Programme curriculum

Programme, level of studies INFORMATICS (BA DEGREE STUDIES)

Cycle from academic year 2023/2024

Predicted number of students starting the cycle

30

Year I Semester I

			C	OMPULSORY	COURSES			
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
1.	Computer architecture	lecture	15	Exam	1	15	3	K W01 K 1104 K 1106 K 1130 K K01
1.		laboratory	15	Graded Pass	2	30	5	K_W01,K_U04, K_U06, K_U30, K_K01
2.	Computer networks and Internet	lecture	15	Exam	1	15	5	K_W01, K_W04, K_U02, K_U04, K_U06, K_U15, K_U17,
۷.	Computer networks and internet	laboratory	30	Graded Pass	2	60	5	K_U24, K_U30, K_K01, K_K02
3.	Introduction to computer science	lecture	30	Exam	1	30	7	K_W01, K_W03, K_W04, K_W06, K_U01, K_U02, K_U04,
٥.	introduction to computer science	laboratory	45	Graded Pass	2	90	,	K_U06, K_U07, K_U08, K_U11, K_U17, K_K01, K_K02
4.	Introduction to differential and integral calculus	lecture	30	Exam	1	30	5	K_W02, K_W05, K_U03, K_U21, K_U22, K_K01
4.		laboratory	30	Graded Pass	2	60	,	K_W02, K_W03, K_003, K_021, K_022, K_K01
5.	Linear algebra	lecture	15	Exam	1	15	5	K_W02, K_U03, K_U21, K_K01
J.	Linear digesta	laboratory	30	Graded Pass	2	60	,	K_W02, K_003, K_021, K_K01
6.	Logic	lecture	10	Exam	1	10	2	zgodnie z uchwałg Senatu KUL
0.	Logic	class	15	Graded Pass	2	30	2	zgounie z denwarą Senatu ROL
7.	Protection of intellectual property	lecture	15	Graded Pass	1	15	1	K_W08
				ELECTIVE CO	URSES			
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

Programme curriculum Programme, level of studies INFORMATICS (BA DEGREE STUDIES) Cycle from academic year 2023/2024

Predicted number of students starting the cycle

30

Year I Semester II

				COMPULSOI	RY COURSE	:S			
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	
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,	
	Augustinis of Hamerical analysis	laboratory	15	Graded Pass	2	30		K_U20, K_U22, K_K01	
2.	Analytic geometry	lecture	15	Exam	1	15	3	K W02, K U03, K U21, K U22, K K01	
	, and yet geometry	laboratory	15	Graded Pass	2	30		K_1102) K_000) K_022) K_022, K_K01	
3.	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	
1	Discrete mathematics	lecture	30	Exam	1	30	5	K W09, K U21, K U22, K K01	
4.	Discrete mathematics	laboratory	30	Graded Pass	2	60	,	K_W03, K_021, K_022, K_K01	
5.	Entrepreneurship	workshops	15	Graded Pass	2	30	1	zgodnie z uchwałą Senatu KUL	
		lecture	30	Exam	1	30		K W01, K W03, K W06, K U02, K U04, K U07, K U08,	
6.	Fundamentals of algorithms and programming	laboratory	30	Graded Pass	2	60	6	K_U09, K_U11, K_U12, K_U17, K_K01, K_K02	
7.	Operating systems	lecture	15	Exam	1	15	4	K_W01, K_W04, K_U01, K_U02, K_U04, K_U17, K_U19,	
	operating systems	laboratory	30	Graded Pass	2	60	-	K_K01, K_K02, K_K04	
8.	Tutoring	workshops	15	Graded Pass	2	30	1	zgodnie z uchwałą Senatu KUL	
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 classes	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

Programme curriculum

Programme, level of studies INFORMATICS (BA DEGREE STUDIES)

