

UP FAMNIT

STUDY PROGRAMME: **COMPUTER SCIENCE** (1st bologna cycle), in **English**
COMPULSORY AND ELECTIVE COURSE IN THE ACADEMIC YEAR **2025/26**

Published: 6 November 2025

Last change: /

1st YEAR (10 compulsory courses)

NUMB.	COURSE	YEAR	SEMESTER	LANGUAGE
1	Mathematics I - Analysis I	1st	Autumn	English
2	Mathematics II - Algebra I	1st	Autumn	English
3	Programming I	1st	Autumn	English
4	Computer Practicum I	1st	Autumn	English
5	Theoretical Computer Science I – Discrete Structures	1st	Autumn	English
6	Systems I – Hardware	1st	Spring	English
7	Systems II – Operating Systems and Computer Networks	1st	Spring	English
8	Programming II – Concepts of Programming Languages	1st	Spring	English
9	Theoretical Computer Science II – Formal Languages and Computability	1st	Spring	English
10	Computer Practicum II	1st	Spring	English

2nd YEAR (7 compulsory and 3 elective courses)

NUMB.	COURSE	YEAR	SEMESTER	LANGUAGE
1	Data Structures and Algorithms	2nd	Autumn	English
2	Programming III – Concurrent Programming	2nd	Autumn	English
3	Introduction to Database Systems	2nd	Autumn	English
4	Computer Networks	2nd	Spring	English
5	Systems III – Information Systems	2nd	Spring	English
6	Mathematics III – Algebra II	2nd	Spring	English
7	Mathematics IV – Combinatorics with Graph Theory	2nd	Spring	English
8	<i>Internal elective course</i>	2nd		
9	<i>Internal elective course</i>	2nd		
10	<i>External elective course - English Language ¹</i>	2nd		

3rd YEAR (4 compulsory, 6 elective courses and seminar - final project paper)

NUMB.	COURSE	YEAR	SEMESTER	LANGUAGE
1	Software Engineering	3rd	Autumn	English
2	Information Technology Management	3rd	Spring	English
3	Theoretical Computer Science III – Information Theory	3rd	Spring	English
4	Seminar – Final Project Paper	3rd	Autumn & Spring	English
5	<i>Internal elective course</i>	3rd		
6	<i>Internal elective course</i>	3rd		
7	<i>Internal elective course</i>	3rd		
8	<i>External elective course</i>	3rd		
9	<i>External elective course</i>	3rd		
10	<i>External elective course</i>	3rd		

ELECTIVE COURSES

NUMB.	COURSE	ECTS CREDITS	AVAILABLE FOR THE YEAR OF STUDY	INTERNAL/ EXTERNAL ELECTIVE	COURSE LEADER	LANGUAGE	SEMESTER
1	English Language (B2) ¹	6	2nd	external	Martina Paradiž	English	Autumn
2	Multimedia Design	6	3rd	internal or external	Matjaž Kljun	English	Autumn
3	Introduction to Machine Learning and Data Mining	6	3rd	internal or external	Branko Kavšek	English	Autumn
4	Geographic Information Systems	6	3rd	internal or external	Mojca Poklar	English	Autumn
5	Human–Computer Interaction	6	2nd, 3rd	internal or external	Matjaž Kljun	English	Autumn
6	Graph Theory	6	3rd	internal or external	Martin Milanič	English	Autumn
7	Game Development	6	3rd	internal or external	Jernej Vičič	English	Autumn
8	Adaptive Interactive Systems	6	3rd	internal or external	Marko Tkaličič	English	Spring
9	Augmented Reality	6	2nd, 3rd	internal or external	Klen Čopič Pucihar	English	Spring
10	Data Programming	6	3rd	internal or external	Uroš Godnov	English	Spring

NOTES:

[1] The first external elective course in the 2nd year is the English Language Course. The student may substitute this course with any course that falls within the areas of Mathematics or Computer Science and is taught in English.

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.