

COURSES IN THE ACADEMIC YEAR 2019/2020

Published: 15 July 2019

STUDY PROGRAMME AT UP FAMNIT: **MATHEMATICAL SCIENCES**<sup>1</sup> (2nd bologna cycle), in **English**

Last change: 25 September 2019

Course	ECTS credits	Course description <sup>3</sup>	Possible to choose as <sup>4</sup>	Course leader <sup>2</sup>	Language	Semester <sup>1</sup>
Theory of Finite Fields <sup>[5]</sup>	6	IS	IS, ES	Štefko Miklavič	English	autumn
Selected Topics in Theory of Finite Geometries	6	IS	IS, ES	Gyorgy Kiss	English	autumn
Cryptographic Hash Functions and Block Chains	6	IS	IS, ES	Enes Pasalic	English	autumn
Theory of Permutation Groups	6	IS	IS, ES	Istvan Kovacs	English	autumn
Selected Topics in Analysis I	6	BC	BC, IS, ES	Jasna Prezelj	English	autumn
History and Methodology of the Subject	3	IS	IS, ES	Tomaž Pisanski	English	autumn
Coding Theory	6	IS	IS, ES	Enes Pasalic	English	autumn
<del>Selected Topics in Complex Analysis</del>	<del>6</del>	<del>IS</del>	<del>IS, ES</del>	<del>Jasna Prezelj</del>	<del>English</del>	<del>autumn</del>
Selected Topics in Dynamical Systems	6	IS	IS, ES	Jasna Prezelj	English	spring
Selected Topics in Numerical Mathematics	6	IS	IS, ES	Vito Vitrih	English	spring
Selected Topics in Topology	6	IS	IS, ES	Russ Woodroofe	English	spring
Graph Algorithms	6	ES	ES	Martin Milanič	Slovene	autumn
Mathematical Practicum	6	BC	BC, IS, ES	Vito Vitrih	English	spring
Symmetry and Traversability in Graphs	6	IS	IS, ES	Edward Tauscher Dobson	English	autumn
Selected Topics in Theory of Association Schemes	6	IS	IS, ES	Istvan Kovacs	English	spring
Selected Topics in Discrete Mathematics I	6	BC	BC, IS, ES	Istvan Kovacs	English	spring
Selected Topics in Algebra I	6	BC	BC, IS, ES	Klavdija Kutnar	English	spring
Selected Topics in Number Theory	6	IS	IS, ES	Štefko Miklavič	English	spring
Selected Topics in Cryptography I	6	BC	BC, IS, ES	Enes Pasalic	English	spring

**IMPORTANT INFORMATION:**

During studies, students must take altogether 12 courses (3 basic courses, 6 internal selected and 3 external selected), 4 seminars and prepare as well as defend their Master's thesis.

Courses (basic and elective) are awarded with 6 ECTS. Some elective courses are rewarded with 3 ECTS.

Students choose basic courses and internal elective courses related to their selected study field.

More information on study field is available here: <https://www.famnit.upr.si/en/education/master/mathematical-sciences/#heading5>

In the academic year 2019/20 five study field will be available: General Mathematics, Theoretical Mathematics, Cryptography, Discrete Mathematics, Geometry and Applications.

Student choose the study field by enrolling in the first year of study.

More information are available on our website: <https://www.famnit.upr.si/en/education/master/mathematical-sciences/#heading4>

**NOTES:**

[1] Semester: Academic calendar 2019/2020 is published on Faculty website <https://www.famnit.upr.si/en/education/general-information/#heading2>.

[2] Course leaders will be confirmed by UP FAMNIT Senate in September 2019.

[3] Courses are: basic course (BC), elective - internal selected course (IC), elective - external selected course (EC).

[4] A basic course can be also chosen as internally or externally elective course, an internally elective course can be also chosen as externally elective course.

[5] This course can be chosen by students that passed the course Algebra IV - Algebraic Structures at undergraduate level.

**Subsequent changes of a chosen elective course (at enrollment) is possible only with a written request.** The request must be sent through ŠIS.

A printed version must be delivered to the Student Services until **15th October 2019** (for courses in the 1st semester) or **28th February 2020**

(for courses in Spring semester).

After these dates, all requests will be discussed at UP FAMNIT Committee of Academic and Student Affairs.

In this case students must provide an exhaustive explanation for the change.

**SUBSEQUENT CHANGES OF OFFERED COURSES:**

Possible subsequent changes of the offered courses will be published on **18th September 2019** and marked in red in this document.