

Course descriptions

TABLE OF CONTENTS

1. 2-prUINz-112/23	Didactics of Informatics.....	2
2. 2-prUINz-913/23	Didactics of Informatics (state exam).....	3
3. 2-prUINz-212/23	Didactics of Programming.....	4
4. 2-prUINx-105/21	Digital Literacy of Teachers.....	5
5. 2-prUINx-203/21	Digital Technologies Around Us.....	6
6. 2-prUINz-901/23	Diploma Thesis Project.....	7
7. 2-prUINz-912/23	Informatics (state exam).....	8
8. 2-prUINz-106/23	Informatics (1).....	9
9. 2-prUINz-206/23	Informatics (2).....	10
10. 2-prUINz-306/23	Informatics (3).....	11
11. 2-prUINz-103/23	Mathematical Fundamentals of Informatics (1).....	12
12. 2-prUINz-104/23	Mathematical Fundamentals of Informatics (2).....	13
13. 2-prUINz-101/23	Programming (1).....	14
14. 2-prUINz-102/23	Programming (2).....	15
15. 2-prUINz-201/23	Programming (3).....	16
16. 2-prUINz-202/23	Programming (4).....	17
17. 2-prUINz-111/23	Propedeutics of Informatics Education (1).....	18
18. 2-prUINz-211/23	Propedeutics of Informatics Education (2).....	19
19. 2-prUINz-301/23	Robotics in Education.....	20
20. 2-prUINz-302/23	Správa informatickej učebne.....	22
21. 2-prUINz-221/23	Teaching Practice.....	23
22. 2-prUINz-911/23	Thesis Defence (state exam).....	24

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINz-112/23	Course title: Didactics of Informatics
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 20s / 8s Form of the course: on-site learning	
Number of credits: 0	
Recommended semester: 2.	
Educational level: N	
Prerequisites:	
Course requirements:	
Learning outcomes:	
Class syllabus:	
Recommended literature:	
Languages necessary to complete the course:	
Notes:	
Past grade distribution Total number of evaluated students: 18	
ABS	NEABS
94,44	5,56
Lecturers: prof. RNDr. Ivan Kalaš, PhD.	
Last change:	
Approved by:	

STATE EXAM DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINz-913/23	Course title: Didactics of Informatics
Number of credits: 0	
Educational level: N	
State exam syllabus:	
Last change: 21.09.2023	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINz-212/23	Course title: Didactics of Programming
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 24s / 12s Form of the course: on-site learning	
Number of credits: 0	
Recommended semester: 4.	
Educational level: N	
Prerequisites: FMFI.KDMFI/2-prUINz-202/23 - Programming (4)	
Course requirements:	
Learning outcomes:	
Class syllabus:	
Recommended literature:	
Languages necessary to complete the course:	
Notes:	
Past grade distribution Total number of evaluated students: 0	
ABS	NEABS
0,0	0,0
Lecturers: doc. PaedDr. Monika Tomcsányiová, PhD.	
Last change: 15.05.2023	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINx-105/21	Course title: Digital Literacy of Teachers
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 12s / 6s Form of the course: on-site learning	
Number of credits: 0	
Recommended semester: 1.	
Educational level: N	
Prerequisites:	
Course requirements:	
Learning outcomes:	
Class syllabus:	
Recommended literature:	
Languages necessary to complete the course:	
Notes:	
Past grade distribution Total number of evaluated students: 70	
ABS	NEABS
100,0	0,0
Lecturers: Mgr. Mária Čujdíková, PhD.	
Last change:	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINx-203/21	Course title: Digital Technologies Around Us
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 12s / 6s Form of the course: on-site learning	
Number of credits: 0	
Recommended semester: 3.	
Educational level: N	
Prerequisites:	
Course requirements:	
Learning outcomes:	
Class syllabus:	
Recommended literature:	
Languages necessary to complete the course:	
Notes:	
Past grade distribution Total number of evaluated students: 42	
ABS	NEABS
97,62	2,38
Lecturers: PaedDr. Natália Kováčová, PhD., PaedDr. Andrea Hrušecká, PhD., PaedDr. Roman Hrušecký, PhD.	
Last change:	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINz-901/23	Course title: Diploma Thesis Project
Educational activities: Type of activities: lecture Number of hours: per week: per level/semester: 4s Form of the course: on-site learning	
Number of credits: 0	
Recommended semester: 5.	
Educational level: N	
Prerequisites:	
Course requirements:	
Learning outcomes:	
Class syllabus:	
Recommended literature:	
Languages necessary to complete the course:	
Notes:	
Past grade distribution Total number of evaluated students: 0	
ABS	NEABS
0,0	0,0
Lecturers: doc. RNDr. Zuzana Kubincová, PhD., RNDr. Monika Dillingerová, PhD.	
Last change: 15.05.2023	
Approved by:	

