

## Computer Science MSc (Software Architecture Specialization 2022)

### Compulsory subjects

Code	Subject	Lecture (L)	Practice (Pr)	Labor	Consultation	Requirement	Credit	Semester	Subject requirement	1st Semester	2nd Semester	3rd Semester	4th Semester
IPM-22fRMEG	Research methodology L+Pr.	1	2	0	2	XPG	5	1		1+2+0+2			
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
IPM-22fesztPE	Theory of programming	2	0	0	1	E	3	1	IPM-22fesztPG (weak)	2+0+0+1			
IPM-22fesztPG	Theory of programming	0	2	0	1	PG	3	1		0+2+0+1			
IPM-22fesztPCMSG	Preparation course for master studies and developing learning skills	0	3	0	0	PG	2	1		0+3+0+0			

IPM-22fpiPME	Project Management	2	0	0	0	E	2	1,3		2+0+0+0		2+0+0+0		
IPM-22fesZFSE	Formal semantics	2	0	0	1	E	3	2	IPM-22fesZFSG (weak)		2+0+0+1			
IPM-22fesZFSG	Formal semantics	0	2	0	1	PG	3	2			0+2+0+1			
IPM-22fesZDAAG	Design and analysis of algorithms	0	2	0	1	PG	3	2			0+2+0+1			
IPM-22fesZSQTE	Software quality and testing	2	0	0	1	E	3	2	IPM-22fesZSQTG (weak)		2+0+0+1			
IPM-22fesZSQTG	Software quality and testing	0	0	2	1	PG	3	2			0+0+2+1			
IPM-22fesZSALAB1	Software Technology Lab I.	0	0	4	1	PG	5	2			0+0+4+1			
IPM-22fesZDDSE	Design of Distributed Systems	2	0	0	1	E	3	3	IPM-22fesZDDSG (weak)			2+0+0+1		
IPM-22fesZDDSG	Design of Distributed Systems	0	0	2	1	PG	3	3			0+0+2+1			
IPM-22fesZSALAB2	Software Technology Lab II.	0	0	4	1	PG	5	3			0+0+4+1			
	<b>Compulsory subjects credits</b>						<b>54</b>				<b>15</b>	<b>28</b>	<b>11</b>	
	<b>Compulsory elective credits</b>						<b>30</b>				<b>15</b>	<b>2</b>	<b>13</b>	
<b>IPM-22fERASMUS</b>	<b>Erasmus mobility</b>						<b>max 24 credits</b>	<b>3</b>					<b>max 24 credits</b>	
	<b>Elective credits</b>						<b>6</b>	<b>3</b>					<b>6+0+0</b>	
<b>IPM-24fTHCONS</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>30</b>
	<b>Summa credit</b>						<b>120</b>							

## Compulsory elective subjects

Code	Subject	Lecture (L)	Practice (Pr)	Labor	Consultation	Requirement	Credit	Semester	Subject requirement	1st Semester	2nd Semester	3rd Semester	4th Semester
IPM-22fesZAJPE	Advanced Java programming	2	0	0	1	E	3	1	IPM-22fesZAJPG (weak)	2+0+0+1			
IPM-22fesZAJPG	Advanced Java programming	0	0	2	1	PG	3	1		0+0+2+1			
IPM-22fesZIDSEG	Introduction to Data Science	2	0	2	2	XE	6	1		2+0+2+2			
<i>IPM-22feszMCE</i>	<i>Models of Computation***</i>	2	0	0	0	E	2	1	IPM-22feszMCG (weak)	2+0+0+0			
<i>IPM-22feszMCG</i>	<i>Models of Computation***</i>	0	2	0	1	PG	3	1		0+2+0+1			
IPM-22feszMCEG	Models of Computation	2	2	0	1	XE	5	1		2+2+0+1			
IPM-22fesZPAIEG	Principles of artificial intelligence	2	0	2	2	XE	6	1		2+0+2+2			
IPM-22fesZAAE	Advanced Algorithms	2	0	0	1	E	3	1,3	IPM-22fesZAAG (weak)	2+0+0+1		2+0+0+1	
IPM-22fesZAAG	Advanced Algorithms	0	2	0	1	PG	3	1,3		0+2+0+1		0+2+0+1	
IPM-22fesZCISE	Complex information systems	2	0	0	1	E	3	2	IPM-22fesZCISG (weak)		2+0+0+1		
IPM-22fesZCISG	Complex information systems	0	0	2	1	PG	3	2			0+0+2+1		

IPM-22feszfUNLEG	Functional Languages	2	0	2	2	XE	6	2			2+0+2+2	
IPM-22feszMLEG	Machine Learning	2	0	2	2	XE	6	2	IPM-22fesfIDSEG		2+0+2+2	
IPM-22fesfSESCE	Service Science	2	0	0	1	E	3	2	IPM-22fesfSESCG (weak)		2+0+0+1	
IPM-22fesfSESCG	Service Science	0	0	2	1	PG	3	2			0+0+2+1	
IPM-22fesfADSEG	Analysis of distributed systems	2	2	0	2	XPG	6	3				2+2+0+2
IPM-22fesfICSE	Introduction to Computer Security	2	0	0	1	E	3	3	IPM-22fesfICSG (weak)			2+0+0+1
IPM-22fesfICSG	Introduction to Computer Security	0	0	2	1	PG	3	3				0+0+2+1
IPM-22fesfMTAIEG	Methods and tools for AI applications	2	0	2	2	XE	6	3				2+0+2+2
IPM-22fesfSEAPE	Scalable enterprise applications	2	0	0	1	E	3	3	IPM-22fesfSEAPG (weak)			2+0+0+1
IPM-22fesfSEAPG	Scalable enterprise applications	0	0	2	1	PG	3	3				0+0+2+1

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

**\*\*\* Discontinued subject**