					
DatZ2058	Software Engineering Methods II	3				✓				
InfT2041	System Analysis and Modeling	6			✓					
InfT2042	System Analysis and Modeling (Project)	1.5				✓				
Software engineering specialization courses										
DatZ2013	WWW Technologies	4.5		✓						
DatZ2014	WWW Technologies (Project)	1.5			✓					
DatZ1009	Introduction to Programming I	3	✓							
DatZ1010	Introduction to Programming II	3		✓						
InfT2033	Windows Programming	3			✓					
InfT2034	Database Access Applications	3				✓				
InfT2035	Database Access Applications (Project)	1.5					✓			
DatZ2016	Operating Systems I	3	✓							
DatZ2017	Operating Systems II	3		✓						
InfT1033	Application Software	3	✓							
InfT3018	Graphic Application Software	3	✓							
DatZ2024	Computer Networks	3			✓					
InfT2047	Security Testing	3						✓		
DatZ2004	Database Technologies I	3	✓							
DatZ2005	Database Technologies II	3		✓						
InfT4006	Software Testing	3				✓				
DatZ3003	Large Databases I	3			✓					
DatZ3004	Large Databases II	3				✓				
DatZ4005	Administration of Computer Networks I	3					✓			
DatZ4007	Administration of Computer Networks II	3						✓		
DatZ3022	Programming Tools	3						✓		
InfT3034	Virtual Environment Design and Programming	3						✓		
DatZ4004	Web Programming	6					✓			
InfT3002	Multimedia Technologies	3		✓						
DatZ4012	Machine Learning Basics	3					✓			
InfT4037	Advanced Programming	3						✓		
InfT4040	Fundamentals of E-commerce Technologies	3			✓					
InfT3033	Computational Sustainability	3						✓		
InfT3032	Automating of GIS processes	3				✓				
InfT4026	Data Security	3						✓		
Elective course										
Fizi1003	Basic Physics	3			✓					
Valo1053	Latvian Language I	3	✓							
Valo2056	Latvian Language II	3		✓						
SpoZ1001	Sport I	1.5	✓							
SpoZ1002	Sport II	1.5		✓						
SpoZ2001	Sport III	1.5			✓					
Practice and Bachelor Thesis										
InfTP007	Professional Qualification Practice I	24							✓	
InfTP008	Professional Qualification Practice II	15								✓
InfT4032	Bachelor Thesis I	3							✓	
InfT4034	Bachelor Thesis II	15								✓
DatZ4010	Bachelor Thesis Defence	18								✓