Master's Degree in Bioinformatics and Computational Biology
Academic course 2019-2020

Information

Mandatory: 60 ECTS

Master's project: 12 ECTS

Master's Degree in Bioinformatics and Computational Biology of the Autonomous University of Madrid overall consists of 72 ECTS credits and is made up of six compulsory modules with 60 ECTS altogether. Finally, the Master is completed with a Master's Project of 12 ECTS.

Modules:

MODULE I - Sequence Analysis and Structural Bioinformatics

MODULE II - Programming and Computational Techniques in Bioinformatics MODULE III - Statistics and Data Analysis

MODULE IV - Genomics and Massive Sequencing Data Analysis MODULE V - Biology of Systems and Networks

MODULE VI - Research Seminars MODULE VII - Master's Project

Curriculum

Code	Subject	Semester	ECTS	Status	Module
33080	Sequence Analysis	1	3	Mandatory	I
33081	Molecular Phylogeny	1	3	Mandatory	I
33082	Structural Bioinformatics	1	3	Mandatory	I
33083	Processing and Massive Data Management	1	6	Mandatory	II
33084	Scientific Programming and Algorithms in Bioinformatics	1	3	Mandatory	II
33085	Programming and Statistics in R	1	6	Mandatory	III
33086	Machine Learning	2	6	Mandatory	III
33087	Text Mining	2	3	Mandatory	III
33088	Next Generation Sequencing Fundamentals and Translational Genomics	1	6	Mandatory	IV
33089	Metagenomics	2	3	Mandatory	IV
33090	Transcriptomics, Genomic Regulation and Epigenomics	2	6	Mandatory	IV
33091	Characterization of Networks and Biological Topologies	2	3	Mandatory	V
33092	Biological Networks and Biology Systems	2	6	Mandatory	V
33093	Research Seminars	2	3	Mandatory	VI
33094	Master's Project	3	12	Mandatory	VII

According to the agreements of the Committee on Postgraduate Studies at UAM, those elective subjects having less than five students enrolled, may not be taught. Involved students will be advised for relocation and enrollment in other subjects.

The offer of optional subjects could suffer minor changes before the start of lessons for reasons of adjustments in Master's teaching organization, in which case, it will be properly announced.