Computer Science MSc (Data Science Specialization 2020)

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**		

Obligatory 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-18fatIMDEG	Interactive media design and development*		2	X	2	0	PG	1	5	1	2+2+0+1			
IPM-18fatFDSE	Foundations of Data Science		2	E	0	0		0	2	1	2+0+0+0			
IPM-18fatFDSG	Foundations of Data Science		0		0	2	PG	0	2	1	0+0+2+0			
IPM-18fatTPE	Theory of programming		2	E	0	0		0	2	1	2+0+0+0			
IPM-18fatTPG	Theory of programming		0		0	2	PG	1	3	1	0+0+2+1			

IPM-18fatCISE	Complex information systems*		2	E	0	0		0	2	2		2+0+0+0		
IPM-18fatCISG	Complex information systems*		0		2	0	PG	1	3	2		0+2+0+1		
IPM-18fatDMDBE	Data models and databases		2	E	0	0		0	2	2		2+0+0+0		
IPM-18fatDMDBG	Data models and databases		0		2	0	PG	0	2	2		0+2+0+0		
IPM-18fatMLEG	Machine Learning	IPM-20fIDSEG	2	X	2	0		1	5	2		2+2+1+0		
IPM-20fatODSEG	Optimization for Data Science*		2	X	2	0	PG	0	4	2		2+2+0+0		
IPM-20fatDSLAB1	Data Science Lab I	IPM-20fIDSEG	0		3	0	PG	1	4	2		0+3+0+1		
IPM-18fatAMLEG	Advanced Machine Learning		2	X	0	2		1	5	3			2+0+2+1	
IPM-20fatDSLAB2	Data Science Lab II.*		0		5	0	PG	1	6	3			0+5+0+1	
IPM-18fatNSEG	Network Science		2	X	2	0		1	5	3			2+2+0+1	
IPM-18fatOSTEG	Open-source Technologies for Real-time Data Analytics		2	X	2	0		1	5	3			2+2+0+1	
IPM-20fatSDAEG	Sensor Data Analytics		2	X	0	2		0	4	3			2+0+2+1	
IPM-18fatSMEG	Stream Mining		2	X	2	0		1	5	3			2+2+0+1	
	Obligatory course credits								**66**					
	Optional course								**9**	**1**	**6+0+0**	**3+0+0**		**signiture**
IPM-20fTHCONS	**Thesis consultation**					**5**	**PG**	**10**	**30**	**4**				**30**
	Summa credit in semester										**30**	**30**	**30**	**30**
	Summa credit								**120**					
	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 engedéllyek vehetik fel az I&E modult a *-gal megjeölt tárgyak kiváltása mellett.
• A hallgatók a Data Science 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&Entrepreneurshop (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 Data Science Lab I. and Lab II. courses
• EIT students fulfill the requirements of the internship and complete their thesis work (parallelly), in the last semester of their academic studies.

CA: Practice with continuous assessment