

# Undergraduate Programme Specification

## BSc (Hons) Applied Biomedical Science/ BSc (Hons) Biomedical Science

This specification provides a summary of the main features of the programme and learning outcomes that a student might reasonably be expected to achieve and demonstrate where full advantage is taken of all learning opportunities offered. Further details on the learning, teaching and assessment approach for the programme and modules can be accessed on the University website and Virtual Learning Environment, GCU Learn. All programmes of the University are subject to the University's [Quality Assurance](#) processes.

<b>1. GENERAL INFORMATION</b>			
<b>Programme Title</b>	BSc (Hons) Biomedical Science BSc (Hons) Applied Biomedical Science		
<b>Final Award</b>	Bachelor of Science in Applied Biomedical Science with Honours Bachelor of Science in Biomedical Science with Honours		
<b>Awarding Body</b>	Glasgow Caledonian University		
<b>School</b>	Health & Life Sciences		
<b>Department</b>	Biological & Biomedical Sciences		
<b>Mode of Study</b>	Full-time Part-time		
<b>Location of Delivery</b>	Glasgow Campus		
<b>UCAS Code</b>	B940		
<b>Accreditations (PSRB)</b>	Institute of Biomedical Science (IBMS – ABMS and BMS) Health & Care Professions Council (HCPC – ABMS only)		
<b>Period of Approval</b>	<b>From:</b>	September 2025	<b>To:</b> August 2030
<b>2. EDUCATIONAL AIMS OF PROGRAMME</b>			

The educational aims are to:

- (i) provide an understanding of the scientific investigation of human health and disease;
- (ii) produce graduates who have developed the skills, knowledge and competence to practice in Biomedical Science;
- (iii) develop laboratory skills to allow students to make valid scientific measurements;
- (iv) produce graduates who are able to integrate theory and practice and who are critical, reflective thinkers;
- (v) Encourage the development of creative and innovative thinking through a range of approaches
- (vi) foster an ethos of career-long, self-directed learning through continuous professional development;
- (vii) provide students with a supportive learning environment;
- (viii) be inclusive of all sectors of society and be responsive to the needs of individuals, employers and stakeholders.

In addition, Honours students undertaking the project will:

- (i) Conduct a literature survey to support an investigative project;
- (ii) Propose reasoned lines of further investigation;
- (iii) Design and prepare a project under supervision

### **3. LEARNING OUTCOMES**

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills, qualities and other attributes in the following areas:

#### **A: Knowledge and understanding;**

- A1 Explain essential facts, concepts, principles and theories in the study of Biomedical Science
- A2 Acquire an in-depth understanding of key advanced aspects of discipline-specific topics through research-led discovery
- A3 Understand the principles and areas of applicability of a range of research methodologies, data acquisition and data interpretation techniques
- A4 Understand the principles and practice of Biomedical Science investigations

#### **B: Practice: Applied knowledge, skills and understanding;**

- B1 Competence in the practical application of a range of appropriate techniques and test measurement systems in the life sciences
- B2 Show ability to interpret current thinking in terms of their significance and the underlying theory
- B3 Evaluate critically research material from a variety of sources to gain a coherent understanding of theory and practice
- B4 Design and carry out an experimental programme independently
- B5 Develop an awareness of current scientific issues within an ethical framework whilst engaging with professional processes and practices

#### **C: Generic cognitive skills;**

- C1 Ability to analyse problems and develop strategies for their solution
- C2 Make a reasoned choice from a range of strategies and techniques as to which is most appropriate to solve a given problem

C3 Apply critical, creative and innovative thinking, problem solving & reflective practice to a variety of theoretical and practical situations

**D: Communication, numeracy and ICT skills**

D1 Use IT for communication, information retrieval and data handling

D2 Be proficient in the use of IT for accessing databases and scientific literature and in the practical application of a range of statistical, quality assurance and computational techniques used in the treatment of experimental data

D3 Communicate effectively with a wide range of individuals/stakeholders using a variety of means

**E: Autonomy, accountability and working with others.**

E1 Plan, conduct and accurately report on work carried out by themselves

E2 Critical discussion, evaluation and reporting of work carried out by themselves or others

E3 Ability to prepare, interpret and implement risk assessments/ethics applications and undertake safe reflective and effective laboratory procedures

E4 Utilise effective time management to organise and plan work to ensure tasks are completed and deadlines met

E5 Develop effective independent and group working skills

E6 Understanding the needs of patients and their carers, and the ability to communicate effectively with both patient groups and other health care professionals

#### **4. LEARNING AND TEACHING METHODS**

The programme provides a variety of learning and teaching methods. Programme and Module specific guidance will provide detail of the learning and teaching methods specific to each module.

