

Course Information Form

This Course Information Form provides the definitive record of the designated course

Section A: General Course Information

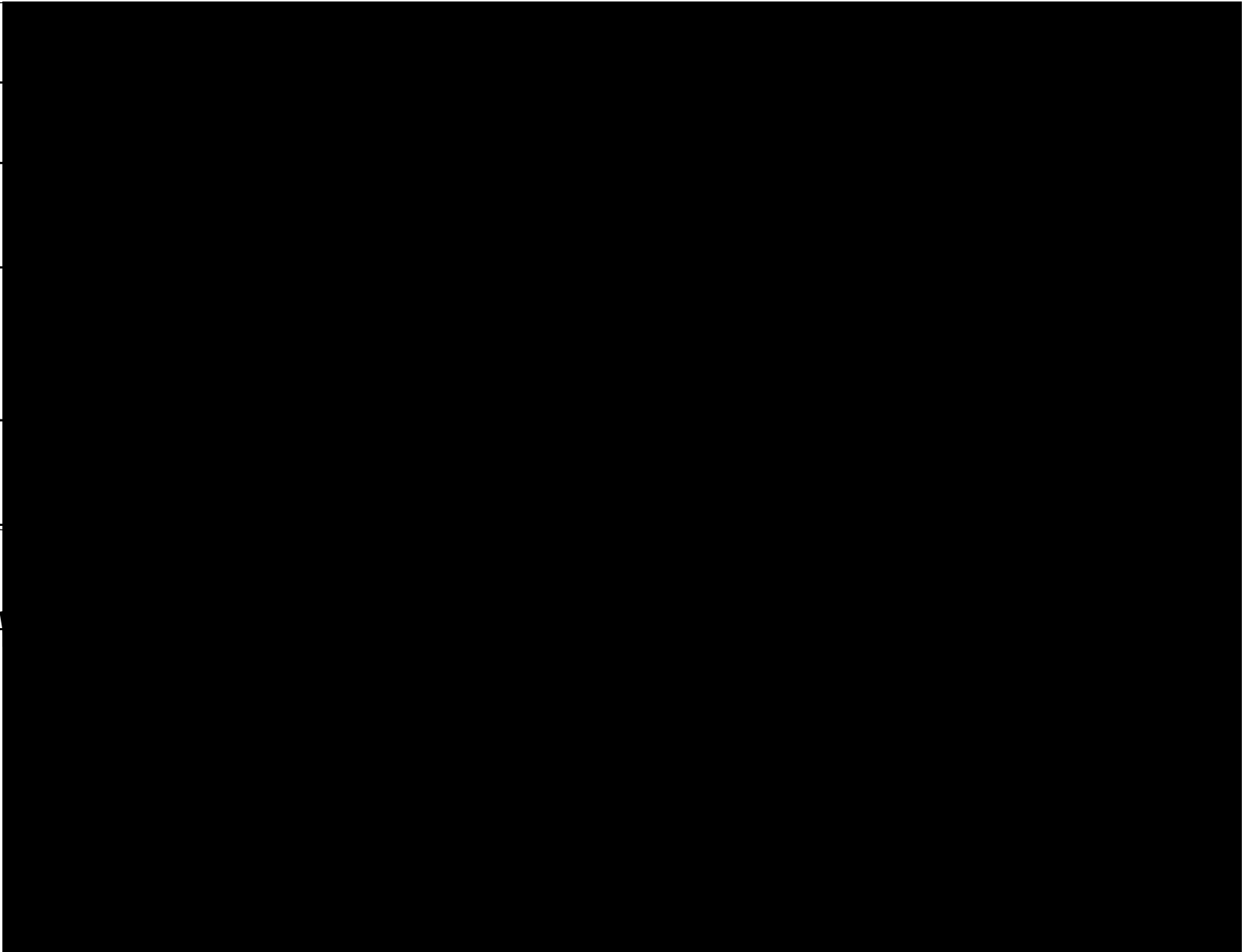
Course Title	BSc (Hons) Biotechnology with Data Analytics
Final Award	MSc
Route Code	MSBDAAAF
Intermediate Qualification(s)	
FHEQ Level	7
Location of Delivery	University Square Campus, Luton
Mode(s) and length of study	24 months full time
Standard intake points (months)	October and February
External Reference Points as applicable	

Professional, Statutory or Regulatory Body (PSRB) accreditation or endorsement	n/a
HECoS code(s)	100134
UCAS Course Code	n/a

