



University of Ruse Angel Kanchev

70 Years

Facing Knowledge, Youth and Future



7017 Ruse, 8 Studentska Str.

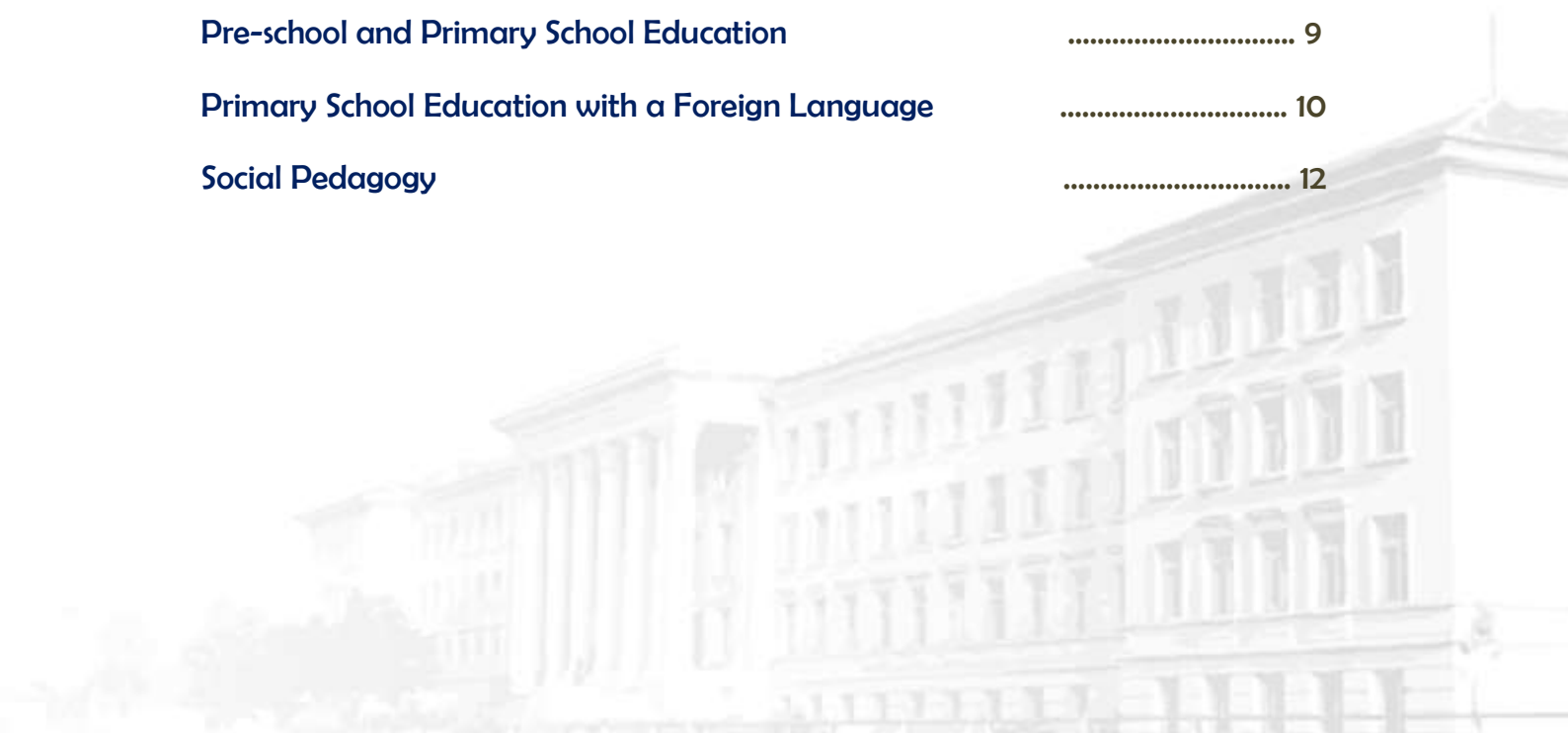
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Faculty of Natural Sciences and Education

Courses in English

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Undergraduate Studies in Computer Science

