

[Załącznik 5e do Uchwały RW nr 28/VII/2021 z dn. 25.02.2021 r.](#)

The Faculty of Mathematics and Information Science, Warsaw University of Technology  
**Graduate Programme (M.Sc.Eng.) in Computer Science and Information Systems**  
**3-semester programme**  
**specialization: Artificial Intelligence**  
**(valid from academic year 2021/2022)**

**COMPUTER SCIENCE - summer semester (3SEM - AI sem.1 or 2)**

**Obligatory courses**

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	Elements of modern physics	4	2	1	0	0	
2	High performance computing	3	2	0	2	0	
3	Humanities seminar	3	0	2	0	0	
Total:		10	4	3	2	0	0
Hours (total):			9				
Hours (without Sports, HES, Languages):			7				

**Specialization: Artificial intelligence**

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	Neural networks	5	2	0	2	0	E
2	Knowledge representation and reasoning	5	2	0	2	0	E
3	Diploma seminar 1 (sem.2)*	2	0	2	0	0	
4	Elective 1	4	3				
5	Elective 2	4	3				
Total:		20	6	2	8	0	2
Hours (total):			16				

**COMPUTER SCIENCE - winter semester (3SEM - AI sem.1 or 2)**

**Obligatory courses**

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	Advanced topics in mathematics (elective block)	4	3				
2	Advanced algorithms	4	2	0	0	1	E
3	IT projects management	4	2	0	0	2	E
4	Humanities (elective)	2	2				
Total:		14	7	2	0	3	2
Hours (total):			12				
Hours (without Sports, HES, Languages):			10				

**Specialization: Artificial intelligence**

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	Calculus - advances	4	2	2	0	0	
2	Image and speech recognition	5	2	1	1	0	
3	Programming in logic and symbolic programming	4	1	0	2	0	
4	Data compression	3	2	0	1	0	
Total:		16	7	3	4	0	0
Hours (total):			14				

**COMPUTER SCIENCE - summer or winter semester (3SEM - AI sem.3)**

**Obligatory courses**

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	Master thesis	20	0	0	0	0	
Total:		20	0	0	0	0	0
Hours (total):			0				

**Specialization: Artificial intelligence**

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	Diploma seminar 2	2	0	2	0	0	
2	Elective 3	4	3				
3	Elective 4	4	3				
Total:		10	2	2	4	0	0
Hours (total):			8				

\* The first semester of the diploma seminar takes place in the second semester,  
 i.e. winter for students beginning their course in the summer, or summer for those beginning in the winter semester