

Computer Science MSc (Data Science 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-20fIDSEG	Introduction to data science		2	X	2		1	5	1	2+2+1			
IPM-18fatIMDEG	Interactive media design and development		2	X	2	PG	1	5	1	2+2+1			
IPM-18fatFDSE	Foundations of data science		2	E				2	1	2+0+0			
IPM-18fatFDSG	Foundations of data science				2	PG		2	1	0+2+0			
IPM-20fSTEG	Software technology		2	X	2	PG	1	5	1	2+2+1			
IPM-18fatTPE	Theory of programming		2	E				2	1	2+0+0			
IPM-18fatTPG	Theory of programming				2	PG	1	3	1	0+2+1			
IPM-20fmiPREPG	Preparation course for master studies and developing learning skills *		0		3	PG	0	2	1	0+3+0			
IPM-18fatCISE	Complex information systems		2	E				2	2		0+2+0		
IPM-18fatCISG	Complex information systems				2	PG	1	3	2		0+2+1		
IPM-18fatDMDBE	Data models and databases		2	E				2	2		2+0+0		
IPM-18fatDMDBG	Data models and databases				2	PG		2	2		0+2+0		
IPM-18fatMLEG	Machine learning	IPM-20fIDSEG	2	X	2		1	5	2		2+2+1		
IPM-20fatODSEG	Optimization for data science		2	X	2	PG		4	2		2+2+0		
IPM-20fatDSLAL1	Data Science Lab I.	IPM-20fIDSEG			3	PG	1	4	2		0+3+1		
IPM-18fatSZVSAMLEG	Software for Advanced Machine Learning **				2	PG	0	2	1	0+2+0			
IPM-20fWATEG	Web engineering		2	X	2	PG	1	5	2		2+2+1		

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IPM-18fatAMLEG	Advanced machine learning		2	X	2		1	5	3			2+2+1	
IPM-20fatDSL2	Data Science Lab II.				5	PG	1	6	3			0+5+1	
IPM-18fatNSEG	Network science		2	X	2		1	5	3			2+2+1	
IPM-18fatOSTEG	Open-source technologies for real-time data analytics		2	X	2		1	5	3			2+2+1	
IPM-20fatSDAEG	Sensor data analytics		2	X	2			4	3			2+2+0	
IPM-18fatSMEG	Stream mining		2	X	2		1	5	3			2+2+1	
	Elective courses							9	1,2	6+0+0	3+0+0		
IPM-20fTHCONZ	Thesis consultation						10	30	4				signature
IPM-20fPRG	Internship ***							0	2-4				240 hours
	Total credits per semester									30	30	30	30
	Total credits							120					

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

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

Registration and accomplishment is strongly recommended.

*** The requirement of internship is fulfilled by the completion of Data Science Lab I&II. courses.

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