

**Programme Plan**  
**Programme, level of studies INFORMATICS (BA DEGREE STUDIES)**  
**Academic Year 2022/2023**

**Year I Semester I**

**Predicted number of students in the semester** 10

<b>COMPULSORY COURSES</b>								
<b>No.</b>	<b>Course name</b>	<b>Type of class</b>	<b>Number of teaching hours</b>	<b>Form of assessment</b>	<b>Number of groups</b>	<b>Total hours</b>	<b>ECTS Points</b>	<b>Course instructor</b>
1.	Computer architecture	lecture	15	Exam	1	15	3	prof. dr hab. Anatoliiy Melnyk,
		laboratory	15	Graded Pass	1	15		prof. dr hab. Anatoliiy Melnyk
2.	Computer networks and Internet	lecture	15	Exam	1	15	5	dr Marcin Płonkowski
		laboratory	30	Graded Pass	1	30		dr Marcin Płonkowski
3.	Introduction to computer science	lecture	30	Exam	1	30	7	Dr Dorota Pylak
		laboratory	45	Graded Pass	1	45		mgr Sara Jurczyk-Zielińska
4.	Introduction to differential and integral calculus	lecture	30	Exam	1	30	5	dr Wiesław Głowczyński
		laboratory	30	Graded Pass	1	30		mgr Maciej Parol
5.	Linear algebra	lecture	15	Exam	1	15	5	dr Grzegorz Dymek
		laboratory	30	Graded Pass	1	30		dr Grzegorz Dymek
6.	Logic	lecture	10	Exam	1	10	2	dr Piotr Lipski
		class	15	Graded Pass	1	15		dr Marcin Czakon
7.	Protection of intellectual property	lecture	15	Graded Pass	1	15	1	dr Krzysztof Dobieżyński
<b>ELECTIVE COURSES</b>								
1.	Foreign language	foreign language classes	30	Graded Pass			2	SJO
2.	Physical education	class	30	Pass			0	SWFiS

\* The student undergoes training: Health and safety procedures training, Student rights and obligations, Student culture and ethos

<b>NUMBER OF TEACHING HOURS PER SEMESTER PER STUDENT:</b>	<b>355</b>
<b>ECTS POINTS PER SEMESTER PER STUDENT:</b>	<b>30</b>

**Programme Plan**  
**Programme, level of studies INFORMATICS (BA DEGREE STUDIES)**  
**Academic Year 2022/2023**

**Year I Semester II**

**Predicted number of students in the semester** 10

COMPULSORY COURSES								
No.	Course name	Type of class	Number of teaching hours	Form of assessment	Number of groups	Total hours	ECTS Points	Course instructor
1.	Algorithms of numerical analysis	lecture	15	Exam	1	15	3	dr Małgorzata Nowak-Kępczyk
		laboratory	15	Graded Pass	1	15		dr Małgorzata Nowak-Kępczyk
2.	Analytic geometry	lecture	15	Exam	1	15	3	dr Grzegorz Dymek
		laboratory	15	Graded Pass	1	15		dr Grzegorz Dymek
3.	Computer graphics	laboratory	15	Graded Pass	1	15	2	dr Armen Grigoryan
4.	Discrete mathematics*	lecture	30	Exam	1	30	5	dr Armen Grigoryan
		laboratory	30	Graded Pass	1	30		dr Armen Grigoryan
5.	Entrepreneurship	workshops	15	Graded Pass	1	15	1	prof. dr hab. Tomasz Stuczyński
6.	Fundamentals of algorithms and programming	lecture	30	Exam	1	30	6	Dr Dorota Pylak
		laboratory	30	Graded Pass	1	30		mgr Sara Jurczyk-Zielińska
7.	Operating systems	lecture	15	Exam	1	15	4	dr Viktor Melnyk, prof. KUL
		laboratory	30	Graded Pass	1	30		dr Viktor Melnyk, prof. KUL
8.	Tutoring	workshops	15	Graded Pass	1	15	1	mgr Patrycja Jędrzejewska-Rzezak
9.	Websites design	laboratory	30	Graded Pass	1	30	3	<i>umowa cywilnoprawna</i>
ELECTIVE COURSES								
1.	Foreign language	foreign language classes	30	Graded Pass			2	SJO
2.	Physical education	class	30	Pass			0	SWFiS

\* Joint course with Mathematics

<b>NUMBER OF TEACHING HOURS PER SEMESTER PER STUDENT:</b>	<b>360</b>
<b>ECTS POINTS PER SEMESTER PER STUDENT:</b>	<b>30</b>

**Programme Plan**  
**Programme, level of studies INFORMATICS (BA DEGREE STUDIES)**  
**Academic Year 2022/2023 – cycle 2021/2022**

