

1st YEAR (10 compulsory courses)

NUMB.	COURSE	YEAR	SEMESTER	LANGUAGE
1	Algebra I – Matrix Calculus	1st	Autumn	English
2	Analysis I - Foundations of Analysis	1st	Autumn	English
3	Programming I	1st	Autumn	English
4	Computer Practicum	1st	Autumn	English
5	Theoretical Computer Science I	1st	Autumn	English
6	Data Programming	1st	Spring	English
7	Organic Chemistry and Biochemistry	1st	Spring	English
8	Analysis II – Infinitesimal Calculus	1st	Spring	English
9	Genetics	1st	Spring	English
10	Algebra II – Linear Algebra	1st	Spring	English

2nd YEAR (11 compulsory courses)

NUMB.	COURSE	YEAR	SEMESTER	LANGUAGE
1	Data Structures and Algorithms	2nd	Autumn	English
2	Introduction to Database Systems	2nd	Autumn	English
3	Analysis III – Functions of Many Variables	2nd	Autumn	English
4	Foundations of Physics with Biophysics	2nd	Autumn	English
5	Introduction to Machine Learning and Data Mining	2nd	Autumn	English
6	Introduction to Bioinformatics	2nd	Autumn	English
7	Statistics	2nd	Spring	English
8	Programming II – Concepts of Programming Languages	2nd	Spring	English
9	Algorithms in Bioinformatics	2nd	Spring	English
10	Nucleotide Sequence Analysis	2nd	Spring - 4th quarter	English
11	Physical Chemistry with Chemoinformatics ¹	3rd	Spring - 4th quarter	English

3rd YEAR (7 compulsory, 4 elective courses and Seminar - Final project paper)

NUMB.	COURSE	YEAR	SEMESTER	LANGUAGE
1	Structures of Biological Molecules	3rd	Autumn - 1rd quarter	English
2	Biotechnology	3rd	Autumn - 2nd quarter	English
3	Evolutionary and Population Genetics	3rd	Autumn	English
4	Evolutionary Biology	3rd	Autumn	English
5	Functional Genomics	3rd	Spring - 3rd quarter	English
6	Physical Chemistry with Chemoinformatics	3rd	Spring - 4th quarter	English
7	Systems III – Information Systems	3rd	Spring	English
8	Mathematical Modelling in Bioinformatics	3rd	Spring	English
9	Seminar - Final Project Paper	3rd	Spring	English
10	<i>Internal elective course</i>	3rd		
11	<i>External elective course</i>	3rd		
12	<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	Introduction to numerical calculations	6	3rd	internal or external	Vito Vitrih	English	Autumn
2	Multimedia design	6	3rd	external	Matjaž Kljun	English	Autumn
3	Biological Topics in English	6	3rd	internal or external	Sara Župan	English	Spring
4	Systems biology approach in human disease study	6	3rd	internal or external	Anže Županič, Katja Lakota	English	Spring
5	Biomolecular Modeling	6	3rd	internal or external	Jure Pražnikar	English	Spring
6	Practical Training	6	3rd	internal or external	Matjaž Hladnik		

NOTES:

[1] The students of the 2nd year listen to the compulsory course Physical Chemistry with Chemoinformatics, instead of choosing an elective course for the 2nd year. They will choose this elective course in the 3rd year.

ELECTIVE COURSES - IMPORTANT INFORMATION FOR STUDENTS

Syllabus is available on Faculty website <https://www.famnit.upr.si/en/education/undergraduate/bf-first/#heading4>

* It is in students' interests that the courses are evenly distributed throughout the entire academic year. Therefore, before choosing elective courses, check in which semester the courses will be implemented.

* beside the listed courses, students may choose some other courses offered within other study programmes (website: Education/Undergraduate Studies).

Notice that their timetable is suitable only for the students of the study programme within the course is offered, which means that in case of overlapping, students will have to find individually an agreement with the course leader.

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 SIS 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/si/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.

