

Computer Science MSc (Software Architecture Specialization 2022)

Core Courses

Code	Courses	Lecture (L)	Labor	Practice (Pr)	Consultation	Requirement	Credit	Semester	Subject requirement	1st Semester	2nd Semester	3rd Semester	4th Semester
IPM-22fRMEG	Research methodology L+Pr.*	1	2	0	2	XPG	5	1		2+2+0+1			
IPM-22fASTE	Advanced Software Technology L.*	2	0	0	2	E	4	2			2+0+0+2		
IPM-22fDAAE	Design and analysis of algorithms L.*	2	0	0	2	E	4	2			2+0+0+2		
IPM-22fPRG	Internship						0	2-4					240 hours
	Core course credits						13			5	8		

Compulsory Courses of the Specialization

Code	Courses	Lecture (L)	Labor	Practice (Pr)	Consultation	Requirement	Credit	Semester	Subject requirement	1st Semester	2nd Semester	3rd Semester	4th Semester
IPM-22fesztPE	Theory of programming*	2	0	0	1	E	3	1	IPM-22fesztPG (week)	2+0+0+1			
IPM-22fesztPG	Theory of programming*	0	0	2	1	PG	3	1		0+0+2+1			
IPM-22fesztPCMSG	Preparation course for master studies and developing learning skills	0	0	3	0	PG	2	1		0+0+3+0			
IPM-22fzpiPME	Project Management	2	0	0	0	E	2	1,3		2+0+0+0		2+0+0+0	
IPM-22fesztFSE	Formal semantics*	2	0	0	1	E	3	2	IPM-22fesztFSG (week)		2+0+0+1		
IPM-22fesztFSG	Formal semantics*	0	0	2	1	PG	3	2			0+0+2+1		
IPM-22fesztDAAG	Design and analysis of algorithms*	0	0	2	1	PG	3	2			0+0+2+1		
IPM-22fesztSQTE	Software quality and testing*	2	0	0	1	E	3	2	IPM-22fesztSQTG (week)		2+0+0+1		
IPM-22fesztSQTG	Software quality and testing*	0	2	0	1	PG	3	2			0+2+0+1		
IPM-22fesztSALAB1	Software Technology Lab I.	0	4	0	1	PG	5	2			0+4+0+1		
IPM-22fesztDDSE	Design of Distributed Systems*	2	0	0	1	E	3	3	IPM-22fesztDDSG			2+0+0+1	

IPM-22feszdDSG	Design of Distributed Systems*	0	2	0	1	PG	3	3				0+2+0+1	
IPM-22feszsALAB2	Software Technology Lab II.	0	4	0	1	PG	5	3				0+4+0+1	
	Compulsory course credits						41				10	20	11
	Compulsory elective courses credits						30				15	2	13
IPM-22fERASMUS	Erasmus mobility						max 24 credits	3					max 24 credits
	Optional course						6	3					6+0+0
IPM-22fTHCONS	Thesis consultation			5	10	PG	30	4					signature
	Summa credit in semester										30	30	30
	Summa credit						120						

Compulsory elective courses

Code	Courses	Lecture (L)	Labor	Practice (Pr)	Consultation	Requirement	Credit	Semester	Subject requirement	1st Semester	2nd Semester	3rd Semester	4th Semester
IPM-22feszAJPE	Advanced Java programming*	2	0	0	1	E	3	1	IPM-22feszAJPG (week)	2+0+0+1			
IPM-22feszAJPG	Advanced Java programming*	0	2	0	1	PG	3	1		0+2+0+1			