Winter semester, 2019/2020 academic year			Summer semester, 2019/2020 academic year			
FIRST YEAR						
Code	Course name	ECTS		Code	Course name	ECTS
1034	Introduction to Programming	8		1076	Object Oriented Programming	8
0848	Introduction to Informatics	4		1083	Computer Architectures	6
1051	Calculus I	6		0854	Discrete structures	6
1065	Linear Algebra and Geometry	8		1089	Calculus II	6
0856	English Part I	4		1106	English Part II	4
SECOND YEAR						
1118	Data Structures and Programming	7		1182	Data Bases	7
1119	Operating Systems	6		1183	Computer Networks and Communications	5
1122	Computer Graphics	7		0865	Multimedia Systems and Technologies	7
1125	Numerical Methods	6		1184	Non-procedural Programming	5
1181	English for Computing	4		<i>Elective Courses (students elect a course from each group)</i>		
				Group A		
				1186	Workshop in OOP	3
				1187	Workshop in Computer Graphics	3
				Group B		
				1188	Workshop on Discrete Structures	3
				1190	Mathematical Software	3
THIRD YEAR						
1192	Algorithm Development and Analysis	6		1212	Artificial Intelligence	6
1193	Component Oriented Programming	6		1215	Internet Technologies	6
1194	Information Systems	6		1185	Probability and Statistics *	5
1197	Software Engineering	7		<i>Elective Courses (students elect a course from each group)</i>		
<i>Elective Courses (students elect a course)</i>				Group A		
1200	Mathematical Methods for Optimization	5		1198	Workshop in Databases	3
1248	Operations Research	5		1199	Workshop in Data Structures and Programming	3
				0887	Integrated Practice	3
				Group B		
				1191	The Number Theory	5
				1260	Coding Theory	5

					Group C	
				1444	History of Mathematics and Informatics	5
FOURTH YEAR						
1446	Human-computer Interaction	5		1518	Computer Modeling	4
1447	Image Processing	6				
1472	Programming Languages, Automation, Computing	6				
<i>Elective Courses (students elect a course from each group)</i>				<i>Elective Courses (students elect a course from each group)</i>		
Group A				Group A		
1475	Programming for Internet	5		1524	Social-legal aspects of Information technologies	4
1481	Web Design	5		1531	Information Technologies in Management	4
Group B				Group B		
1206	Computer Linguistics	5		1538	Programming of Mobile Devices	4
1501	Client-Server Technology	5		1539	Geographical Information Systems	4
				1544	Visual Programming	4
Group C				Group C		
1218	Workshop on Software Engineering	3		1545	Assembler	4
1245	Workshop on Computer Networks and Communications	3		1546	System Programming	4
1244	Workshop on Non-procedural Programming	3				

* Individual consultations in English

Undergraduate Studies in Informatics and Information Technologies in the Business

Winter semester, 2019/2020 academic year			Summer semester, 2019/2020 academic year			
FIRST YEAR						
Code	Course name	ECTS		Code	Course name	ECTS
0848	Introduction to Informatics	4		0061	Computer Architectures	6
0845	Calculus	6		0854	Discrete Structures	6
0856	English Part I	4		1106	English Part II	4
0832	Linear Algebra and Geometry	6		1076	Object Oriented Programming	8
SECOND YEAR						
1119	Operating Systems	6		0861	Probability and Statistics *	6
0857	Computer Graphics	7		0863	Computer Networks and Communications	6
0859	Accounting	5		1184	Non-procedural Programming	6
0860	Human Resource Management	5		1510	Data Bases	7
1118	Data Structures and Programming	7				
THIRD YEAR						
0867	Component Oriented Programming	6		1215	Internet Technologies	6
1197	Software Engineering	7		1212	Artificial Intelligence	6
0869	Communication Policy	6		0875	Multimedia Systems and Technologies	5
0861	Operations Research	6		<i>Elective Courses (students elect a course)</i>		
				0882	Workshop in Software Engineering	3
				0886	Workshop in Computer Graphics	3
				0887	Workshop	3
FOURTH YEAR						
0892	Visual Programming Ms Office	7				
1447	Image Processing	6				
1446	Human-computer Interaction	6				
1194	Information Systems	6				
<i>Elective Courses (students elect a course)</i>				<i>Elective Courses (students elect a course)</i>		
	Group A			Group A		
1475	Programming for Internet	5		1544	Visual Programming	4
1481	Web Design	5		1539	Geographical Information Systems	4

				1538	Programming of Mobile Devices	4
				0908	Computer Linguistics	4
					Group B	
				1546	System Programming	4
				1545	Assembler	4
					Group C	
				0912	Computer Modelling	4
				0913	Programming Languages, Automation, Computing	4

