

Programme Specification

1	Awarding body	University of London					
2	Teaching Institution	Birkbeck College					
3	Programme Title(s)	MSc Bio-business					
4	Programme Code(s)	TMSBIOBS_C					
5	UCAS code (if applicable)	N/A					
6	Home Department	Biological Sciences					
7	Exit Award(s)	PGCert Bio-business, PGDip Bio-business,					
8	Duration of Study (number of years)	1 (FT) or 2 (PT)					
9	Mode of Study	FT	x	PT	x	DL	
10	Level of Award (FHEQ)	Level: 7					
11	Other teaching depts or institution	Centre for Innovation Management Research (CIMR) in the Department of Management					
12	Professional, Statutory Regulatory Body(PSRB) details	N/A					
13	QAA Benchmark Group	N/A					

14	Programme Rationale & Aims
	<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>Main Aims:</p> <p>The programme is intended to provide students with a thorough understanding of:</p> <ul style="list-style-type: none"> • The importance of innovation, research and technology in business strategy. • Central issues in the management of innovation in firms. • Entrepreneurship and business development in the context of biological and chemical research. • The role of risk management, regulation, and communication. • The types of technologies and outputs used particularly in industrial biological and chemical sciences. • A historical and future-trend focussed perspective of the biological and chemical science industry.

	<p>Distinctive Features of the programme:</p> <ul style="list-style-type: none"> • Provides training for students in management and business principles, in research methods via new and existing modules offered by CIMR in the Department of Management, and new modules in the Department of Biological Sciences. • Analyses core and specialist issues in business innovation focussed on biological and chemical sciences. • Provides specialist presentations from authorities in subject areas such as ethics, pharmaceuticals, and technology transfer. New biological sciences module content is informed by a high-profile industrial panel. • Requires the students to carry out an independent piece of research within the subject area of the programme. • Is based on evening face-to-face study, in full-time or part-time modes.
15	<p>Entry Criteria</p> <ol style="list-style-type: none"> 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. 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. 3. A professional or other qualification obtained by written examinations approved by the College. 4. Relevant experience, supporting statements and references may be taken into consideration, especially in the case of non-standard applications.
16	<p>Learning Outcomes</p> <p>On successful completion of this programme a student will be expected to be able to:</p> <p>Subject specific skills:</p> <ol style="list-style-type: none"> 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 biological and chemical business innovation. 3. Display an in-depth knowledge of innovation processes, and how innovation is related to industrial biological and chemical research. 4. Have a thorough understanding and ability to critically assess issues of innovation management in different business contexts.

	<ol style="list-style-type: none"> 5. Demonstrate critical knowledge of the link between public perceptions of science, the media, outputs of the industrial biosciences sector, and the funding structure of the industry. 6. Understand the spectrum of biological and chemical research areas and their outputs relevant to industrial application. 7. Understand the emerging industry landscape and the likely developments across the biological and chemical science industry. 8. Demonstrate an ability to apply the acquired knowledge through a piece of independent research in a central aspect of industrial biological and chemical research or business. <p>Intellectual skills:</p> <ol style="list-style-type: none"> 9. Critically analyse primary and secondary texts. 10. Collect and analyse data. 11. Study a problem in depth. 12. Perform comparative analysis, including assessment of a multitude of conflicting perspectives. 13. Develop imaginative and original approaches to the use of theoretical and methodological tools. 14. Have insight into the detailed processes of applied research in the biological and chemical sciences, and the time and resource frames in which they are accomplished. 15. Perform interdisciplinary analysis, including understanding and being able to advise on both the scientific realities and the implication for business, and the business realities and the implications for science. <p>Practical, personal and social skills:</p> <ol style="list-style-type: none"> 16. Solve problems and work independently, using library, archive, and other original research skills. 17. Demonstrate planning and organisational skills, including essay writing. 18. Demonstrate communication and presentation skills, including argument and debate. 19. Gain experience in engaging with experts and managers. 20. Acquire “hands on”, real-world knowledge, through working on “close-to-reality” projects; and through incubator visits and investor talks.
17	Learning, teaching and assessment methods
	<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"> 1. A programme of evening lectures and seminars for each course. 2. Careful design of workload and its distribution across academic terms. 3. A variety of assessment methods. 4. A comprehensive postgraduate handbook to guide and support independent learning.

