LID-A-P/2023

first-cycle studies

professional title awarded to graduates: licencjat

field of study: INFORMATION TECHNOLOGY (ENG)

specialty: Programming education profile: practical

type of study: full-time Students admitted in the academic year: 2023/2024

			EC	TS cre	edits				N	umber	of hou	rs								I Year						I					II Y	/ear											III	Year			_		_
. Course title	Level	T-1		Inc	ludin	g	7.4	[			ncludi	ing					sem	1					sem 2					sen	m 3					sem	4					S€	em 5					s	sem 6		
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All-University Courses																																																	
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Digital Safety and Awarness	-	1		1	0	0	10		10	0	0	0	0	0	10					1																											$\neg$		
Foundamentals of Economics	-	1		1	0	0	20		0	20	0	0	0	0		_											20				1				1					$\top$		+						$\neg$	17
Law	-	1	_	1	0	0	20				0	0	0	0		1											20				1									$\neg$		+				$\neg$	$\neg$		17
Personal Business Model	-	1		1	0	0	20		0	0	10	0	10	0													1	10	10		1																$\neg$		
Academic Writing Skills	-	1		1	0	0	8		0	0	0	8	0	0																				8			1										$\neg$		
Health and Safety while Studying	-	0	_	0	0	0	4	_	0	4	0	0	0	0		4				0																				$\neg$		+				$\neg$	$\neg$		17
Health Education in Lifestyle Diseases	-	0		0	0	0	16		0	16	0	0	0	0							16				0																						$\neg$		
Physical Education	T -	0		0	0	0	60		0	0	60	0	0	0								30			0		3	30			0																		
Basic Courses																																																	
Fundamentals of Mathematics	-	4		2	0	0	34		16	0	18	0	0	0	16	18	3			4																				Т	Т	T			$\Box$				
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Discrete Mathematics	1 -	6		2	0	0			20			0	0	0	20	30	0			6																						1							
Fundamentals of Statistics	-	2		1	0	0	16					16	0	0							1		16		2										1				7	$\top$	$\top$	1			$\sqcap$	$\neg$	$\neg$		
Introduction to Electronics and Electrical Engineering	3	4		2	0	0	33		15	0	0	18	0	0												15		18	8		4											T							
Physics	-	4		1	0	0	30		15	0	0	15	0	0						15	5		15		4															I									
Major-Related and Specialty Courses																																																	
Algorithms and Data Structures	4	5		3	3	0	56		28	0	0 :	28	0	0						2	В		28		5															Т	$\top$	Т			П	$\neg$	$\neg$		T
Introduction to IT	3	3		1	2	0	28		14	0	0	14	0	0	14		14			3																				T							T		
Introduction to Programming	3	3		2	2	0	40		20	0	0	20	0	0	20		20			3																						$oldsymbol{ol}}}}}}}}}}}}}}$							
Programming	4	8		4	6	0	80		40	0	0	40	0	0						20	0		20		4	20		20	0		4																		
Software Engineering	5	4		2	2	0	46		22	0	0	24	0	0																		22		24			4												
Computer System Architecture	4	7		3	4	0	60	-	30	0	0	30	0	0																		30		30			7												
Operating Systems	3	4		2	2	0	40	_	24	0	0	16	0	0												24		16	6		4																		
Network Technologies (CCNA)	3	5		3	4	0	60		20	0	0	20	20	0	20		20	20		5																													
Social and Occupational Problems of IT	-	2		1	0	1	25		0	10	0	0	0	15							10			15	2																								
Computer Graphics with HCI Elements	4				2	0	•						0	0																									15	1	5		2						
Databases	3			2	2	0	40						0	0																		20		20			3					Ш.			ш				
Artificial Intelligence	4	4		1	2	0	30		10	0	0	20	0	0																								10		2	20	Ш.	4		ш				
Programming Project	4			2	6	0	50					0	50	0															50		6											Ш.			ш				
Team Project	3	8		3	8	0	65		0				65	0																												Ш.			ш		6	65	
Elective Course 1		6	_	_	6	0	48		_	_			28	0														20	0 28		6														ш				
Elective Course 2		6		2	6	0	48						28	0																										2	20 28	3	6		ш				
Programming languages 1	4				7	0	56						24	0																				32	24		7								ш				
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Techniques of Software Creations	4			2	4	2							0	0	oxdot				_			$\sqcup$				ш		_		$\perp$		Щ									_	Щ		_	$\sqcup$		32		
Diploma Seminar	-	10			10	0	30						0	0					_									_					-		1					15	—	_	5			15	_		
Vocational Apprenticeship		32		32			960						0	0		_	4	1								L.J		_	4	$\perp$		Щ.	48		4	Щ	16			4	4	4		Щ.		480	_		
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electives	:	30.6	5%																																														
ECTS credits to obtain within Humanities/Social Studie	•	5																																															
Lo To creates to obtain within Hamanites/Social Studie	•	·																																															
															Ţ.	CI	SCO, A	NS Aut	horis	ed Train	ing			Cla	sses d	evelopi	ng pra	ctical	skills					eL	Dist	ance l	Learni	ng											
Classes involving direct participation of academic teach	ers or o	ther pe	ople	condu	cting	the cl	lass								<u> </u>		,				٠		1333	and a			3.		_									-											
Classes developing practical skills		•	•		٠										Г	Ex	am							Pro	ject co	mplete	d with	a sepa	arate d	degree	•				Onli	ne Cla	asses												
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																																						_		$\overline{}$	$\overline{}$	$\overline{}$				$\overline{}$			_
Additional compulsory classes* for international studer	ts																																																

