

Programme Specification

1	Awarding body	University of London
2	Teaching Institution	Birkbeck College
3	Programme Title(s)	MSc Structural Molecular Biology
4	Programme Code(s)	TMSBISCL_C (2-year programme) TMSBISC3_C (3-year programme)
5	UCAS code (if applicable)	N/A
6	Home Department	Biological Sciences
7	Exit Award(s)	<p>PG Certificate Protein Crystallography for completion of <i>Protein Crystallography</i> plus any other module (60 credits, total).</p> <p>PG Certificate Macromolecular Electron Microscopy for completion of <i>Macromolecular Electron Microscopy</i> plus any other module (60 credits, total).</p> <p>PG Certificate Structural Molecular Biology for any other combination of two modules (60 credits, total).</p> <p>PG Diploma Structural Molecular Biology awarded for any 120 credits (including projects).</p> <p>Alternative exit award of <i>MSc Biological Sciences</i> awarded for any 180 credits at level 7 from modules in home department (limited to a max. of one project module).</p>
8	Duration of Study (number of years)	2 years or 3 years
9	Mode of Study	Part-time distance learning
10	Level of Award (FHEQ)	7
11	Other teaching depts or institutions (if applicable)	None
12	Professional, Statutory Regulatory Body (PSRB) details	N/A
13	<u>QAA Benchmark Statement</u>	N/A

14	Programme Rationale & Aims
	<p>Main Aims: The programme will offer the necessary background for students to become conversant in current structural biology research. Students successfully completing the programme would be able to start laboratory-based research in the area with strong background knowledge and people working in related fields would be able to understand the current literature.</p> <p>Distinctive Features: The programme may be completed entirely by distance learning, making it accessible worldwide. For students able to attend for a brief stint, there is an option to undertake</p>

	<p>some on-site practical work toward the research project.</p> <p>For those who do not wish to undertake the full MSc, the programme offers 3 possible exit routes leading in each case to PG Certificates as well as a possible exit route to a PG Diploma.</p> <p>The part-time pace makes the programme particularly suitable for people in work or who wish to update their skills ready to return to work, or to retrain.</p>
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15	Entry Criteria
	Degree in science, computing or mathematics, or equivalent qualification, or relevant work experience.

16	Learning Outcomes
	<p>The mix of learning outcomes to be met varies depending on the collection of modules selected and on the nature of the project. Per-module learning outcomes are found in the module specifications.</p> <p>Overall, students will be expected to have gained fluency in a selection of modern structural molecular biology methods relating to protein structure analysis generally, and will have gained facility in applying one or more of these methods to analysis of a specific protein(s).</p>

17	Learning, teaching and assessment methods
	<p>All teaching in the optional modules is internet-based. The course material is released in a number of discrete sections via a dedicated, password-protected website. Materials include self-paced worksheets/question sets that are followed up by regular online tutorials. Modules typically are assessed by a number question/problem sets and by a 1.5 h end-of-module exam.</p> <p>As for the optional modules, the compulsory project may be taken via distance-learning. Alternatively, the project may include a ca. 2 week stint of laboratory work at Birkbeck at a specified period during the summer vacation. Distance-learning projects are assessed by written work relating to findings from surveys of relevant literature and to directed analysis of a structural biology problem/task. Laboratory projects are assessed similarly, but also include a written report of the laboratory work.</p>

18	Programme Description
	<p>For the MSc Structural Molecular Biology, students take 4 taught (optional) modules of 30 credits each (120 credits), plus a 60-credit project, for 180 credits in total. The taught modules may be taken over one or two years. A project module may be taken only in the final year (thus, in Year 2 or Year 3).</p> <p><i>Protein Structure</i> is required for any students who have not studied protein structure at all to undergraduate level.</p> <p>MSc students may NOT take all three of: <i>Protein Structure Determination</i>, <i>Protein Crystallography</i>, and <i>Macromolecular Electron Microscopy</i>.</p>

	<p>The PG Diploma Structural Molecular Biology may be awarded for any 120 credits (including projects).</p> <p>The PG Certificate Protein Crystallography may be awarded for completion of <i>Protein Crystallography</i> plus any other module (60 credits, total).</p> <p>The PG Certificate Macromolecular Electron Microscopy for completion of <i>Macromolecular Electron Microscopy</i> plus any other module (60 credits, total).</p> <p>The PG Certificate Structural Molecular Biology for any other combination of two modules (60 credits, total).</p>
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19	Programme Structure			
PART-TIME PROGRAMME ONLY (2 or 3 years)				
Year 1 and 2: Two modules per year from the following				
Level	Module Code	Module Title	Credits	Status*
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
7	SCBS061S7	Macromolecular and Cellular Electron Microscopy	30	Optional
Year 2 or 3				
Level	Module Code	Module Title	Credits	Status*
7	SCBS062D7 or SCBS063D7	Project Structural Molecular Biology or Laboratory Project Structural Molecular Biology	60	Compulsory

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
	<p>Admissions This programme adheres to the College Admissions Policy http://www.bbk.ac.uk/registry/policies/documents/admissions-policy.pdf</p> <p>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</p> <p>Programme Regulations This programme adheres to the College Common Awards Scheme http://www.bbk.ac.uk/registry/policies/regulations</p>

	Programme Specific Regulations (if applicable): N/A
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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/student-services

22	Methods of Enhancing Quality and Standards
	<p>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.</p> <p>For more information please see the Academic Standards and Quality website http://www.bbk.ac.uk/registry/about-us/operations-and-quality</p>

23	Programme Director	Professor Nicholas Keep
24	Start Date <i>(term/year)</i>	Autumn 2001
25	Date approved by TQEC	Spring 2001
26	Date approved by Academic Board	Summer 2001
27	Date(s) updated/amended	08 July 2020. Added additional exit award of MSc Biological Sciences.