

Computer Science MSc (Cybersecurity specialization)

Code	Subject	Subject prerequisite	Lecture (L)	Practice (Pr)	Credit	Semester *	Recommended semester			
							1st	2nd	3rd	4th
IPM-22fkbCGE	Cryptography L.	(5*)	2	0	2	A	2			
IPM-22fkbCGG	Cryptography Pr.		0	2	3	A	3			
IPM-22fkbICSE	Introduction to Computer Security L.	(5*)	2	0	3	A	3			
IPM-22fkbICSG	Introduction to Computer Security Pr.		0	2	3	A	3			
IPM-22fkbDSEG	Introduction to Data Science L+Pr.		2	2	6	A,S	6			
IPM-22fkbPCMSG	Preparation course for master studies and developing learning skills Pr. (4*)		0	3	2	A,S	2			
IPM-22fRMEG	Research methodology L+Pr. **		1	2	5	A,S	5			
IPM-22fASTE	Advanced Software Technology L. **		2	0	4	S		4		
IPM-22fDAAE	Design and analysis of algorithms L. **		2	0	4	S		4		
IPM-22fkbISPEG	Information security and privacy L+Pr.		2	2	6	S		6		
IPM-22fkbNSSE	Network and System Security L.	(5*)	2	0	3	S		3		
IPM-22fkbNSSG	Network and System Security Pr.		0	2	3	S		3		
IPM-22fkbPQCE	Post-quantum cryptography L.		2	0	3	S		3		
IPM-22fkbSQTE	Software quality and testing L.	(5*)	2	0	3	S		3		
IPM-22fkbSQTG	Software quality and testing Pr.		0	2	3	S		3		
IPM-22fkbTCG	Topics in cryptography seminar Pr.		0	2	3	S		3		

* Subjects are offered either in the Autumn semester (A) or in the Spring semester (S) or in both (A,S).

** Core subject of the Computer Science MSc study programme regardless the specialization.

(3*) The required duration of the internship is 6 weeks (240 hours). The requirement of internship is fulfilled by the completion of subjects Cyber Security Lab I&II.

(4*) The accomplishment is mandatory for international students. Credits are counted as compulsory subject credits.

(5*) Fulfilment of the practice part is the prerequisite of obtaining a grade in the lecture part.

Computer Science MSc (Cybersecurity specialization)

Code	Subject	Subject prerequisite	Lecture (L)	Practice (Pr)	Credit	Semester *	Recommended semester			
							1st	2nd	3rd	4th
IPM-22fkbACRE	Advanced cryptography L.	(5*)	2	0	3	A			3	
IPM-22fkbACRG	Advanced cryptography Pr.		0	2	3	A			3	
IPM-22fkbCRPE	Cryptography protocols L.	(5*)	2	0	3	A			3	
IPM-22fkbCRPG	Cryptography protocols Pr.		0	2	3	A			3	
IPM-22fkbSCLAB1	Cyber Security Lab I		0	2	4	A			4	
IPM-22fkbSCLAB2	Cyber Security Lab II.		0	4	6	A			6	
IPM-22fkbCRAE	Provably secure modular design of cryptographic protocols L.	(5*)	2	0	3	A			3	
IPM-22fkbCRAG	Provably secure modular design of cryptographic protocols Pr.		0	2	3	A			3	
	Compulsory subject credits in total				84		24	32	28	
	Elective subjects				6		6			
IPM-22fTHCONS	Thesis consultation				30	A,S				30
IPM-22fPRG	Internship (3*)				0					
	Total credits per semester						30	32	28	30
	Total credits				120					

The accomplishment of the following listed subjects is mandatory only for EIT students.

Students do not participating in the EIT Digital Master programme can obtain elective subject credits for fulfilling them:

IPM-22fi&EBEG	I&E Basics
IPM-22fi&EBDL1E	Business Development Lab I.
IPM-22fi&EBDL1G	Business Development Lab I.
IPM-22fi&EBDL2E	Business Development Lab II.
IPM-22fi&EBDL2G	Business Development Lab II.
IPM-22fi&EIAOEEG	Innosocial aspects of entrepreneurship
IPM-22fi&ETSSG	Thematic Summer Schools with I&E project
IPM-22fi&ESTEG	I&E Study