

PLAN OF STUDIES

FACULTY: Faculty of Information and Communication Technology

MAIN FIELD OF STUDY: Applied Computer Science

EDUCATION LEVEL: second-level studies

FORM OF STUDIES: full-time studies

PROFILE: general academic

SPECIALIZATION: Computer Engineering

LANGUAGE OF STUDY: English

In effect since 2023/2024

*delete as applicable

Plan of studies structure (optionally)

1) in ECTS point layout

	CNPS	ECTS	CNPS	ECTS	CNPS	ECTS	CNPS	ECTS	
	900	30	900	30	900	30	900	30	
20	Physics of Contemporary Comp. Science 30	1 ECTS	Fundamentals of Business and Intellectual Property 90	3 ECTS	MSc Thesis I 60	2 ECTS	Diploma Seminar 60	2 ECTS	20
19	Foreign Language II 60	2 ECTS	Foreign Language I 30	1 ECTS	Ethics of new technologies 60	2 ECTS	MSc Thesis II 540	18 ECTS	19
18									18
17									17
16									16
15									15
14	14								
13	13								
12	12								
11	11								
10	10								
9	9								
8	8								
7	7								
6	6								
5	5								
4	4								
3	3								
2	2								
1	1								
sem	I		II		III		IV		total
t/sem	20/300		20/300		20/300		20/300		80/1200

2) in hourly layout

	CNPS	ECTS	CNPS	ECTS	CNPS	ECTS	CNPS	ECTS	
	900	30	900	30	900	30	900	30	
20	Physics of Contemporary Comp. Science 10000		Fundamentals of Business and Intellectual Protection 20000		MSc Thesis I 00020		Diploma Seminar 00002		20
19	Foreign Language II 03000		Foreign Language I 01000		Ethics of new technologies 00001		MSc Thesis II 000(10)0		19
18									18
17			Software System Development 20021 E	Recent Advances in Computer Science 00001				17	
16		Methods of planning and analyzing experiments 10000			Advanced Topics in Artificial Intelligence 20020 E			16	
15	Advanced Databases 10020		Project Management 20020		Data Warehouses 10210 E		Research Methodology 20200		15
14									14
13									13
12	Mobile and Multimedia Systems 20200		Advanced computer networks 20200		User experience 20020		Parallel and Distributed Computing 21100		12
11									11
10									10
9									9
8	Information Systems Modeling and Analysis 22000 E		Analysis of Web-based systems 20200 E		Video game design 20200		Parallel and Distributed Computing 21100		8
7									7
6									6
5									5
4	Foundations of Knowledge Engineering 22000 E		Analysis of Web-based systems 20200 E		Video game design 20200		Parallel and Distributed Computing 21100		4
3									3
2									2
1									1
sem	I		II		III		IV		total
t/sem	20/300		20/300		20/300		20/300		80/1200

1. Set of obligatory and optional courses and groups of courses in semestral arrangement

Semester 1

Obligatory courses / groups of courses

Number of ECTS points 2

No.	Course/ group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Learning effect symbol	Number of hours		Number of ECTS points			Form ² of course/gr oup of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	Total	DN ⁵ classes	BU ¹ classes			University -wide ⁴	Concerni ng scientific activities ⁵	Practical ⁶	Type ⁷
1	W04IST- SM4015G	Physics of Contemporary Computer Science	1					KIST_W01	15	30	1	0	0,6	T	Z				PD
2	W04IST- SM4020G	Methods of planning and analyzing experiments	1					KIST_W01	15	30	1	0	0,6	T	Z				PD
Total			2	0	0	0	0		30	60	2	0	1,2						

Optional courses / groups of courses: Foreign Languages (minimum 45 hours in semester, 2 ECTS points)

No.	Course/ group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Learning effect symbol	Number of hours		Number of ECTS points			Form ² of course/gr oup of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	Total	DN ⁵ classes	BU ¹ classes			University -wide ⁴	Concerni ng scientific activities ⁵	Practical ⁶	Type ⁷
1	SJO- SM0002	Foreign Language II		3				KIST_U12	45	60	2	0	1,5	T	Z	O			KO
Total			0	3	0	0	0		45	60	2	0	1,5						

