

The Faculty of Mathematics and Information Science, Warsaw University of Technology  
**Graduate Programme (M.Sc.Eng.) in Computer Science**  
 (3-semester programme, specialization Business Intelligence Systems Development,  
 valid from academic year 2016/2017)

**COMPUTER SCIENCE - summer semester (3SEM - BISD sem.1)**

**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: Business intelligence systems development**

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	Advances in computer statistics	4	2	0	2	0	E
2	Introduction to SAS system	4	2	0	2	0	E
3	Enterprise data management	4	1	0	2	0	
4	<i>Elective 1</i>	4			3		
5	<i>Elective 2</i>	4			3		
Total:		20	7	0	10	0	2
Hours (total):				17			

**COMPUTER SCIENCE - winter semester (3SEM - BISD sem.2)**

**Obligatory courses**

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	<i>Advanced topics in mathematics (elective block)</i>	4			3		
2	Advanced algorithms	4	2	0	0	1	E
3	Software testing	4	1	1	1	0	E
4	<i>Humanities (elective)</i>	2			2		
5	<i>Physical education and sports</i>	0	0	2	0	0	
Total:		14	6	5	1	1	2
Hours (total):				13			
Hours (without Sports, HES, Languages):				9			

**Specialization: Business intelligence systems development**

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	Data mining - advances	4	2	0	1	0	
2	Business analytics programming	4	2	0	0	2	
3	Computational intelligence in business applications	3	1	0	0	2	
4	Business intelligence and web applications	3	1	0	2	0	
5	<i>Diploma seminar 1</i>	2	0	2	0	0	
Total:		16	6	2	3	4	0
Hours (total):				15			

**COMPUTER SCIENCE - summer semester (3SEM - BISD sem.3)**

**Obligatory courses**

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	<i>Master thesis preparation</i>	16	0	0	0	0	
Total:		16	0	0	0	0	0
Hours (total):				0			

**Specialization: Business intelligence systems development**

No.	Course	ECTS	Lc	Ex	Lab	P	Exam
1	<i>Diploma seminar 2</i>	2	0	2	0	0	
2	<i>Elective 3</i>	4			3		
3	<i>Elective 4</i>	4			3		
4	<i>Elective 5</i>	4			3		
Total:		14	3	2	6	0	0
Hours (total):				11			