STATE EXAM DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINz-912/23	Course title: Informatics
Number of credits: 0	
Educational level: N	
State exam syllabus:	
Last change:	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINz-106/23	Course title: Informatics (1)
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 20s / 8s Form of the course: on-site learning	
Number of credits: 0	
Recommended semester: 2.	
Educational level: N	
Prerequisites:	
Course requirements:	
Learning outcomes:	
Class syllabus:	
Recommended literature:	
Languages necessary to complete the course:	
Notes:	
Past grade distribution Total number of evaluated students: 16	
ABS	NEABS
100,0	0,0
Lecturers: Mgr. Lucia Budinská, PhD.	
Last change: 15.05.2023	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINz-206/23	Course title: Informatics (2)
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 20s / 8s Form of the course: on-site learning	
Number of credits: 0	
Recommended semester: 3.	
Educational level: N	
Prerequisites:	
Course requirements:	
Learning outcomes:	
Class syllabus:	
Recommended literature:	
Languages necessary to complete the course:	
Notes:	
Past grade distribution Total number of evaluated students: 0	
ABS	NEABS
0,0	0,0
Lecturers: RNDr. Michal Winczer, PhD.	
Last change: 15.05.2023	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINz-306/23	Course title: Informatics (3)
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 16s / 6s Form of the course: on-site learning	
Number of credits: 0	
Recommended semester: 5.	
Educational level: N	
Prerequisites:	
Course requirements: Continuous assessment: tests, experiments, individual creative work Indicative assessment scale: A 90%, B 80%, C 70%, D 60%, E 50%	
Learning outcomes: The student will get acquainted with the methods of creating efficient algorithms and will be able to design and use algorithms for selected problems.	
Class syllabus: - Complexity of algorithms, complexity analysis - Methods of creating efficient algorithms: divide and conquer, greedy, dynamic programming, methods based on state space search	
Recommended literature:	
Languages necessary to complete the course:	
Notes:	
Past grade distribution Total number of evaluated students: 0	
ABS	NEABS
0,0	0,0
Lecturers: RNDr. Michal Winczer, PhD.	
Last change: 15.05.2023	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINz-103/23	Course title: Mathematical Fundamentals of Informatics (1)
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 20s / 8s Form of the course: on-site learning	
Number of credits: 0	
Recommended semester: 1.	
Educational level: N	
Prerequisites:	
Course requirements:	
Learning outcomes:	
Class syllabus:	
Recommended literature:	
Languages necessary to complete the course:	
Notes:	
Past grade distribution Total number of evaluated students: 18	
ABS	NEABS
94,44	5,56
Lecturers: PaedDr. Daniela Bezáková, PhD.	
Last change: 15.05.2023	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINz-104/23	Course title: Mathematical Fundamentals of Informatics (2)
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 20s / 8s Form of the course: on-site learning	
Number of credits: 0	
Recommended semester: 2.	
Educational level: N	
Prerequisites: FMFI.KDMFI/2-prUINz-103/23 - Mathematical Fundamentals of Informatics (1)	
Course requirements:	
Learning outcomes:	
Class syllabus:	
Recommended literature:	
Languages necessary to complete the course:	
Notes:	
Past grade distribution Total number of evaluated students: 16	
ABS	NEABS
100,0	0,0
Lecturers: PaedDr. Daniela Bezáková, PhD.	
Last change: 15.05.2023	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINz-101/23	Course title: Programming (1)
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 20s / 8s Form of the course: on-site learning	
Number of credits: 0	
Recommended semester: 1.	
Educational level: N	
Prerequisites:	
Course requirements:	
Learning outcomes:	
Class syllabus:	
Recommended literature:	
Languages necessary to complete the course:	
Notes:	
Past grade distribution Total number of evaluated students: 18	
ABS	NEABS
94,44	5,56
Lecturers: prof. RNDr. Ivan Kalaš, PhD.	
Last change: 15.05.2023	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINz-102/23	Course title: Programming (2)
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 20s / 8s Form of the course: on-site learning	
Number of credits: 0	
Recommended semester: 2.	
Educational level: N	
Prerequisites: FMFI.KDMFI/2-prUINz-101/23 - Programming (1)	
Course requirements:	
Learning outcomes:	
Class syllabus:	
Recommended literature:	
Languages necessary to complete the course:	
Notes:	
Past grade distribution Total number of evaluated students: 17	
ABS	NEABS
94,12	5,88
Lecturers: prof. RNDr. Ivan Kalaš, PhD.	
Last change: 15.05.2023	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINz-201/23	Course title: Programming (3)
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 24s / 12s Form of the course: on-site learning	
Number of credits: 0	
Recommended semester: 3.	
Educational level: N	
Prerequisites: FMFI.KDMFI/2-prUINz-102/23 - Programming (2)	
Course requirements:	
Learning outcomes:	
Class syllabus:	
Recommended literature:	
Languages necessary to complete the course:	
Notes:	
Past grade distribution Total number of evaluated students: 0	
ABS	NEABS
0,0	0,0
Lecturers: doc. RNDr. Zuzana Kubincová, PhD.	
Last change: 15.05.2023	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2-prUINz-202/23	Course title: Programming (4)
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 20s / 8s Form of the course: on-site learning	
Number of credits: 0	
Recommended semester: 4.	
Educational level: N	
Prerequisites: FMFI.KDMFI/2-prUINz-201/23 - Programming (3)	
Course requirements:	
Learning outcomes:	
Class syllabus:	
Recommended literature:	
Languages necessary to complete the course:	
Notes:	
Past grade distribution Total number of evaluated students: 0	
ABS	NEABS
0,0	0,0
Lecturers: PaedDr. Andrea Hrušecká, PhD.	
Last change: 15.05.2023	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINz-111/23	Course title: Propedeutics of Informatics Education (1)
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 16s / 8s Form of the course: on-site learning	
Number of credits: 0	
Recommended semester: 1.	
Educational level: N	
Prerequisites:	
Course requirements:	
Learning outcomes:	
Class syllabus:	
Recommended literature:	
Languages necessary to complete the course:	
Notes:	
Past grade distribution Total number of evaluated students: 20	
ABS	NEABS
85,0	15,0
Lecturers: Mgr. Karolína Miková, PhD.	
Last change: 15.05.2023	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINz-211/23	Course title: Propedeutics of Informatics Education (2)
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 20s / 8s Form of the course: on-site learning	
Number of credits: 0	
Recommended semester: 4.	
Educational level: N	
Prerequisites:	
Course requirements:	
Learning outcomes:	
Class syllabus:	
Recommended literature:	
Languages necessary to complete the course:	
Notes:	
Past grade distribution Total number of evaluated students: 0	
ABS	NEABS
0,0	0,0
Lecturers: Mgr. Karolína Miková, PhD.	
Last change:	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINz-301/23	Course title: Robotics in Education
Educational activities: Type of activities: lecture Number of hours: per week: per level/semester: 16s Form of the course: on-site learning	
Number of credits: 0	
Recommended semester: 5.	
Educational level: N	
Prerequisites:	
Course requirements: Priebežné hodnotenie: tvorba aktivít počas seminárov (50%) a metodických materiálov a paralelné testovanie týchto aktivít pre vybrané robotické hračky (50%) Orientačná hodnotiacia stupnica: A 90 %, B 80 %, C 70 %, D 60 %, E 50 % Scale of assessment (preliminary/final): 80/20	
Learning outcomes: Students will gain personal experience working with educational robots and applications to control them, for different age categories. They are trying to implement activities. They will discuss and look for suitable solutions. They will get acquainted with project teaching and with the constructionist form of teaching and will be able to start the basic principles of these forms in educational activities with a robotic kit.	
Class syllabus: Students will gain personal experience working with educational robots and applications to control them, for different age categories. They are trying to implement activities. They will discuss and look for suitable solutions. They will get acquainted with project teaching and with the constructionist form of teaching and will be able to start the basic principles of these forms in educational activities with a robotic kit.	
Recommended literature:	
Languages necessary to complete the course:	
Notes:	
Past grade distribution Total number of evaluated students: 0	
ABS	NEABS
0,0	0,0
Lecturers: Mgr. Karolína Miková, PhD., Mgr. Jakub Krcho	