Cycle from academic year 2023/2024

Predicted number of students starting the cycle

30

Year II Semester III

				COMPULSOR	RY COURSE:	S		
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
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,
	compater modeling and simulations	laboratory	30	Graded Pass	2	60)	K_U17, K_K01
2.	Databases I	lecture	30	Exam	1	30	5	K_W01, K_W04, K_W10, K_U02, K_U04, K_U14, K_U17,
۷.	Databases	laboratory	30	Graded Pass	2	60	5	K_U22, K_U23, K_U26, K_U27, K_U30, K_K01, K_K02
3.	Foundations of probabilistic methods	lecture	30	Exam	1	30	5	K_W09, K_U22, K_K01
3.	Foundations of probabilistic methods	laboratory	30	Graded Pass	2	60	3	K_W09, K_022, K_K01
4.	History of philosophy	lecture	30	Exam	1	30	2	zgodnie z uchwałą Senatu KUL
5.	Object oriented programming	lecture	30	Exam	1	30	5	K_W01, K_W03, K_W06, K_U04, K_U06, K_U07, K_U08,
٥.	Object-oriented programming	laboratory	30	Graded Pass	2	60	3	K_U10, K_U11, K_U12, K_U17, K_K01
				ELECTIVE	COURSES			
1.	Foreign language	foreign language classes	30	Graded Pass			2	zgodnie z uchwałą Senatu KUL
		SPECIA	ALISATION CO	URSES (Studer	nt choose o	ne special	isation)	
		Spe	cialisation: pı	rogramming ar	nd informat	ion proce	ssing	
1	Data protection	lecture	30	Graded Pass	1	30	5	K W03, K W04, K W06, K W10, K U02, K K01, K K05
1.	Data protection	laboratory	30	Graded Pass	2	60	J	K_WU3, K_WU4, K_WU0, K_WI0, K_U02, K_K01, K_K03
			Specialisation	n: computer gro	phics and i	multimedi	ia	
1	Mathematical basics for computer graphics	lecture	30	Graded Pass	1	30	5	K W02, K W11, K U02, K K01
1.	iviatifematical basics for computer graphics	laboratory	30	Graded Pass	1	30	,	N_VVO2, N_VV11, N_UU2, N_NU1

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

Programme curriculum

Programme, level of studies INFORMATICS (BA DEGREE STUDIES)

Cycle from academic year 2023/2024

Predicted number of students starting the cycle

30

Year II Semester IV

	rear ii Seillester IV								
			COMPL	JLSORY COUR	SES				
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	
1	Algorithms and data structures	lecture	30	Exam	1	30	5	K_W01, K_W03, K_W06, K_U06, K_U08, K_U10,	
1.	Algorithms and data structures	laboratory	30	Graded Pass	2	60	,	K_U11, K_U12, K_U17, K_K01, K_K02	
2	Artificial intelligence	lecture	30	Exam	1	30	5	K_W01, K_W10, K_U02, K_U04, K_U09, K_U10,	
۷.	Artificial intelligence	laboratory	30	Graded Pass	2	60	3	K_U16, K_U23, K_K01	
2	Object-oriented programming II	lecture	30	Exam	1	30	5	K_W01, K_W03,K_W06, K_U04, K_U07, K_U08,	
٥.	object offented programming if	laboratory	30	Graded Pass	2	60	,	K_U10, K_U11, K_U12, K_U17, K_K01	
1	Project management	lecture	15	Exam	1	15	3	K_W01, K_W04, K_W06, K_U01, K_U04, K_U17,	
т.	Troject management	laboratory	30	Graded Pass	2	60	3	K_K01, K_K02, K_K04, K_K05	
5.	Statistical analysis of data	lecture	30	Exam	1	30	5	K W09, K U22, K U28	
J.	Statistical analysis of data	laboratory 30 Graded Pass		2	60	3	K_W03, K_022, K_020		
			ELEC	TIVE COURSES	5				
1.	Foreign language	foreign language classes	30	Graded Pass			2	zgodnie z uchwałą Senatu KUL	
		exam		Exam			1		
		SPECIALISATION	COURSES (St	tudent choose	one specia	alisation)		
		Specialisation	: programmi	ng and inform	ation proc	essing			
1.	Internet applications development	tutorial	30	Graded Pass	1	30	5	K W06, K U02, K U04, K U05, K K01	
	c. sppiloadolis acreiopilicit	laboratory	30	Graded Pass	Graded Pass 2		J		
		Specialisat	tion: comput	er graphics an	d multimed	dia			
1	Methods and algorithms for computer graphics	lecture	30	Graded Pass	1	30	5	K W11 K H02 K H04 K H25 V V01	
1.	inictious and algorithms for compater graphics	laboratory	30	Graded Pass	1	30	ر	K_W11, K_U02, K_U04, K_U25, K_K01	

