

UP FAMNIT

Published: 21 October 2024

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

Last change: /

**1ST YEAR (9 compulsory, 2 seminars and 1 external elective course (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
Big Data in Structural Bioinformatics	6	elective	1st	Jure Pražnikar	English	autumn

**2ND YEAR (3 compulsory, 2 external elective courses <sup>1,2</sup> (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	autumn
Computational Social Science	6	elective	2nd	Marko Tkalčič	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.