Functional Genetics and Bioinformatics: **Bioinformatics**

(2-year Master's program, 120 credits; recommended study plan)

1st Winter Semester

Introduction to Omics & Biotechnology
(KMB/921)
Practicals in Omics & Biotechnology
(KMB/933)
Seminars in Omics & Biotechnology
(KMB/926)
Practical Computing for Biologists
(KMB/925)
Bioinformatics for Biologists
(KMB/613)
The New Statistics for Exp. Biologists
(KMB/929)
Bioethics
(KMB/913)
Masters Thesis Assignment
(KMB/885)
Master's English Examination – TOEFL
(OJZ/930) *

*can be passed anytime during the studies

Python I
(UAI/735I)   G1

1st Summer Semester

Master thesis, Practical part
(KMB/881)
Genetics – Colloquia
(KMB/180)
Cell Structure and Function
(KMB/914)
Essays in Omics & Biotechnology
(KMB/918)

BASH Programming
(KMB/934)
Introduction to R
(KMB/922)
Genomics
(KMB/919)

Databases
(UAI/697E)   G1

Molecular Physiology and Metabolism
(KMB/924)
Structural Bioinformatics
(KMB/927)   G3

2nd Winter Semester

Master thesis, Practical part
(KMB/881)

Transcriptomics and Epigenomics
(KMB/930)

Data Analysis in Natural Sciences
(UAI/330E)
Python in Data Sciences
(UAI/331)   G2

Molecular Phylogenetics
(KPA/604)
Molecular Ecology
(KZO/412I)   G3

2nd Summer Semester

Master thesis, Practical part
KMB/881
Genetics – Colloquia
(KMB/180)

Microbial Ecology and Genomics
(KPA/172)   G3

Core courses (common to all): 75 credits   Obligatory courses: 19 credits   Obligatory elective courses: ≥ 4 credits of G1, ≥ 4 credits of G2, ≥ 9 credits of G3