



LEEDS  
BECKETT  
UNIVERSITY

# Course Specification

## BSc (Hons) Biomedical Sciences

### Course Code: BIOMS

BSc (Hons) Biomedical Sciences (Medical Biochemistry Pathway) B643

BSc (Hons) Biomedical Sciences (Medical Microbiology Pathway) B644

BSc (Hons) Biomedical Sciences (Pharmacological Sciences Pathway)  
B645

BSc (Hons) Biomedical Sciences (Molecular Biotechnology Pathway)  
B646

BSc (Hons) Applied Biomedical Sciences B988

2022/23

[leedsbeckett.ac.uk](http://leedsbeckett.ac.uk)

# ***Applicant Facing Course Specification for 2022/23 Undergraduate Entrants***

BSc (Hons) Biomedical Sciences

BSc (Hons) Biomedical Sciences (Medical Biochemistry Pathway) B643

BSc (Hons) Biomedical Sciences (Medical Microbiology Pathway) B644

BSc (Hons) Biomedical Sciences (Pharmacological Sciences Pathway) B645

BSc (Hons) Biomedical Sciences (Molecular Biotechnology Pathway) B646

BSc (Hons) Applied Biomedical Sciences B988

**Confirmed at 05/05/2022**

## **General Information**

### **Award**

BSc (Hons) Biomedical Sciences and pathways

BSc (Hons) Biomedical Sciences

### **Pathways**

BSc (Hons) Biomedical Sciences

BSc (Hons) Biomedical Sciences (Medical Biochemistry Pathway)

BSc (Hons) Biomedical Sciences (Molecular Biotechnology Pathway)

BSc (Hons) Biomedical Sciences (Pharmacological Sciences Pathway)

BSc (Hons) Biomedical Sciences (Medical Microbiology Pathway)

BSc (Hons) Applied Biomedical Sciences (\*)

**All awards are Accredited by the Royal Society of Biology and Institute of Biomedical Science**

### **Contained Awards**

**Contained Awards (all awards are non-accredited)**

#### **Biomedical Sciences**

Certificate of Higher Education Biomedical Sciences

Diploma of Higher Education Biomedical Sciences

Bachelor of Science Biomedical Sciences

#### **Medical Biochemistry Pathway**

Diploma of Higher Education Biomedical Sciences (Medical Biochemistry Pathway)

Bachelor of Science Biomedical Sciences (Medical Biochemistry Pathway)

### **Molecular Biotechnology Pathway**

Diploma of Higher Education Biomedical Sciences (Molecular Biotechnology Pathway)

Bachelor of Science Biomedical Sciences (Molecular Biotechnology Pathway)

### **Pharmacological Sciences Pathway**

Diploma of Higher Education Biomedical Sciences (Pharmacological Sciences Pathway)

Bachelor of Science Biomedical Sciences (Pharmacological Sciences Pathway)

### **Medical Microbiology Pathway**

Diploma of Higher Education Biomedical Sciences (Medical Microbiology Pathway)

Bachelor of Science Biomedical Sciences (Medical Microbiology Pathway)

### **BSc (Hons) Applied Biomedical Sciences pathway**

No contained awards as students who fail the placement will revert to their pathway.

#### **Awarding Body**

Leeds Beckett University

#### **Level of Qualification and Credits**

Level 6 of the Framework for Higher Education Qualifications, with 120 credit points at each of Levels 4, 5 and 6 of the UK Credit Framework for Higher Education (360 credits in total).

#### **Course Lengths and Standard Timescales**

Start dates will be notified to students via their offer letter. The length of the course is confirmed below and modes of delivery will be confirmed prior to the start date in line with Government guidance:

- 3 years (full time, campus based)
- 6 years (part time, campus based)
- 4 Years (full-time 1 year placement – only available for BSc (Hons) Applied Biomedical Sciences)

**Part Time Study**

PT delivery is usually at half the intensity of the FT equivalent course, although there may be flexibility to increase your pace of study to shorten the overall course duration. Some modules may be delivered in a different sequence to that defined within this information set but the modules offered within each level are consistent. Please note that the work placement option is not generally available to PT students.

**Location(s) of Delivery**

City Campus, Leeds (and location of placement for BSc (Hons) Applied Biomedical Sciences)

**Entry Requirements**

Admissions criteria are confirmed in your offer letter. Details of how the University recognises prior learning and supports credit transfer are located here: [www.leedsbeckett.ac.uk/studenthub/recognition-of-prior-learning](http://www.leedsbeckett.ac.uk/studenthub/recognition-of-prior-learning).

Admissions enquiries may be directed to: [AdmissionsEnquiries@leedsbeckett.ac.uk](mailto:AdmissionsEnquiries@leedsbeckett.ac.uk).

