

**UP FAMNIT**

**STUDY PROGRAMME: COMPUTER SCIENCE (1st bologna cycle), in English**  
**COMPULSORY AND ELECTIVE COURSE IN THE ACADEMIC YEAR 2024/2025**

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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</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)	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	Adaptive Interactive Systems	6	3rd	internal or external	Marko Tkalčič	English	Spring
7	Graph Theory	6	3rd	internal or external	Martin Milanič	English	Spring
8	Augmented Reality	6	2nd, 3rd	internal or external	Klen Čopič Pucihar	English	Spring
9	Data Programming	6	3rd	internal or external	Uroš Godnov	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.