

## Programme Specification

1	<b>Awarding body</b>	University of London					
2	<b>Teaching Institution</b>	<b>Birkbeck College</b>					
3	<b>Programme Title(s)</b>	<b>MSc Bio-business</b>					
4	<b>Programme Code(s)</b>	TMSBIOBS_C					
5	<b>UCAS code</b>	N/A					
6	<b>Home Department</b>	Biological Sciences					
7	<b>Exit Award(s)</b>	PG Cert Bio-business, PG Dip Bio-business,					
8	<b>Duration of Study (number of years)</b>	1 year full-time					
9	<b>Mode of Study</b>	FT	x	PT		DL	
10	<b>Level of Award (FHEQ)</b>	7					
11	<b>Other teaching depts or institution</b>	Centre for Innovation Management Research (CIMR) in the Department of Management					
12	<b>Professional, Statutory Regulatory Body(PSRB) details</b>	N/A					
13	<a href="#"><u>QAA Benchmark Group</u></a>	N/A					

14	<b>Programme Rationale &amp; Aims</b>
	<p>The programme seeks to equip students with theories, principles and tools for analysing and working with the major issues pertaining to various types of firms in the biological and chemical science industry. The transition from research science project into a viable business is fraught with difficulty and risk, which is an important topic in public policy and of great significance to the UK economy. This programme can therefore make a valuable contribution to both job creation for Birkbeck students and to the wider economy.</p> <p>Combining both science and entrepreneurial modules is expected to create high impact and enable students to more easily transition between scientific and business careers.</p> <p><b>Main Aims:</b></p> <p>The programme is intended to provide students with a thorough understanding of:</p> <ul style="list-style-type: none"> <li>• The importance of innovation, research and technology in business strategy.</li> <li>• Central issues in the management of innovation in firms.</li> <li>• Entrepreneurship and business development in the context of life sciences and healthcare research.</li> <li>• The role of risk management, regulation, and communication.</li> <li>• The types of technologies and outputs used particularly in industrial life sciences and healthcare.</li> <li>• A historical and future-trend focussed perspective of the life sciences and healthcare translation and commercial offerings.</li> </ul>

	<p><b>Distinctive Features of the programme:</b></p> <ul style="list-style-type: none"> <li>• Provides training for students in entrepreneurship, innovation management and business principles, via new and existing modules offered by CIMR in the Department of Management, and new modules in the Department of Biological Sciences.</li> <li>• Analyses core and specialist issues in business innovation focussed on biological and chemical sciences.</li> <li>• Provides specialist presentations from authorities in subject areas such as pharmaceuticals, business development and technology transfer. New biological sciences module content is informed by a high-profile industrial panel.</li> <li>• Requires the students to carry out an independent piece of research within the subject area of the programme.</li> <li>• Is based on evening face-to-face study, in full-time or part-time modes.</li> </ul>
15	<p><b>Entry Criteria</b></p> <ol style="list-style-type: none"> <li>1. Normally at least a second-class honours degree, preferably in a biological or chemical science subject area from a UK university or a non-UK equivalent; other qualifications will be considered.</li> <li>2. Non-native English speakers need to provide proof of English language ability equivalent to: IELTS 6.5 with at least 6.0 in all subparts. TOEFL (paper-based: Score of 600, plus 5 in TWE; internet: Score of 100, plus 24/30 in the reading and writing subtests), the Cambridge Certificate of Proficiency in English (Pass at grade B) or the Cambridge Certificate of Advanced English (Pass at Grade A) will also be accepted. If scores are slightly below the required level, students would be encouraged to apply, as a pre-session English course may be recommended.</li> <li>3. A professional or other qualification obtained by written examinations approved by the College.</li> <li>4. Relevant experience, supporting statements and references may be taken into consideration, especially in the case of non-standard applications.</li> </ol>
16	<p><b>Prospectus Entry</b></p> <p>For those seeking insightful roles in the life sciences and healthcare industries, an understanding of the science, regulatory environment, communications and deal making is essential. MSc Bio-Business delivers broad yet detailed insight into both the theory and practice of entrepreneurship and business in the bioscience industry, focusing upon commercial activity in science-related projects.</p> <p>The Bio-business programme provides an overview of the life sciences sector, supported and complemented by business, entrepreneurial, and applied modules. The structure of the biotechnology and pharmaceutical industries is explored in the context of regulation and public perception, to highlight issues of risk, regulation, and socioeconomic benefits stemming from technology and material developments.</p> <p>The main aims are to convey a broad understanding of all these critical issues and to provide detailed insight into both the theory and practice of entrepreneurship and business in the context of the life sciences and healthcare industries, recognising the differences</p>

