

Computer Science MSc (Digital Factory specialization 2022, Fall Semester)

Core Courses

Code	Courses	Lecture (L)	Labor	Practice (Pr)	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		2+2+0+1			
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)	Labor	Practice (Pr)	Consultation	Requirement	Credit	Semester	Subject requirement	1st Semester	2nd Semester	3rd Semester	4th Semester
IPMSEK-22fi4ICSE	Introduction to Computer Security	2	0	0	1	E	3	1	IPMSEK-22fi4ICSG (week)	2+0+0+1			
IPMSEK-22fi4ICSG	Introduction to Computer Security	0	2	0	1	PG	3	1		0+2+0+1			
IPMSEK-22fi4FEPEG	Manufacturing Engineering for Programmers	2	0	2	2	PG	6	1		2+0+0+1			
IPMSEK-22fi4MSLSG	Master studies and learning skills	0	0	3	0	PG	2	1		0+0+3+1			
IPMSEK-22fi4PAIEG	Principles of artificial intelligence	2	0	2	2	XE	6	1		2+0+2+2			

IPMSEK-22fi4DMEG	Digital Manufacturing L+Pr.	2	2	0	0	XPG	4	2			2+2+0+0			
IPMSEK-22fi4ROBEG	Industrial robotics L+Pr.	2	2	0	1	XPG	5	2			2+2+0+1			
IPMSEK-22fi4ICEG	Industrial communications L+Pr.	2	2	0	1	XPG	5	2			2+2+0+1			
IPMSEK-22fi4IDEG	Industrial Databases L+Pr.	2	2	0	1	XE	5	2			2+2+0+1			
IPMSEK-22fi4IMLDLEG	Introduction to Machine Learning and Deep Learning L+Pr.	2	0	2	2	XE	6	2			2+0+2+2			
IPMSEK-22fi4CNCPEG	CNC programming L+Pr.	2	0	2	1	XPG	5	3				2+0+2+1		
IPMSEK-22fi4DAMEG	Data Mining L+Pr.	2	2	0	2	XE	6	3				2+2+0+2		
IPMSEK-22fi4DFLAB1	Digital Factory Lab I	0	1	0	4	PG	5	3				0+1+0+4		
IPMSEK-22fi4DFLAB2	Digital Factory Lab II.	0	1	0	4	PG	5	3				0+1+0+4		
IPMSEK-22fi4HBPEG	Hardware based programming L+Pr.	1	0	3	1	XPG	5	3				1+0+3+1		
	Compulsory course credits						71				20	25	26	
	Optional course						6	1,3			2		4	
IPMSEK-22fTHCONS	Thesis consultation			5	10	PG	30	4						signature
	Summa credit in semester										27	33	30	30
	Summa credit						120							

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