Across the programme the learning and teaching methods and approaches may include the following:

- Lectures
- Seminars
- Practical classes
- Placements
- Simulation experiences
- Groupwork
- Flipped classroom approaches
- Online learning

The above approaches may be delivered either in person or online as appropriate and determined at module level by the Module Leader.

#### **5. ASSESSMENT METHODS**

The programme provides a variety of formative and summative assessment methods. Programme and Module specific guidance will provide detail of the assessment methods specific to each module.

Across the programme the assessment methods may include the following:

- Written coursework (essays, reports, case studies, dissertation, literature review)
- Oral coursework (presentations, structured conversations)
- Practical Assessment (Placement, VIVA, Laboratory work)
- Group work
- Blogs and Wikis
- Portfolio Presentations
- Formal Examinations and Class Tests

The above assessments may be delivered either in person and online as appropriate and determined at module level by the Module Leader.

#### **6. ENTRY REQUIREMENTS**

Specific entry requirements for this programme can be found on the prospectus and study pages on the GCU website at this location: [www.gcu.ac.uk/study](http://www.gcu.ac.uk/study). Those whose first language is not English, must demonstrate, and provide evidence of, a proficiency in English to at least level 7.0 of IELTS (or equivalent), with no element below 6.5, as per HCPC requirements. See here for the IBMS English language requirements and the evidence that is acceptable: <https://www.hcpc-uk.org/registration/getting-on-the-register/international-applications/documents/certificate-of-english-language-proficiency/>

The Course webpage specific to this Programme is:

<https://www.gcu.ac.uk/study/courses/undergraduate-applied-biomedical-sciencebiomedical-science-glasgow>

### **Equality Diversity and Inclusion**

Glasgow Caledonian University is committed to providing a rewarding Higher Education opportunity and experience to applicants with the potential to benefit from, and contribute to the GCU experience, mission and values. The University is committed to increasing opportunities for widening access, social inclusion and providing opportunities to students from disadvantaged backgrounds as measured by the HESA Performance indicators. GCU's policies on contextualised admissions and Equality and Diversity can be found [here](#).

All students entering the programme are required to adhere to the [GCU Code of Student Conduct](#).

## **7. Distinctive Features of the Programme**

The BSc (Hons) Biomedical Science degree (BMS) and BSc (Hons) Applied Biomedical Science degree (ABMS) are accredited by the [Institute of Biomedical Science \(IBMS\)](#), and the BSc (Hons) Applied Biomedical Science degree is approved by the [Health and Care Professions Council \(HCPC\)](#).

A biomedical scientist analyses specimens from patients which helps doctors and other health professionals diagnose diseases and monitor the effectiveness of treatment. Biomedical scientist is a protected title and anyone who wishes to use this protected title are required to register with the HCPC, the regulatory body created under the Health Act, 1999.

The HCPC are a regulator of 16 health and care professions in the UK, including biomedical scientists. They set standards for biomedical scientists' education, training, and practice. They approve programmes which biomedical scientists must meet to register with them and keep a register of biomedical scientists who meet their standards.

In July 2003, the Privy Council approved the HCPC standards of proficiency for the safe and effective practice of registrant biomedical scientists. The most recent review of the Standards of Proficiency was published in 2022 and implement from the 1<sup>st</sup> of September 2023.

The IBMS is the professional body for scientists, support staff and students in the field of biomedical science. They support, progress and promote members' careers and their profession, and ensure recognition for the important role that biomedical science plays in society. The IBMS oversees the route to HCPC registration as a biomedical scientist in the UK. The IBMS award the Certificate of Competence, which provides evidence that individuals have met the HCPC Standards of Proficiency for Biomedical Scientists, are 'fit to practise as a Biomedical Scientist and are eligible to apply to register with the HCPC.

and The IBMS provides professional standards and supports members in their practice by setting quality standards through training, education, assessments, examinations, and continuous professional development.

### **Routes to HCPC Registration**

BSc (Hons) Biomedical Science

The BSc (Hons) BMS degree at GCU meets the academic criteria required which is detailed in the [HCPC Standards of Education and Training](#). However, to become HCPC registered you must also complete the IBMS Registration Training Portfolio in an approved IBMS training laboratory. This

can be completed after you graduate and are working in an IBMS approved laboratory as a Trainee Biomedical Scientist. Once the Training Portfolio is successfully completed you will be awarded an IBMS Certificate of Competence. You are now eligible to apply for HCPC registration as a Biomedical Scientist.

