Year of entry: 2020/21



## **Programme Specification**

1	Awarding body	University	of London		
2	Teaching Institution	Birkbeck	Birkbeck College		
3	Programme Title(s)	Postgraduate Certificate Macromolecular Electron Microscopy			
4	Programme Code(s)	TPCMACE	TPCMACEM_C		
5	UCAS code (if applicable)	N/A	N/A		
6	Home Department	Biological	Biological Sciences		
7	Exit Award(s)	N/A	N/A		
8	Duration of Study (number of years)	1-year			
9	Mode of Study	FT	PT	DL	٧
10	Level of Award (FHEQ)	7	1		
11	Other teaching depts or institution	N/A	N/A		
12	Professional, Statutory Regulatory Body(PSRB) details	N/A	N/A		
13	QAA Benchmark Group	N/A			

## 14 | Programme Rationale & Aims

#### **Main Aims:**

There has been a revolution in Electron Microscopy in the past few years culminating in the award of the 2017 Nobel Prize in Chemistry to Richard Henderson, Joachim Frank and Jacques Dubochet. Electron microscopy can now determine the structures of proteins with near atomic resolution, revolutionising the study of large macromolecular machines.

Birkbeck, University of London is one of the leading centres in electron microscopy in the world. The department of Biological Sciences and its forerunner have been teaching Structural Biology via the internet since 1996 and now offer a new course dealing with the latest techniques in Macromolecular Electron Microscopy. This can be taken as a standalone 30 credit CPD course, as this Postgraduate Certificate or as part of the MSc in Structural Molecular Biology.

## <sup>15</sup> Entry Criteria

Degree in science, computing or mathematics, or equivalent qualification, or relevant work experience.

### 16 Learning Outcomes

On successful completion of this course, students should be able to:

- Describe image formation in the Electron Microscope
- Describe how to prepare samples for Biological Electron Microscopy
- Explain the steps in processing EM image data through to a final 3D atomic model

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## Learning, teaching and assessment methods

All teaching is internet-based. The course material is released in several sections on a dedicated, password-protected website.

You must successfully complete both coursework and the written exam, which may be taken at an examination centre close to you. All modules are examined by a single 3 hour exam. You are required to answer the questions for the modules you sat and spend 1.5 hours per module.

## 18 Programme Description

This programme consists of the module in Macromolecular Electron Microscopy and one other module from the MSc in Structural Molecular Biology

<sup>19</sup> Pı	Programme Structure								
Part Time 1-year programme									
Year 1									
Level	Module Code	Module Title	Credits	Status*					
7	SCBS061S7	Macromolecular Electron Microscopy	30	Compulsory					
Plus o	ne 30-credit opt	tion from the indicative list below:							
7	SCBS056S7	Principles of Protein Structure	30	Optional					
7	SCBS057S7	Protein Structure Determination	30	Optional					
7	SCBS058S7	Protein Expression and Purification	30	Optional					
7	SCBS059S7	Protein Bioinformatics	30	Optional					
7	SCBS060S7	Protein Crystallography	30	Optional					

## Status\*

CORE – Module must be taken and passed by student; COMPULSORY – Module must be taken, mark can be reviewed at sub-exam board; OPTIONAL – Student can choose to take this module

# 20 Regulations

#### Admissions

This programme adheres to the College Admissions Policy: <a href="http://www.bbk.ac.uk/registry/policies/documents/admissions-policy.pdf">http://www.bbk.ac.uk/registry/policies/documents/admissions-policy.pdf</a>

### Credit Transfer

Accredited Prior Learning will be considered in line with the College Policy on Accredited Prior Learning

http://www.bbk.ac.uk/registry/policies/documents/accreditation-prior-learning.pdf

## • Programme Regulations

This programme adheres to the College Common Awards Scheme <a href="http://www.bbk.ac.uk/registry/policies/regulations">http://www.bbk.ac.uk/registry/policies/regulations</a>

• Programme Specific Regulations (or not applicable) N/A

Year of entry: 2020/21



## 21 Student Attendance Framework – in brief

The full version of the 'Student Attendance Framework' is available http://www.bbk.ac.uk/mybirkbeck/services/rules/Attendance-Framework.pdf .

### Principle

Consistent and regular student attendance in class (or equivalent) promotes and affords student success. Inconsistent and irregular attendance is less likely to result in student success and is consistent with lower marks and degree classifications being achieved and awarded.

### **Attendance expectation**

Birkbeck, University of London expects you to consistently attend all timetabled sessions, including lectures, seminars, group and individual tutorials, learning support sessions, workshops, laboratories, field trips, inductions and demonstrations.

### **E-Registers**

All Birkbeck students are issued with student cards. Students are expected to take them to classes and to assessment venues and to present them to a member of staff if requested. This is for the purpose of identifying Birkbeck students.

## 21 Student Support and Guidance

All Birkbeck students have access to a range of student support services, details can be found on our website here: http://www.bbk.ac.uk/mybirkbeck/services/facilities

## Methods of Enhancing Quality and Standards

The College has rigorous procedures in place for the monitoring and enhancing its educational provision. This includes regular monitoring of programmes drawing on feedback from various sources including external examiner's reports, student feedback, student achievement and progression data. In addition, departments are reviewed every four to five years through the internal review process that includes external input.

For more information please see the Academic Standards and Quality website http://www.bbk.ac.uk/registry/about-us/operations-and-quality.

23	Programme Director	Professor Helen Saibil	
24	Start Date (term/year)	Autumn 2020	
25	Date approved by TQEC	Autumn 2019	
26	Date approved by Academic Board	Spring 2019	
27	Date(s) updated/amended	August 2019 for October 2020	