\* in the 2nd semester of studies, the student must take the exam at level A1 of the Common European Framework of Reference for Languages students with certified knowledge of the Polish language at level A1 of CEFR are exempted from the obligation to participate in classes in the third semester of studies

No.	Electives 1 (1 of 2)	Level	offered in semester
1	Operational Research	3	3
2	Cybersecurity Essentials	3	3
No.	Electives 2 (1 of 2)	Level	offered in semester
No.	Electives 2 (1 of 2) Elements of Automation and Robotics	Level 3	offered in semester 5

## INFORMATION TECHNOLOGY AND MANAGEMENT IN RZESZÓW

first-cycle studies

professional title awarded to graduates: licencjat

field of study: INFORMATION TECHNOLOGY (ENG) specialty: Game Design and Development

education profile: practical type of study: full-time

Students admitted in the academic year: 2023/2024

LID-A-GDD/2023

				ECT	S cred	lits				Numb	er of h	ours								I Yea	ar										II Ye	ar					Т						I Year					
No.	Course title	Level	T-1-	_	Inclu			Tatal			Incl	uding					se	m 1					em 2					se	m 3					sem 4			+			sem 5	5				ser	m 6		
			Tota	_	P P	PP	DL	Total	L	S	W	Lab	Р	eL	L	S	W L	ab P	eL	<b>ECTS</b>	L S	W	Lab F	eL.	<b>ECTS</b>	L	s \	W La	ab P	eL E	CTS	L S	w	Lab	Р є	L EC	TS L	. S	W	Lab	P e	LECT	rs L	S	W La	ab P	eL Ef	CTS
	All-University Courses																																															
	English language		8	Ĭ	6	0	0	120	0	0	0	120	0				•	60		4			60		4																							
	Digital Safety and Awarness	-	1		1 (		0	10	10	0		0	0	0	10					1																												
	Foundamentals of Economics	-	1				0	20	0	20		0		0													20				1								$\perp$					$\perp \perp$		$\perp$		
4		-	1			_	0	20	0	20		0	_	0													20				1								$\perp$					$\perp \perp$		$\perp$		
	Personal Business Model	-	1				0	20	0	0			10														1	10	10		1								$\perp$					$\perp \perp$		$\perp$		
	Academic Writing Skills	-	1				0	8	0	0	-	8		0																				8		1			$\perp$					$\perp \perp$		$\perp$		
	Health and Safety while Studying	-	0				0	4	0	4	-		-			4				0																			$\perp$					$\perp \perp$		$\perp$		
	Health Education in Lifestyle Diseases	-	0			_		16	0	16											16				0														$\perp \perp$					$\bot \bot$			_	4
	Physical Education	-	0	- (	0 (	0	0	60	0	0	60	0	0	0								30			0		3	30			0								Щ					ш		ш		
	Basic Courses								_																																							_
	Fundamentals of Mathematics	-	4					34				0			16	1	18		1	4	_																	4	$\bot$					$oldsymbol{+}$	_	$\bot$	_	Ш
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	Discrete Mathematics	-	6				0	50	20	0				0	20	- 3	30	_	1	6								_										4	$\bot$					$oldsymbol{+}$	_		_	4
	Fundamentals of Statistics	-	2			_	0	16	0	0		_	0	0				_	1				16		2			_										4	$\bot$					$oldsymbol{+}$	_		_	4
	Introduction to Electronics and Electrical Engineering	3	4				0	33	15	0	_	18		0	┡	_	_	_	1		_			_		15	$\vdash$	1	8		4	_	+		_			4_	$\mapsto$		_			++	-	+	-	4
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	Major-Related and Specialty Courses		_		· I ·	<u> </u>				_	_										- I		00.1	_			_					_	, ,			_	_					_					_	_
	Algorithms and Data Structures	4					0	56	28				0		<b>  </b>				1		28	+	28		5	ш	$\vdash \vdash$	_					1 .		_			1	$\mapsto$					++	$-\!\!\!+$	+	-	4
	Introduction to IT	3	3				0	28	14	0	0	14		0	14			14	4	3	_	4				$\vdash$	oxdot	_		Щ		_	1		_			4—	$\vdash$					++	$-\!\!\!\!+$	+	_	4
