

## Computer Science MSc (Fintech specialization)

### Core Courses

Code	Courses	Lecture (L)	Labor	Practice (Pr)	Consultation	Requirement	Credit	Semester	Subject requirement	1st Semester	2nd Semester	3rd Semester	4th Semester
IPM-22fRMEG	Research methodology L+Pr.*	1	2	0	2	PG	5	1		2+2+0+1			
IPM-22fASTE	Advanced Software Technology L.*	2	0	0	2	E	4	2			2+0+0+2		
IPM-22fDAAE	Design and analysis of algorithms L.*	2	0	0	2	E	4	2			2+0+0+2		
IPM-22fPRG	Internship						0	2-4					240 hours
	<b>Core course credits</b>						<b>13</b>			<b>5</b>	<b>8</b>		

### Compulsory 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-22fIDSEG	Introduction to Data Science*	2	2	0	2	XE	6	1		2+0+2+2			
IPM-22fpiCSE	Introduction to Computer Security*	2	0	0	1	E	3	1	IPM-22fpiICSG (weak)	2+0+0+1			
IPM-22fpiICSG	Introduction to Computer Security*	0	2	0	1	PG	3	1		0+2+0+1			
IPM-22fpiIFE	Introduction to Finance*	2	0	0	0	E	2	1	IPM-22fpiIFG (weak)	2+0+0+0			
IPM-22fpiIFG	Introduction to Finance*	0	2	0	1	PG	3	1		0+2+0+1			

IPM-22fpiCISE	Complex information systems*	2	0	0	1	E	3	2	IPM-22fpiCISG (weak)		2+0+0+1		
IPM-22fpiCISG	Complex information systems*	0	2	0	1	PG	3	2			0+2+0+1		
IPM-22fpiSESCE	Service Science*	2	0	0	1	E	3	2	IPM-22fpiSESCG (weak)		2+0+0+1		
IPM-22fpiSESCG	Service Science*	0	2	0	1	PG	3	2			0+2+0+1		
IPM-22fpiBIE	Business Intelligence and Data Visualization*	2	0	0	1	E	3	3	IPM-22fpiBIG (weak)			2+0+0+1	
IPM-22fpiBIG	Business Intelligence and Data Visualization*	0	2	0	1	PG	3	3				0+2+0+1	
IPM-22fpiDFISE	Development of Financial IT Systems*	2	0	0	1	E	3	3	IPM-22fpiDFISG (weak)			2+0+0+1	
IPM-22fpiDFISG	Development of Financial IT Systems*	0	2	0	1	PG	3	3				0+2+0+1	
IPM-22fpiFTLAB1	Fintech Lab I*	0	2	0	2	PG	4	3				0+2+0+2	
IPM-22fpiFTLAB2	Fintech Lab II.	0	4	0	2	PG	6	3				0+4+0+2	
	<b>Compulsory course credits</b>						<b>52</b>				<b>18</b>	<b>12</b>	<b>22</b>
	<b>Compulsory elective courses credits</b>						<b>19</b>				<b>7</b>	<b>5</b>	<b>7</b>
<b>IPM-22fERASMUS</b>	<b>Erasmus mobility</b>						<b>max 24 credits</b>	<b>3</b>					<b>max 24 credits</b>
	<b>Optional course</b>						<b>6</b>	<b>2,3</b>			<b>5+0+0</b>	<b>1+0+0</b>	
<b>IPM-22fTHCONS</b>	<b>Thesis consultation</b>			<b>5</b>	<b>10</b>	<b>PG</b>	<b>30</b>	<b>4</b>					<b>signature</b>
	<b>Summa credit in semester</b>										<b>30</b>	<b>30</b>	<b>30</b>
	<b>Summa credit</b>						<b>120</b>						

### Compulsory elective courses

Code	Courses	Lecture (L)	Labor	Practice (Pr)	Consultation	Requirement	Credit	Semester	Subject requirement	1st Semester	2nd Semester	3rd Semester	4th Semester
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IPM-22fpiDNDEG	Deep Network Development	2	2	0	0	XE	6	1		2+2+0+2			
IPM-22fpiPAIEG	Principles of artificial intelligence	2	2	0	2	XE	6	1		2+2+0+2			
IPM-22fpiPCMSG	Preparation course for master studies and developing learning skills*	0	0	3	0	PG	2	1		0+0+3+0			
IPM-22fpiDMDBE	Data models and databases	2	0	0	1	E	2	2	IPM-22fpiDMDBG (weak)		2+0+0+1		
IPM-22fpiDMDBG	Data models and databases	0	2	0	1	PG	2	2			0+2+0+1		
IPM-22fpiDRLEG	Deep Reinforcement Learning	2	2	0	2	XE	6	1			2+2+0+2		
IPM-22fpiISPEG	Information Security and Privacy	2	2	0	2	XE	6	2			2+2+0+2		
IPM-22fpiMLEG	Machine Learning	2	2	0	2	XE	6	2	IPM-22fpiDSEG		2+2+0+2		
IPM-22fpiADNDEG	Advanced Deep Network Development	2	2	0	2	XE	6	3	IPM-22fpiDNDEG			2+2+0+2	
IPM-22fmiACEG	Affective computing	2	2	0	2	XE	6	3				2+2+0+2	
IPM-22fpiCOSCEG	Cognitive Science	2	0	2	2	XE	6	3				2+0+2+2	
IPM-22fpiCOLLIEG	Collective Intelligence	2	2	0	2	PG	6	3				2+2+0+2	
IPM-22fpiCIEG	Computational Intelligence	2	2	0	2	XE	6	3				2+2+0+2	
IPM-22fatNSEG	Network Science	2	0	2	2	XE	6	3				2+0+2+2	
IPM-22fpiPME	Project Management	2	0	0	0	E	2	1,3		2+0+0+0		2+0+0+0	

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 entrepreneurship	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	
	<b>Summa credit in semester</b>										<b>30</b>	<b>30</b>	<b>30</b>
	<b>Summa credit</b>						<b>120</b>						

**PG: Practice Grade E: Exam Grade XPG: Lecture+Practice with Practical Grade XE: Lecture+Practice with Exam**

- Az EIT-es hallgatók számára I&E modul mellett a \*-gal megjelölt tárgyak elvégzése kötelező.
- A hallgatók a Fintech Lab I. és II. teljesítésével kiváltják a szakmai gyakorlatot.
- Az EIT-s hallgatók az utolsó félévükben végzik a szakmai gyakorlatot a diplomamunka készítésével párhuzamosan

- EIT students are required to complete the Innovation&Entrepreneurship (I&E) module and required to complete all subjects indicated by asterisk (\*) in the sample curriculum of the specialization.
- Computer Science Master course students with Fintech specialization are entitled to fulfill the requirements of the internship by the completion of Fintech 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.