The Faculty of Mathematics and Information Science, Warsaw University of Technology
Undergraduate Programme (B.Sc.) in Computer Science and Information Systems
valid from academic year 2023/2024

COMPUTER SCIENCE & IS - semester 1

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	Calculus 1	6	2	2	0	0	E
2	Linear Algebra with Geometry	5	2	2	0	0	E
3	Introduction to Formal Logic and Set Theory	5	2	2	0	0	E
4	Physics 1	4	2	1	0	0	
5	Programming 1 - Fundamentals	6	2	1	2	0	
6	Computer Architecture	4	2	1	0	0	
7	Health and Safety Training	0					
8	Library Training	0					
	Total:	30	12	9	2	0	3
	Hours (total):		23				
	Hours (without Sports, HES, Languages):		23				

COMPUTER SCIENCE & IS - semester 2

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	Calculus 2	5	2	3	0	0	E
2	Discrete Mathematics 1	4	2	2	0	0	
3	Physics 2	4	2	1	1	0	E
4	Programming 2 - Object Oriented	5	2	0	2	0	
5	Fundamentals of Information Theory	4	2	0	1	0	
6	UNIX Fundamentals	2	0	0	2	0	
7	*Humanities 1*	2	0	2	0	0	
8	*Language*	4	0	4	0	0	
9	*Physical Education and Sports 1*	0	0	2	0	0	
	Total:	30	10	14	6	0	2
	Hours (total):		30				
	Hours (without Sports, HES, Languages):		22				

COMPUTER SCIENCE & IS - semester 3

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	Mathematical Modeling	5	2	2	0	0	E
2	Discrete Mathematics 2	4	2	2	0	0	E
3	Algorithms and Data Structures	7	2	2	2	0	E
4	Programming 3 - Advanced	4	2	0	2	0	
5	Data Transmission	4	2	0	1	0	
6	Operating Systems 1	2	1	0	1	0	
7	*Language*	4	0	4	0	0	
8	*Physical Education and Sports 2*	0	0	2	0	0	
	Total:	30	11	12	6	0	3
	Hours (total):		29				
	Hours (without Sports, HES, Languages):		23				

COMPUTER SCIENCE & IS - semester 4

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	Probability	4	2	2	0	0	E
2	Object Oriented Design	4	1	0	2	0	
3	Programming in Graphical Environment	4	2	0	2	0	
4	Databases	4	2	0	2	0	E
5	Numerical Methods 1	4	2	1	1	0	E
6	Operating Systems 2	4	2	0	1	0	
7	*Humanities 2 (Communication Skills)*	2		2			
8	*Language*	4	0	4	0	0	
9	*Physical Education and Sports 3*	0	0	2	0	0	
	Total:	30	13	9	8	0	3
	Hours (total):		30				
	Hours (without Sports, HES, Languages):		22				

COMPUTER SCIENCE & IS - semester 5

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	Computer Statistics	5	2	0	2	0	E
2	Automata Theory and Formal Languages	5	2	2	0	0	E
3	Software Engineering 1	4	2	0	0	1	
4	Numerical Methods 2	4	2	1	1	0	
5	Computer Networks	4	2	0	1	0	
6	*Multilayer Application Development (elective block 1)*	4	3				
7	*Elective 1*	4	3				
	Total:	30	12	3	8	1	2
	Hours (total):		24				
	Hours (without Sports, HES, Languages):		24				

COMPUTER SCIENCE & IS - semester 6

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	Artificial Intelligence Fundamentals	4	2	0	0	1	E
2	Software Engineering 2	5	0	0	3	0	
3	Computer Graphics 1	5	2	0	2	0	E
4	*Embedded Systems (elective block 2)*	4	3				E
5	*Elective 2*	4	3				
6	*Elective 3*	4	3				
7	*Elective 4*	4	3				
	Total:	30	8	0	13	1	3
	Hours (total):		22				
	Hours (without Sports, HES, Languages):		22				

COMPUTER SCIENCE & IS - semester 7

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	Algorithms and Computability	4	2	1	1	0	
2	*Diploma Seminar*	2	0	2	0	0	
3	*Group Project*	3	1	0	0	1	
4	*Elective 5*	4	3				
5	*Humanities 3*	2	2				
6	*Bachelor diploma thesis*	15	0	0	0	0	
	Total:	35	6	3	3	1	0
	Hours (total):		13				
	Hours (without Sports, HES, Languages):		11				

Student Internship (after sem. 4 or sem. 6) - 4 weeks, 4 ECTS, not within the ECTS limits
C1 Academic English Exam to be passed by the end of study