Last change: 15.05.2023
Approved by:

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINz-302/23	Course title: Správa informatickej učebne
Educational activities: Type of activities: lecture / independent work Number of hours: per week: per level/semester: 16s / 4s Form of the course: on-site learning	
Number of credits: 0	
Recommended semester: 5.	
Educational level: N	
Prerequisites:	
Course requirements:	
Learning outcomes:	
Class syllabus:	
Recommended literature:	
Languages necessary to complete the course:	
Notes:	
Past grade distribution Total number of evaluated students: 0	
ABS	NEABS
0,0	0,0
Lecturers: Mgr. Miroslav Wagner	
Last change:	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINz-221/23	Course title: Teaching Practice
Educational activities: Type of activities: practice Number of hours: per week: per level/semester: 20s Form of the course: on-site learning	
Number of credits: 0	
Recommended semester: 3., 4..	
Educational level: N	
Prerequisites:	
Course requirements:	
Learning outcomes:	
Class syllabus:	
Recommended literature:	
Languages necessary to complete the course:	
Notes:	
Past grade distribution Total number of evaluated students: 0	
ABS	NEABS
0,0	0,0
Lecturers: RNDr. Michal Winczer, PhD.	
Last change:	
Approved by:	

STATE EXAM DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/2- prUINz-911/23	Course title: Thesis Defence
Number of credits: 0	
Educational level: N	
State exam syllabus:	
Last change:	
Approved by:	