

Handbook for “3+2” Programme with QUB **(BIO22 Curriculum)**

1. Programme Overview

The Department of Biomedical Sciences (DBS) collaborates with Queen's University Belfast to launch this five-year joint programme that trains personnel who can pursue a career in food science and nutrition with biomedical background. Student who completes this programme can receive one bachelor's degree from UM and one bachelor's degree from QUB.

2. General Eligibility

The applicant should be a UM student who has enrolled in BSc in Biomedical Sciences in or after the 2022/2023 academic year.

3. English Proficiency

The applicant must have achieved an IELTS for UKVI (Academic) test score of 6.5 or above, with a minimum of 5.5 in all four elements of the test (or equivalent as defined by QUB), taken within the last two years. If an applicant has an IELTS score of 5.5 or equivalent, the applicant is expected to undertake an English Language programme at QUB prior to commencing the study at QUB.

4. Academic Performance for Admission

By the time of admission to the programme, the applicant should have outstanding academic standing and **MUST**:

- (1) have achieved a minimum cumulative GPA of 2.7 and
- (2) have successfully completed the courses listed below at UM with a grade of B- or better in all courses.

| UM Course | Credit |
|-----------------------------------------------------------------------------------|---------------|
| 1st Academic Year | |
| APAC1004 General Physics | 4 |
| APAC1005 Physics Lab | 1 |
| HSCI1000 General Chemistry | 3 |
| HSCI1001 General Chemistry Lab | 2 |
| HSCI1002 Introduction to Biological Sciences | 3 |
| HSCI1003 General and Clinical Biochemistry | 3 |
| HSCI1004 Biochemistry Lab | 1.5 |
| HSCI1005 Organic Chemistry | 4 |
| HSCI1006 Organic Chemistry Lab | 2 |
| MATH1007 Introduction to Probability | 1 |
| Community and Peer Education | 3 |
| Languages and Skills Course (English Language)^a / Free Elective | 6 |

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| General Education Course: (GELH compulsory) GELH1000 Chinese Language and Culture | 3 |
| General Education Course: (GEST compulsory) GEST1003 Quantitative Reasoning for Health Science | 3 |
| 2 nd Academic Year | |
| CISC1001 Programming Science | 3 |
| CISC1004 Introduction to Computer Science | 3 |
| HSCI2000 Cell and Molecular Biology | 3 |
| HSCI2001 Cell and Molecular Biology Lab | 1.5 |
| HSCI2002 General and Clinical Microbiology | 3 |
| HSCI2003 Microbiology Lab | 1.5 |
| HSCI2004 Genetics and Epigenetics | 3 |
| HSCI2006 Physiology and Pathophysiology | 3 |
| HSCI2007 Physiology Lab | 1.5 |
| HSCI2008 Human Anatomy | 3 |
| HSCI3002 Immunology and Infectious Diseases | 3 |
| HSCI3003 Biostatistics and Experimental Design | 3 |
| Languages and Skills Course (English Language)^a / Free Elective | 3 |
| Languages and Skills Course (Chinese or Portuguese Language)^b / Free Elective | 3 |
| General Education Course: (GEGA compulsory) GEGA1000 Macao and Chinese Civilization | 3 |
| General Education Course: (GEGA elective) GEGA1007 Nutrition in Health and Disease | 3 |
| 3 rd Academic Year | |
| HSCI2005 Biology of Development and Aging | 3 |
| HSCI3000 Neuroscience and Neurodegenerative Diseases | 3 |
| HSCI3001 Endocrinology and Metabolic Diseases | 3 |
| HSCI3004 Genomics and Bioinformatics | 3 |
| HSCI3005 Genetics, Genomics and Bioinformatics Lab | 1.5 |
| HSCI4001 Cancer Biology and Therapy | 3 |
| HSCI4002 Stem Cell Biology and Regenerative Medicine | 3 |
| HSCI4006 Public Health | 3 |
| HSCI4007 Translational Medicine | 3 |
| HSCI2009 Pharmacology | 3 |
| HSCI4009 Toxicology | 3 |
| Languages and Skills Course: CISC1000 Information Technology Fundamentals and Practices | 3 |

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| General Education Course: (GESB compulsory) GESB1000 Ethics, Values, Law and Society | 3 |
| General Education Course: (GELH elective) Any GE courses in Languages and Humanities | 3 |

^a If the applicant has tested out one to three Languages and Skills Courses (English Language), the applicant is required to take free elective course(s) at UM to make up the required credits.

^b If the applicant has tested out the Languages and Skills Course (Chinese or Portuguese Language), the applicant is required to take one free elective course at UM to make up the required credits.

5. Courses taken at QUB in the 4th and 5th Academic Years

| QUB Course | Credit | Course Exemption at UM |
|-------------------------------------------------------------------------------------|--------|------------------------|
| 4 th Academic Year | | |
| BIO2301 Food Commodities, Processing and Hygiene | 40 | GEST1018 |
| BIO2302 Food Innovation, Diet and Health | 40 | GESB2001 |
| BIO2101 Principles of Food Quality | 20 | a |
| BIO2201 Instrumental Food Analysis | 20 | a |
| 5 th Academic Year | | |
| BIO3302 Project (FQN) | 40 | HSCI4000, HSCI4005 |
| BIO3101 Business Innovation and Entrepreneurship | 20 | a |
| BIO3301 Food Supply Chain Safety and Security | 40 | a |
| Required Elective: BIO2303 Work Placement / SCM3001 Clinical Nutrition | 20 | a |

^a The successfully completed course can be used for exempting the free elective course at UM, which is required for making up the credits because of testing out a Languages and Skills Course.

6. Graduation Requirement

The enrolled student shall have successfully completed the following requirements in order to receive the BSc in Biomedical Sciences from UM and BSc in Food Science and Nutrition from QUB.

| Year of Study | BSc in Biomedical Sciences at UM | BSc in Food Science and Nutrition at QUB |
|-----------------|----------------------------------|------------------------------------------|
| 1 st | 120.5-123.5 | 120 *Transferred from UM |
| 2 nd | | |
| 3 rd | | |
| 4 th | 12 *Through course exemption | 240 |
| 5 th | | |
| Total Credit | 132.5-135.5 | 360 |

7. Academic Advisor

If an applicant finds questions, please contact:

Prof. Henry KWOK

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8. Remark

It is important to note that the completion of this joint programme does not fulfill the professional qualification for a dietician in Macao, and the requirement for this profession is governed by Regulamento Administrativo n.º 23/2021.

The curricular arrangement may be subject to change, and student who is interested in the joint programme is encouraged to communicate with the academic advisor for updates.