### BSc (Hons) Applied Biomedical Science

The BSc (Hons) ABMS degree is an integrated degree which allows for completion of the IBMS Training Portfolio as part of the programme. Most of this Portfolio is completed during the Practice Placement module when you undertake a clinical placement. The Registration Portfolio is fully completed after you successfully complete the BSc (Hons) ABMS degree. You will be awarded an IBMS Certificate of Competence at Graduation which allows you to apply for HCPC Registration as a Biomedical Scientist. Students who are awarded a BSc (Hons) degree in Applied Biomedical Science, are eligible to apply for licentiate membership of the Institute of Biomedical Science.

Details of all routes to HCPC registration are available on the IBMS website [here](#) and information on the HCPC application process is [here](#).

## 8. PROGRAMME STRUCTURE AND AVAILABLE AND FINAL EXIT AWARDS<sup>1</sup>

The following modules are delivered as part of this programme:

Module Code	Module Title	Core or Optional	SCQF Level	Credit Size	Coursework %	Examination %	Practical %
M1C726395	Biological Chemistry**	Core	7	40	30 (2 x 15)	70 (2 x 35)	
M1C724205	Core Skills in Biosciences **	Core	7	40	40 (2 x 20)		60
M1B130730	Introduction to the Human Body	Core	7	20	30	70	
M1B130731	Systematic Physiology	Core	7	20	30	70	
M2B130732	Infection & Immunity	Core	8	20	50	50	
M2C130733	Cellular Regulation & Metabolism	Core	8	20	50	50	
M2C726361	Core Skills in Biosciences 2*	Core	8	20	30		70
M2C730737	Clinical Biochemistry***	Core	8	20	50	50	
M2C730736	Haematology***	Core	8	20	50	50	
M2B126349	Biomedical Science Clinical Skills***	Core	8	20	100		
M3C430739	Clinical Genetics (BMS)***	Core	9	20	50	50	
M3B130740	Systematic & Cellular Pathology (BMS)***	Core	9	20	40	60	
M3C530741	Clinical Microbiology (BMS)***	Core	9	20	40	60	
M3B126377	Clinical Laboratory Skills***	Core (DE)	9	20	100		
M3B926366	Practice Placement***	Optional	9	60	100		
M3C926378	Bioscience Placement	Optional	9	60	100		
M3I530744	Bioinformatics	Optional	9	20	100 (2 X 50 %)		
M3C530745	Current Trends in Microbiology	Optional	9	20	100 (2 X 50 %)		
M3B426445	Nutrition & Public Health	Optional	9	20	100		
M3N225784	Inspiring Action and Creating Change: An Introduction to Social Innovation	Optional	9	20	100		
M3B230746	Forensic Pharmacology & Analysis	Optional	9	20	40	60	
M3C926373	Experimental Design & Analysis	Core	9	20	100		

<sup>1</sup> Periodically, programmes and modules may be subject to change or cancellation. Further information on this can be found on the GCU website here: [www.gcu.ac.uk/currentstudents/essentials/policiesandprocedures/changesandcancellationtoprogrammes](http://www.gcu.ac.uk/currentstudents/essentials/policiesandprocedures/changesandcancellationtoprogrammes)

					(1 x 35%, 1 x 65%)		
MHC926731	Projects & Workshop	Core	10	40	100		
MHC726389	Biology of Disease	Core	10	20	40	60	
MHC730748	Advanced Blood Science (BMS) <sup>***</sup>	Core	10	20	30	70	
MHB226379	Translational Medicine	Core	10	20	40	60	
MHC526359	Concepts in Infectious Disease	Core	10	20	30	70	

\*\* 40 credit modules are taken across Trimester A and B. Assessments are required in each Trimester that contribute to the final overall mark for the module.

Students undertaking the programme on a full-time basis commencing in September of each year will undertake the modules in the order presented above. This may be subject to variation for students commencing the programme at other times of year (e.g. January) and/or undertaking the programme on a part-time or distance learning mode of delivery.

\*\*\* Indicates the clinical specialisms. Students must achieve a pass mark (40%) in all assessment components. These modules cannot be compensated.

