

STUDY PROGRAMME CURRICULUM COMPUTER AND INFORMATION SCIENCE

Name of study programme	Computer and information science
Programme characteristics	
Type	higher professional
Cycle	bachelor
University of Ljubljana members	• Faculty of Computer and Information Science, Večna pot 113, 1000 Ljubljana, Slovenija

Year 1

	University Course Code	Course title	Lecturers	Contact hours					Individual student work	Total hours	ECTS	Semesters	Elective
				Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study					
1.	0039655	Introduction to Computer Science	Vlado Stankovski	45		30			105	180	6	1st semester	no
2.	0039651	Programming 1	Janez Demšar	45		30			105	180	6	1st semester	no
3.	0039653	Computer Architecture	Robert Rozman	45		30			105	180	6	1st semester	no
4.	0039647	Mathematics	Polona Oblak	45		30			105	180	6	1st semester	no
5.	0039646	Discrete Structures	Gašper Fijavž	45		30			105	180	6	1st semester	no
6.	0039652	Programming 2	Tomaž Dobravec	45		30			105	180	6	2nd semester	no
7.	0039650	Databases	Matjaž Kukar	45		30			105	180	6	2nd semester	no
8.	0039654	Computer Communications	Mojca Ciglaric	45		30			105	180	6	2nd semester	no
9.	0039648	Operating Systems	Peter Peer	45		30			105	180	6	2nd semester	no
10.	0039649	Introduction to Probability and Statistics	Aleksandar Jurišic	45		30			105	180	6	2nd semester	no

	Total	450	0	300	0	0	1050	1800	60	
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Year 2

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0070031	Algorithms and Data Structures I	Jurij Mihelič	45		30			105	180	6	1st semester	no
2.	0070034	General elective courses		180		120			420	720	24	1st semester	yes
3.	0070032	Algorithms and Data Structures 2	Andrej Brodnik	45		30			105	180	6	2nd semester	no
4.	0070035	General elective courses		135		90			315	540	18	2nd semester	yes
5.	0069530	Specialist elective course		45		30			105	180	6	2nd semester	yes
Total				450	0	300	0	0	1050	1800	60		

Programme related electives for study year 2

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0039664	Electronic and Mobile Business	Rok Rupnik	45		30			105	180	6	1st semester	yes
2.	0039674	Databases 2	Aljaž Zrnec	45		30			105	180	6	1st semester	yes
3.	0039666	Information Systems	Damjan Vavpotič	45	10	20			105	180	6	1st semester	yes
4.	0039665	Graphic Design	Iztok Lebar Bajec, Narvika Bovcon	45		30			105	180	6	1st semester	yes
5.	0039670	Communications Protocols and Network Security	Andrej Brodnik	45		30			105	180	6	1st semester	yes

6.	0039673	Computer Organisation	Robert Rozman	45	6	24			105	180	6	1st semester	yes
7.	0039662	Digital Circuits	Miha Moškon	45	10	20			105	180	6	1st semester	yes
8.	0039681	Computer Graphics	Iztok Lebar Bajec	45	15	15			105	180	6	1st semester	yes
9.	0039692	Artificial Intelligence	Igor Kononenko	45	6	24			105	180	6	1st semester	yes
10.	0039693	User Interfaces	Aleš Smrdel	45		30			105	180	6	2nd semester	yes
11.	0039678	Compilers and Virtual Machines	Boštjan Slivnik	45		30			105	180	6	2nd semester	yes
12.	0039691	Testing and Quality	Igor Rožanc	45		30			105	180	6	2nd semester	yes
13.	0039684	Information Systems Development	Damjan Vavpotič	45	10	20			105	180	6	2nd semester	yes
14.	0039679	Multimedia Content Production	Borut Batagelj	45	10	20			105	180	6	2nd semester	yes
15.	0039663	Digital Signal Processing	Franc Jager	45		30			105	180	6	2nd semester	yes
16.	0039686	Web Technologies	Aleš Smrdel	45	10	20			105	180	6	2nd semester	yes
17.	0039694	Input-Output Systems	Robert Rozman	45		30			105	180	6	2nd semester	yes
18.	0039672	Digital Logic Design	Miha Moškon	45		30			105	180	6	2nd semester	yes
19.	0039675	Data Mining	Tomaž Curk	45	10	20			105	180	6	2nd semester	yes
20.	0041950	The C Programming language	Tomaž Dobravec	15		45			30	90	3	1st semester	yes
21.	0039689	Computer Science Skills	Tomaž Dobravec	15		45			30	90	3	1st semester, 2nd semester	yes
22.	0039690	Computer Science Skills 2	Tomaž Dobravec	15		45			30	90	3	1st semester, 2nd semester	yes
23.	0041949	Topics in Computer and Information Science		45		30			105	180	6	2nd semester	yes
Total				945	87	648	0	0	2190	3870	129		