	Introduction to Programming	3	3				0	40	20	0		20		0	20		- 12	20	1	3		+				L	$\vdash \vdash$	27.22					1 .		_			1	$\mapsto$					++	$-\!\!\!+$	+	-	4
	Programming	4	_			_	0	80	40	0		_	0			_			_		20	4	20		4	20		2	0		4	_	1 1		_			4	+			_		++	_	+	_	_
	Software Engineering	5					0	46	22	0	0	24		0	-		_		4		_			_			-	_				22		24	_	4		4	+					+	$-\!\!+$	+	_	_
	Computer System Architecture	4					0	60	30	0		30		0		_			_		_	4				L,			200			30	1 1	30	_	7		4	+			_		++	_	+	_	4
	Operating Systems	3					0	40	24			16		0						_	_			_		24	-	1	6		4	_			_		_	4	+					+	$-\!\!+$	+	_	_
	Network Technologies (CCNA)		5				0	60	20	0		20			20		332	20 20		5	-	_			_		-	_				_			_		_	4	+					+	$-\!\!+$	+	_	_
	Social and Occupational Problems of IT	-	2				1	25	0	10		0	0	15		_			_		10	0		15	2	ш							1		_			+	+			_		++	_	+	_	4
	Computer Graphics with HCI Elements	3						30	0	15		15		0	-		_		4		_			_			-	_				00			_			15		15		2		+	$-\!\!+$	+	_	_
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	Artificial Intelligence	4	4				0	30 50	10	0	0	20	0 50	0			_		+		_	+	_	_		Н	_	+			_	_	1 1		-		1	,	₩	20	_	4	_	++	+	++	-	_
	Programming Project	3					0	65	0	0		_	65		-		_		+		_	+		-		$\vdash$	-	-	50	_	6	_	1		_		_	+-	+			_	_	++	$-\!\!\!+$	-	-	_
	Team Project Elective Course 1	3	8		_	_	0		0		0	0		0			_		+		_	+	_	_		Н	_				6	_	1 1		-			+-	++			_	_	++	+	65	-	8
	Elective Course 1		6			_	0	48 48	0	0	_	20		0	-	-	_		+	_	_	-	_	_			-	- 2	0 28		ь	_		-	-		_	+-	+	20	28	6	_	+	-+	+	-	H
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	Preproduction Game Engines and Programming Technologies	4					0	56	0	0		32			-	-	_		+	_	_	-	_	_			-					_	-	32	20	-	_	+-	+	32	24	5	_	+	-+	+	-	H
	Physics in Games	4	4			_	0	32	0	0	0	32		0	1	-	_		+		_	+	-	-		$\vdash$		-	-	-			1 1	-+	-	_	_	+		32	24	4	_	++	+	+	_	Ε
	Marketing and Business Aspects of Games	4	2				1	22	0	0	0	22		0	-	-	_		+	_	_	-	_	_			-					_		-	-		_	+-	+	32		4	_	+	2:	2		-
	Creating Graphic Asets	4					0	28	0	0	0	28	0	0			-		+		+	+		-		$\vdash$	-	2	0		3	+	+ +	-	-		_	+	+		-+		_	++			-	<u> </u>
	Levels Design	4	3			_	0	24	0	0	0	24	0	0					+			+ +		-1		$\vdash$	$\vdash$	- 2	-		,	+	+ - 1	-+				1	++					++	2	+	_	3
	Animation and Motion Capture Techniques	4	3		_		0	28	0	0	_	28	0	0	$\vdash$	+		+	$\vdash$		_	+		+		$\vdash$	$\vdash$	+	+			_	+	28	-+	,		+	++	+				++	-+-	+++		-
	Artificial Intelligence in Games	4					0	20	0	0	-	20	0	0					+			+ +		-1		$\vdash$	$\vdash$					+	+ - 1	20		,		1	++					++	2	0		2
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	ECTS credits to obtain within Humanities/Social Studies		5																																													
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DP	Classes involving direct participation of academic teache	rs or of	ther peo	ople c	onduct	ting th	ne clas	s							_								_										•															
	Classes developing practical skills															E	xam							Proj	ject co	mplete	ed with	a sepa	arate de	gree					Online	Class	es											
DL	Distance Learning														_									-																								
	Additional compulsory classes* for international students	s																																														
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in the 2nd semester of studies, the student must take the exam at level A1 of the Common European Framework of Reference for Languages
 students with certified knowledge of the Polish language at level A1 of CEFR are exempted from the obligation to participate in classes in the third semester of studies