	<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 15,000 word dissertation 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. Two modules (<i>Research Methods in Management 1</i> and <i>Principles of Organization and Management</i>) are assessed by examination only.</p> <p>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.</p>
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18	Programme Description
	<p>The MSc Bio-business comprises 6 compulsory modules of 15 credits each (totalling 90 credits), plus a compulsory 60 credit written Project with a choice of theoretical analysis or research focus. In addition students select 2 optional modules of 15 credits each (30 credits), totalling 180 credits to gain the MSc. The programme may be completed in one year of full-time study, or through part-time study over two years.</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 a project module (60 credits), its respective prerequisite, 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>

19	Programme Structure			
Full Time programme				
Year 1				
Level	Module Code	Module Title	Credits	Status
7	BUMN135H7	Entrepreneurial Venture Creation	15	Compulsory
7	MOMN038H7	Intellectual Capital and Competitiveness	15	Optional
7	SCBS054H7	Perspective on Profession	15	Optional
7	SCBS031H7	The Bio Industry	15	Compulsory
7	SCBS032H7	Future Health Technologies	15	Compulsory
7	MOMN011H7	Research Methods in Management I	15	Optional
7	MOMN042H7	Innovation Systems: Networks and Social Capital	15	Optional
7	BUMN063H7	Entrepreneurial Finance	15	Compulsory
7	MOMN073H7	Entrepreneurship and Innovation	15	Compulsory
7	SCBS049H7	The Entrepreneurship Process	15	Compulsory
7	SCBS055D7 OR SCBS030D7	Analytical Project: Bio-business* OR Research Project: Bio-business*	60	Compulsory *
*These modules are alternative, compulsory modules: students must take ONLY one OR the other, with the selection requiring having completed the respective prerequisites.				
In addition to the compulsory modules, students must select 2 x 15 options subject to the following - Students taking Analytical Project: Bio-business must take EITHER MOMN042H7 Innovation Systems: Networks and Social Capital OR MOMN038H7 Intellectual Capital and Competitiveness.				
Students taking Research Project: Bio-business must take MOMN011H7 Research Methods in Management I.				

Part Time programme**Year 1**

Level	Module Code	Module Title	Credits	Status
7	BUMN135H7	Entrepreneurial Venture Creation	15	Compulsory
7	SCBS031H7	The Bio Industry	15	Compulsory
7	SCBS032H7	Future Health Technologies	15	Compulsory
7	MOMN011H7	Research Methods in Management I	15	Optional
7	MOMN042H7	Innovation Systems: Networks and Social Capital	15	Optional
7	BUMN063H7	Entrepreneurial Finance	15	Compulsory
7	MOMN073H7	Entrepreneurship and Innovation	15	Compulsory

Year 2

7	MOMN038H7	Intellectual Capital and Competitiveness	15	Optional
7	SCBS054H7	Perspective on Profession	15	Optional
7	SCBS049H7	The Entrepreneurship Process	15	Compulsory
7	SCBS055D7 OR SCBS030D7	Analytical Project: Bio-business* OR Research Project: Bio-business*	60	Compulsory*

***These modules are alternative, compulsory modules: students must take ONLY one OR the other, with the selection requiring having completed the respective prerequisites.**

In addition to the compulsory modules, students must select 2 x 15 options subject to the following - Students taking **Analytical Project: Bio-business** must take EITHER MOMN042H7 Innovation Systems: Networks and Social Capital OR MOMN038H7 Intellectual Capital and Competitiveness.

Students taking **Research Project: Bio-business** must take MOMN011H7 Research Methods in Management I.

20	Regulations
	<ul style="list-style-type: none"> Admissions This programme adheres to the College Admissions Policy: http://www.bbk.ac.uk/registry/policies/documents/admissions-policy.pdf Credit Transfer

	<p>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> <ul style="list-style-type: none"> • Programme Regulations This programme adheres to the College Common Awards Scheme http://www.bbk.ac.uk/registry/policies/regulations <p>Programme Specific Regulations:</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 a project module (60 credits), its respective prerequisite, 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>
21	<p>Student Attendance Framework – in brief</p> <p>The full version of the ‘Student Attendance Framework’ is available http://www.bbk.ac.uk/mybirkbeck/services/rules/Attendance-Framework.pdf .</p> <p>Principle</p> <p>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.</p> <p>Attendance expectation</p> <p>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.</p> <p>E-Registers</p> <p>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.</p>
22	<p>Student Support and Guidance</p> <p>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</p>
23	<p>Methods of Enhancing Quality and Standards</p>

	<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>
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24	Programme Director	Dr Renos Savva (Dept Biological Sciences and a CIMR core member)
25	Start Date <i>(term/year)</i>	Autumn 2014
26	Date approved by TQEC	Spring Term 2013
27	Date approved by Academic Board	Summer Term 2013
28	Date(s) updated/amended	April 2019 (for Autumn 2019)