Year 3

	University Course Code	Course title	Lecturers	Contact hours					Individual student work	Total hours	ECTS	Semesters	Elective
				Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study					
1.	0070037	Software Engineering	Igor Rožanc	45	20	10			105	180	6	1st semester	no
2.	0070034	General elective courses		180		120			420	720	24	1st semester	yes
3.	0070039	Industrial Practice						225	315	540	18	2nd semester	no
4.	0070038	Diploma seminar	Franc Solina	45	10	5			120	180	6	2nd semester	no
5.	0069530	Specialist elective course		45		30			105	180	6	2nd semester	yes
Total				315	30	165	0	225	1065	1800	60		

Programme related electives for study year 3

	University Course Code	Course title	Lecturers	Contact hours					Individual student work	Total hours	ECTS	Semesters	Elective
				Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study					
1.	0039710	IT Governance	Rok Rupnik	45		30			105	180	6	1st semester	yes
2.	0039706	Multimedia Technologies	Alenka Kavčič	45	10	20			105	180	6	1st semester	yes
3.	0039725	Parallel and Distributed Systems and Algorithms	Patricio Bulić	45	10	20			105	180	6	1st semester	yes
4.	0039718	System Software	Branko Šter	45		30			105	180	6	1st semester	yes
5.	0039712	Process Automation	Nejc Ilc, Uroš Lotrič	45	10	20			105	180	6	1st semester	yes
6.	0039724	Embedded Systems	Patricio Bulić	45	10	20			105	180	6	1st semester	yes
7.	0039717	Robotics and Machine Perception	Danijel Skočaj	45		30			105	180	6	1st semester	yes

8.	0039721	Game Technology and Virtual Reality	Peter Peer	45		30			105	180	6	1st semester	yes
9.	0039708	Decision Systems	Aleksander Sadikov	45	10	20			105	180	6	1st semester	yes
10.	0039707	Numerical Methods	Aljaž Zalar	45		30			105	180	6	1st semester	yes
Total				450	50	250	0	0	1050	1800	60		

Discipline related electives

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0041962	English, level A	Nina Bishop Bostič	30		15			45	90	3	2nd semester	yes
2.	0041963	English, level B	Nina Bishop Bostič	30		15			45	90	3	1st semester	yes
3.	0041964	English, level C	Nina Bishop Bostič	30		15			45	90	3	2nd semester	yes
4.	0041965	Computer Science in Practice I	Gašper Fijavž	5				40	45	90	3	1st semester, 2nd semester	yes
5.	0041966	Computer Science in Practice II	Gašper Fijavž	5				40	45	90	3	1st semester, 2nd semester	yes
6.	0041967	Physical education	Iztok Mihevc			30			60	90	3	1st semester	yes
7.	0096887	Use of IT for study	Damjan Vavpotič	30		15			45	90	3	1st semester, 2nd semester	yes
Total				130	0	90	0	80	330	630	21		