The following final and early Exit Awards are available from this programme <sup>2</sup>:

**Certificate of Higher Education in Biological Sciences**- *achieved upon successful completion of 120 credits*

**Diploma of Higher Education in Biological Sciences**- *achieved upon successful completion of 240 credits*

**Bachelor of Science in Biological Sciences**- *achieved upon successful completion of 360 credits*

**Bachelor of Science with Honours in Biomedical Science**- *achieved upon successful completion of 480 credits*

**Bachelor of Science with Honours in Applied Biomedical Science** - *achieved upon successful completion of 480 credits subject to the conditions un footnote 3 below.*

<sup>2</sup> Please refer to the [GCU Qualifications Framework](#) for the minimum credits required for each level of award and the Programme Handbook for requirements on any specified or prohibited module combinations for each award.

## 9. ASSESSMENT REGULATIONS

Students should expect to complete their programme of study under the GCU Assessment Regulations that were in place at the commencement of their studies on that programme, unless proposed changes to University Regulations are advantageous to students. These can be found at:

<https://www.gcu.ac.uk/aboutgcu/supportservices/qualityassuranceandenhancement/regulations-and-policies>

In addition to the GCU Assessment Regulations noted above, this programme is subject to Programme Specific Regulations in line with the following approved Exceptions:

Case No: 242a

Details:

### *ii. International Student's English Language requirements*

International applicants and those whose first language is not English, must demonstrate, and provide evidence of, a proficiency in English to at least level 7.0 of IELTS (or equivalent), with no element below 6.5, as per HCPC requirements. See here for the IBMS English language requirements and the evidence that is acceptable: <https://www.hcpc-uk.org/registration/getting-on-the-register/international-applications/documents/certificate-of-english-language-proficiency/>

### *iii. Compensation*

Compensation for failure in a single module when students have passed all other modules at any one level will not normally apply to clinical subject modules. This applies to the modules Clinical Biochemistry (M2C730737), Haematology (M2C730736), Biomedical Science Clinical Skills/Clinical Laboratory Skills (M2B126349/M3B126377), Molecular Diagnostics (BMS), (M3C430768), Clinical Microbiology (BMS)(M3C5307410), Systematic and Cellular Pathology (BMS)(M3B130740), Clinical Genetics (BMS) (M3C430739), Advanced Blood Science (BMS) (MHC730748). In addition, students on the Applied Biomedical Science Programme cannot be compensated for failure in the Practice Placement module. This is to ensure all students have met the required Standards of Proficiency in clinical subject areas.

### *iv. Pass mark all components*

Students must achieve a pass mark (40%) in all assessment components for modules that cover the clinical laboratory specialisms. This applies to the modules Clinical Biochemistry (M2C730737), Haematology (M2C730736), Biomedical Science Clinical Skills/Clinical Laboratory Skills (M2B126349/M3B126377), Molecular Diagnostics (BMS)(M3C430768), Clinical Microbiology (BMS)(M3C5307410), Systematic and Cellular Pathology (BMS)(M3B130740), Clinical Genetics (BMS) (M3C430739), Advanced Blood Science (BMS) (MHC730748).

*v. Carrying of failed modules into subsequent levels*

GCU assessment regulations allow for the carrying of up to two failed modules into subsequent levels of the Programme. The Biomedical Science and the Applied Biomedical Science Programmes will not normally permit this to occur. The rationale for this is that it must be ensured that necessary Standards of Proficiency which underpin subsequent higher-level modules have been attained by students before progressing to the next level of the Programme.

*vi. HCPC Registration*

Students who are awarded a BSc (Hons) in Applied Biomedical Science, will be eligible to apply for registration with HCPC and licentiate membership of the Institute of Biomedical Science.

*vii. Aegrotat awards*

Due to the requirements of HCPC (Assessment Standards 6.7.3), an aegrotat award will not enable a graduate to be eligible for admission to the HCPC Register. In the case of an aegrotat award, a graduate will be awarded a degree in Biological Sciences.

**VERSION CONTROL (to be completed in line with AQPP processes)****Any changes to the PSP must be recorded below by the programme team to ensure accuracy of the programme of study being offered.**

<i>Version Number</i>	<i>Changes/Updates</i>	<i>Date Changes/Updates made</i>	<i>Date Effective From</i>
1.0	Transfer to 25/26 template/Newly revised programme for entry 2025 onwards	10/9/2025	10/9/2025
2.0	Exception case 62 rescinded	10/9/2025	25/26
3.0	Exception - Pass mark all components added for IBMS accreditation	10/9/2025	25/26
4.0	Removal of 80% attendance requirement for the Programmes, Removal of Molecular Diagnostics module, Removal of Royal Society of Biology accreditation	7/7/2026	26/27