

SOFTWARE ENGINEERING



▶▶ LEVELS OF ACHIEVEMENT ■■■■■■■■ 1 = BEGINNER ■■■■■■■■ 2 = INTERMEDIATE ■■■■■■■■ 3 = ADVANCED

▶▶ CORE CREDITS 35 ▶▶ MANDATORY PROGRAM CREDITS 147 ▶▶ ELECTIVE CREDITS 18

COURSE NAME	CREDITS	COURSE TYPE	CORE COMPETENCIES										SPECIFIC COMPETENCIES										REQUIREMENTS
			Written Communication	Oral Communication	Critical Thinking	Quantitative Reasoning	Information Literacy	Citizenship	Innovative Thinking	A - Science Knowledge Application	B - Experiment Planning and Conducting	C - Process and System Design	D - Multi-disciplinary Teamwork	E - Engineering Problem Solving	F - Ethical and Professional Responsibility	G - Effective Communication	H - Engineering Solution Impact Assessment	I - Continuous and Independent Learning	J - Contemporary Knowledge	K - Use of Modern Engineering Tools			
▶▶ TERM 1 CRD 21																							
Language Comprehension and Production I	4	CORE	1																				HU24 Leveling of language or have approved Language PDN (level definition test)
Basic Mathematics	6	CORE			1																		MA393 Leveling Math or have approved Maths PDN (level definition test)
Programming I	6	PROGRAM		1																			MA393 Leveling Math or have approved Maths PDN (level definition test)
Creativity Workshop	3	CORE							1														Does not have requirements
Ethics and Citizenship	2	CORE								1													HU24 Leveling of language or have approved Language PDN (level definition test)
▶▶ TERM 2 CRD 21																							
Business Organization and Management	4	CORE																					Does not have requirements
Language Comprehension and Production II	4	CORE	2		1																		HU03 Language Comprehension and Production I
Academic Research Seminar I	2	CORE	1																				HU03 Language Comprehension and Production I
Programming II	5	PROGRAM			2																		CC47 Programming I
Calculus I	6	CORE				1																	MA420 Basic Mathematics
▶▶ TERM 3 CRD 21																							
Accounting and Budgeting	4	CORE								2													AD99 Business Organization and Management
Requirement Specification and Analysis	3	PROGRAM	1																				AD99 Business Organization and Management
Algorithms and Data Structures	4	PROGRAM																					CC67 Programming II and simultaneously with MA265 Discrete Mathematics
Discrete Mathematics	6	PROGRAM				1																	MA420 Basic Mathematics and CC47 Programming I
Physics I	4	CORE																					MA262 Calculus I and MA95 Leveling of Physics or have approved Physics PDN (level definition test)
▶▶ TERM 4 CRD 23																							
Database Design	4	PROGRAM																					1 CC68 Algorithms and Data Structures
Computer Architecture and Operating Systems	5	PROGRAM																					MA265 Discrete Mathematics
HCI and Mobile Technologies	4	PROGRAM																					SI997 Requirement Specification and Analysis
Computational Mathematics	4	PROGRAM				1																	MA262 Calculus I
Physics II	6	PROGRAM																					MA466 Physics I
▶▶ TERM 5 CRD 22																							
Open Source Applications	3	PROGRAM																					1 SI400 Database Design
Web Applications	3	PROGRAM																					SI400 Database Design
Software Design and Patterns	4	PROGRAM																					SI997 Requirement Specification and Analysis
Calculus II	6	PROGRAM																					MA262 Calculus I
Physics III	6	PROGRAM																					MA462 Physics II
▶▶ TERM 6 CRD 19																							
Finance and Economic Engineering	4	PROGRAM																					CA59 Accounting and Budgeting
Algorithmic Complexity	4	PROGRAM																					CC68 Algorithms and Data Structures
Software Assessment	3	PROGRAM																					SI385 HCI and Mobile Technologies and 100 approved credits
Data Networks and Communication	4	PROGRAM																					2 SI407 Computer Architecture and Operating Systems
Applied Statistics 1	4	PROGRAM																					MA475 Computational Mathematics
▶▶ TERM 7 CRD 20																							
Artificial Intelligence	5	PROGRAM																					CC76 Algorithmic Complexity
ISW Experiment Design	4	PROGRAM																					MA469 Applied Statistics 1 and 100 approved credits
Fundamentals of Software Architecture	5	PROGRAM																					SI424 Software Design and Patterns
Concurrent and Distributed Programming	3	PROGRAM																					CC76 Algorithmic Complexity
Mobile Applications	3	PROGRAM																					SI421 Applications Open Source
▶▶ TERM 8 CRD 17																							
Academic Research Seminar II (Engineering)	3	PROGRAM																					HU159 Academic Research Seminar I and 145 approved credits
Professional Performance Workshop	4	PROGRAM																					SI433 ISW Experiment Design and HU61 English 5
Software Projects Management	4	PROGRAM																					SI434 Fundamentals of Software Architecture
Sustainable Business Entrepreneurship	3	PROGRAM																					SI405 Finance and Economic Engineering
Elective	3	ELECTIVE																					-
▶▶ TERM 9 CRD 19																							
Evaluation and New Trends of Software Architecture	4	PROGRAM																					2 SI434 Fundamentals of Software Architecture
Project Workshop I	5	PROGRAM																					SI413 Software Projects Management and have approved 2 pre-professional internships credits , SI391 Professional Performance Workshop
Quality and Improvement of Software Processes	4	PROGRAM																					SI434 Fundamentals of Software Architecture
Elective	3	ELECTIVE																					-
Elective	3	ELECTIVE																					-
▶▶ TERM 10 CRD 17																							
Fundamentals of Business Intelligence	3	PROGRAM																					2 SI434 Fundamentals of Software Architecture
Project Workshop II	5	PROGRAM																					3 SI408 Project Workshop I
Elective	3	ELECTIVE																					-
Elective	3	ELECTIVE																					-
Elective	3	ELECTIVE																					-