

## COURSE CATALOGUE

### WARSAW SCHOOL OF INFORMATION TECHNOLOGY

COMPUTER SCIENCE, FIRST CYCLE (ENGINEER), FULL-TIME, I YEAR, I SEMESTER

No.	Name of Subjects	Contact hours						ECTS
		LE	CL	LA	TU	PR	SE	
1.	Algebra	30	30					5
2.	Calculus 1	30	45					5
3.	Structure and Analysis of Algorithms	30	14					4
4.	Philosophy	30						3
5.	Foreign Language 1		45					2
6.	Office Applications 1			45				3
7.	Fundamentals of Economics	30						3
8.	Fundamentals of Digital Logic	30	14					4
9.	Introduction to Networking			2				0
10.	Industrial Safety Training	4						0
11.	Physical Education		30					1
12.	Mathematics – compensatory courses		30					0
<b>Total amount of hours:</b>		<b>184</b>	<b>208</b>	<b>47</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30</b>

LE – lectures, CL – classes, LA – laboratories, TU – tutoring, PR – project, SE – seminar

COMPUTER SCIENCE, FIRST CYCLE (ENGINEER), FULL-TIME, I YEAR, II SEMESTER

No.	Name of Subjects	Contact hours						ECTS
		LE	CL	LA	TU	PR	SE	
1.	Calculus 2	30	30					5
2.	Foundations of Law	30						2
3.	Foreign Language 2		45					2
4.	Office Applications 2			45				3
5.	Computer Organization and Architecture	30						4
6.	Fundamentals of Economics 2	30						3
7.	Fundamentals of Mathematics	30	30					5
8.	Basics of Programming	30		45				5
9.	Physical Education		30					1
10.	Mathematics – compensatory courses		15					0
<b>Total amount of hours:</b>		<b>180</b>	<b>150</b>	<b>90</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30</b>

LE – lectures, CL – classes, LA – laboratories, TU – tutoring, PR – project, SE – seminar

COMPUTER SCIENCE, FIRST CYCLE (ENGINEER), FULL-TIME, II YEAR, III SEMESTER

No.	Name of Subjects	Contact hours						ECTS
		LE	CL	LA	TU	PR	SE	
1.	Databases 1	20		30				4
2.	Physics 1	30						2
3.	Foreign Language 3		45					2
4.	Discrete Mathematics	30	30					5
5.	Object-oriented Programming 1	30		45				5
6.	Probability and Statistics	30	30					5
7.	Operating Systems 1	30		30				5
8.	Introduction to the WEB			30				2
<b>Total amount of hours:</b>		<b>170</b>	<b>105</b>	<b>135</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30</b>

LE – lectures, CL – classes, LA – laboratories, TU – tutoring, PR – project, SE – seminar

COMPUTER SCIENCE, FIRST CYCLE (ENGINEER), FULL-TIME, II YEAR, IV SEMESTER

No.	Name of Subjects	Contact hours						ECTS
		LE	CL	LA	TU	AT	SE	
1.	Operation Research	30	14	21				4
2.	Databases 2	30		30				4
3.	Physics 2	30						3
4.	Foreign Language 4		45					2
5.	XML			30				3
6.	Laboratory of Computer Algebra			14				2
7.	Windows Programming			30				3
8.	Statistical Methods of Decision Making	10		20				4
9.	Operating Systems 2	30		30				5
<b>Total amount of hours:</b>		<b>130</b>	<b>59</b>	<b>175</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30</b>

LE – lectures, CL – classes, LA – laboratories, TU – tutoring, AT – atelier, SE – seminar

COMPUTER SCIENCE, FIRST CYCLE (ENGINEER), FULL-TIME, III YEAR, V SEMESTER

No.	Name of Subjects	Contact hours						ECTS
		LE	CL	LA	TU	PR	SE	
1.	Algorithms and Data Structures 1	30		15				3
2.	Databases 3	16						3
3.	Web Databases 1			21		9		2
4.	Software Engineering	30						3
5.	Foreign Language 5		45					2
6.	Laboratory of Software Engineering 1			15				2
7.	Analysis of Low-level Code	15		15				3
8.	Fundamentals of Telecommunication	16						3
9.	System Programming	10		15				3
10.	Image Processing	30		30				3
11.	Networks and Distributed Systems	30		30				5
12.	Building Database Applications 1			21		9		2
13.	Introduction to Cryptology	30	15					4
14.	IT Project Management	16		8				2
<b>Total amount of hours:</b>		<b>223</b>	<b>60</b>	<b>170</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>40</b>

LE – lectures, CL – classes, LA – laboratories, TU – tutoring, PR – project, SE – seminar

COMPUTER SCIENCE, FIRST CYCLE (ENGINEER), FULL-TIME, III YEAR, VI SEMESTER

No.	Name of Subjects	Contact hours						ECTS
		LE	CL	LA	TU	PR	SE	
1.	Oracle Database Administration	30		30				4
2.	LINUX System Administration			24				3
3.	Algorithms and Data Structures 2	30		30				4
4.	Algorithms for Image Processing	14		14				3
5.	Databases 4	16						3
6.	Databases in Object-oriented Programming			20				2
7.	Computer System Security	24		8				3
8.	Web Databases 2			21		9		2
9.	Java Programming	21		14				3
10.	Foreign Language 6		45					2
11.	Teamwork Shop	4	3			20	6	2
12.	Apprenticeship							2
13.	Client-server Application Programming	10		21				3
14.	Low-level Programming 1			18				2
15.	Programming in C#			30				2
16.	Ruby on Rails	12		18				2
17.	Computer Networks	16		16				5
18.	Geographic Information Systems GIS	8		22				2
19.	Cryptographic Systems	30	14					3
20.	Digital Technology	30		30				4
12.	Building Database Applications 2			15				2
<b>Total amount of hours:</b>		<b>245</b>	<b>62</b>	<b>331</b>	<b>0</b>	<b>29</b>	<b>6</b>	<b>58</b>

LE – lectures, CL – classes, LA – laboratories, TU – tutoring, PR – project, SE – seminar

COMPUTER SCIENCE, FIRST CYCLE (ENGINEER), FULL-TIME, IV YEAR, VII SEMESTER

No.	Name of Subjects	Contact hours						ECTS
		LE	CL	LA	TU	PR	SE	
1.	English Language – Fianal Exam		3					0
2.	Digital Electronics	16						3
3.	Data Warehouses			24				4
4.	Intelligent Computing System	30						4
5.	Modeling and Generating of Database Applications			16				3
6.	Intellectual Property Protection	16						2
7.	Dissertation 1 <sup>st</sup> level					240		15
8.	Internet Application Programming			30				2
9.	Object-oriented Programming in Java	15		30				3
10.	Dissertation Seminar 1 <sup>st</sup>						14	2
11.	Active Elements of Computer Networks	16		16				5
12.	Computer Network Administration	16		16				5
	<b>Total amount of hours:</b>	<b>109</b>	<b>3</b>	<b>132</b>	<b>0</b>	<b>240</b>	<b>14</b>	<b>48</b>

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