**Course Fees**

Course fees and any additional course costs are confirmed in your offer letter. Fees enquiries may be directed to [Fees@leedsbeckett.ac.uk](mailto:Fees@leedsbeckett.ac.uk).

**Timetable Information**

Timetables for Semester 1 will be made available to students during induction week via:

- i) The Student Portal (MyBeckett)
- ii) The Leeds Beckett app

Any difficulties relating to timetabled sessions may be discussed with your Course Administrator.

**Policies, Standards and Regulations ([www.leedsbeckett.ac.uk/academicregulations](http://www.leedsbeckett.ac.uk/academicregulations))**

The exemptions are for BSc (Hons) Applied Biomedical Sciences only.

For placement module only – in order to achieve the award BSc (Hons) Applied Biomedical Sciences there will be:

- 100% attendance
- A zero credit
- Pass/fail module
- This is a 45-week placement, starting in Sept, so outside of the standard University calendar

BSc (Hons) Applied Biomedical Sciences Students must comply with the university's fitness to practise policy:

[www.leedsbeckett.ac.uk/-/media/files/policies/student/ups\\_fitness\\_to\\_practise\\_policy\\_procedure.pdf](http://www.leedsbeckett.ac.uk/-/media/files/policies/student/ups_fitness_to_practise_policy_procedure.pdf)

There are no additional or non-standard regulations which relate to the other pathways.

## Key Contacts

<b>Your Course Director</b>	Dr Wayne Roberts
<b>Your Academic Advisor</b>	An academic member of the course team
<b>Your Course Administrator</b>	<a href="mailto:Healthsciences@leedsbeckett.ac.uk">Healthsciences@leedsbeckett.ac.uk</a>

## Professional Accreditation or Recognition Associated with the Course

### Professional Body

Royal Society of Biology

### Accreditation/ Recognition Summary

Accreditation by the Royal Society of Biology recognises and supports the advancement of skills and education in the biosciences, throughout the UK and internationally. Graduates from accredited degree programmes are equipped with well-rounded knowledge and skill sets, making them highly employable both within and beyond their chosen field.

### Professional Body

Institute of Biomedical Science

### Accreditation/ Recognition Summary

IBMS BSc accreditation ensures that a degree course covers the specified subjects at the required level to meet the Health and Care Profession Council (HCPC) standards of proficiency for biomedical scientists and that students receive a wide-ranging, research informed scientific education and develop practical skills and experience that employers value.

The BSc (Hons) Applied Biomedical Sciences route includes a 45-week hospital-based placement in an IBMS approved Pathology laboratory. During the placement it is expected that the IBMS Registration Portfolio will be completed and, following successful verification, allows entry onto the HCPC register as a Biomedical Scientist directly at graduation without the need for further training.

## Course Overview

### Aims

The aims of the BSc (Hons) Biomedical Sciences programme are:

- To provide a sound higher education in biomedical Sciences as applied to human health and disease
- To provide a progressive programme of study that enables students to achieve a scientific approach within all of the disciplines that inform an understanding of humans health and disease
- To provide a supportive learning environment that encourages students to adopt the scientific process in order to formulate questions concerning health care Sciences and to put forward and test the applicability of innovative solutions
- To enable students to become lifelong learners through reflective and evaluative skills, allowing them to adapt and respond to change
- To enable students to communicate effectively
- To enable students to develop a critical appreciation of existing knowledge bases and to enable them to add to that knowledge by formulating and implementing effective research strategies to foster a responsible and thoughtful approach and an awareness of the ethical issues related to their studies.
- to enable students to graduate with a degree acceptable for the education requirements for registration as a biomedical scientist

### Course Learning Outcomes

At the end of the course, students will be able to:

- 1 Describe the main principles, theories and concepts of the contributory disciplines of biomedical sciences, and be able to discuss the relative importance of the contribution of each of these disciplines to an understanding of current issues in the field of biomedical sciences on a global level, while demonstrating a specialist knowledge in the pathway area they have chosen to study
- 2 To appreciate the contribution of biomedical sciences to current advances in health sciences both in developed and developing countries
- 3 Demonstrate the ability to integrate the knowledge base from different disciplines to promote innovative solutions to problems and dilemmas
- 4 Demonstrate the ability to add to the knowledge base by the formulation of research questions and the development and implementation of appropriate research strategies
- 5 Demonstrate a range of employability skills such as communication, critical analysis, problem-solving, reflection, information retrieval skills, team work, plus confidently use digital technologies to enhance academic, personal, and professional development
- 6 Demonstrate the ability to carry out a range of laboratory techniques and procedures in line with those of a diagnostic or research laboratory

## Teaching and Learning Activities

### Summary

The programme aims to provide a progressive and cohesive route of applied learning, enabling students to understand the relationship between biology and medical science and to apply this knowledge.