Course Aims	<p>The aim of the course is to provide you with an understanding of how microbes can be used to benefit humankind. New technologies in molecular biology, microbiology and computational biology will be taught and it will be shown how these methodologies are applied in biotechnology industries and the underlying biochemistry explained at an advanced level.</p> <p>A laboratory based project will be offered in one of the five taught themes (i) molecular biology, (ii) computational biology, (iii) applied microbiology, (iv) Biomaterials, and (v) analytical biology to provide our graduates with the laboratory skills required for subsequent employment in biotech/pharmaceutical industries or academia.</p> <p>The Data Analytics Units are designed for non-computing graduates who are looking to apply information technology to their current career, or who are looking to change their career direction. These Units covers a wide range of topics including programming, databases, security, project management and computer networking. During the course you will learn the underpinning theory of these topics, and you will apply this theory in practical scenarios.</p>															
	<p>Upon successful completion of your course you should meet the appropriate learning outcomes for your award shown in the table below</p> <table border="1"> <thead> <tr> <th></th> <th>Outcome</th> <th>Award</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Demonstrate systematic understanding and a critical awareness of new technologies in molecular biology</td> <td>MSc Biotechnology with Data Analytics</td> </tr> <tr> <td>2</td> <td>Show significant knowledge and understanding of the principles of recombinant protein expression and development process;</td> <td>MSc Biotechnology with Data Analytics</td> </tr> <tr> <td>3</td> <td>Demonstrate systematic knowledge and understanding of nucleotide and protein sequence databases and the tools to model 3-dimensional protein structures with molecular modelling software</td> <td>MSc Biotechnology with Data Analytics</td> </tr> <tr> <td>4</td> <td>Show systematic understanding of those industrial processes to exploit the use of microbes for a specific product or application;</td> <td>MSc Biotechnology with Data Analytics</td> </tr> </tbody> </table>			Outcome	Award	1	Demonstrate systematic understanding and a critical awareness of new technologies in molecular biology	MSc Biotechnology with Data Analytics	2	Show significant knowledge and understanding of the principles of recombinant protein expression and development process;	MSc Biotechnology with Data Analytics	3	Demonstrate systematic knowledge and understanding of nucleotide and protein sequence databases and the tools to model 3-dimensional protein structures with molecular modelling software	MSc Biotechnology with Data Analytics	4	Show systematic understanding of those industrial processes to exploit the use of microbes for a specific product or application;
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**Course Learning
Outcomes**

5
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12



learning process a collaborative effort.

Computing and Information Technology is everywhere nowadays and the Data Analytics portion of the course will develop your skills in this area. Even before the course you may have been exposed to various information technologies. Our teaching uses this everyday experience as a starting point to embark on systematic analysis and interpretation of these technologies using the right tools. This is done in a variety of ways across all teaching units. Most of the teaching in this area is based on lectures complemented by practical sessions that serve to apply and further develop the contents of the lecture within practical exercises.

Assessment

Assessment is undertaken in all units of the course to check that you have met the threshold standards expected of all students. Most units have two summative assessment points and you will be provided with feedback that is designed to show you where you are meeting/exceeding the standards and where/how you can/should make further improvement. The final assessment in most of the taught units is a formal written examination. Elsewhere, a range of assessment methods are used. These include not only scientific laboratory reports, but others that develop a range of transferable skills, including research proposals and poster/oral presentations. These are designed to build upon and extend what is expected of students with an undergraduate degree.

**Assessment
Regulations**

Note: Be aware that our regulations change every year

Approved Variations and Additions to Standard Assessment Regulations

n/a

Section C: Assessment Plan

The course is assessed as follows :

MSBDAAAF/*MSBPMAAF Feb Start- MSc Biotechnology with Data Analytics (Delivery Pattern A and *B Oct or Feb start)

Unit Code	Level	Period	Core/Option	Ass 1 Type code	Ass 1 Submit wk	Ass 2 Type code	Ass 2 Submit wk	Ass 3 Type code	Ass 3 Submit wk	Ass 4 Type code	Ass 4 Submit wk
BSS074-6	7	BLK1 (AY2), BLK3 (AY2), *BLK1 (AY2)	Core	CW-EPO	8						
CIS132-6	7	BLK1 (AY2), BLK3 (AY2), *BLK3 (AY2), *BLK5 (AY2)	Core	CW-RW	8						
CIS108-6	7	BLK2 (AY2), BLK4 (AY2), *BLK4 (AY2), *BLK6 (AY2)	Core	PJ-ART	5	EX	7				

CIS109-6	7	BLK4 (AY2), BLK6 (AY2), *BLK2 (AY2), *BLK4 (AY2)	Core	CW-PO	6						
BHS000-6	7	SEM1 (AY3), *SEM 1 (AY3)	Core	PJ-PRO	13	CW-JO	13	PR-OR	13		
BHS043-6	7	SEM1 (AY1) OR SEM1 (AY2)	Core	CW-PO	12						
BHS042-6	7	SEM1 (AY1), SEM1 (AY2), *SEM 1 (AY1), *SEM 1 (AY2)	Core	PR-LAB	9	EX	13				
BHS012-6	7	SEM1 (AY1), SEM1 (AY2), *SEM 1 (AY1), *SEM 1 (AY2)	Core	PR-OR	7	IT-PT	11				

BHS013-6	7	SEM2 (AY1), *SEM 1 (AY1)	Core	WR-PO	9	EX	13				
BHS014-6	7	SEM2 (AY1), *SEM 1 (AY1)	Core	CW-PO	11						

Glossary of Terms for Assessment Type Codes	
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CW-EPO	Coursework - e-Portfolio
CW-JO	Coursework - Journal
CW-PO	Coursework - Portfolio
CW-RW	Coursework - Reflective Writing
EX	Exam (Invigilated)
IT-PT	Summative in-class test or phase test
PJ-ART	Coursework - Artefact
PJ-PRO	Coursework - Project Report
PR-LAB	Practical - Laboratory Based
PR-OR	Practical - Oral Presentation
WR-PO	Coursework - Poster

Administrative Information	
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School	School of Life Sciences
Head of School/Department	Professor S.S. Sreenivasaprasad
Course Coordinator	Guy Grant