Year II Semester III

Predicted number of students in the semester 12

	COMPULSORY COURSES							
No.	Course name	Type of class	Number of teaching hours	Form of assessment	Number of groups	Total hours	ECTS Points	Course instructor
1.	Computer modeling and simulations*	lecture	30	Exam	1	30	5	dr hab. Aliaksandr Chychuryn
		laboratory	30	Graded Pass	1	30		dr hab. Aliaksandr Chychuryn
2.	Databases I*	lecture	30	Exam	1	30	5	dr Joanna Kapusta
		laboratory	30	Graded Pass	1	30		dr Joanna Kapusta
3.	Foundations of probabilistic methods	lecture	30	Exam	1	30	5	Dr hab. August Zapala
		class	30	Graded Pass	1	30		Dr hab. August Zapala
4.	History of philosophy	lecture	45	Exam	1	45	3	dr Maksymilian Roszyk
5.	Object-oriented programming*	lecture	30	Exam	1	30	5	Dr Dorota Pylak
		laboratory	30	Graded Pass	1	30		mgr Sara Jurczyk-Zielińska
	ELECTIVE COURSES							
1.	Foreign language	foreign language classes	30	Graded Pass			2	SJO
SPECIALISATION COURSES (Student choose one specialisation)								
Specialisation: programming and information processing								
1.	Data protection	lecture	30	Graded Pass	1	30	5	dr Viktor Melnyk, prof. KUL
		laboratory	30	Graded Pass	1	30		dr Viktor Melnyk, prof. KUL
Specialisation: computer graphics and multimedia								
1.	Mathematical basics for computer graphics*	lecture	30	Graded Pass	1	30	5	suspended
		laboratory	30	Graded Pass	1	30		suspended

\*Joint course with Mathematics

<b>NUMBER OF TEACHING HOURS PER SEMESTER PER STUDENT:</b>	<b>375</b>
<b>ECTS POINTS PER SEMESTER PER STUDENT:</b>	<b>30</b>

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**Academic Year 2022/2023 – cycle 2021/2022**

**Year II Semester IV****Predicted number of students in the semester**

12

	COMPULSORY COURSES							
No.	Course name	Type of class	Number of teaching hours	Form of assessment	Number of groups	Total hours	ECTS Points	Course instructor
1.	Algorithms and data structures	lecture	30	Exam	1	30	5	dr Michał Horodelski
		laboratory	30	Graded Pass	1	30		dr Michał Horodelski
2.	Artificial intelligence*	lecture	30	Exam	1	30	5	dr hab. Ryszard Kozera
		laboratory	30	Graded Pass	1	30		dr Michał Horodelski
3.	Object-oriented programming II	lecture	30	Exam	1	30	4	Dr Dorota Pylak
		laboratory	30	Graded Pass	1	30		mgr Sara Jurczyk-Zielińska
4.	Project management	lecture	15	Exam	1	15	3	dr inż. Rafał Lizut
		laboratory	30	Graded Pass	1	30		dr inż. Rafał Lizut
5.	Statistical analysis of data*	lecture	30	Exam	1	30	5	dr Kamil Powroźnik
		laboratory	30	Graded Pass	1	30		dr Kamil Powroźnik
	ELECTIVE COURSES							
1.	Foreign language	foreign language classes	30	Graded Pass			2	SJO
		exam		Exam			1	
SPECIALISATION COURSES (Student choose one specialisation)								
Specialisation: programming and information processing								
1.	Internet applications development	tutorial	30	Graded Pass	1	30	5	umowa cywilnoprawna
		laboratory	30	Graded Pass	1	30		umowa cywilnoprawna
Specialisation: computer graphics and multimedia								
1.	Methods and algorithms for computer graphics	lecture	30	Graded Pass	1	30	5	suspended
		laboratory	30	Graded Pass	1	30		suspended

\* Joint course with Mathematics

\*\* student choose practical placement – 3 weeks (120 h) during summer holiday (course credit in 5th semester)