We aim to develop student's ability to critically evaluate and participate in multi-disciplinary work and to develop to a high level the professional skills and competencies essential for graduates in this field. The course includes a large amount of laboratory based practicals and projects, which develop technical and scientific skills as well as problem solving, analytical and other transferable skills.

In addition to subject specific knowledge and skills, graduates will have developed strong communication and IT skills, allowing them to function effectively and efficiently within the varied and demanding places of work.

The programme of academic study will develop reflective learners able to take responsibility and be accountable for the process of their learning and its practical application. This will lay the foundation for career-long professional development and lifelong learning to support best professional practice and the maintenance of professional and personal standards and aspirations.

A variety of learning and teaching strategies are used enabling students from a diverse range of backgrounds to participate and achieve effectively. Methods of delivery differ, from formal lectures, to tutorials and workshops, laboratory practical's, on line activities both as part of a classroom activity or independently ensure that all students can adopt an approach which is right for them, with guidance from their academic advisor.

### Your Modules

This information is correct for students progressing through the programme within standard timescales. Option modules listed are indicative of a typical year. There may be some variance in the availability of option modules. Students who are required to undertake repeat study may be taught alternate modules which meet the overall course learning outcomes. Details of module delivery will be provided in your timetable.

### Course Structure

Level 4			
Semester 1	Core (Y/N)	Semester 2	Core (Y/N)
Principles of Pharmacology	Y	Human Physiology	Y
Cell Biology	Y	Immunology & Haematology	Y
Practical and Study Skills	Y	Biochemistry	Y
Genetics	Y	Microbial World	Y

Level 5

BSc (Hons) Applied Biomedical Sciences – students who are studying this route will undertake modules for their specific pathway as below and in addition undertake a placement module

BSc (Hons) Biomedical Sciences			
Semester 1	Core (Y/N)	Semester 2	Core (Y/N)
Professional and Scientific Practice	Y	Infectious Diseases	Y
Physiology and Metabolism	Y	Immunological Disorders	Y
Medical Pathophysiology	Y	Transfusion Science	Y
		Human Genetics	Y
Research Methods in Biosciences			Y

BSc (Hons) Biomedical Sciences (Medical Microbiology Pathway)			
Semester 1	Core (Y/N)	Semester 2	Core (Y/N)
Professional and Scientific Practice	Y	Infectious Diseases	Y
Medical and Environmental Microbiology	Y	Immunological Disorders	Y
Medical Pathophysiology	Y	Transfusion Science	Y
Research Methods in Biosciences			Y

BSc (Hons) Biomedical Sciences (Medical Biochemistry Pathway)			
Semester 1	Core (Y/N)	Semester 2	Core (Y/N)
Professional and Scientific Practice	Y	Metabolic Biochemistry	Y
Biochemistry of Common Diseases	Y	Immunological Disorders	Y
Medical Pathophysiology	Y	Transfusion Science	Y
Research Methods in Biosciences			Y

BSc (Hons) Biomedical Sciences (Molecular Biotechnology Pathway)			
Semester 1	Core (Y/N)	Semester 2	Core (Y/N)
Professional and Scientific Practice	Y	DNA Technology	Y
Biochemistry of Common Diseases	Y	Immunological Disorders	Y
Medical Pathophysiology	Y	Transfusion Science	Y
Research Methods in Biosciences			Y

BSc (Hons) Biomedical Sciences (Pharmacological Sciences Pathway)			
Semester 1	Core (Y/N)	Semester 2	Core (Y/N)
Professional and Scientific Practice	Y	Pharmacological Treatment of Disease	Y
Biochemistry of Common Diseases	Y	Immunological Disorders	Y
Medical Pathophysiology	Y	Transfusion Science	Y
Research Methods in Biosciences			Y

### **BSc (Hons) Applied Biomedical Sciences only – Placement**

The BSc (Hons) Applied Biomedical Sciences placements are in conjunction with local NHS Hospital Pathology departments. Availability of placements may be variable and limited by these organisations. The process for application is communicated to students at Level 5 and is in the form of a written application followed by an invitation to competitive interview. Dependent upon the number of applicants and spaces available, not all students may be successful in their application. Unsuccessful applicants would remain on the BSc (Hons) Biomedical Sciences route of their choice.

The purpose of the placement is to provide the student with valuable work experience and appropriate training to support the completion of an IBMS registration portfolio. The IBMS verifies competence to practice against the HCPC Standards of Proficiency and awards a Certificate of Competence for individuals who wish to register as a Biomedical Scientist with the HCPC.

