

Computer Science MSc (Digital Factory specialization 2023, Fall Semester) starting in Autumn with Erasmus Mobility

Core Courses

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

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
IPMSEK-22fi4HBPEG	Hardware based programming L+Pr.	1	3	0	1	XPG	5	1		1+3+0+1			
IPMSEK-22fi4MSLSG	Master studies and learning skills	0	3	0	0	PG	2	1		0+3+0+1			
IPMSEK-22fi4PAIEG	Principles of artificial intelligence	2	2	0	2	XE	6	1		2+2+0+2			
IPMSEK-23fi4PYEG	Python L+Pr.	1	2	0	1	XPG	4	1		1+2+0+1			
IPMSEK-23fi4ERPSEG	ERP Systems L+Pr.	2	2	0	2	XPG	6	2			2+2+0+2		

IPMSEK-24fi4IDEG	Industrial Databases L+Pr.	2	0	2	2	XE	6	2			2+0+2+2		
IPMSEK-22fi4IMLDLEG	Introduction to Machine Learning and Deep Learning L+Pr.	2	2	0	2	XE	6	2			2+2+0+2		
IPMSEK-24fi4PETEG	Privacy enhancing technologies	1	1	0	2	XE	4	3				1+1+0+2	
IPMSEK-22fi4DAMEG	Data Mining L+Pr.	2	0	2	2	XE	6	3				2+0+2+2	
IPMSEK-22fi4DFLAB1	Digital Factory Lab I	0	0	1	4	PG	5	3				0+0+1+4	
IPMSEK-22fi4DFLAB2	Digital Factory Lab II.	0	0	1	4	PG	5	3				0+0+1+4	
IPMSEK-24fi4ROBEG	3D technologies and Robotics L+Pr.	2	0	2	2	XPG	6	3				2+0+2+2	
	Compulsory course credits						61				17	17	27
	Compulsory elective courses credits						20				10	10	
IPMSEK-22fiERASMUS	Erasmus mobility						max 24 credits	3					max 24 credits
	Optional course						6	1,3			3		3
IPMSEK-22fiTHCONS	Thesis consultation		5		10	PG	30	4					signature
	Summa credit in semester										25+10	25+10	30
	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
IPMSEK-23fi4PLCEG	PLC programming and communications L+Pr.	2	0	2	1	XPG	5	1		2+0+2+1			
IPMSEK-23fi4TAMEG	Topics in Applied Mathematics L+Pr.	2	2	0	1	XPG	5	1		2+2+0+1			
IPMSEK-23fi4AADEG	Advanced Application Design L+Pr.	2	2	0	1	XPG	5	2			2+2+0+1		
IPMSEK-22fi4ICEG	Industrial communications L+Pr.	2	0	2	1	XPG	5	2			2+0+2+1		

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