PHD (MICROBIAL BIOTECHNOLOGY)

Programme Requirements

Code	Title	Credits
Students take taught modules to the value of **80** credits as follows:		
Technical Skills and Knowledge		
Students take **30** credits as follows – all listed core modules (**10** credits) and **20** credits of elective modules:		
Core Modules		
MB7001	Disseminating Research Results to a Scientific Audience	5
MB7002	Critical Appraisal of Biotechnology Research	5
Elective Modules		
Students take modules to the value of **20** credits from the following:		20
BT6001	Genetic Engineering (5)	
CS6501	Programming for Bioscientists I (5)	
CS6502	Programming for Bioscientists II (5)	
MB6004	Advanced Molecular Microbial Biotechnology (5)	
MB6300	Computational Systems Biology (5)	
MB6301	Genomic Data Analysis (5)	
ML6005	Molecular Techniques in the Life Sciences (5)	
Complementary and Transferrable Skills		
Students take **15** credits as follows – all listed core modules (**5** credits) and **10** credits of elective modules:		
Core Modules		
PG6015	An Introduction to Research Integrity, Ethics and Open Science	5
Elective Modules		
Students take modules to the value of **10** credits from the following:		10
PG6001	STEPS - Scientific Training for Enhanced Postgraduate Studies (5)	
PG6003	Teaching and Learning for Graduate Studies (5)	
PG6009	Graduate Information Literacy (5)	
PG6014	Scientific Outreach and Communication (5)	
PG6025	Community-Based Participatory Research (5)	
Innovation Skills		
Students take **35** credits as follows – all listed core modules (**30** credits) and **5** credits of elective modules:		
Core Modules		
LW6104	Principles of Intellectual Property Law	5
MB7003	Biotechnology Industry Placement	25
Elective Modules		
Students take modules to the value of **5** credits from the following:		5
AC6301	Innovation Finance (5)	
IS6306	Technology Business Planning (5)	
Total Credits		**80**

Indicative Breakdown of Training over the 4 Years of the Programme

This table represents the typical breakdown of training and will vary according to the individual PCDP. **80** credits of training must be achieved by the end of year 3 of the PhD.

Year	Research	Modules covering different skills	Modules covering different skills	Modules covering different skills
		Technical	Complementary	Innovation
Year 1	60 credits	20 credits	5 credits	5 credits
Year 2	65 credits	10 credits	10 credits	5 credits
Year 3	65 credits			25 credits
Year 4	90 credits			

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*.