

Computer Science MSc (Artificial Intelligence Specialization 2021)

Core Courses

Code	Courses	Subject requirement	Lecture (L)	Exam (E)	Labor	Practice (Pr)	Practice Grade (PG)	Consultation	Credit	Semester	1st Semester	2nd Semester	3rd Semester	4th Semester
IPM-20fIDSEG	Intorduction to Data Science		2	X	2	0		1	5	1	2+2+0+1			
IPM-20fSTEG	Software Technology*		2	X	0	2	CA	1	5	1	2+0+2+1			
IPM-20fWATEG	Web engineering*		2	X	2	0	CA	1	5	2		2+2+0+1		
IPM-20fPRG	Internship								0	2-4				240 hours
	Core course credits								15		10	5		

Compulsory Courses of the Specialization

Code	Courses	Subject requirement	Lecture (L)	Exam (E)	Labor	Practice (Pr)	Practice Grade (PG)	Consultation	Credit	Semester	1st Semester	2nd Semester	3rd Semester	4th Semester
IPM-19fmiCVEG	3D Computer Vision		2	X	2	0		1	5	1	2+2+0+1			
IPM-19fmiPAIEG	Principles of artificial intelligence		2	X	2	0		1	5	1	2+2+0+1			
IPM-19fmiMTAAEG	Methods and tools for AI applications		2	X	2	0		1	5	1	2+2+0+1			
IPM-20fmiDRLEG	Deep Reinforcement Learning	IPM-21fmiSZVSAMLEG	2	X	2	0	CA	1	5	2		2+2+0+1		
IPM-19fmiMLEG	Machine Learning	IPM-20fIDSEG	2	X	2	0		1	5	2		2+2+0+1		
IPM-19fmiAMLEG	Advanced Machine Learning	IPM-21fmiSZVSAMLEG	2	X	0	2		1	5	3			2+0+2+1	

IPM-19fmiROBEG	AI Robotics		2	X	2	0		1	5	3			2+2+0+1	
	Compulsory course credits								35		15	10	10	
	Compulsory elective courses credits								34		5	10	19	
	Optional course								6	2,3		5+0+0	1+0+0	
	Thesis consultation					5	PG	10	30	4				signature
	Summa credit in semester										30	30	30	30
	Summa credit								120					

Compulsory elective courses

Code	Courses	Subject requirement	Lecture (L)	Exam (E)	Labor	Practice (Pr)	Practice Grade (PG)	Consultation	Credit	Semester	1st Semester	2nd Semester	3rd Semester	4th Semester
IPM-19fmiMASEG	Multi-agent systems*		2	X	2	0		1	5	1	2+2+0+1			
IPM-20fmiRMG	Research methodology*		0		0	2	PG	1	3	1	0+0+2+1			
IPM-20fmiPREPG	Preparation course for master studies and developing learning skills*		0		0	3	PG	0	2	1	0+0+3+0			
IPM-21fmiSZVSAMLEG	Software for Advanced Machine Learning*		0		0	2	PG	0	2	1	0+0+2+0			
IPM-19fmiCOSCEG	Cognitive Science*		2	X	0	2		1	5	1,3	2+0+2+1		2+0+2+1	
IPM-19fmiACEG	Affective computing*	IPM-21fmiSZVSAMLEG	2	X	2	0		1	5	1,3	2+2+0+1		2+2+0+1	
IPM-21fmiFDSE	Foundations of Data Science*		2	E	0	0		0	2	1,3	2+0+0+0		2+0+0+0	
IPM-21fmiFDSDG	Foundations of Data Science*		0		0	2	PG	0	2	1,3	0+0+2+0		0+0+2+0	
IPM-20fmiLP1E	Logic programming I.*		2	E	0	0		0	2	2		2+0+0+0		
IPM-19fmiGTEG	Game theory*		2	X	0	2	CA	0	4	2		2+0+2+0		
IPM-20fmiREPTEG	Representation Theory*		2	X	2	0		1	5	2		2+2+0+1		
IPM-20fmiNLPEG	Natural Language Processing*	IPM-21fmiSZVSAMLEG	2	X	2	0		1	5	2		2+2+0+1		
IPM-21fmiCIEG	Computational Intelligence		2	X	0	2		1	5	2		2+0+2+1		
IPM-20fmiLP2G	Logic programming II.*		0		2	0	PG	0	2	3			0+2+0+0	
IPM-21fmiSIEG	Societal Intelligence		2	X	0	2		1	5	3			2+0+2+1	

IPM-21fmiDNDEG	Deep Network Developments	IPM-19fmiMLEG	2	X	2	0		1	5	3			2+2+0+1	
IPM-21fmiAIPLAB1	AI Project Lab I.	IPM-21fmiSZVSAMLEG	0		3	0	PG	1	4	3			0+3+0+1	
IPM-21fmiAIPLAB2	AI Project Lab II.	IPM-21fmiSZVSAMLEG	0		5	0	PG	1	6	3			0+5+0+1	

I&E modul

IPM-18fi&EBEG	I&E Basics		2	X	0	2	PG	1	5	1	2+0+2+1			
IPM-18fi&EBDL1E	Business Development Lab I.		2	E	0	0		0	2	1	2+0+0+0			
IPM-18fi&EBDL1G	Business Development Lab I.		0		0	2	PG	1	3	1	0+0+2+1			
IPM-18fi&EBDL2E	Business Development Lab II.		2	E	0	0		0	2	2		2+0+0+0		
IPM-18fi&EBDL2G	Business Development Lab II.		0		0	2	PG	1	3	2		0+0+2+1		
IPM-18fi&MSTEEG	I&E Management skills for tech entrepreneurs		2	X	0	2	PG	1	5	2		2+0+2+1		
IPM-18fi&ETSSG	Thematic Summer Schools with I&E project		0		0	4	PG	0	4	2		0+0+4+0		
IPM-18fi&ESTEG	I&E Study		2	X	0	2	PG	2	6	3			2+0+2+2	
	Summa credit in semester										30	30	30	30
	Summa credit								120					

• Az EIT-es hallgatók a képzés első évében az I&E modult végzik. A szakirányra jelentkező hallgatók külön engedélyek vehetik fel az I&E modult a *-gal megjeölt tárgyak kiváltása mellett.

• A hallgatók az Artificial Intelligence Project Lab I. és II. teljesítésével kiváltják a szakmai gyakorlatot.

• Az EIT-s hallgatók az utolsó félévükben végzik a szakmai gyakorlatot a diplomamunka készítésével párhuzamosan

• The EIT students are doing the Innovation&Entrepreneurship (I&E) module in their first year of studies. Students applying to this major may be allowed to take the I&E module in exchange of *-marked courses

• Computer Science Master course students with Artificial Intelligence specialization are entitled to fulfill the requirements of the internship by the completion of Artificial Intelligence Project Lab I. and Lab II. courses

• EIT students fulfill the requirements of the internship and complete their thesis work (parallely), in the last semester of their academic studies.

CA: Practice with continuous assessment