annex 3 to programme documentation

Programme curriculum
Programme, level of studies INFORMATICS (BA DEGREE STUDIES)
Cycle from academic year 2024/2025

Predicted number of students starting the cycle **30**
Year I Semester I

No.	Course name	Type of class	Number of teaching hours	Form of assessment	Number of groups	Total hours	ECTS Points	Reference to programme learning outcomes
	COMPULSORY COURSES							
1.	Computer architecture	lecture	15	Exam	1	15	3	K_W01,K_U04, K_U06, K_U30, K_K01
		laboratory	15	Graded Pass	2	30		
2.	Computer graphics	laboratory	15	Graded Pass	2	30	2	K_W11, K_U01, K_U02, K_U04, K_U17, K_U25, K_K01, K_K02
3.	Computer networks and Internet	lecture	15	Exam	1	15	5	K_W01, K_W04, K_U02, K_U04, K_U06, K_U15, K_U17, K_U24, K_U30, K_K01, K_K02
		laboratory	30	Graded Pass	2	60		
4.	Introduction to computer science	lecture	30	Exam	1	30	6	K_W01, K_W03, K_W04, K_W06, K_U01, K_U02, K_U04, K_U06, K_U07, K_U08, K_U11, K_U17, K_K01, K_K02
		laboratory	30	Graded Pass	2	60		
5.	Introduction to differential and integral calculus	lecture	30	Exam	1	30	5	K_W02, K_W05, K_U03, K_U21, K_U22, K_K01
		laboratory	30	Graded Pass	2	60		
6.	Linear algebra	lecture	15	Exam	1	15	4	K_W02, K_U03, K_U21, K_K01
		laboratory	30	Graded Pass	2	60		
7.	Logic	lecture	10	Exam	1	10	2	*zgodnie z uchwałą Senatu KUL*
		class	15	Graded Pass	2	30		
8.	Protection of intellectual property	lecture	15	Graded Pass	1	15	1	K_W08
	ELECTIVE COURSES							
1.	Foreign language	foreign language classes	30	Graded Pass			2	*zgodnie z uchwałą Senatu KUL*
2.	Physical education	class	30	Pass			0	*zgodnie z uchwałą Senatu KUL*

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

NUMBER OF TEACHING HOURS PER SEMESTER PER STUDENT:	**355**
ECTS POINTS PER SEMESTER PER STUDENT:	**30**

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Programme curriculum
Programme, level of studies INFORMATICS (BA DEGREE STUDIES)
Cycle from academic year 2024/2025

Predicted number of students starting the cycle 30
Year I Semester II

No.	Course name	Type of class	Number of teaching hours	Form of assessment	Number of groups	Total hours	ECTS Points	Reference to programme learning outcomes
	COMPULSORY COURSES							
1.	Analytic geometry	lecture	15	Exam	1	15	3	K_W02, K_U03, K_U21, K_U22, K_K01
		laboratory	15	Graded Pass	2	30		
2.	Developers tools	laboratory	15	Graded Pass	2	30	2	K_W01, K_W04, K_U01, K_U2, K_U23, K_K01, K_K05
3.	Discrete mathematics	lecture	30	Exam	1	30	5	K_W09, K_U21, K_U22, K_K01
		laboratory	30	Graded Pass	1	30		
4.	Entrepreneurship	workshops	15	Graded Pass	2	30	1	*zgodnie z uchwałą Senatu KUL*
5.	Fundamentals of algorithms and programming	lecture	30	Exam	1	30	6	K_W01, K_W03, K_W06, K_U02, K_U04, K_U07, K_U08, K_U09, K_U11, K_U12, K_U17, K_K01, K_K02
		laboratory	30	Graded Pass	2	60		
6.	Introduction to tutoring	workshops	15	Graded Pass	2	30	1	*zgodnie z uchwałą Senatu KUL*
7.	Operating systems	lecture	15	Exam	1	15	4	K_W01, K_W04, K_U01, K_U02, K_U04, K_U17, K_U19, K_K01, K_K02, K_K04
		laboratory	30	Graded Pass	2	60		
8.	Python language programming	lecture	15	Exam	1	15	3	K_W01, K_W06, K_U04, K_U08 K_U11, K_U17, K_K01, K_K02, K_K05, K_K06
		laboratory	15	Graded Pass	2	30		
9.	Websites design	laboratory	30	Graded Pass	2	60	3	K_W01, K_W06, K_U02, K_U04, K_U05, K_U17, K_K01, K_K04
	ELECTIVE COURSES							
1.	Foreign language	foreign language	30	Graded Pass			2	*zgodnie z uchwałą Senatu KUL*
2.	Physical education	class	30	Pass			0	*zgodnie z uchwałą Senatu KUL*

NUMBER OF TEACHING HOURS PER SEMESTER PER STUDENT:	**360**
ECTS POINTS PER SEMESTER PER STUDENT:	**30**

annex 3 to programme documentation

Programme curriculum
Programme, level of studies INFORMATICS (BA DEGREE STUDIES)
Cycle from academic year 2024/2025

