

PLAN OF STUDIES

FACULTY: Information and Communication Technology

MAIN FIELD OF STUDY: Computer Engineering

EDUCATION LEVEL: second-level studies

FORM OF STUDIES: full-time studies

PROFILE: general academic

SPECIALIZATION: Advanced Computer Science (ACS)

LANGUAGE OF STUDY: english

In effect since 2023/2024

Plan of studies structure (optionally)

1) in ECTS point layout

(space for scheme of plan)

2) in hourly layout

(space for scheme of plan)

¹BU – number of ECTS points assigned to hours of classes requiring direct participation of academic teachers and other persons conducting classes

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⁴University-wide subject /group of classes – enter O

⁵DN - number of ECTS points assigned to the classes related to the University's academic activity in the discipline/disciplines to which the main field of study is assigned

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1. Set of obligatory and optional subjects and groups of classes in semestral arrangement

Semester 1

Obligatory subjects / groups of classes Number of ECTS points 29

No.	Subject / groups of classes code	Name of subject / groups of classes (denote group of courses with symbol GK)	Weekly number of hours					Learning effect symbol	Number of hours		Number of ECTS points			Form ² of subject / groups of classes	Way ³ of crediting	Subject / groups of classes			
			lec	cl	lab	pr	sem		ZZU	CNPS	Total	DN ⁵ classes	BU ¹ classes			University -wide ⁴	Concerning scientific activities ⁵	Practical ⁶	Type ⁷
1	W11ITE-SM4001	Physics	1					K2ITE_W01	15	25	1		0,68	T/Z	Z	O			PD
2	W08W04-SM4002	Social Communication					1	K2ITE_U02 K2ITE_K01	15	50	2		0,68	T/Z	Z	O		P(1)	KO
3	W04ITE-SM4010	Computer Project Management (GK)	2		1		1	K2ITE_W06 K2ITE_U03 K2ITE_K02 K2ITE_K03	60	125	5		2,88	T/Z*	E (w)			P(2,5)	K
4	W04ITE-SM4017G	Optimization Methods: Theory and Applications (GK)	2				2	K2ITE_W05 K2ITE_W07 K2ITE_U08	60	125	5	5	2,72	T/Z*	Z(w)			P(2,5)	K
5	W04ITE-SM4018G	IT Applications in Business and Commerce (GK)	2				2	K2ITE_W05 K2ITE_K03 K2ITE_U03	60	125	5	5	2,88	T/Z*	Z(w)		DN	P (2,5)	K
6	W04ITE-SM4019G	Information Systems Modeling (GK)	2		1			K2ITE_W06 K2ITE_U04	45	75	3	3	2,04	T/Z*	Z (w)		DN	P(1,5)	K
7	W04ITE-SM4013	Discrete Mathematics (GK)	2				2	K2ITE_W01 K2ITE_U04	60	125	5		3,04	T/Z*	E (w)			P (2,5)	K
8	W04ITE-SM4020G	Research Skills and Methodologies (GK)	1				2	K2ITE_W03 K2ITE_K04	45	75	3	3	2,04	T/Z	Z		DN	P (2)	K
Total			12	0	2	6	4	–	360	725	29	16	16,96	–	–	–	-	P (14,5)	–

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⁴University-wide subject / group of classes – enter O

⁵DN - number of ECTS points assigned to the classes related to the University's academic activity in the discipline/disciplines to which the main field of study is assigned

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Optional subjects (minimum 15 hours in semester, 1 ECTS points)

No.	Subject / groups of classes code	Name of subject / groups of classes (denote group of courses with symbol GK)	Weekly number of hours					Learning effect symbol	Number of hours		Number of ECTS points			Form ² of subject / groups of classes	Way ³ of crediting	Subject / groups of classes			
			lec	cl	lab	pr	sem		ZZU	CNPS	Total	DN ⁵ classes	BU ¹ classes			University-wide ⁴	Concerning scientific activities ⁵	Practical ⁶	Type ⁷
1	SJO-SM0001	Foreing Language I		1				K2ITE U01	15	30	1		0,63	T	Z	O		P (1)	KO
		Total	0	1	0	0	0	-	15	30	1	0	0,63	-	-	-	-	P (1)	-

