Programme Regulations: 20212/23

Programme Title: Degree of Master Science in Bioinformatics – Code 5198F

Notes:

(i) These programme regulations should be read in conjunction with the University's Postgraduate (Taught) Progress Regulations and Examination Conventions.

(ii) A compulsory module is a module which a student is required to study.

(iii) All optional modules are offered subject to the constraints of the timetable and to any restrictions on the number of students who may be taught on a particular module. Not all modules may be offered in all years and they are listed subject to availability.

(iv) All modules are delivered in Block mode unless stated otherwise as Linear, eLearning or distance learning.

1. Programme structure

(a) The programme is available for study in full-time mode only.

(b) The period of study for full-time mode shall be 1 year starting in September.

(c) The programme comprises modules to a credit value of 180.

(d) All candidates shall take the following compulsory modules:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Credits Sem 3*	*Level*	*Mode*
CSC8309	Genome Scale Data Analytics	10		10		7	Block
CSC8324	Modelling Cellular Systems	10	10			7	Block
CSC8325	An Introduction to Bioinformatics Theory and Practice	10	10			7	Block
CSC8326	Advanced Bioinformatics Theory and Practice	10	10			7	Block
CSC8330	Advanced Programming for Digital Biology	10		10		7	Block
CSC8333	Research Skills and group project for Digital Biology	10		10		7	Block
CSC8391	Research Project for Bioinformatics	80		20	60	7	
CSC8621	Computing Foundations of Data Science	10	10			7	Block
MAS8406	Numeric Skills for Digital Biology	10	10			7	Block

(e) All candidates shall take ONE of the following optional modules:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Credits Sem 3*	*Level*	*Mode*
CSC8320	Fundamentals of Cell and Molecular Biology	10	10			7	Block
CSC8321	Computing for Digital Biology	10	10			7	Block

(e) All candidates shall take ONE of the following optional modules:

Code	*Descriptive title*	*Total Credits*	*Credits Sem 1*	*Credits Sem 2*	*Credits Sem 3*	*Level*	*Mode*
CSC8305	Computational Analysis of Complex Biological Systems	10		10		7	Block
CSC8332	Bio-Data Science	10		10		7	Block

2. Assessment methods

Details of the assessment pattern for each module are explained in the module outline.

3. Other

This programme is designed to produce graduates who will be expected to be equally capable in theoretical and practical aspects of their subject and it is essential that only students of equally high calibre in both aspects of the programme are eligible for merit and distinction awards. Therefore, the regulations are as follows:

Course Requirements

A number of areas in which specific regulations have been defined for this programme, and approved by the Faculty Education Committee, are documented below, and in these areas these provisions take precedence over other University regulations.

Progression within the MSc Bioinformatics degree

Two assessed components comprise the MSc Bioinformatics degree:

- Component 1: The first and second semester taught modules (100 credits).
- Component 2: Research Project (80 credits)

In order to be permitted to start Component 2 a candidate must:

- obtain a weighted average mark for Component 1 of at least 50,
- and have passed at least 70 credits in Component 1.

Progression to Component 2 can only occur when the above progression thresholds are met.

Award of the MSc Bioinformatics degree

To obtain the MSc Bioinformatics degree, candidates must satisfy the examiners in both assessed components as follows.

- A student will be recommended for the *award of MSc with Distinction* if they have achieved a pass mark in 180 credits with a weighted average mark across all 180 credits of at least 70 and have a Component 2 mark of at least 70.
- A student will be recommended for the *award of MSc with Merit* if they have achieved a pass mark in 180 credits with a weighted average mark across all 180 credits of at least 60 and have a Component 2 mark of at least 60.
- A student will be recommended for the *award of MSc* if they have achieved a pass mark in at least 160 credits with a weighted average mark across all 180 credits of at least 50.