

Time schedule	Level	Module Code	Module Title	Course Code	Course Title	Hourly volume					Credit
						Integrated course	Lab	Project	Self Study	Total	
Semester 1	SCSE	CSE110	Fundamental and applied mathematics	CSE111	Engineering mathematics	45			35	80	7,5
				CSE112	Applied probabilities and statistics	45			35	80	
				CSE113	Mathematics lab		22,5		12,5	35	
		CSE120	Electronic	CSE121	Analog electronics	22,5			14,5	37	4,5
				CSE122	Digital circuits	30	15		35	80	
		CSE130	Algorithm & programming	CSE131	Algorithm and data structure	45			31	76	6
				CSE132	Programming workshop C++		22,5	22,5	35	80	
		CSE140	Logic and analysis	CSE141	Formal logic	45			33	78	6
				CSE142	Algorithm of numerical analysis	22,5	22,5		33	78	
		LAC150	Languages and cultures I	LAC151	English I: TOEIC B1,1 Certification	22,5			16,5	39	4,5
LAC152	French I: Communication technique & preparation for Delf B1,1			22,5			16,5	39			
LAC153	Economics and business management			22,5			16,5	39			
CSE160	Project	CSE161	supervised project I			22,5	16,5	39	1,5		
Semester 2	SCSE	CSE210	Theory and Optimization	CSE211	Language theory and compilation	45			33	78	6
				CSE212	Graph theory and optimization	45			33	78	
		CSE220	Programming & web multimedia	CSE221	Object oriented programming	22,5	22,5	22,5	52,5	120	7,5
				CSE222	Web and multimedia Programming		22,5	22,5	30	75	
		CSE230	preparing to certification I	CSE231	preparing for LPI 101 certification		22,5		15	37,5	4,5
				CSE232	preparing for the CCNA1 certification	22,5	22,5		34,5	79,5	
		CSE240	Architecture and transmission	CSE241	Digital transmission	30	15		33	78	6
				CSE242	Architecture & micro processors	30	15		33	78	
		LAC250	Languages and cultures II	LAC251	English II: Certification TOEIC B1,2	22,5			16,5	39	4,5
				LAC252	French II: Communication technique and preparation for Delf B2,1	22,5			16,5	39	
LAC253	Introduction to financial systems and banking management			22,5			16,5	39			
CSE260	project	CSE261	Supervised project II			22,5	16,5	39	1,5		
<b>TOTAL</b>						<b>585</b>	<b>202,5</b>	<b>90</b>	<b>660</b>	<b>1560</b>	<b>60</b>

Time schedule	Level	Module Code	Module Title	Course Code	Course Title	Hourly volume					Credit
						Integrated course	Lab	Project	Self Study	Total	
Semester 3	SCSE	CSE310	Hard Design Methodology	CSE311	Processor design methodology	45			35	80	7,5
				CSE312	Operating systems and concurrent programming	45	22,5		47,5	115	
		CSE320	Algorithms, Database and Operational research	CSE321	Algorithm design and analysis	45			35	80	9
				CSE322	Operational research	45			35	80	
				CSE323	Database design	22,5	22,5		29	74	
		CSE330	Software engineering	CSE331	software engineering & agile method	33		12	35	80	6
				CSE332	Object-oriented analysis and design	22,5	22,5		31	76	
		CSE340	preparing to certification II	CSE341	Preparing for the CCNA2 certification	45			35	80	4,5
				CSE342	Preparing for LPI 102		22,5		14,5	37	
		LAC350	Languages and Cultures III	LAC351	English III: TOEIC B2,1 Certification	22,5			16,5	39	3
LAC352	French III: Communication technique and preparation for Delf Pro 1			22,5			16,5	39			
Semester 4	SCSE	CSE410	Soft Design Methodology	CSE411	Design and development projects			45	36	81	6
				CSE412	Software engineering II	45			30	75	
		CSE420	IoT and embedded systems	CSE421	Embedded Systems	22,5	22,5		33	78	6
				CSE422	Networking computer	22,5	22,5		33	78	
		CSE430	Decision support and database management	CSE431	Database management systems	22,5	22,5		33	78	4,5
				CSE432	artificial Intelligence	22,5			16,5	39	
		LAC440	Languages and Cultures III	LAC441	English IV: TOEIC B2,2 Certification	22,5			16,5	39	4,5
				LAC442	French IV: Communication technique and preparation for Delf Pro 2	22,5			16,5	39	
				LAC443	Business creation and systems management	22,5			16,5	39	
		CSE450/1	Architecture and programming	CSE451/1	Functional programming	22,5	22,5		33	78	6
CSE452/1	Software architecture			22,5	22,5		33	78			
CSE460	Project	CSE453/1	End year project			45	33	78	3		
<b>TOTAL</b>						<b>595,5</b>	<b>202,5</b>	<b>102</b>	<b>660</b>	<b>1560</b>	<b>60</b>

Time schedule	Level	Module Code	Module Title	Course Code	Course Title	Hourly volume					Credit
						Integrated course	Lab	Project	Self Study	Total	
THIRD YEAR	SCSE	LAC510	Languages and corporate culture	LAC511	English V: Certification TOEIC C1	15			11	26	3
				LAC512	Human rights	15			11	26	
				LAC513	Project management	15			11	26	
		CSE520/1	Massive data management	CSE522/1	Data Mining and Analysis	15	15		22	52	5
				CSE523/1	Big data framework & technologies	30	15		33	78	
		CSE530/1	Systems Security	CSE531/1	IT security	30			22	52	3
				CSE532/1	Operational safety and fault tolerance	15			11	26	
		CSE540/1	Interactive decision support systems	CSE541/1	Interactive decision support systems	30			22	52	5
				CSE542/1	Advanced machine learning	30	15		33	78	
		CSE550/1	Systems check	CSE551/1	Preparation to certification ISTQB	15	15		22	52	5
				CSE552/1	Verification of Complex Systems	30			22	52	
				CSE553/1	Software architecture project			15	11	26	
		CSE560/1	Software development	CSE561/1	Service oriented engineering	15	15		22	52	6
				CSE562/1	Model driven engineering	15	15		22	52	
				CSE563/1	Development of advanced web applications (JEE/,NET)	15	15		22	52	
		CSE570/1	Mobile programming	CSE571/1	Mobile Programming	15			11	26	3
				CSE572/1	Distributed database	15			11	26	
				CSE573/1	project mobile programming			15	11	26	
		CSE 660	traineeship	CSE660/1	Internship 1(1-2 months)			75	55	130	30
				CSE660/2	Internship 2 (1-2 months)			75	55	130	
CSE660/3	GRADUATION RESEARCH PROJECT (4-6 months)					300	220	520			
<b>TOTAL</b>						<b>315</b>	<b>105</b>	<b>480</b>	<b>660</b>	<b>1560</b>	<b>60</b>