Predicted number of students starting the cycle 30
Year II Semester III

No.	Course name	Type of class	Number of teaching hours	Form of assessment	Number of groups	Total hours	ECTS Points	Reference to programme learning outcomes
	COMPULSORY COURSES							
1.	Computer modeling and simulations	lecture	30	Exam	1	30	5	K_W01, K_W05, K_W06, K_W11, K_U03, K_U06, K_U11, K_U17, K_K01
		laboratory	30	Graded Pass	2	60		
2.	Databases I	lecture	30	Exam	1	30	5	K_W01, K_W04, K_W10, K_U02, K_U04, K_U14, K_U17, K_U22, K_U23, K_U26, K_U27, K_U30, K_K01, K_K02
		laboratory	30	Graded Pass	2	60		
3.	Foundations of probabilistic methods	lecture	30	Exam	1	30	5	K_W09, K_U22, K_K01
		laboratory	30	Graded Pass	1	30		
4.	Object-oriented programming	lecture	30	Exam	1	30	5	K_W01, K_W03, K_W06, K_U04, K_U06, K_U07, K_U08, K_U10, K_U11, K_U12, K_U17, K_K01
		laboratory	30	Graded Pass	2	60		
	ELECTIVE COURSES							
1.	Foreign language	foreign language classes	30	Graded Pass			2	*zgodnie z uchwałą Senatu KUL*
2.	Obligatory course in the field of history of philosophy*	lecture	30	Exam			2	*zgodnie z uchwałą Senatu KUL*
	SPECIALISATION COURSES (Student choose one specialisation)							
	Specialisation: programming and information processing							
1.	Data protection and cybersecurity	lecture	30	Graded Pass	1	30	5	K_W03, K_W04, K_W06, K_W10, K_U02, K_K01, K_K05
		laboratory	30	Graded Pass	1	30		
	Specialisation: computer graphics and multimedia							
1.	Mathematical basics for computer graphics	lecture	30	Graded Pass	1	30	5	K_W02, K_W11, K_U02, K_K01
		laboratory	30	Graded Pass	1	30		

* student choose 1 lecture (list of optional courses in the annex no. 9a)

NUMBER OF TEACHING HOURS PER SEMESTER PER STUDENT:	**360**
ECTS POINTS PER SEMESTER PER STUDENT:	**29**

annex 3 to programme documentation

Programme curriculum
Programme, level of studies INFORMATICS (BA DEGREE STUDIES)
Cycle from academic year 2024/2025

Predicted number of students starting the cycle 30
Year II Semester IV

No.	Course name	Type of class	Number of teaching hours	Form of assessment	Number of groups	Total hours	ECTS Points	Reference to programme learning outcomes
	COMPULSORY COURSES							
1.	Algorithms and data structures	lecture	30	Exam	1	30	5	K_W01, K_W03, K_W06, K_U06, K_U08, K_U10, K_U11, K_U12, K_U17, K_K01, K_K02
		laboratory	30	Graded Pass	2	60		
2.	Artificial intelligence	lecture	30	Exam	1	30	5	K_W01, K_W10, K_U02, K_U04, K_U09, K_U10, K_U16, K_U23, K_K01
		laboratory	30	Graded Pass	2	60		
3.	Object-oriented programming II	lecture	30	Exam	1	30	5	K_W01, K_W03,K_W06, K_U04, K_U07, K_U08, K_U10, K_U11, K_U12, K_U17, K_K01
		laboratory	30	Graded Pass	2	60		
4.	Project management	lecture	15	Exam	1	15	3	K_W01, K_W04, K_W06, K_U01, K_U04, K_U17, K_K01, K_K02, K_K04, K_K05
		laboratory	30	Graded Pass	2	60		
5.	Statistical analysis of data	lecture	30	Exam	1	30	5	K_W09, K_U22, K_U28
		laboratory	30	Graded Pass	2	60		
	ELECTIVE COURSES							
1.	Foreign language	foreign language classes	30	Graded Pass			2	*zgodnie z uchwałą Senatu KUL*
		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	K_W06, K_U02, K_U04, K_U05, K_K01
		laboratory	30	Graded Pass	1	30		
Specialisation: computer graphics and multimedia								
1.	Methods and algorithms for computer graphics	lecture	30	Graded Pass	1	30	5	K_W11, K_U02, K_U04, K_U25, K_K01
		laboratory	30	Graded Pass	1	30		

* 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:	**31**

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Programme curriculum
Programme, level of studies INFORMATICS (BA DEGREE STUDIES)
Cycle from academic year 2024/2025

