



# COMPUTER SCIENCE SECOND DEGREE STUDIES

**PROFILE: PRACTICAL | DEGREE: MASTER | PROGRAM FOR 2023/2024 INTAKE: 2023/2024**



## FULL-TIME STUDIES





1.5-year second-cycle studies – 3 semesters





**TOTAL NUMBER OF HOURS AND ECTS**





**ECTS credits: 90**  
**No. of hours: 1345**

LEGEND

FORM OF CREDIT: E – Exam, ZO – Graded credit, Z – Non-graded credit

<div></div> <div>COURSE TITLE</div>	SEMESTER I				
	<div>FULL-TIME STUDIES</div>				
	ECTS	Lecture	Practical classes (eg. workshop)	Other	Form of credit
Introduction Module: <ul style="list-style-type: none"><li>• Introduction to Vistula University</li><li>• OHS training;</li><li>• Library training;</li><li>• Business etiquette;</li><li>• Introduction to Intercultural Communication</li></ul>	2			60	ZO
Master Diploma Project I	2			50	ZO
Management in IT	3	30	15		ZO
Foreign Language 1	3		30	60	ZO
SET1-Python for Artificial Intelligence-IT Elective I	5	30	30		E
SET1-Signal Processing-IT Elective II	5	30	30		E
SET2-Linux/Ubuntu Operating Systems-IT Elective I	5	30	30		E
SET2-Introduction to Cloud Technologies-IT Elective II	5	30	30		E
SET3-One of the other specialization course-IT Elective I	5	30	30		E
SET3-One of the other specialization course-IT Elective II	5	30	30		E
<div>SPECIALIZATIONS TO CHOOSE</div>					
<b>SPECIALIZATION Design and applications of wireless networks for the Internet of Things</b>					
Introduction to microprocessor systems	5	30	30		E
Software design for microprocessor systems	5	30	30		E
<b>SPECIALIZATION Design and applications of mobile applications</b>					
Introduction to the design of mobile applications	5	30	30		E
Architectural patterns of websites for mobile devices	5	30	30		E
<b>SPECIALIZATION Cybersecurity and reliability of information and industrial systems</b>					
Introduction to cybersecurity and reliability	5	30	30		E
Methods of risk analysis and information and industrial systems design	5	30	30		E
<b>SPECIALIZATION Applied Data Science and AI</b>					
NLP and Large Language Models	5	30	30		E
Statistics & Mathematics for Artificial Intelligence	5	30	30		E
	TOTAL: 80	TOTAL: 450	TOTAL: 465	TOTAL: 170	

<div>   </div> <div>COURSE TITLE</div>	SEMESTER II				
	<div>  FULL-TIME STUDIES </div>				
	ECTS	Lecture	Practical classes (eg. workshop)	Other	Form of credit
Master Diploma Seminar I	2			50	Z0
Proseminar				5	Z
Introduction to entrepreneurship and project management	3	30	15		Z0
Foreign Language 2			30	60	E
SET1-Applied Machine Learning-IT Elective III	5	30	30		E
SET1-Data Analytics & Visualization with Python-IT Elective IV	5	30	30		E
SET2-Designing the wireless network infrastructure-IT Elective III	5	30	30		E
SET2-Security of wireless and mobile systems-IT Elecetive IV	5	30	30		E
SET3-One of the other specialization course-IT Elective III	5	30	30		E
SET3-One of the other specialization course-IT Elective IV	5	30	30		E
 <b>SPECIALIZATIONS TO CHOOSE</b>					
<b>SPECIALIZATION Design and applications of wireless networks for the Internet of Things</b>					
Specification and simulation of communication protocols	5	30	30		E
Applications of sensor networks	5	30	30		E
<b>SPECIALIZATION Design and applications of mobile applications</b>					
Graphic interfaces for mobile devices	5	30	30		E
Mobile application testing	5	30	30		E
<b>SPECIALIZATION Cybersecurity and reliability of information and industrial systems</b>					
Cybersecurity and reliability management for information and industrial systems	5	30	30		E
Cybersecurity and reliability testing for information and industrial systems	5	30	30		E
<b>SPECIALIZATION Applied Data Science and AI</b>					
Deep Learning and Reinforcement Learning	5	30	30		E
Big Data Analytics	5	30	30		E
	TOTAL: 75	TOTAL: 450	TOTAL: 465	TOTAL: 115	

<div>   </div> <div>COURSE TITLE</div>	SEMESTER III				
	<div>  FULL-TIME STUDIES </div>				
	ECTS	Lecture	Practical classes (eg. workshop)	Other	Form of credit
Master Diploma Seminar II	11			135	Z0
 <b>INTERNSHIP</b>					
<b>Student internship</b>	19			480	Z0
	TOTAL: 30	TOTAL: 0	TOTAL: 0	TOTAL: 615	