Optional courses / groups of courses (minimum 225 hours in semester, 26 ECTS points)

No.	Course/ group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Learning effect symbol	Number of hours		Number of ECTS points			Form ² of course/gr oup of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	Total	DN ⁵ classes	BU ¹ classes			University- wide ⁴	Concerni ng scientific activities ⁵	Practical ⁶	Type ⁷
1	W04IST- SM4004G	Information Systems Modelling and Analysis (GK)	2	2				KIST_W02, KIST_W07, KIST_U08	60	210	7	4	4,2	T/Z (W)	E (W)				S
2	W04IST- SM4009G	Foundations of Knowledge Engineering (GK)	2	2				KIST_W05, KIST_U05	60	210	7	3	4,2	T/Z (W)	E (W)				S
3	W04IST- SM4002G	Advanced Databases (GK)	1			2		KIST_W05, KIST_U03	45	180	6	3	3,6	T/Z (W)	Z (W)			P (4)	S
4	W04IST- SM4007G	Mobile and Multimedia Systems (GK)	2		2			KIST_W06, KIST_U06	60	180	6	3	3,6	T/Z (W)	Z (W)			P(3)	S
Total			7	4	2	2	0		225	780	26	13	15,6					7	

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					
9	7	2	2	0	300	900	30	13	18,3

Semester 2

Obligatory courses / groups of courses

Number of ECTS points 3

No.	Course/ group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Learning effect symbol	Number of hours		Number of ECTS points			Form ² of course/gr oup of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	Total	DN ⁵ class es	BU ¹ classes			University- wide ⁴	Concerni ng scientific activities ⁵	Practical ⁶	Type ⁷
1	W08IST- SM4018W	Fundamentals of Business and Intellectual Protection	2					KIST_W08, KIST_K02	30	90	3	0	1,8	T	Z	O			KO
		Total	2	0	0	0	0		30	90	3	0	1,8						

Optional courses / groups of courses Foreign Languages (minimum 15 hours in semester, 1 ECTS points)

No.	Course/ group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Learning effect symbol	Number of hours		Number of ECTS points			Form ² of course/gr oup of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	Total	DN ⁵ classes	BU ¹ classes			University- wide ⁴	Concerni ng scientific activities ⁵	Practical ⁶	Type ⁷
1	SJO- SM0001	Foreign Language I		1				KIST_U12	15	30	1	0	0,5	T	Z	O			KO
		Total	0	1	0	0	0		15	30	1	0	0,5						

Optional courses / groups of courses (minimum 255 hours in semester, 26 ECTS points)

No.	Course/ group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Learning effect symbol	Number of hours		Number of ECTS points			Form ² of course/gr oup of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	Total	DN ⁵ classes	BU ¹ classes			University -wide ⁴	Concerni ng scientific activities ⁵	Practical ⁶	Type ⁷
1	W04IST- SM4008G	Software System Development (GK)	2			2	1	KIST_W02, KIST_W06, KIST_U01, KIST_U10, KIST_U11, KIST_U06, KIST_U08 , KIST_U13 KIST_K04	75	210	7	4	4,2	T/Z (W, S)	E (W)			P (3)	S
2	W04IST- SM4021G	Project Management (GK)	2			2		KIST_W02, KIST_W06, KIST_U07, KIST_U13, KIST_K04	60	180	6	3	3,6	T/Z (W)	Z (W)			P (3)	S
3	W04IST- SM4102G	Advanced Computer Networks (GK)	2		2			KIST_W02, KIST_W03, KIST_U03	60	180	6	2	3,6	T/Z (W)	Z (W)			P (3)	S
4	W04IST- SM4005G	Analysis of Web-based Systems (GK)	2		2			KIST_W02, KIST_W07, KIST_U03,	60	210	7	3	4,2	T/Z (W)	E (W)			P (3)	S
Total			8	0	4	4	1		255	780	26	12	15,6					12	

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					
10	1	4	4	1	300	900	30	12	17,9