* Individual consultations in English

Undergraduate Studies in Financial Mathematics

Winter semester, 2019/2020 academic year			Summer semester, 2019/2020 academic year		
FIRST YEAR					
Code	Course name	ECTS	Code	Course name	ECTS
S00701	Mathematical Analysis I *	6	S00870	Mathematical Analysis II *	7
S00769	Linear Algebra and Geometry *	7	S00982	Discrete Mathematics *	6
S00700	Introduction to Economics	6	S01094	Theory of Probability *	6
S00770	VBA Programming	6	S02371	Insurance *	6
S00771	English in Financial Mathematics 1	5	S00771	English in Financial Mathematics 2	5
SECOND YEAR					
S01223	Ordinary Differential Equations*	7	S01548	Partial Differential Equations *	5
S01246	Computer Mathematics *	6	S01549	Numerical Methods *	6
S01448	Statistics *	6	S01550	Econometrics *	5
S01451	Programming in EXEL *	6	S01870	Data Bases *	5
S00771	English in Financial Mathematics 3	5	S01871	English in Financial Mathematics 4	4
THIRD YEAR					
S02372	Modelling in Finance *	6	S02378	Insurance Mathematics *	7
S02373	Introduction to Financial Mathematics *	7	S02377	Financial Management *	6
S00876	Operations Research in Economics*	7	S02379	Monte Carlo Methods *	6
S02374	Stochastic Analysis *	5			
S02380	Neural Networks	6			
<i>Elective Courses (students elect a course)</i>			<i>Elective Courses (students elect a course)</i>		
S02375	Typesetting with LaTeX *	5	S02381	Web Design *	5
FOURTH YEAR					
S02388	Calculus of Variations and Economic Appl. *	6	S00853	Business Economics	3
SB14353	Computer Finance*	6	SB14354	Financial Law	2
SB14352	Financial Engineering *	6	SB14356	Language and style *	2
S02384	Risk Analysis *	6	S02418	Mathematical Finance Practicum *	3
S02438	Business Simulation and Optimization *	6	SB14355	Methodology of Research*	1
<i>Elective Courses (students elect a course)</i>			<i>Elective Courses (students elect a course)</i>		
			S02387	Theory and Management of Investment Portfolios *	3

* Individual tuition in English (in the form of teacher-student consultations)

Undergraduate Studies in Pedagogy of Education in Mathematics and Informatics

Winter semester, 2019/2020 academic year			Summer semester, 2019/2020 academic year			
FIRST YEAR						
Code	Course name	ECTS		Code	Course name	ECTS
S01027	Linear Algebra	6		S00075	Algebra	6
S01034	Introduction to Programming	8		S01030	Geometry 2	6
S01051	Mathematical Analysis 1	6		S01076	Object-oriented Programming	8
S01070	Geometry 1	6		S01504	English 2	4
S01947	English 1	4				
SECOND YEAR						
S00048	Mathematical Software	3		S00054	Pedagogical Psychology	5
S00049	Data Structures and Programming	8		S00055	Data Bases	5
S00050	Working and Visual Programming in MS Office	5		S00056	Computer Architectures	4
S00051	Operating Systems	5		S00057	Computer Graphics and Image Processing	5
S00052	Mathematical Analysis 2	6		S00058	Probability and Statistics *	6
S00053	Geometry 3	3		S00222	School Course in Algebra	5
THIRD YEAR						
S00223	School Course in Analysis Pedagogic	5		S02042	Methods of Instruction in Mathematics	6
S01096	School Course in Informatics and Information Technologies	5		S02043	Methods of Instruction in Informatics and Information Technologies	6
S01410	Resource Based Object-oriented Programming	5		S02048	Lesson Observation in Mathematics	2
S01411	School Course in Geometry	6		S02060	Lesson Observation in Informatics	2
S02001	Ordinary Differential Equations	5		S02063	Multimedia Systems and WEB Design	7
				S02064	Computer Communications and Networks	7
FOURTH YEAR						
S02216	Audio-visual and Information Technologies in Education	3		S02571	Number Theory	5
<i>Elective Courses (students elect a course)</i>				<i>Elective Courses (students elect a course)</i>		
S02274	Problems in Mathematics Competitions	6		S02576	Pedagogical Communication	2
S02392	Extracurricular Work in Mathematics	6				
<i>Elective Courses (students elect a course)</i>						

S02436	Mathematical Optimization	6
S02564	Numerical Methods *	6
<i>Elective Courses (students elect a course)</i>		
S02565	Visual Tool for Programming (DELPHI)	5
S02566	Visual Tool for Programming (VC++)	5
S02567	Desktop Publishing	5
<i>Elective Courses (students elect a course)</i>		
S02568	Computer Modelling	6
S02569	Problems in Informatics Competitions	6
S02570	Extracurricular Work in Informatics	6

