

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 2025/2026

COMPUTER SCIENCE AND INFORMATION SYSTEMS - 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	
	Total:	30	12	9	2	0	3
	Hours (total):			23			
	Hours (without Sports, HES, Languages):			23			

COMPUTER SCIENCE AND INFORMATION SYSTEMS - 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		2			
8	Language	4	0	4	0	0	
9	Physical education and sports 1	0	0	2	0	0	
	Total:	30	12	12	6	0	2
	Hours (total):			30			
	Hours (without Sports, HES, Languages):			22			

COMPUTER SCIENCE AND INFORMATION SYSTEMS - 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	6	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	3	2	0	2	0	
7	Language	4	0	4	0	0	
8	Physical education and sports 2	0	0	2	0	0	
	Total:	30	12	12	7	0	3
	Hours (total):			31			
	Hours (without Sports, HES, Languages):			25			

COMPUTER SCIENCE AND INFORMATION SYSTEMS - 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	2	0	
7	Humanities 2	2		2			
8	Language	4	0	4	0	0	
9	Physical education and sports 3	0	0	2	0	0	
	Total:	30	13	9	9	0	3
	Hours (total):			31			
	Hours (without Sports, HES, Languages):			23			

COMPUTER SCIENCE AND INFORMATION SYSTEMS - 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 (elective block 1)	4			3		
6	Multilayer application development (elective block 2)	4			3		
7	Elective 1	4			3		
	Total:	30	11	3	9	1	2
	Hours (total):				24		
	Hours (without Sports, HES, Languages):				24		

COMPUTER SCIENCE AND INFORMATION SYSTEMS - semester 6

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	Artificial intelligence fundamentals	4	2	0	0	2	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 3)	4			3		
5	Elective 2	4			3		
6	Elective 3	4			3		
7	Elective 4	4			3		
	Total:	30	8	0	13	2	2
	Hours (total):				23		
	Hours (without Sports, HES, Languages):				23		

COMPUTER SCIENCE AND INFORMATION SYSTEMS - semester 7

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	Diploma seminar	2	0	2	0	0	
2	Group project	3	1	0	0	1	
3	Data processing (elective block 4)	4			3		
4	Elective 5	4			3		
5	Humanities 3	2			2		
6	Bachelor diploma thesis	15	0	0	0	0	
	Total:	30	5	2	4	1	0
	Hours (total):				12		
	Hours (without Sports, HES, Languages):				10		

Student Internship (after sem 4 or sem. 6) - 4 weeks, 4 ECTS, not within the ECTS limits

Student Internship 120 hours