Course descriptions

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COURSE DESCRIPTION

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:	**Course title:**
FMFI.KDMFI/2-prUINz-112/23	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: 19

ABS	NEABS
94,74	5,26

Lecturers: prof. RNDr. Ivan Kalaš, PhD.

Last change:

Approved by: doc. RNDr. Zuzana Kubincová, PhD.

STATE EXAM DESCRIPTION

Academic year: 2025/2026	
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: doc. RNDr. Zuzana Kubincová, PhD.	

COURSE DESCRIPTION

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:	**Course title:**
FMFI.KDMFI/2-prUINz-212/23	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-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: 16

ABS	NEABS
93,75	6,25

Lecturers: doc. PaedDr. Monika Tomcsányiová, PhD.

Last change: 15.05.2023

Approved by: doc. RNDr. Zuzana Kubincová, PhD.

COURSE DESCRIPTION

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:	**Course title:**
FMFI.KDMFI/2-prUINx-105/21	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: 71

ABS	NEABS
100,0	0,0

Lecturers: Mgr. Mária Čujdíková, PhD.

Last change:

Approved by: doc. RNDr. Zuzana Kubincová, PhD.

COURSE DESCRIPTION

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:	**Course title:**
FMFI.KDMFI/2-prUINx-203/21	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: 59

ABS	NEABS
98,31	1,69

Lecturers: PaedDr. Mgr. Natália Kováčová, PhD., PaedDr. Andrea Hrušecká, PhD., PaedDr. Roman Hrušecký, PhD.

Last change:

Approved by: doc. RNDr. Zuzana Kubincová, PhD.

COURSE DESCRIPTION

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:	**Course title:**
FMFI.KDMFI/2-prUINz-901/23	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: 16

ABS	NEABS
93,75	6,25

Lecturers: doc. RNDr. Zuzana Kubincová, PhD., RNDr. Monika Dillingerová, PhD.

Last change: 15.05.2023

Approved by: doc. RNDr. Zuzana Kubincová, PhD.

STATE EXAM DESCRIPTION

Academic year: 2025/2026	
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: doc. RNDr. Zuzana Kubincová, PhD.	

COURSE DESCRIPTION

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:	**Course title:**
FMFI.KDMFI/2-prUINz-106/23	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: 17

ABS	NEABS
100,0	0,0

Lecturers: Mgr. Lucia Budinská, PhD.

Last change: 15.05.2023

Approved by: doc. RNDr. Zuzana Kubincová, PhD.

COURSE DESCRIPTION

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:	**Course title:**
FMFI.KDMFI/2-prUINz-206/23	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: 17

ABS	NEABS
100,0	0,0

Lecturers: RNDr. Michal Winczer, PhD., Mgr. Lucia Budinská, PhD.

Last change: 15.05.2023

Approved by: doc. RNDr. Zuzana Kubincová, PhD.

COURSE DESCRIPTION

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:	**Course title:**
FMFI.KDMFI/2-prUINz-306/23	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: 16

ABS	NEABS
93,75	6,25

Lecturers: RNDr. Michal Winczer, PhD.

Last change: 15.05.2023

Approved by: doc. RNDr. Zuzana Kubincová, PhD.

COURSE DESCRIPTION

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:	**Course title:**
FMFI.KDMFI/2-prUINz-103/23	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: 19

ABS	NEABS
94,74	5,26

Lecturers: PaedDr. Daniela Bezáková, PhD.

Last change: 15.05.2023

Approved by: doc. RNDr. Zuzana Kubincová, PhD.

COURSE DESCRIPTION

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:	**Course title:**
FMFI.KDMFI/2-prUINz-104/23	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: 17

ABS	NEABS
100,0	0,0

Lecturers: PaedDr. Daniela Bezáková, PhD.

Last change: 15.05.2023

Approved by: doc. RNDr. Zuzana Kubincová, PhD.

COURSE DESCRIPTION

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:	**Course title:**
FMFI.KDMFI/2-prUINz-101/23	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: 19

ABS	NEABS
94,74	5,26

Lecturers: prof. RNDr. Ivan Kalaš, PhD.

Last change: 15.05.2023

Approved by: doc. RNDr. Zuzana Kubincová, PhD.

COURSE DESCRIPTION

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:	**Course title:**
FMFI.KDMFI/2-prUINz-102/23	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: 18

ABS	NEABS
94,44	5,56

Lecturers: prof. RNDr. Ivan Kalaš, PhD.

Last change: 15.05.2023

Approved by: doc. RNDr. Zuzana Kubincová, PhD.

COURSE DESCRIPTION

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:	**Course title:**
FMFI.KDMFI/2-prUINz-201/23	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: 17

ABS	NEABS
94,12	5,88

Lecturers: doc. RNDr. Zuzana Kubincová, PhD.

Last change: 15.05.2023

Approved by: doc. RNDr. Zuzana Kubincová, PhD.

COURSE DESCRIPTION

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:	**Course title:**
FMFI.KDMFI/2-prUINz-202/23	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: 16

ABS	NEABS
93,75	6,25

Lecturers: PaedDr. Andrea Hrušecká, PhD.

Last change: 15.05.2023

Approved by: doc. RNDr. Zuzana Kubincová, PhD.

COURSE DESCRIPTION

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:	**Course title:**
FMFI.KDMFI/2-prUINz-111/23	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: 21

ABS	NEABS
85,71	14,29

Lecturers: doc. Mgr. Karolína Miková, PhD.

Last change: 15.05.2023

Approved by: doc. RNDr. Zuzana Kubincová, PhD.

COURSE DESCRIPTION

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:	**Course title:**
FMFI.KDMFI/2-prUINz-211/23	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: 17

ABS	NEABS
88,24	11,76

Lecturers: doc. Mgr. Karolína Miková, PhD.

Last change:

Approved by: doc. RNDr. Zuzana Kubincová, PhD.

COURSE DESCRIPTION

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:	**Course title:**
FMFI.KDMFI/2-prUINz-301/23	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 hodnotiaca 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: 16

ABS	NEABS
93,75	6,25

Lecturers: doc. Mgr. Karolína Miková, PhD., Mgr. Jakub Krcho

Last change: 15.05.2023
Approved by: doc. RNDr. Zuzana Kubincová, PhD.

COURSE DESCRIPTION

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:	**Course title:**
FMFI.KDMFI/2-prUINz-302/23	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: 16

ABS	NEABS
93,75	6,25

Lecturers: Mgr. Miroslav Wagner

Last change:

Approved by: doc. RNDr. Zuzana Kubincová, PhD.

COURSE DESCRIPTION

Academic year: 2025/2026

University: Comenius University Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:	**Course title:**
FMFI.KDMFI/2-prUINz-221/23	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: 16

ABS	NEABS
100,0	0,0

Lecturers: RNDr. Michal Winczer, PhD., PaedDr. Mgr. Natália Kováčová, PhD.

Last change:

Approved by: doc. RNDr. Zuzana Kubincová, PhD.

STATE EXAM DESCRIPTION

Academic year: 2025/2026	
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: doc. RNDr. Zuzana Kubincová, PhD.	