MSC (BIOINFORMATICS AND COMPUTATIONAL BIOLOGY)

Programme Requirements

Code	Title	Credits
STREM FOR BIOLOGICAL SCIENCE GRADUATES		
Students take **90** credits as follows - all listed core modules (**85** credits) and **5** credits of elective modules:		
Biological Science Taught Modules		
Core Modules		
CS6405	Datamining	5
CS6501	Programming for Bioscientists I	5
CS6502	Programming for Bioscientists II	5
MB6300	Computational Systems Biology	5
MB6301	Genomic Data Analysis	5
MB6302	Computational Microbiome Analysis	5
ST3300	Data Analysis I	5
ST4400	Data Analysis II	5
ST5005	Introduction to Probability and Statistics	5
Elective Modules		
Students take **5** credits from the following:		
CS6421	Deep Learning	5
AM6020	Open Source Infrastructure for Modelling with Data	5
AM6016	Dynamic Machine Learning with Applications	5
MS6005	Discrete Mathematics	5
CS6503	Introduction to Relational Databases	5
Biological Science Research Module		
Core Modules		
MB6303	Dissertation in Bioinformatics and Computational Biology	30
STREAM FOR COMPUTER SCIENCE GRADUATES		
Students take **90** credits as follows - all listed core modules (**85** credits) and **5** credits of elective modules:		
Computer Science Taught Modules		
Core Modules		
ST5005	Introduction to Probability and Statistics	5
BC6002	Molecular Biology	5
BC6003	Biomolecules	5
BL6023	Cells, Biomolecules, Genetics and Evolution	5
CS6405	Datamining	5
CS6502	Programming for Bioscientists II	5
MB6300	Computational Systems Biology	5
MB6301	Genomic Data Analysis	5
MB6302	Computational Microbiome Analysis	5
ST3300	Data Analysis I	5
ST4400	Data Analysis II	5
Elective Modules		
MS6005	Discrete Mathematics	5
CS6501	Programming for Bioscientists I	5
Computer Science Research Modules		
Core Modules		

MB6303	Dissertation in Bioinformatics and Computational Biology	30
STREAM FOR MATHEMATICS GRADUATES		
Students take **90** credits as follows - all listed core modules (**85** credits) and **5** credits of elective modules:		
Mathematics Taught Modules		
Core Modules		
ST3300	Data Analysis I	5
or ST4400	Data Analysis II	
AM6016	Dynamic Machine Learning with Applications	5
BC6002	Molecular Biology	5
BC6003	Biomolecules	5
BL6023	Cells, Biomolecules, Genetics and Evolution	5
AM6020	Open Source Infrastructure for Modelling with Data	5
CS6405	Datamining	5
CS6502	Programming for Bioscientists II	5
MB6300	Computational Systems Biology	5
MB6301	Genomic Data Analysis	5
MB6302	Computational Microbiome Analysis	5
Elective Modules		
Students take **5** credits from the following:		
CS6503	Introduction to Relational Databases (5)	
CS6501	Programming for Bioscientists I (5)	
Mathematics Research Module		
Core Modules		
MB6303	Dissertation in Bioinformatics and Computational Biology	30
STREAM FOR STATISTICS GRADUATES		
Students take **90** credits as follows - all listed core modules (**85** credits) and **5** credits of elective modules:		
Statistics Taught Modules		
Core Modules		
AM6016	Dynamic Machine Learning with Applications	5
BC6002	Molecular Biology	5
BC6003	Biomolecules	5
BL6023	Cells, Biomolecules, Genetics and Evolution	5
AM6020	Open Source Infrastructure for Modelling with Data	5
CS6405	Datamining	5
CS6502	Programming for Bioscientists II	5
MB6300	Computational Systems Biology	5
MB6301	Genomic Data Analysis	5
MB6302	Computational Microbiome Analysis	5
MS6005	Discrete Mathematics	5
Elective Modules		
Students take modules to the value of **5** credits from the following:		
CS6503	Introduction to Relational Databases	5
CS6501	Programming for Bioscientists I	5
Statistics Research Module		
Core Modules		
MB6303	Dissertation in Bioinformatics and Computational Biology	30

Examinations

Full details and regulations governing Examinations for each programme will be contained in the *Marks and Standards Book* and for each module in the *Book of Modules.*