Modules offered by MBB 2015-16

Level 1

Module number	Title	Semester	Credits
MBB110	Maths for Molecular Bioscience	1	10
MBB161	Biochemistry	1+2	20
MBB162	Genetics	1+2	20
MBB163	Microbiology	1+2	20
MBB164	Molecular Biology	1+2	20
MBB165	Practical Molecular Biosciences 1	1+2	30

In level 1, students take 120 credits, of which 110 comprise MBB161, 162, 163, 164 and 165. MBB110 is recommended for students without A level or AS Maths. Students may take any 10-credit course at the University of Sheffield, including a wide range of language modules.

Level 2

Module number	Title	Semester	Credits
FCP201	Molecules to Market	2	10
MBB210	History & Philosophy for Molecular Bioscience	2	10
MBB261	Biochemistry 2	2	20
MBB262	Genetics 2	2	20
MBB263	Microbiology 2	2	20
MBB265	Practical Molecular Bioscience 2	1+2	30
MBB266	Molecular Bioscience 2A	1	20
MBB267	Molecular Bioscience 2B	1	20

In level 2, students take 120 credits. All MBB students take MBB265, 266 and 267. They also choose two from MBB261, 262 and 263, depending on their academic interests. The remaining 10 credits can come from any compatible 10-credit module at the University, including FCP201 and MBB210.

Level 3

Module number	Title	Semester	Credits
BMS351	Gametes, Embryos and Stem Cells	1B	10
MBB301	Macromolecular Machines	2A	10
MBB302	Physical Methods for Studying Biological Structures	1A	10
MBB303	Cells as Factories	1B	10
MBB304	Plant Biotechnology	1A	10
MBB306	Virus Infections of Humans	1A	10
MBB308	Molecular Systems Biology and Synthetic Biology	1B	10
MBB309	Membrane Protein Structure and Function	1B	10
MBB310	Assembly of Supramolecular Structures	2B	10
MBB311	Molecular Immunology	1A	10
MBB313	Genome Stability and Genetic Change	2A	10
MBB320	Human Genetics 1	1B	10
MBB323	Microbial Sensing of the Environment	2A	10
MBB325	The RNA World	1A	10

MBB334	Biochemical Basis of Human Disease	2A	10
MBB335	Bacterial Pathogenicity	2B	10
MBB336	Human Genetics 2	2A	10
MBB339	Evolutionary Genetics	2B	10
MBB340	The Microbiology of Extreme Environments	2A	10
MBB342	Genetics of Cell Growth and Division	2B	10
MBB343	Biochemical Signalling	2A	10
MBB344	Genomic Science	1A	10
MBB360	Project	1+2	20
MBB361	Literature Review	2	10
MBB362	Biochemistry Data Handling	1+2	10
MBB363	Genetics Data Handling	1+2	10
MBB364	Microbiology Data Handling	1+2	10

In level 3, all students do MBB360 (Project), which can be lab-based, computer based, clinical diagnostics, science communication or public outreach. They also do MBB361 and one of the data handling modules, depending on their degree course. The remaining 80 credits are usually chosen from the remaining set of modules listed here, the choice being dependent on the degree course.

Level 4

Module number	Title	Semester	Credits
MBB401	Introduction to Research Methodology	1	10
MBB402	Advanced Literature Review	1+2	20
MBB403	Extended Laboratory Project	1+2	80
MBB404	Project in Industry	1+2	80
MBB405	Advanced Research Topics	1+2	10

In level 4, most of the year (up to Easter) is spent in the lab: either MBB403, or (if they are working in industry) MBB404.