Computer Science for Autonomous Systems MSc
Spring semester

Core Courses

Code	Courses	Lecture (L)	Labor	Practice (Pr)	Consultation	Requirement	Credit	Semester	Subject requirement	1st Semester	2nd Semester	3rd Semester	4th Semester
IPM-22AUTRMG	Research methodology L+Pr.	1	0	2	2	XPG	5	1		1+0+2+2			
IPM-22AUTAIPAEG	Deep Reinforcement Learning L+Pr.*	2	0	2	2	XPG	6	1		2+0+2+2			
IPM-22AUTDAAE	Design and Analysis of Algorithms L.*	2	0	0	2	E	4	1		2+0+0+2			
IPM-22AUTIDSEG	Introduction to Data Science L+Pr.	2	2	0	2	XE	6	1		2+2+0+2			
IPM-22AUTCVEG	3D Computer Vision L+Pr.*	2	2	0	2	XE	6	2			2+2+0+2		
IPM-22AUTISPE	Image and Signal Processing L.*	2	0	0	1	E	3	2	IPM-22AUTISPG (weak)		2+0+0+1		
IPM-22AUTISPG	Image and Signal Processing Pr.*	0	2	0	1	PG	3	2			0+2+0+1		
IPM-22AUTIDSEG	Introduction to Vehicles and Sensors L.+Pr.*	2	0	1		XE	4	2			2+0+0+1		
IPM-22AUTNMEG	Numerical Methods for Optimization L+Pr.	2	2	0	2	PG	6	3				2+2+0+2	
IPM-22fPRG	Internship						0	2-4					240 hours
	Core course credits						**43**			**21**	**16**	**6**	

Compulsory Elective 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-22AUTASTE	Advanced Software Technology L.	2	0	0	2	E	4	1		2+0+0+2			
IPM-22AUTAUSLAB1	AUS Lab I.	0	3	0	2	PG	5	1		0+3+0+2			
IPM-22AUTDAAG	Design and analysis of algorithms Pr.	0	0	2	1	PG	3	1		0+0+2+1			
IPM-22AUTDNDEG	Deep Network Development*	2	2	0	2	XE	6	1		2+2+0+2			
IPM-22AUTPREPG	Preparation course for master studies and developing learning skills Pr.*	0	0	3	0	PG	2	1		0+0+3+0			
IPM-22AUTTAMEG	Topics in Applied Mathematics L+Pr.	2	0	2	1	XPG	5	1		2+0+2+1			
IPM-22AUTSSFEG	3D Sensing and Sensor Fusion L.+Pr.*	2	0	2	2	XE	6	2			2+0+2+2		
IPM-22AUTAAE	Advanced Algorithms L.	2	0	0	1	E	3	2	IPM-22AUTAAG (weak)		2+0+0+1		
IPM-22AUTAAG	Advanced Algorithms Pr.	0	0	2	1	PG	3	2			0+0+2+1		
IPM-22AUTADLEG	Advanced Deep Network Development L+Pr.*	2	0	2	2	XE	6	2	IPM-22AUTDNDEG		2+0+2+2		
IPM-22AUTAUSLAB2	AUS Lab II	0	3	0	2	PG	5	2			0+3+0+2		
IPM-22AUTPHFTG	Human Factors in Traffic Environment Pr.*	0	0	2	0	PG	2	2			0+0+2+0		
IPM-22AUTIVPEG	Image and Video Processing L.+Pr.*	2	0	2	2	XE	6	2			2+0+2+2		
IPM-22AUTLFADE	Legal Framework for Autonomous Driving L.	2	0	0	0	E	2	2			2+0+0+0		
IPM-22AUTPME	Project Management L.	2	0	0	0	E	2	2			2+0+0+0		
IPM-22AUTSCTE	System and Control Theory L.	2	0	0	1	E	3	2	IPM-22AUTSCTG (weak)		2+0+0+1		
IPM-22AUTSCTG	System and Control Theory Pr.	0	2	0	1	PG	3	2			0+2+0+1		

IPM-23AUTi3DCPAEG	3D point cloud processing and analysis	2	0	2	2	XE	6	2			2+0+2+2		
IPM-22AUTCGE	Computer graphics L.	2	0	0	1	E	3	3	IPM-22AUTCGG (weak)			2+0+0+1	
IPM-22AUTCGG	Computer graphics Pr.	0	0	2	1	PG	3	3				0+0+2+1	
IPM-22AUTERTSEG	Embedded and Real-Time Systems L+Pr.*	2	2	0	2	XE	6	3				2+2+0+2	
IPM-22AUTSQTE	Software quality and testing L.	2	0	0	1	E	3	3	IPM-22AUTSQTG (weak)			2+0+0+1	
IPM-22AUTSQTG	Software quality and testing Pr.	0	2	0	1	PG	3	3				0+2+0+1	
IPM-22AUTTHESIS	**Thesis consultation**			**1**	**0**	**PG**	**30**	**4**					**signiture**
	Optional course						***6***	***3***				***6+0+0***	
	Compulsory elective courses credits						***41***			***9***	***14***	***18***	
IPM-22AUTERASMUS	**Erasmus mobility**						**max 24 credits**	**3**				**max 24 credits**	
	Summa credit in semester									**30**	**30**	**30**	**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 entreneurship	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: Practical Grade E: Exam 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.
- Az EIT-s hallgatók az utolsó félévükben végzik a szakmai gyakorlatot a diplomamunka készítésével párhuzamosan

- EIT students are required to complete the Innovation&Entrepreneurshop (I&E) module and required to complete all subjects indicated by asterisk (*) in the sample curriculum of the specialization.
- EIT students fulfill the requirements of the internship and complete their thesis work (parallelly), in the last semester of their academic studies.