IPM-22fes>IDSEG	Introduction to Data Science	2	2	0	2	XE	6	1		2+0+2+2			
IPM-22fes>MCE	Models of Computation	2	0	0	0	E	2	1	IPM-22fes>MCG (week)	2+0+0+0			
IPM-22fes>MCG	Models of Computation	0	0	2	1	PG	3	1		0+0+2+1			
IPM-22fes>PAIEG	Principles of artificial intelligence	2	2	0	2	XE	6	1		2+2+0+2			
IPM-22fes>AAE	Advanced Algorithms	2	0	0	1	E	3	1,3	IPM-22fes>AAG (week)	2+0+0+1		2+0+0+1	
IPM-22fes>AAG	Advanced Algorithms	0	0	2	1	PG	3	1,3		0+2+0+1		0+2+0+1	
IPM-22fes>CISE	Complex information systems	2	0	0	1	E	3	2	IPM-22fes>CISG (week)		2+0+0+1		
IPM-22fes>CISG	Complex information systems	0	2	0	1	PG	3	2			0+2+0+1		
IPM-22fes>FUNLEG	Functional Languages	2	2	0	2	XE	6	2			2+2+0+2		
IPM-22fes>MLEG	Machine Learning	2	2	0	2	XE	6	2	IPM-22fes>IDSEG		2+2+0+2		
IPM-22fes>SESCE	Service Science	2	0	0	1	E	3	2	IPM-22fes>SESCG (week)		2+0+0+1		
IPM-22fes>SESCG	Service Science	0	2	0	1	PG	3	2			0+2+0+1		
IPM-22fes>ADSEG	Analysis of distributed systems*	2	0	2	2	XPG	6	3				2+0+2+2	
IPM-22fes>ICSE	Introduction to Computer Security	2	0	0	1	E	3	3	IPM-22fes>ICSG (week)			2+0+0+1	
IPM-22fes>ICSG	Introduction to Computer Security	0	2	0	1	PG	3	3				0+2+0+1	
IPM-22fes>MTAIEG	Methods and tools for AI applications	2	2	0	2	XE	6	3				2+2+0+2	
IPM-22fes>SEAPE	Scalable enterprise applications*	2	0	0	1	E	3	3	IPM-22fes>SEAPG (week)			2+0+0+1	
IPM-22fes>SEAPG	Scalable enterprise applications*	0	2	0	1	PG	3	3				0+2+0+1	

I&E modul

Code	Courses	Lecture (L)	Labor	Practice (Pr)	Consultation	Requirement	Credit	Semester	Subject requirement	1st Semester	2nd Semester	3rd Semester	4th Semester
IPM-22fi&EBEG	I&E Basics	2	0	2	2	XPG	6	1		2+0+2+2			
IPM-22fi&EBDL1G	Business Development Lab I.	0	0	2	2	PG	4	1		0+0+2+2			
IPM-22fi&EBDL2G	Business Development Lab II.	0	0	2	2	PG	4	2			0+0+2+2		
IPM-22fi&EIAOEEG	Innosocial aspects of the entrepreneurship	2	0	2	2	XPG	6	2			2+0+2+2		
IPM-22fi&ETSSG	Thematic Summer Schools with I&E project	1	0	1	2	XPG	4	2			1+0+1+2		
IPM-22fi&ESTEG	I&E Study	2	0	2	2	XPG	6	3				2+0+2+2	
	Summa credit in semester									30	30	30	30
	Summa credit						120						

PG: Practice Grade E: Exam Grade XPG: Lecture+Practice with Practical Grade XE: Lecture+Practice with Exam

- Az EIT-es hallgatók számára I&E modul mellett a *-gal megjelölt tárgyak elvégzése kötelező.
- A hallgatók a Software Architecture Lab I.és II. teljesítésével kiváltják a szakmai gyakorlatot.
- Az EIT-s hallgatók az utolsó félévükben végzik a szakmai gyakorlatot a diplomamunka készítésével párhuzamosan

- EIT students are required to complete the Innovation&Entrepreneurship (I&E) module and required to complete all subjects indicated by asterisk (*) in the sample curriculum of the specialization
- Computer Science Master course students with Software Architecture specialization are entitled to fulfill the requirements of the internship by the completion of Software Architecture Lab I. and Lab II. courses
- EIT students fulfill the requirements of the internship and complete their thesis work (parallelly), in the last semester of their academic studies.