^{*} 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

Programme curriculum Programme, level of studies INFORMATICS (BA DEGREE STUDIES) Cycle from academic year 2023/2024

Predicted number of students starting the cycle

30

Year III Semester V

	rear in Semester V		CO	MPULSORY CO	DURSES			
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
1.	Ethics	lecture	25	Exam	1	25	1	zgodnie z uchwałą Senatu KUL
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,
٥.	Optimization methods	laboratory	15	Graded Pass	2	30	3	K_U22, K_K01, K_K02
4.	Python language programming	lecture	15	Exam	1	15	3	K_W01, K_W06, K_U04, K_U08 K_U11, K_U17,
٦.	Tython language programming	laboratory	15	Graded Pass	2	30	3	K_K01, K_K02, K_K05, K_K06
5.	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,
J.	oorthare engineering	laboratory	30	Graded Pass	2	60	J	K_K04, K_K05
				ELECTIVE COU	RSES			
1.	Laboratory of programming*	laboratory	30	Graded Pass	2	60	3	K_W06, K_W08, K_U08, K_U17, K_K06
2.	Seminar**	seminar	30	Pass	1	30	2	K_W08, K_U02, K_U17, K_U18, K_U23, K_U29, K_U30, K_K01, K_K03, K_K05
3.	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
		SPECIALISA	TION COURSE	S (Student ch	oose one sp	ecialisatio	on)	
		Specialis	ation: progra	mming and in	formation p	rocessing		
1	Cyanala and matrically the arm	lecture	30	Graded Pass	1	30	_ [V MO2 K MO4 K MO5 K HO2 K HO4 K KO4
1.	Graph and network theory	laboratory	30	Graded Pass	2	60	5	K_W03, K_W04, K_W06, K_U02, K_U04, K_K01
2.	Machine learning	laboratory	30	Graded Pass	2	60	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
		Speci	alisation: con	nputer graphic	s and multi	media		

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
۷.	ividitimedia programming	laboratory	30	Graded Pass	1	30	J	K_W03, K_W04, K_W11, K_002, K_004, K_K01

^{*} 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)

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

Programme curriculum Programme, level of studies INFORMATICS (BA DEGREE STUDIES) Cycle from academic year 2023/2024

Predicted number of students starting the cycle

30

Year III Semester VI

				COMPULSOR	RY COURSES			
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
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,
1.	Algorithms and computational complexity	laboratory	15	Graded Pass	2	30	3	K_U17, K_U22, K_K01, K_K02
				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	3	90	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,
4.	BA project and preparation for a diploma examination	assignment		Pass			10	K_K01, K_K03, K_K05
		SPECIAL	ISATION COL	JRSES (Studen	t choose on	e special	isation)	
		Speci	alisation: pro	gramming an	d informati	on proces	ssing	
1	Databases II	lecture	30	Graded Pass	1	30	5	V W10 V 1102 V 1104 V 1126 V 1127 V V01
1.	Databases II	laboratory	30	Graded Pass	2	60		K_W10, K_U02, K_U04, K_U26, K_U27, K_K01
2.	Practice of programming	laboratory	30	Graded Pass	2	60	3	K_W04, K_W06, K_U02, K_U04,K_U13, K_K01, K_K06
	_	Sį	ecialisation:	computer gra	phics and n	nultimedi	a	
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
1.	Computer image analysis	laboratory	30	Graded Pass	1	30	J	N_ vv03, N_ vv04, N_ vv00, N_ vv11, N_ 002, N_ 004, N_ N01
2.	Computer animation	laboratory	30	Graded Pass	1	30	3	K_W11, K_U02, K_K01

^{***} 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

^{*} 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)