between science-based projects and other types of commercial activity. The programme features specialist professional contributors from across the life sciences and healthcare sector ecosystem. Hands-on experiential learning is also provided: such as business planning, entrepreneurial teamwork and pitching for funds.

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### Learning Outcomes

On successful completion of this programme a student will be expected to be able to:

#### Subject specific skills

1. Appreciate and understand the nature and application of general management and business principles.
2. Appreciate and understand the importance of strategic management of innovation and the role of risk management and regulation in relation to life sciences and healthcare innovation.
3. Display an in-depth knowledge of innovation processes, and how innovation is related to translational life sciences and healthcare research.
4. Have a thorough understanding and ability to critically assess issues of innovation management in different business contexts.
5. Demonstrate critical knowledge of the link between public perceptions of science, the media, outputs of the life sciences and healthcare sector, and the funding structure of the industry.
6. Understand the spectrum of life sciences and healthcare research areas and their outputs relevant to industrial application.
7. Achieve critical understanding of the history, trends, and the state-of-the-art in the life sciences sector.
8. Understand the emerging industry landscape and the likely developments across the life sciences and healthcare industry.
9. Demonstrate an ability to demonstrate the acquired knowledge through an independent research project in translational life sciences and healthcare research or business.

#### Intellectual skills

10. Critically analyse primary and secondary scholarly texts as well as appraise popular sources.
11. Gather and evaluate information and analyse data.
12. Study a problem in depth and re-assess and modify it as appropriate.
13. Perform comparative analysis, including assessment of multiple conflicting perspectives.
14. Develop imaginative and original approaches to the use of theoretical and methodological tools.
15. Have insight into the detailed processes of applied research in life sciences and healthcare, and the time and resource frames in which they are accomplished.
16. Perform interdisciplinary analysis, including understanding and being able to advise on both the scientific realities and the implication for business, and the business

