



Study Plan

B.Sc. Computer Science

Faculty of Mathematics and Information Science

Study plan for reference only; may be subject to change.

Lc: Lecture T: Tutorials L: Laboratories P: Project

Semester 1

Course title	ECTS	Lc	T	L	P	h/sem
Calculus 1	6	2	2	0	0	60
Programming 1 - fundamentals	6	2	2	1	0	75
Introduction to formal logic and set theory	5	2	2	0	0	60
Linear algebra with geometry	5	2	2	0	0	60
Electronic principles	4	2	1	0	0	45
Physics 1	4	2	1	0	0	45

Semester 2

Course title	ECTS	Lc	T	L	P	h/sem
Calculus 2	5	2	3	0	0	75
Programming 2 - object oriented	5	2	0	2	0	60
Discrete mathematics 1	4	2	2	0	0	60
Introduction to digital systems	4	2	1	0	0	45
Language	4	0	4	0	0	60
Physics 2	4	2	1	1	0	60

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Communication skills (humanities)	2	0	2	0	0	30
UNIX fundamentals	2	0	0	2	0	30
Physical education and sports	0	0	2	0	0	30

Semester 3

Course title	ECTS	Lc	T	L	P	h/sem
Algorithms and data structures	7	2	2	2	0	90
Differential equations	4	2	2	0	0	60
Discrete mathematics 2	4	2	2	0	0	60
Language	4	0	4	0	0	60
Programming 3 - advanced	4	2	0	2	0	60
Data transmission	3	2	0	1	0	45
Humanities	2	0	0	0	0	30
Operating systems 1	2	1	0	1	0	30
Physical education and sports	0	0	2	0	0	30

Semester 4

Course title	ECTS	Lc	T	L	P	h/sem
Databases	4	2	0	2	0	60
Language	4	0	4	0	0	60
Numerical methods 1	4	2	1	1	0	60
Object oriented design	4	1	0	2	0	45
Operating systems 2	4	2	0	1	0	45
Probability	4	2	2	0	0	60

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Programming in graphical environment	4	2	0	2	0	60
Student internship (after sem.4 or sem.6)	4	0	0	0	0	160
Humanities	2	0	0	0	0	30
Physical education and sports	0	0	2	0	0	30

Semester 5

Course title	ECTS	Lc	T	L	P	h/sem
Automata theory and formal languages	4	2	1	1	0	60
Computer networks	4	2	0	1	0	45
Computer statistics	4	2	0	2	0	60
Elective 1	4	0	0	0	0	45
Multilayer application development (elective block 1)	4	0	0	0	0	45
Numerical methods 2	4	2	1	1	0	60
Software engineering 1	4	2	1	0	0	45
Language	2	0	2	0	0	30

Semester 6

Course title	ECTS	Lc	T	L	P	h/sem
Computer graphics 1	5	2	0	2	0	60
Software engineering 2	5	0	0	3	0	45
Artificial intelligence fundamentals	4	2	0	0	1	45
Elective 2	4	0	0	0	0	45
Elective 3	4	0	0	0	0	45

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Elective 4	4	0	0	0	0	45
Embedded systems (elective block 2)	4	0	0	0	0	45
Student internship (after sem.4 or sem.6)	4	0	0	0	0	160

Semester 7

Course title	ECTS	Lc	T	L	P	h/sem
Bachelor thesis / project preparation	12	0	0	0	0	0
Algorithms and computability	7	2	1	1	0	60
Elective 5	4	0	0	0	0	45
Group project	4	1	0	0	1	30
Diploma seminar	3	0	2	0	0	30