

UP FAMNIT

STUDY PROGRAMME: **DATA SCIENCE** (2nd bologna cycle), in **English**
COMPULSORY AND ELECTIVE COURSE IN THE ACADEMIC YEAR **2024/205**

Published: 15 July 2024

Last change: /

1ST YEAR (9 compulsory, 2 seminars and 1 external elective course ¹ (6 ECTS))

COURSE	ECTS CREDITS	COMPULSORY / ELECTIVE	YEAR	COURSE LEADER	LANGUAGE	SEMESTER
Mathematical Practicum	6	compulsory	1st		English	autumn
Data Science Seminar I	3	compulsory	1st		English	autumn
Databases for Big Data	6	compulsory	1st		English	autumn
Data Practicum I	3	compulsory	1st		English	autumn
Data Engineering and Distributed Information Systems	6	compulsory	1st		English	autumn
Intelligent System	6	compulsory	1st		English, Slovene	autumn
Statistics	6	compulsory	1st		English	spring
Data Science Ethics	3	compulsory	1st		English	spring
Selected Topics in Information Visualisation	6	compulsory	1st		English	spring
Selected Topics in Discrete Mathematics	6	compulsory	1st		English	spring
Data Science Seminar II	3	compulsory	1st		English	spring
Graph Algorithms	6	elective	1st	Martin Milanič	English	autumn

2ND YEAR (3 compulsory, 2 external elective courses ^{1,2} (12 ECTS), practical training and Master's thesis)

COURSE	ECTS CREDITS	COMPULSORY / ELECTIVE	YEAR	COURSE LEADER	LANGUAGE	SEMESTER
Mining Massive Data	6	compulsory	2nd		English	autumn
Data Practicum II	6	compulsory	2nd		English	autumn
Selected Topics in Numerical Mathematics	6	compulsory	2nd		English	spring
Practical training (3 weeks)	6	compulsory	2nd			
Master's Thesis (preparation and defence)	24	compulsory	2nd			
Foundations of Data Science and Artificial Intelligence	6	elective	2nd	Miklos Kresz	English	autumn
Big Data in Structural Bioinformatics	6	elective	2nd	Jure Pražnikar	English	autumn
Selected Topics in Digital Signal Processing and Analysis	6	elective	2nd	Peter Rogelj	English	spring
Computational Social Science	6	elective	2nd	Marko Tkalčič	English	spring

NOTES:

[1] Students that haven't passed a course in the field of probability in their undergraduate studies, have to choose 1 external elective course in that field.

[2] Students of the 1st year that will enroll in the 2nd year and are employed on the project GDI UP, don't choose the 2 elective courses of the 2nd year.

After the enrollment Student Services will enter 2 elective courses in their index: (1) Selected topics on data processing; (2) Selected topics on data visualization II.

Subsequent changes of a chosen elective course (at enrollment):

* until 30 September 2024: the student informs Student Services (referat@famnit.upr.si) and the change is entered in the students' index;

* from 1 October 2024: the student sends a request through ŠIS in the first 2 weeks of the semester for the course, chosen in the current academic year.

Detailed information (submission, last dates,...) will be published by Student Services at the beginning of each semester, so students should follow notices from the Student Services (<https://www.famnit.upr.si/sl/obvestila>). The decision is made by the Committee for Study and Student Affairs UP FAMNIT.

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.