Altogether in semester

Total number of hours					Total number of ZZU hours	Total number of CNPS hours	Total number of ECTS points	Total number of ECTS points for DN classes ⁵	Number of ECTS points for BU classes ¹
lec	cl	lab	pr	sem					
12	1	2	6	4	375	755	30	16	17,59

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⁴University-wide subject /group of classes – enter O

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Semester 2

Obligatory subjects / groups of classes

Number of ECTS points 3

No.	Subject / groups of classes code	Name of subject / groups of classes (denote group of courses with symbol GK)	Weekly number of hours					Learning effect symbol	Number of hours		Number of ECTS points			Form ² of subject / groups of classes	Way ³ of crediting	Subject / groups of classes			
			lec	cl	lab	pr	sem		ZZU	CNPS	Total	DN ⁵ classes	BU ¹ classes			University-wide ⁴	Concerning scientific activities ⁵	Practical ⁶	Type ⁷
1	W04ITE-SM4021G	Secure systems and networks (GK)	2		1			K2ITE-W04 K2ITE-U04	45	75	3	3	2,04	T/Z*	Z (w)		DN	P(1)	K
Total			2	0	1	0	0	–	45	75	3	3	2,04	–	–	–	–	P (1)	–

Optional subjects / groups of classes (minimum 45 hours in semester, 2 ECTS points)

No.	Subject / groups of classes code	Name of subject / groups of classes (denote group of courses with symbol GK)	Weekly number of hours					Learning effect symbol	Number of hours		Number of ECTS points			Form ² of subject / groups of classes	Way ³ of crediting	Subject / groups of classes			
			lec	cl	lab	pr	sem		ZZU	CNPS	Total	DN ⁵ classes	BU ¹ classes			University-wide ⁴	Concerning scientific activities ⁵	Practical ⁶	Type ⁷
1	SJO-SM0002	Foreign Language II		3				K2ITE-U01	45	60	2		1,63	T	Z	O		P (2)	KO
Total			0	3	0	0	0	–	45	60	2	0	1,63	–	–	–	–	P (2)	–

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Optional subjects / groups of classes - Advanced Computer Science (minimum 285 hours in semester, 25 ECTS points)

No.	Subject / groups of classes code	Name of subject / groups of classes (denote group of courses with symbol GK)	Weekly number of hours					Learning effect symbol	Number of hours		Number of ECTS points			Form ² of subject / groups of classes	Way ³ of crediting	Subject / groups of classes			
			lec	cl	lab	pr	sem		ZZU	CNPS	Total	DN ⁵ classes	BU ¹ classes			University-wide ⁴	Concerning scientific activities ⁵	Practical ⁶	Type ⁷
1	W04ITE-SM4246P	Research Project				3		K2ITE_U08 K2ITE_K02	45	75	3	3	2,28	T	Z		DN	P (3)	S
2	W04ITE-SM4226	ACS Seminar 1					2	K2ITE_W07 K2ITE_U05	30	50	2	2	1,36	T/Z	Z		DN	P (2)	S
3	W04ITE-SM4247G	Modeling and Optimization of Computer Networks (GK)	1			2	1	K2ITE_W07 K2ITE_U08 K2ITE_U10 K2ITE_K04	60	150	6	6	3,04	T/Z*	E (w)		DN	P (4)	S
4	W04ITE-SM4248G	Information and Storage Management (GK)	1		1			K2ITE_W07 K2ITE_U09	30	50	2	2	1,36	T/Z*	Z (w)		DN	P (1)	S
5	W04ITE-SM4249G	Neural Networks (GK)	2			2		K2ITE_W07 K2ITE_W08 K2ITE_U08	60	150	6	6	2,88	T/Z*	Z (w)		DN	P (3)	S
6	W04ITE-SM4250G	Machine Learning (GK)	2		1	1		K2ITE_W08 K2ITE_U08 K2ITE_K01 K2ITE_K02	60	150	6	6	2,96	T/Z*	E (w)		DN	P (3)	S
Total			6	0	2	8	3	-	285	625	25	25	13,88	-	-	-	-	P (16)	-

