

## Computer Science MSc (Artificial Intelligence specialization)

### Compulsory courses

Code	Subject	Subject prerequisite	Lecture (L)	Exam (E)	Practice (Pr)	Practice Grade (PG)	Consultation	Credit	Semester	1st Semester	2nd Semester	3rd Semester	4th Semester
IPM-19fmiCVEG	<a href="#">3D Computer vision</a>		2	X	2		1	5	1	2+2+1			
IPM-20fIDSEG	<a href="#">Introduction to data science</a>		2	X	2		1	5	1	2+2+1			
IPM-19fmiMTAAEG	<a href="#">Methods and tools for AI applications</a>		2	X	2		1	5	1	2+2+1			
IPM-19fmiPAIEG	<a href="#">Principles of artificial intelligence</a>		2	X	2		1	5	1	2+2+1			
IPM-20fSTEG	<a href="#">Software technology</a>		2	X	2	PG	1	5	1	2+2+1			
IPM-18fatSZVSAMLEG	<a href="#">Software for Advanced Machine Learning *</a>				2	PG	0	2	1	0+2+0			
IPM-20fmiPREPG	Preparation course for master studies and developing learning skills **				3	PG	0	2	1	0+3+0			
IPM-20fmiDRLEG	<a href="#">Deep reinforcement learning</a>		2	X	2	PG	1	5	2		2+2+1		
IPM-19fmiMLEG	<a href="#">Machine learning</a>	IPM-20fIDSEG	2	X	2		1	5	2		2+2+1		
IPM-20fWATEG	<a href="#">Web engineering</a>		2	X	2	PG	1	5	2		2+2+1		
IPM-19fmiAMLEG	<a href="#">Advanced machine learning</a>		2	X	2		1	5	3			2+2+1	
IPM-19fmiROBEG	<a href="#">AI robotics</a>		2	X	2		1	5	3			2+2+1	
IPM-20fmiAILAB1	<a href="#">Artificial Intelligence Lab I.</a>				3	PG	1	4	3			0+3+1	
IPM-20fmiAILAB2	<a href="#">Artificial Intelligence Lab II.</a>				5	PG	1	6	3			0+5+1	
	Elective courses							6	2,3		5+0+0	1+0+0	
	Compulsory elective courses ***							24		5	10	9	
IPM-20fTHCONZ	<b>Thesis consultation</b>						10	30	4				signature
IPM-20fPRG	<b>Internship ****</b>							0	2-4				240 hours
	<b>Total credits per semester</b>									30	30	30	30
	<b>Total credits</b>							120					

\* This **elective** course familiarizes students with the software background of the 3rd semester course - Advanced Machine Learning.

Registration and accomplishment is strongly recommended.

\*\* The accomplishment is mandatory for international students. Credits are counted towards compulsory elective course credits.

\*\*\* From the list of compulsory elective courses, students are required to fulfill courses in the amount of 24 credits.

\*\*\*\* The requirement of internship is fulfilled by the completion of Artificial Intelligence Lab I&II. courses.

## Compulsory elective courses of Artificial Intelligence specialization

Code	Subject	Subject prerequisite	Lecture (L)	Exam (E)	Practice (Pr)	Practice Grade (PG)	Consultation	Credit	Semester	1st Semester	2nd Semester	3rd Semester	4th Semester
IPM-19fmiACEG	<a href="#">Affective computing</a>		2	X	2		1	5	3			2+2+1	
IPM-19fmiCOSCEG	<a href="#">Cognitive science</a>		2	X	2		1	5	1	2+2+1			
IPM-18fatFDSE	<a href="#">Foundations of data science</a>		2	E				2	1	2+0+0			
IPM-18fatFDSG	<a href="#">Foundations of data science</a>				2	PG		2	1	0+2+0			
IPM-19fmiGTEG	<a href="#">Game theory</a>		2	X	2	PG	0	4	2		2+2+0		
IPM-20fmiLP1E	<a href="#">Logic programming I.</a>		2	E	0		0	2	2		2+0+0		
IPM-20fmiLP2G	<a href="#">Logic programming II.</a>		0		2	PG	0	2	3			0+2+0	
IPM-19fmiMASEG	<a href="#">Multi-agent systems</a>		2	X	2		1	5	1	2+2+1			
IPM-20fmiNLPEG	<a href="#">Natural language processing</a>		2	X	2		1	5	2		2+2+1		
IPM-20fmiPREPG	Preparation course for master studies and developing learning skills		0		3	PG	0	2	1	0+3+0			
IPM-20fmiREPTG	<a href="#">Representation theory</a>		2	X	2		1	5	2		2+2+1		
IPM-20fmiRMG	<a href="#">Research methodology</a>		0		2	PG	1	3	2		0+2+1		
IPM-18fatSZVSAMLEG	<a href="#">Software for Advanced Machine Learning</a>		0		2	PG	0	2	1	0+2+0			

From the list of compulsory elective courses, students are required to fulfill courses in the amount of 24 credits.

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

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

IPM-18fi&EBEG	I&E Basics
IPM-18fi&EBDL1E	Business Development Lab I.
IPM-18fi&EBDL1G	Business Development Lab I.
IPM-18fi&EBDL2E	Business Development Lab II.
IPM-18fi&EBDL2G	Business Development Lab II.
IPM-18fi&EIAOEEG	Innosocial aspects of entrepreneurship
IPM-18fi&ETSSG	Thematic Summer Schools with I&E project
IPM-18fi&ESTEG	I&E Study