Predicted number of students starting the cycle 30
Year III Semester V

No.	Course name	Type of class	Number of teaching hours	Form of assessment	Number of groups	Total hours	ECTS Points	Reference to programme learning outcomes
	COMPULSORY COURSES							
1.	Algorithms of numerical analysis	lecture	15	Exam	1	15	3	K_W03, K_W06, K_U04, K_U07, K_U08, K_U11, K_U17, K_U20, K_U22, K_K01
		laboratory	15	Graded Pass	2	30		
2.	Marriage and family in Christian anthropology	tutorial	25	Graded Pass	1	25	2	*zgodnie z uchwałą Senatu KUL*
3.	Optimization methods	lecture	15	Exam	1	15	3	K_W01, K_W03, K_W06, K_U07, K_U11, K_U20, K_U22, K_K01, K_K02
		laboratory	15	Graded Pass	2	30		
4.	Software engineering	lecture	30	Exam	1	30	5	K_W04, K_W06, K_U02, K_U04, K_U13, K_U14, K_U17, K_U23, K_U29, K_U30, K_K01, K_K02, K_K04, K_K05
		laboratory	30	Graded Pass	2	60		
	ELECTIVE COURSES							
1.	Obligatory course in the field of ethics***	lecture	25	Exam		25	1	*zgodnie z uchwałą Senatu KUL*
2.	Laboratory of programming*	laboratory	30	Graded Pass	2	60	3	K_W06, K_W08, K_U08, K_U17, K_K06
3.	Seminar**	seminar	30	Pass	3	90	2	K_W08, K_U02, K_U17, K_U18, K_U23, K_U29, K_U30, K_K01, K_K03, K_K05
4.	Practical placement	practical placement	120	Pass			4	K_ W07, K_ W08, K_U01, K_U02, K_U04, K_U17, K_K01, K_K02, K_K03, K_K04, K_K06
SPECIALISATION COURSES (Student choose one specialisation)								
Specialisation: programming and information processing								
1.	Graph and network theory	lecture	30	Graded Pass	1	30	5	K_W03, K_W04, K_W06, K_U02, K_U04, K_K01
		laboratory	30	Graded Pass	1	30		
2.	Machine learning	laboratory	30	Graded Pass	1	30	3	K_W03, K_W05, K_W06, K_W09, K_W10, K_U02, K_U03, K_U04, K_U06, K_K01, K_K05, K_K06

Specialisation: computer graphics and multimedia								
1.	Internet graphic design	laboratory	30	Graded Pass	1	30	3	K_W11, K_U02, K_U04, K_U25, K_K01
2.	Multimedia programming	tutorial	30	Graded Pass	1	30	5	K_W03, K_W04, K_W11, K_U02, K_U04, K_K01
		laboratory	30	Graded Pass	1	30		

* student choose 1 laboratory (list of optional courses in the annex no. 9)

** student choose 1 seminar (list of optional courses in the annex no. 9)

*** student choose 1 lecture (list of optional courses in the annex no. 9a)

NUMBER OF TEACHING HOURS PER SEMESTER PER STUDENT:	**320**
ECTS POINTS PER SEMESTER PER STUDENT:	**31**

annex 3 to programme documentation

Programme curriculum
Programme, level of studies INFORMATICS (BA DEGREE STUDIES)
Cycle from academic year 2024/2025

Predicted number of students starting the cycle 30
Year III Semester VI

No.	Course name	Type of class	Number of teaching hours	Form of assessment	Number of groups	Total hours	ECTS Points	Reference to programme learning outcomes
	COMPULSORY COURSES							
1.	Algorithms and computational complexity	lecture	15	Exam	1	15	3	K_W01, K_W03, K_W06, K_U04, K_U07, K_U08, K_U09, K_U17, K_U22, K_K01, K_K02
		laboratory	15	Graded Pass	2	30		
	ELECTIVE COURSES							
1.	Labolatory of programming*	laboratory	30	Graded Pass	2	60	3	K_W06, K_W08, K_U08, K_U17, K_K06
2.	Programming project**	laboratory	30	Pass	2	60	3	K_W08, K_U02, K_U04, K_U08, K_U17, K_U23, K_U30
3.	Seminar***	seminar	30	Pass	3	90	2	K_W08, K_U02, K_U17, K_U18, K_U23, K_U29, K_U30, K_K01, K_K03, K_K05
4.	BA project and preparation for a diploma examination	assignment		Pass			10	
SPECIALISATION COURSES (Student choose one specialisation)								
Specialisation: programming and information processing								
1.	Databases II	lecture	30	Graded Pass	1	30	5	K_W10, K_U02, K_U04, K_U26, K_U27, K_K01
		laboratory	30	Graded Pass	1	30		
2.	Practice of programming	laboratory	30	Graded Pass	1	30	3	K_W04, K_W06, K_U02, K_U04,K_U13, K_K01, K_K06
Specialisation: computer graphics and multimedia								
1.	Computer image analysis	lecture	30	Graded Pass	1	30	5	K_W03, K_W04, K_W06, K_W11, K_U02, K_U04, K_K01
		laboratory	30	Graded Pass	1	30		
2.	Computer animation	laboratory	30	Graded Pass	1	30	3	K_W11, K_U02, K_K01

* student choose 1 laboratory (list of optional courses in the annex no. 9)

** student choose 1 programming project (list of optional courses in the annex no. 9)

*** student choose seminar (list of optional courses in the annex no. 9), student is required to prepare BA project

NUMBER OF TEACHING HOURS PER SEMESTER PER STUDENT:	**210**

ECTS POINTS PER SEMESTER PER STUDENT:	**29**

NUMBER OF TEACHING HOURS PER CYCLE PER STUDENT:	**1980**
ECTS POINTS PER CYCLE PER STUDENT:	**180**