Univerza na Primorskem
Fakulteta za matematiko, naravoslovje in informacijske tehnologije

UP FAMNIT, ACADEMIC YEAR 2023/2024
STUDY PROGRAMME: MATHEMATICS (1st bologna cycle), in English

1st YEAR (10 compulsory courses)

Numb.	Course	Year	Semester	Language
1	Analysis I – Foundations of Analysis	1st	Autumn	English
2	Algebra I - Matrix Calculus	1st	Autumn	English
3	Computer Science I	1st	Autumn	English
4	Discrete Mathematics I – Set Theory	1st	Autumn	English
5	Mathematical Practicum I	1st	Autumn	English, Slovene
6	Computer Practicum	1st	Autumn	English
7	Algebra II – Linear Algebra	1st	Spring	English
8	Analysis II – Infinitesimal Calculus	1st	Spring	English
9	Mathematical Topics in English I	1st	Spring	English
10	Discrete Mathematics II – Combinatorics	1st	Spring	English

2nd YEAR (8 compulsory and 2 elective courses)

Numb.	Course	Year	Semester	Language
1	Physics	2nd	Autumn	English
2	Algebra III – Abstract Algebra	2nd	Autumn	English
3	Analysis III – Functions of Many Variables	2nd	Autumn	English
4	Introduction to Numerical Calculations	2nd	Autumn	English
5	Computer Science II	2nd	Spring	English
6	Probability	2nd	Spring	English
7	Analysis IV – Real Analysis	2nd	Spring	English
8	Algebra IV – Algebraic Structures	2nd	Spring	English
9	Internal elective course I [5]	2nd		
10	External elective course I	2nd		

3rd YEAR (2 compulsory and 8 elective courses)

Numb.	Course	Year	Semester	Language
1	Statistics	3rd	Spring	English
2	Mathematical Modelling	3rd	Spring	English
3	Internal elective course I [5]	3rd		
4	Internal elective course II [5]	3rd		
5	Internal elective course III [5]	3rd		
6	Internal elective course IV [5]	3rd		
7	Internal elective course V [5]	3rd		
8	Internal elective course VI [5]	3rd		
9	External elective course II	3rd		
10	External elective course III	3rd		

ELECTIVE COURSES

Numb.	Course	ECTS-credits	Course is available on the course schedule for the year of study	Internal/external elective course	Course leader	Language	Semester
1	Data Structures and Algorithms	6	2nd	internal or external	Andrej Brodnik	English	Autumn
2	Geometry	6	2nd	internal or external	Istvan Kovacs	English	Autumn
3	Differential Equations	6	3rd	internal or external	Jasna Prezelj	English	Autumn
4	Stochastic Processes I	6	3rd	internal or external	Marko Orel	Slovene	Autumn
5	Complex Analysis	6	3rd	internal or external	Bojan Kuzma	English	Autumn
6	Permutation Groups	6	3rd	internal or external	Istvan Kovacs	English	Autumn
7	Functional Analysis	6	3rd	internal or external	Marko Orel	English	Autumn
8	Cryptography and Computer Safety	6	3rd	internal or external	Pasalic Enes	English	Autumn
9	Symmetric-key Cryptography	6	3rd	internal or external	Pasalic Enes	English	Autumn
10	Solving Equations: from al-Khwarizmi to Galois	6	3rd	internal or external	Lavrauw, Michel	English	Autumn
11	Topology	6	2nd, 3rd	internal or external	Russ Woodroofe	English	Spring
12	Coding Theory	6	3rd	internal or external	Pasalic Enes	English	Spring
13	Graph Theory	6	3rd	internal or external	Martin Milanič	English	Spring
14	Number Theory	6	3rd	internal or external	Miklavič Štefko	English	Spring
~~15~~	~~Algebraic Graph Theory~~	~~6~~	~~3rd~~	~~internal or external~~	~~Ademir Hujdurović~~	~~English~~	~~Spring~~
16	Measure Theory	6	3rd	internal or external	Marko Orel	English	Spring

SUBSEQUENT CHANGES OF OFFERED COURSES:

Possible subsequent changes of the offered courses will be published on Faculty website. Please follow the published information on the Faculty website.