	<p>realities and the implications for science.</p> <p><b>Practical, personal and social skills</b></p> <ol style="list-style-type: none"> <li>17. Solve problems and work independently, using library, archive, and other original research skills.</li> <li>18. Demonstrate planning and organisational skills, including report writing.</li> <li>19. Demonstrate communication and presentation skills, including argument and debate.</li> <li>20. Gain experience in engaging with experts and managers.</li> <li>21. Acquire “hands on”, real-world knowledge, through working on “close-to-reality” projects; and through networking and talks from key stakeholders.</li> <li>22. Respond to feedback positively and demonstrate professionalism in both conduct and output.</li> </ol>
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18	<p><b>Learning, teaching and assessment methods</b></p> <p>The learning and teaching strategy is designed to meet the needs of mature students in full-time employment and to make maximum use of the limited time available to them. Key design features include:</p> <ol style="list-style-type: none"> <li>1. A programme of evening lectures and seminars for each course.</li> <li>2. Careful design of workload and its distribution across academic terms.</li> <li>3. A variety of assessment methods.</li> <li>4. A comprehensive postgraduate handbook to guide and support independent learning.</li> </ol> <p>In all modules, lectures provide an overview of issues relevant to the subject being studied. Seminars follow that allow students to explore issues in more depth. Learning outcomes are defined for all modules each week and are detailed in the module outlines which identify the aims and objectives of the module, the module schedule, weekly readings and learning outcomes, contact details for staff and essential information about assessment. Further materials are distributed in class from time to time and guidance on dissertations, revision and exam technique take place throughout the year.</p> <p>The formal mechanisms of learning and teaching include a combination of lectures, directed readings, seminar discussions, practical exercises, supervised coursework projects, and supervision in independent research. These ensure that the aims and learning outcomes are both clearly understood and effectively achieved by both academic members of staff and students.</p> <p>Assessment methods are (1) coursework, (2) exam, (3) research/ dissertation.</p> <p>Students take eight taught modules of 15 credits each and must also complete a multi-component project for 60 credits. Most of the taught modules are assessed by a combination of coursework and examination. The distribution of marks between coursework and exam varies by module; details are provided in the programme handbook.</p>
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	All modules are assessed on a scale where 50% is the Pass Mark, 60% – 69% denotes Merit, and above 70% denotes Distinction. Students are required to pass all taught modules and the Dissertation to obtain the MSc. Part -time students will be able to carry forward only one re-sit from the first to the second year.
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19	<b>Programme Description</b>
	<p>The MSc Bio-business comprises 8 compulsory modules of 15 credits each, plus a compulsory 60 credit Project challenging students to theoretical analysis of translational research and personal reflective practice. In 2022/3 the programme is available full-time only.</p> <p>Students may exit the MSc with either a Postgraduate Diploma (PG Dip, 120 credits), or a Postgraduate Certificate (PG Cert, 60 credits).</p> <p>For the PG Dip: EITHER 120 credits from taught modules that must include Entrepreneurial Venture Creation, The Bio Industry, Future Health Technologies, and The Entrepreneurship Process; OR 120 credits in total from the project module (60 credits) and any additional taught modules that must include Entrepreneurial Venture Creation AND The Entrepreneurship Process, WITH The Bio Industry OR Future Health Technologies.</p> <p>For the PG Cert: 60 credits, including: Entrepreneurial Venture Creation, The Bio Industry, Future Health Technologies, and The Entrepreneurship Process.</p>

20	<b>Programme Structure</b>			
<b>Full Time programme</b>				
<b>Year 1</b>				
Level	Module Code	Module Title	Credits	Status
7	BUMN135H7	Entrepreneurial Venture Creation	15	Compulsory
7	MOMN038H7	Intellectual Capital and Competitiveness	15	Compulsory
7	SCBS031H7	The Bio Industry	15	Compulsory
7	SCBS032H7	Future Health Technologies	15	Compulsory
7	MOMN042H7	Innovation Systems: Networks and Social Capital	15	Compulsory
7	MOMN073H7	Entrepreneurship and Innovation	15	Compulsory
7	MOMN083H7	Accounting and Financial Management	15	Compulsory
7	SCBS049H7	The Entrepreneurship Process	15	Compulsory
7	SCBS082D7	Bio-business Project	60	Compulsory

21	<b>Additional Programme Information</b>	
	<p><b><i>PG Dip/PG Cert Exit award requirements:</i></b></p> <p>To exit with a PG Dip: EITHER 120 credits from taught modules that must include Entrepreneurial Venture Creation, The Bio Industry, Future Health Technologies, The Entrepreneurship Process; OR 120 credits in total from the project module (60 credits) and any additional taught modules that must include Entrepreneurial Venture Creation AND The Entrepreneurship Process, WITH The Bio Industry OR Future Health Technologies.</p> <p>To exit with the PG Cert: 60 credits, including: Entrepreneurial Venture Creation, The Bio Industry, Future Health Technologies, and The Entrepreneurship Process.</p>	
22	<b>Programme Director</b>	Dr Renos Savva (Dept Biological Sciences and a CIMR core member )
23	<b>Start Date</b> <i>(term/year)</i>	Autumn 2014
24	<b>Date approved by TQEC</b>	Spring Term 2013
25	<b>Date approved by Academic Board</b>	Summer Term 2013
26	<b>Date(s) updated/amended</b>	March 2022 (for 2022/23)