No.	Electives 1 (1 of 2)	Level	offered in semester
1	Operational Research	3	3
2	Cybersecurity Essentials	3	3

No.	Electives 2 (1 of 2)	Level	offered in semester
1	Elements of Automation and Robotics	3	5
2	Cloud Technologies	3	5

LID-A-CPS/2023

first-cycle studies

professional title awarded to graduates: licencjat

field of study: INFORMATION TECHNOLOGY (ENG)

specialty: Computer Science

education profile: practical type of study: full-time

Students admitted in the academic year: 2023/2024

			ECT	S credi				N	Numbe										I Year											II Yea	ar										III	Year				_
No. Course title	Level	Total		Inclu		Т	otal -			Inclu						sem		_				em 2					sen						sem 4			_			sem 5			Ι.,		sem 6		_
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All-University Courses	_		_													1		_		_							_	, ,	_	_	_		, ,		_	_	_			-						_
1 English language	-	8							0	0		0	0			60	4		4	4	₩.	60		4			_										_					_		$oldsymbol{\perp}$	lacktriangledown	4
2 Digital Safety and Awarness	-	1		1 (					0	0	0	0	0	10		4	4		1	4	1						_										_					_		$oldsymbol{\perp}$	lacktriangledown	4
3 Foundamentals of Economics	-	1		1 (			20		20		_	0	0													20				1														$oldsymbol{\perp}$	$oldsymbol{\sqcup}$	4
4 Law	-	1		1 (					20	0	0	0	0				$\perp$			4						20	_			1														$oldsymbol{\perp}$	$\vdash$	4
5 Personal Business Model	-	1					_			10	_	10	0				$\perp$			4						1	0	10	_	1														$oldsymbol{\perp}$	$\vdash$	4
6 Academic Writing Skills	-	1		1 (		_	8		0	0	8	0	0			4	4			4	1						_						8			1	_					_		$oldsymbol{\perp}$	lacktriangledown	4
7 Health and Safety while Studying	-	0		) (						0		0	0		4				0																									$oldsymbol{\perp}$	$oldsymbol{\sqcup}$	_
8 Health Education in Lifestyle Diseases	-	0	_	) (			_			0	0	0	0							16	_			0																				$oldsymbol{\perp}$	$oldsymbol{\sqcup}$	
9 Physical Education	-	0		) (	) (	0	60	0	0	60	0	0	0								30			0		3	0			0														╨	டட	
Basic Courses																																														_
10 Fundamentals of Mathematics	-	4					•			18		0	_	16	18	8			4																										ш	
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<sup>\*</sup> in the 2nd semester of studies, the student must take the exam at level A1 of the Common European Framework of Reference for Languages students with certified knowledge of the Polish language at level A1 of CEFR are exempted from the obligation to participate in classes in the third semester of studies

## INFORMATION TECHNOLOGY AND MANAGEMENT IN RZESZÓW

No.	Electives 1 (1 of 2)	Level	offered in semester
1	Operational Research	3	3
2	Cybersecurity Essentials	3	3

N	o. Electives 2 (1 of 2)	Level	offered in semester
	DevNet Technologies	4	4
	Programming Languages 1	4	4

No.	Electives 3 (1 of 2)	Level	offered in semester
1	Elements of Automation and Robotics	3	5
2	Cloud Technologies	3	5

No.	Electives 4, 5 (2 of 4)	Level	offered in semester
1	LAN and WLAN Operation	4	5
2	Internet of Things	5	5
3	Game Engines and Programming Technologies	4	5
4	CASE Tools Methodology	4	5

No.	Electives 6 (1 of 2)	Level	offered in semester
1	Advanced Network Technologies	5	6
2	Analytics and Big Data in IoT	5	6