* Individual consultations in English

Undergraduate Studies in Pre-school and Primary School Education

Winter semester, 2019/2020 academic year			Summer semester, 2019/2020 academic year			
FIRST YEAR						
Code	Course name	ECTS		Code	Course name	ECTS
SB14536	General Psychology	3		SB14553	Methods of Instruction in Mathematics for Young Children	7
S02406	Basic Theory of Music	2		S02022	Pedagogical Communication	1
SB14538	Inclusive education	2		S00901	Audio-visual and Information Technologies in Education	2
				<i>Elective Courses (students elect a course)</i>		
				S01979	Musical Instrument	1
				S01521	Group education	1
SECOND YEAR						
SB14555	Age Psychology	4		S03880	Methods of Instruction in Mathematics	9
S03870	Methods of Instruction in Music	4		SB14588	Methods of Teaching Language Acquisition and Development of Speech	2
SB14559	Methods of Teaching Nature Studies	2		S03883	Foundations of Nature Sciences	3
<i>Elective Courses (students elect a course)</i>				SB14559	Methods of Teaching Nature Studies	3
S01979	Musical Instrument	1				
SB14563	Culture of interethnic interaction in pre-school and primary school					
THIRD YEAR						
S03887	Methods of Instruction in Man and Society	4		SB14577	Pedagogical Psychology	3
<i>Elective Courses (students elect a course)</i>						
SB14569	Pedagogy of Communicative Skills	2				
FOURTH YEAR						
S02216	Audiovisual and Information Technologies in Education	3		S03859	Comparative Education	3

Undergraduate Studies in Primary School Education with a Foreign Language

Winter semester, 2019/2020 academic year			Summer semester, 2019/2020 academic year			
FIRST YEAR						
Code	Course name	ECTS		Code	Course name	ECTS
SB14536	General Psychology	3		S02022	Pedagogical Communication	1
S02406	Basic Theory of Music	2		S00076	English Grammar	1
SB14538	Inclusive education	3		S00901	Audio-visual and Information Technologies in Education	2
<i>Elective Courses (students elect a course)</i>				<i>Elective Courses (students elect a course)</i>		
S02399	English 1	5		S01979	Musical Instrument	1
S02400	German 1	5		S01521	Group education	1
S02401	French 1	5		<i>Elective Courses (students elect a course)</i>		
				S02407	English 2	8
				S02408	German 2	8
				S02409	French 2	8
SECOND YEAR						
S02407	English Grammar	1		S03880	Methods of Instruction in Mathematics	9
SB14555	Age Psychology	5		S03903	Lesson Observation (English Language Lessons)	2
S03870	Methods of Instruction in Music	4				
<i>Elective Courses (students elect a course)</i>				<i>Elective Courses (students elect a course)</i>		
S00582	Musical Instrument	1		SB11041	English 4	5
S00583	Culture of interethnic interaction in pre-school and primery school	1		SB11042	German 4	5
				SB11043	French 4	5
<i>Elective Courses (students elect a course)</i>				<i>Elective Courses (students elect a course)</i>		
S03920	English 3	8				
S03921	German 3	8				
S03922	French 3	8				
THIRD YEAR						
S03887	Methods of Instruction in Man and Society	5		S03898	Pedagogical Psychology	3
S03932	Methods of Instruction in English	7		S03946	Linguistic Aspects of Acquisition of English by Young Learners	5
<i>Elective Courses (students elect a course)</i>				<i>Elective Courses (students elect a course)</i>		

S03935	English 5	2
S03936	German 5	2
S03937	French 5	2
<i>Elective Courses (students elect a course)</i>		
S03941	Pedagogy of Communication Skills	1
FOURTH YEAR		
SB11048	Teaching Practice in English Language	2
S02216	Audio-visual and Information Technologies in Education	2
SB11050	Children's Literature in English	3
<i>Elective Courses (students elect a course)</i>		
S03957	English 7	3
S03958	German 7	3
S03959	French 7	3

S03949	English 6	2
S03950	German 6	2
S03951	French 6	2
S03914	Comparative Education	3

Undergraduate Studies in Social Pedagogy

Winter semester, 2018/2019 academic year			Summer semester, 2018/2019 academic year			
FIRST YEAR						
Code	Course name	ECTS		Code	Course name	ECTS
S00873	General Psychology	5		SB14591	Pedagogical Communication	2
SB14538	Inclusive Education	3		S01049	Audio-visual and Information Technologies in Education	3
SECOND YEAR						
S03867	Age Psychology	4		SB14597	Special Pedagogy and Special Psychology	5
				<i>Elective courses (students elect a course)</i>		
				SB14602	Methodology of the Work of Counsellors in Schools	2
THIRD YEAR						
				SB14609	Pedagogical Psychology	6
S01234	Andragogy	7		SB14608	Geragogy	5
S01254	Career and Professional Development	4				
FOURTH YEAR						
SB14612	Management of Social and Educational Projects	4		S01428	Comparative Education	3
S02639	Audio-visual and Information Technologies in Education	3				