

Computer Science and Engineering, International Master's Degree Programme (2 years)

Year/Term			1st autumn		1st spring		2nd autumn		2nd spring	
Code	Title	ECTS	1	2	3	4	1	2	3	4
	Computer Science and Engineering, Master of Science (Technology), 120 ECTS cr	120.0								
Basic Module, 20 ECTS cr										
900017Y	Survival Finnish Course	2.0	2.0							
900013Y	Beginners' Finnish Course 1	3.0		3.0						
813621S	Research Methods	5.0	2.5	2.5						
521145A	Human-Computer Interaction	5.0		5.0						
521260S	Programmable Web Project	5.0			2.5	2.5				
Specialisation Options (only one options is selected), 67 ECTS cr										
Specialisation Options, 1. Computer Vision and Signal Processing , Compulsory Courses 67 ECTS cr										
031025A	Introduction to Optimization	5.0	5.0							
521348S	Statistical Signal Processing	5.0	5.0							
521279S	Signal Processing Systems	5.0		5.0						
521466S	Machine Vision	5.0			5.0					
521289S	Machine Learning	5.0			5.0					
521288S	Multiprocessor Programming	5.0			2.5	2.5				
521493S	Computer Graphics	7.0				7.0				
521285S	Affective Computing	5.0					5.0			
521161S	Multi-modal Data Fusion	5.0					5.0			
521156S	Towards Data Mining	5.0					5.0			
521321S	Elements of Information Theory and Coding	5.0						5.0		
521281S	Application Specific Signal Processors	5.0						5.0		
521273S	Biosignal Processing I	5.0						5.0		
Specialisation Options, 1. Computer Vision and Signal Processing, Recommended Optional Studies										
521495A	Artificial Intelligence	5.0							0.0	
521337A	Digital Filters	5.0							0.0	
521348S	Statistical Signal Processing	5.0								0.0
521147S	Mobile and Social Computing	5.0							0.0	0.0
521467A	Digital Image Processing	5.0					0.0			
521489S	Research Work on Information Processing	8.0					0.0	0.0		
521148S	Ubiquitous Computing Fundamentals	5.0					0.0	0.0		
521283S	Big Data Processing and Applications	5.0				0.0				0.0
Specialisation Options, 2. Ubiquitous Computing , Compulsory Courses 55 ECTS cr										
521148S	Ubiquitous Computing Fundamentals	5.0	2.5	2.5						
521151A	Applied Computing Project I	10.0	2.5	2.5	2.5	2.5				
812331A	Interaction Design	5.0	5.0							
521147S	Mobile and Social Computing	5.0			2.5	2.5				
521290S	Distributed Systems	5.0			5.0					

812650S	Advanced Topics in Human-Centred Design	5.0			5.0					
521283S	Big Data Processing and Applications	5.0				5.0				
521152S	Applied Computing Project II	10.0					2.5	2.5	2.5	2.5
521158S	Natural Language Processing and Text Mining	5.0						5.0		
Specialisation Options, 2. Ubiquitous Computing , Recommended Optional Studies, 12 ECTS cr										
	Selected e.g.12 ECTS credits for this	12.0					6.0	1.0	2.5	2.5
521479S	Software Project	7.0					0.0	0.0		
521149S	Special Course in Information Technology	5-8					0.0	0.0	0.0	0.0
521489S	Research Work on Information Processing	8.0					0.0	0.0	0.0	0.0
521154S	UBISS - International UBI Summer School	5.0				0.0				0.0
815657S	Open Source Software Development	5.0					0.0	0.0		
815305A	Real Time Distributed Software Development	5.0					0.0	0.0		
817603S	System Design Methods for Information Systems	5.0					0.0			
813625S	Information Systems Theory	5.0					0.0	0.0		
521423S	Embedded System Project	5.0							0.0	0.0
521286A	Computer Systems	8.0					0.0	0.0		
521275A	Embedded Software Project	8.0						0.0	0.0	
812671S	Usability Testing (or 812650S)	5.0							0.0	0.0
Common 1. Compulsory, Computer Vision and Signal Processing, 33 ECTS cr										
521013A	Advanced Practical Training	3.0				3.0				
521993S	Master's Thesis in Computer Engineering	30.0							15.0	15.0
Common 2. Ubiquitous Computing, 33 ECTS cr										
521013A	Advanced Practical Training	3.0					3.0			
521993S	Master's Thesis in Computer Engineering	30.0					5.0	5.0	10.0	10.0
Specialisation Options, 1. Computer Vision and Signal Processing			30.0		30.0		30.0		30.0	
Specialisation Options, 1. Computer Vision and Signal Processing			60.0			60.0				
Specialisation Options, 2. Ubiquitous Computing			30.0		30.0		30.0		30.0	
Specialisation Options, 2. Ubiquitous Computing			60.0			60.0				