

Computer Science MSc (Cybersecurity 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-22fkbCGE	Cryptography *	2	0	0	0	E	2	1		2+0+0+0			
IPM-22fkbCGG	Cryptography *	0	0	2	1	PG	3	1		0+0+2+1			
IPM-22fkbICSE	Introduction to Computer Security*	2	0	0	0	E	3	1		2+0+0+0			
IPM-22fkbICSG	Introduction to Computer Security*	0	2	0	1	PG	3	1		0+2+0+1			

IPM-22fkbDSEGE	Introduction to Data Science	2	2	0	2	XE	6	1		2+2+0+2			
IPM-22fkbPCMSG	Preparation course for master studies and developing learning skills.*	0	0	3	0	PG	2	1		0+0+3+0			
IPM-22fkbISPEG	Information security and privacy*	2	2	0	2	XE	6	2			2+2+0+2		
IPM-22fkbNSSE	Network and System Security*	2	0	0	1	E	3	2			2+0+0+1		
IPM-22fkbNSSG	Network and System Security*	0	2	0	1	PG	3	2			0+2+0+1		
IPM-22fkbPQCE	Post-quantum cryptography	2	0	0	1	E	3	2			2+0+0+1		
IPM-22fkbSQTE	Software quality and testing	2	0	0	1	E	3	2			2+0+0+1		
IPM-22fkbSQTG	Software quality and testing	0	2	0	1	PG	3	2			0+2+0+1		
IPM-22fkbTCG	Topics in cryptography seminar	0	0	2	1	PG	3	2			0+0+2+1		
IPM-22fkbACRE	Advanced cryptography*	2	0	0	1	E	3	3				2+0+0+1	
IPM-22fkbACRG	Advanced cryptography*	0	0	2	1	PG	3	3				0+0+2+1	
IPM-22fkbCRPE	Cryptographic protocols*	2	0	0	1	E	3	3				2+0+0+1	
IPM-22fkbCRPG	Cryptographic protocols*	0	2	0	1	PG	3	3				0+2+0+1	
IPM-22fkbSCLAB1	Cyber Security Lab I.*	0	2	0	2	PG	4	3				0+2+0+2	
IPM-22fkbSCLAB2	Cyber Security Lab II.	0	4	0	2	PG	6	3				0+4+0+2	
IPM-22fkbCRAE	Provably secure modular design of cryptographic protocols*	2	0	0	1	E	3	3				2+0+0+1	
IPM-22fkbCRAG	Provably secure modular design of cryptographic protocols*	0	0	2	1	PG	3	3				0+0+2+1	
	Compulsory course credits						71			19	24	28	
	Optional course						6	1,3		6+0+0			
IPM-20fTHCONS	Thesis consultation			5	10	PG	30	4					signature
	Summa credit in semester									30	32	28	30
	Summa credit						120						

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 megjeölt tárgyak elvégzése kötelező.
- A hallgatók a Cyber Security 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 Cybersecurity specialization are entitled to fulfill the requirements of the internship by the completion of Cyber Security 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.