NUMBER OF TEACHING HOURS PER SEMESTER PER STUDENT:	375
ECTS POINTS PER SEMESTER PER STUDENT:	30

**Programme Plan**  
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**Academic Year 2022/2023 – cycle 2020/2021**

**Year III Semester V**

**Predicted number of students in the semester**

6

	COMPULSORY COURSES							
No.	Course name	Type of class	Number of teaching hours	Form of assessment	Number of groups	Total hours	ECTS Points	Course instructor
1.	Algorithms and computational complexity	lecture	15	Exam	1	15	3	dr Paweł Wójcik
		laboratory	15	Graded Pass	1	15		dr Paweł Wójcik
2.	Ethics	lecture	30	Exam	1	30	2	prof. dr hab. Jan Kłos
3.	Optimization methods	lecture	15	Exam	1	15	3	dr Małgorzata Nowak-Kępczyk
		laboratory	15	Graded Pass	1	15		dr Małgorzata Nowak-Kępczyk
4.	Software engineering	lecture	30	Exam	1	30	5	dr inż. Rafał Lizut
		laboratory	30	Graded Pass	1	30		dr inż. Rafał Lizut
ELECTIVE COURSES								
1.	Laboratory of programming*	laboratory	30	Graded Pass	1	30	3	according to the list
2.	Seminar**	seminar	30	Pass	1	30	2	according to the list
3.	Practical placement	practical placement	120	Pass			4	dr inż. Rafał Lizut
SPECIALISATION COURSES (Student choose one specialisation)								
Specialisation: programming and information processing								
1.	Graph and network theory***	lecture	30	Graded Pass	1	30	5	dr Małgorzata Nowak-Kępczyk
		laboratory	30	Graded Pass	1	30		dr Małgorzata Nowak-Kępczyk
2.	Web services programming	laboratory	30	Graded Pass	1	30	3	dr Andrzej Michalski

<b>Specialisation: computer graphics and multimedia</b>								
1.	Multimedia programming	lecture	30	Graded Pass	1	30	5	<i>suspended</i>
		laboratory	30	Graded Pass	1	30		
2.	Internet graphic design	laboratory	30	Graded Pass	1	30	3	<i>suspended</i>

<b>NUMBER OF TEACHING HOURS PER SEMESTER PER STUDENT:</b>	<b>300</b>
<b>ECTS POINTS PER SEMESTER PER STUDENT:</b>	<b>30</b>

\* student choose 1 laboratory

\*\*\* joint course with Mathematics

<b>Laboratory of programming</b>								
1.	Laboratory of programming: applications in basic programming environments	laboratory	30	Graded Pass	1	30	3	<i>suspended</i>
2.	Laboratory of programming: web frameworks	laboratory	30	Graded Pass	1	30	3	mgr Sara Jurczyk-Zielińska

\*\* student choose 1 seminar

<b>Seminars</b>								
1.	Modern approaches to software development	seminar	30	Pass	1	30	2	dr inż. Rafał Lizut
2.	Multimedia applications	seminar	30	Pass	1	30	2	<i>suspended</i>
3.	Network technologies of data protection	seminar	30	Pass	1	30	2	<i>suspended</i>

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**Academic Year 2022/2023 – cycle 2020/2021**

**Year III Semester VI**

**Predicted number of students in the semester**

6

	COMPULSORY COURSES							
No.	Course name	Type of class	Number of teaching hours	Form of assessment	Number of groups	Total hours	ECTS Points	Course instructor
1.	Project management	lecture	15	Exam	1	15	3	dr inż. Rafał Lizut
		laboratory	15	Graded Pass	1	15		dr inż. Rafał Lizut
	ELECTIVE COURSES							
1.	Labolatory of programming*	laboratory	30	Graded Pass	1	30	3	according to the list
2.	Programming project**	laboratory	30	Pass	1	30	3	according to the list
3.	Seminar***	seminar	30	Pass	1	30	2	according to the list
4.	BA project and preparation for a diploma examination	assignment		Pass			10	according to the list
SPECIALISATION COURSES (Student choose one specialisation)								
Specialisation: programming and information processing								
1.	Databases II	lecture	30	Graded Pass	1	30	6	dr Andrzej Michalski
		laboratory	30	Graded Pass	1	30		mgr Maciej Parol
2.	Practice of programming	laboratory	30	Graded Pass	1	30	3	mgr inż. Kamil Jurczyk-Zieliński
Specialisation: computer graphics and multimedia								
1.	Computer animation	laboratory	30	Graded Pass	1	30	3	suspended
2.	Computer image analysis	lecture	30	Graded Pass	1	30	6	suspended
		laboratory	30	Graded Pass	1	30		



NUMBER OF TEACHING HOURS PER SEMESTER PER STUDENT:	210
ECTS POINTS PER SEMESTER PER STUDENT:	30

\* student choose 1 laboratory

Laboratory of programming								
1.	Laboratory of programming: applications in basic programming environments	laboratory	30	Graded Pass	1	30	3	<i>suspended</i>
2.	Laboratory of programming: web frameworks	laboratory	30	Graded Pass	1	30	3	mgr Sara Jurczyk-Zielińska

\*\*student choose 1 programming project

Programming project								
1.	Programming project: programming, algorithms and databases	laboratory	30	Pass	1	30	3	dr inż. Rafał Lizut
2.	Programming project: graphics programming	laboratory	30	Pass	1	30	3	<i>suspended</i>
2.	Programming project: network and internet technology	laboratory	30	Pass	1	30	3	<i>suspended</i>

\*\*\* student choose seminar, student is required to prepare BA project

Seminars								
1.	Modern approaches to software development	seminar	30	Pass	1	30	2	dr inż. Rafał Lizut
2.	Multimedia applications	seminar	30	Pass	1	30	2	<i>suspended</i>
3.	Network technologies of data protection	seminar	30	Pass	1	30	2	<i>suspended</i>