Semester 3

Obligatory courses / groups of courses

Number of ECTS points 2

No.	Course/ group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Learning effect symbol	Number of hours		Number of ECTS points			Form ² of course/gr oup of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	Total	DN ⁵ classes	BU ¹ classes			University- wide ⁴	Concerni ng scientific activities ⁵	Practical ⁶	Type ⁷
1	W08IST- SM4017S	Ethics of New Technologies					1	KIST_W09, KIST_U11, KIST_K03	15	60	2	0	1,2	T	Z	O			KO
Total			0	0	0	0	1		15	60	2	0	1,2						

Optional courses / groups of courses (minimum 285 hours in semester, 28 ECTS points)

No.	Course/ group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Learning effect symbol	Number of hours		Number of ECTS points			Form ² of course/g roup of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	Total	DN ⁵ classes	BU ¹ classes			University- wide ⁴	Concerni ng scientific activities ⁵	Practical ⁶	Type ⁷
1	W04IST- SM4003G	Advanced Topics in Artificial Intelligence (GK)	2			2		KIST_W03, KIST_W04, KIST_U02, KIST_U04	60	210	7	5	4,2	T/Z (W)	E (W)			P (3)	S
2	W04IST- SM4107G	Data Warehouses (GK)	1		2	1		KIST_W05, KIST_U05	60	210	7	3	4,2	T/Z (W)	E (W)			P (4)	S
3	W04IST- SM4022G	User Experience (GK)	2			2		KIST_W02, KIST_W06, KIST_U06, KIST_U09,	60	180	6	4	3,6	T/Z (W)	Z (W)			P (3)	S
4	W04IST- SM4109G	Video Game Design (GK)	2		2			KIST_W06, KIST_U06	60	150	5	2	3	T/Z (W)	Z (W)			P (3)	S
5	W04IST- SM4019S	Recent Advances in Computer Science					1	KIST_W03, KIST_U01, KIST_U10, KIST_U11, KIST_K01	15	30	1	1	0,6	T/Z (S)	Z				S
6	W04IST- SM4016P	Master Thesis I				2		KIST_U01, KIST_U09, KIST_U14	30	60	2	1	1,2	T	Z			P (2)	K
Total			7	0	4	7	1		285	840	28	16	16,8					15	

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					
7	0	4	7	2	300	900	30	16	18

Semester 4

Optional courses / groups of courses (minimum 300 hours in semester, 30 ECTS points)

No.	Course/ group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Learning effect symbol	Number of hours		Number of ECTS points			Form ² of course/gr oup of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	Total	DN ⁵ classes	BU ¹ classes			University- wide ⁴	Concerni ng scientific activities ⁵	Practical ⁶	Type ⁷
1	W04IST- SM4013S	Diploma seminar					2	KIST_U01, KIST_U10, KIST_U11, KIST_K01	30	60	2	1	1,2	T/Z (S)	Z				K
2	W04IST- SM4014D	Master Thesis II					10	KIST_U01, KIST_U09, KIST_U14, KIST_K02	150	540	18	15	10,8	T	Z			P (18)	K
3	W04IST- SM4006G	Parallel and Distributed Computing (GK)	2	1	1			KIST_W02, KIST_W03, KIST_U02	60	180	6	3	3,6	T/Z (W)	Z (W)			P (2)	S
4	W04IST- SM4010W	Research Methodology (GK)	2		2			KIST_W01, KIST_W04, KIST_W07, KIST_U02, KIST_U03	60	120	4	2	2,4	T/Z (W)	Z (W)			P (2)	S
Total			4	1	3	10	2		300	900	30	21	18					22	

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	1	3	10	2	300	900	30	21	18

2. Set of examinations in semestral arrangement

Course / group of courses code	Names of courses / groups of courses ending with examination	Semester
W04IST-SM4004G W04IST-SM4009G	1. Information Systems Modelling and Analysis (GK) 2. Foundations of Knowledge Engineering (GK)	1
W04IST-SM4008G W04IST-SM4005G	1. Software System Development (GK) 2. Analysis of Web Systems (GK)	2
W04IST-SM4003G	1. Advanced Topics in Artificial Intelligence (GK)	3

W04IST-SM4107G	2. Data Warehouses (GK)	
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3. Numbers of allowable deficit of ECTS points after particular semesters:

Semester	Allowable deficit of ECTS points after semester
1	13
2	13
3	8
4	0

Opinion of student government legislative body

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Date

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Name and surname, signature of student representative

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Date

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Dean's signature