

Computer Science MSc (Software Architecture Specialization 2022), Spring semester

Core Courses

Code	Courses	Lecture (L)	Practice (Pr)	Labor	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		1+2+0+2			
IPM-22fASTE	Advanced Software Technology L.*	2	0	0	2	E	4	1		2+0+0+2			
IPM-22fDAAE	Design and analysis of algorithms L.*	2	0	0	2	E	4	1		2+0+0+2			
IPM-22fPRG	Internship						0	2-4					240 hours
	Core course credits						13			13	0		

Compulsory Courses of the Specialization

Code	Courses	Lecture (L)	Practice (Pr)	Labor	Consultation	Requirement	Credit	Semester	Subject requirement	1st Semester	2nd Semester	3rd Semester	4th Semester
IPM-22feszDAAG	Design and analysis of algorithms*	0	2	0	1	PG	3	1		0+2+0+1			
IPM-22feszPCMSG	Preparation course for master studies and developing learning skills	0	3	0	0	PG	2	1		0+3+0+0			
IPM-22feszSALAB1	Software Technology Lab I.	0	0	4	1	PG	5	1		0+0+4+1			
IPM-22feszDDSE	Design of Distributed Systems*	2	0	0	1	E	3	2	IPM-22feszDDSG		2+0+0+1		
IPM-22feszDDSG	Design of Distributed Systems*	0	0	2	1	PG	3	2			0+0+2+1		
IPM-22fpiPME	Project Management	2	0	0	0	E	2	2			2+0+0+0		
IPM-22feszTPE	Theory of programming*	2	0	0	1	E	3	2	IPM-22feszTPG (week)		2+0+0+1		
IPM-22feszTPG	Theory of programming*	0	2	0	1	PG	3	2			0+2+0+1		
IPM-22feszFSE	Formal semantics*	2	0	0	1	E	3	3	IPM-22feszFSG (week)			2+0+0+1	

IPM-22feszfSG	Formal semantics*	0	2	0	1	PG	3	3				0+2+0+1		
IPM-22fesfSQTE	Software quality and testing*	2	0	0	1	E	3	3	IPM-22fesfSQTG (week)			2+0+0+1		
IPM-22fesfSQTG	Software quality and testing*	0	0	2	1	PG	3	3				0+0+2+1		
IPM-22fesfSALAB2	Software Technology Lab II.	0	0	4	1	PG	5	4					0+0+4+1	
	Compulsory course credits						41				10	14	12	5
	Compulsory elective courses credits						30				6	12	12	
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										29	26	30	35
	Summa credit						120							

Compulsory elective courses

Code	Courses	Lecture (L)	Practice (Pr)	Labor	Consultation	Requirement	Credit	Semester	Subject requirement	1st Semester	2nd Semester	3rd Semester	4th Semester
IPM-22fes>IDSEG	Introduction to Data Science	2	0	2	2	XE	6	1		2+0+2+2			
IPM-22fes>AJPE	Advanced Java programming*	2	0	0	1	E	3	2	IPM-22fes>AJPG (week)		2+0+0+1		
IPM-22fes>AJPG	Advanced Java programming*	0	0	2	1	PG	3	2			0+0+2+1		
IPM-22fes>AAE	Advanced Algorithms	2	0	0	1	E	3	2	IPM-22fes>AAG (week)		2+0+0+1		
IPM-22fes>AAG	Advanced Algorithms	0	2	0	1	PG	3	2			0+2+0+1		
IPM-22fes>ADSEG	Analysis of distributed systems*	2	2	0	2	XPG	6	2			2+0+2+2		
IPM-22fes>ICSE	Introduction to Computer Security	2	0	0	1	E	3	2	IPM-22fes>ICSG (week)		2+0+0+1		
IPM-22fes>ICSG	Introduction to Computer Security	0	0	2	1	PG	3	2			0+0+2+1		
IPM-22fes>MCE	Models of Computation	2	0	0	0	E	2	2	IPM-22fes>MCG (week)		2+0+0+0		
IPM-22fes>MCG	Models of Computation	0	2	0	1	PG	3	2			0+2+0+1		

IPM-22feszMtAIEG	Methods and tools for AI applications	2	0	2	2	XE	6	2			2+0+2+2		
IPM-22fesZPAIEG	Principles of artificial intelligence	2	0	2	2	XE	6	2			2+0+2+2		
IPM-22fesZSEAPE	Scalable enterprise applications*	2	0	0	1	E	3	2	IPM-22fesZSEAPG (week)		2+0+0+1		
IPM-22fesZSEAPG	Scalable enterprise applications*	0	0	2	1	PG	3	2			0+0+0+1		
IPM-22fesZCISE	Complex information systems	2	0	0	1	E	3	3	IPM-22fesZCISG (week)			2+0+0+1	
IPM-22fesZCISG	Complex information systems	0	0	2	1	PG	3	3				0+0+2+1	
IPM-22fesZFUNLEG	Functional Languages	2	0	2	2	XE	6	3				2+0+2+2	
IPM-22fesZMLEG	Machine Learning	2	0	2	2	XE	6	3	IPM-22fesZIDSEG			2+0+2+2	
IPM-22fesZSESCE	Service Science	2	0	0	1	E	3	3	IPM-22fesZSESCG (week)			2+0+0+1	
IPM-22fesZSESCG	Service Science	0	2	0	1	PG	3	3				0+2+0+1	

I&E modul

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