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Altogether in semester

Total number of hours					Total number of ZZU hours	Total number of CNPS hours	Total number of ECTS points	Total number of ECTS points for DN classes ⁵	Number of ECTS points for BU classes ¹
lec	cl	lab	pr	sem					
8	3	3	8	3	375	750	30	28	17,55

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Semester 3

Obligatory subjects / groups of classes

Number of ECTS points 3

No.	Subject / groups of classes code	Name of subject / groups of classes (denote group of courses with symbol GK)	Weekly number of hours					Learning effect symbol	Number of hours		Number of ECTS points			Form ² of subject / groups of classes	Way ³ of crediting	Subject / groups of classes			
			lec	cl	lab	pr	sem		ZZU	CNPS	Total	DN ⁵ classes	BU ¹ classes			University-wide ⁴	Concerning scientific activities ⁵	Practical ⁶	Type ⁷
1	W08W04-SM4006	Entrepreneurship (GK)	1				1	K2ITE_W02 K2ITE_K02	30	75	3		1,36	T/Z	Z (w)	O		P (1,5)	KO
Total			1	0	0	0	1	–	30	75	3	0	1,36	–	–	–	–	P (1,5)	–

Optional subjects / groups of classes - Advanced Computer Science (minimum 345 hours in semester, 27 ECTS points)

No.	Subject / groups of classes code	Name of subject / groups of classes (denote group of courses with symbol GK)	Weekly number of hours					Learning effect symbol	Number of hours		Number of ECTS points			Form ² of subject / groups of classes	Way ³ of crediting	Subject / groups of classes				
			lec	cl	lab	pr	sem		ZZU	CNPS	Total	DN ⁵ classes	BU ¹ classes			University-wide ⁴	Concerning scientific activities ⁵	Practical ⁶	Type ⁷	
1	W04ITE-SM4245	ACS Seminar 2					2	K2ITE_U06	30	75	3	3	1,36	T/Z	Z		DN	P (3)	S	
2	W04ITE-SM4218	Final Project						K2ITE_U07 K2ITE_K03 K2ITE_K02	12	275	11	11	1,84	T	Z		DN	P (11)	S	
3	W04ITE-SM4251G	Introduction to Computer Vision in Quality Control (GK)	2				2	K2ITE_W07 K2ITE_W09 K2ITE_U08	60	125	5	5	2,88	T/Z*	Z (w)		DN	P (2,5)	S	
4	W04ITE-SM4252G	Natural Language Processing (GK)	1				2	K2ITE_W07 K2ITE_W08 K2ITE_U10	45	100	4	4	2,2	T/Z*	Z (w)		DN	P (2,5)	S	
5	W04ITE-SM4253G	Research Project 2 (GK)					1	2	K2ITE_U08 K2ITE_K04 K2ITE_U05 K2ITE_K03	45	100	4	4	2,12	T/Z*	Z (p)		DN	P (4)	S
Total			3	0	0		5	4	–	345	675	27	27	10,4	–	–	–	–	P (23)	–

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Altogether in semester

Total number of hours					Total number of ZZU hours	Total number of CNPS hours	Total number of ECTS points	Total number of ECTS points for DN classes ⁵	Number of ECTS points for BU classes ¹
lec	cl	lab	pr	sem					
4	0	0	5	5	375	750	30	27	11,76

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2. Set of examinations in semestral arrangement

Subject / groups of classes code	Names of subjects / groups of classes ending with examination	Semester
W04ITE-SM4010 W04ITE-SM4013	Computer Project Management Discrete mathematics	1
W04ITE-SM4247G W04ITE-SM4250G	Modeling and Optimization of Computer Networks Machine Learning	2

3. Numbers of allowable deficit of ECTS points after particular semesters

Semester	Allowable deficit of ECTS points after semester
1	8
2	8

The deficit after semester 2 applies ONLY to courses/groups of courses not passed in semester 1 (all courses/groups of courses from semester 2 must be passed).

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Opinion of student government legislative body

.....
Date Name and surname, signature of student representative

.....
Date Dean's signature

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