The Registration Portfolio provides the framework for education and training in order for Biomedical Scientists to demonstrate their fitness to practice through evidence of competence that the standards of proficiency have been met. It is divided into 2 sections: Professional Conduct and Professional Practice with each section split into 5 modules. Each module requires 3 pieces of evidence to demonstrate knowledge and competency. Evidence can take the form of written assignments, reflective statements, witness statements and through performing standard hospital investigations.

The portfolio is assessed after the completion of Level 6 Project (as this forms part of the evidence for the Research & Development portfolio module). Following successful portfolio verification and completion of the BSc (Hons) Applied Biomedical Science degree, the student will be eligible to receive a Certificate of

Competence award from the IBMS. This provides eligibility to register with the Health and Care Professions Council (HCPC) as a Biomedical Scientist, a requirement for practising in the NHS

BSc (Hons) Applied Biomedical Sciences students will enrol onto a placement module after Level 5. This non-credit bearing module will be for the duration of the 45-week clinical laboratory placement. Enrolment onto Level 6 follows completion of the placement.

Students are required to pass the placement to obtain the BSc (Hons) Applied Biomedical Sciences, any student who fails the placement would revert onto their chosen pathway.

There are Occupational Health requirements associated with a placement in a hospital setting. These will be managed by Practice Learning Team, Leeds Beckett University and must be completed prior to the placement commencing. The recruitment and application process will be overseen by the Biomedical Sciences department in the School of Health in collaboration with the relevant hospital disciplines. The Pathology department of the hospital will be responsible for establishing an honorary contract for the duration of the placement.

Level 6			
BSc (Hons) Biomedical Sciences			
Semester 1	Core (Y/N)	Semester 2	Core(Y/N)
Enterprise in Biomedical Sciences	Y	Clinical Biochemistry	Y
Medical Genetics	Y	Clinical Immunology	Y
Biology of Cancer	Y	Blood Diseases	Y
Project			Y

BSc (Hons) Biomedical Sciences (Medical Microbiology Pathway)			
Semester 1	Core (Y/N)	Semester 2	Core (Y/N)
Enterprise in Biomedical Sciences	Y	Clinical Biochemistry	Y
Medical Genetics	Y	Clinical Immunology	Y
Global Topics in Infectious Diseases	Y	Blood Diseases	Y
Project			Y

BSc (Hons) Biomedical Sciences		(Medical Biochemistry Pathway)	
Semester 1	Core (Y/N)	Semester 2	Core (Y/N)
Enterprise in Biomedical Sciences	Y	Clinical Biochemistry	Y
Medical Genetics	Y	Clinical Immunology	Y
Global Topics in Infectious Diseases	Y	Blood Diseases	Y
Project			Y

BSc (Hons) Biomedical Sciences		(Molecular Biotechnology Pathway)	
Semester 1	Core (Y/N)	Semester 2	Core (Y/N)
Enterprise in Biomedical Sciences	Y	Medical Biotechnology	Y
Medical Genetics	Y	Clinical Immunology	Y
Global Topics in Infectious Diseases	Y	Blood Diseases	Y
Project			Y

BSc (Hons) Biomedical Sciences		(Pharmacological Sciences Pathway)	
Semester 1	Core (Y/N)	Semester 2	Core (Y/N)
Enterprise in Biomedical Sciences	Y	Advances in Pharmacology	Y
Medical Genetics	Y	Clinical Immunology	Y
Global Topics in Infectious Diseases	Y	Blood Diseases	Y
Project			Y

### Project Arrangements

At level 6, students carry out a research project in an area of their choice (BSc (Hons) Biomedical Sciences) or aligned with the named pathway they wish to follow. Students that choose not to undertake a project with the correct subject specific designation will not meet the necessary criteria for their pathway so will be eligible for a BSc (Hons) Biomedical Sciences degree.

### Assessment Balance and Scheduled Learning and Teaching Activities by Level

The assessment balance and overall workload associated with this course are calculated from core modules and typical option module choices undertaken by students on the course. They have been reviewed and confirmed as representative by the Course Director but applicants should note that the specific option choices students make may influence both assessment and workload balance.

A standard 20 credit module equates to 200 notional learning hours, which may be comprised of teaching, learning and assessment, any embedded placement activities and independent study. Modules may have more than one component of assessment.

### Assessment

Level 4 is assessed by examinations predominately, with some coursework and practical assessments.

Level 5 is assessed by coursework predominately, with some examinations and practical assessments.

Level 6 is assessed by coursework predominately, with some examinations and practical assessments.

### Workload

Overall Workload	Level 4	Level 5	Level 6
Teaching, Learning and Assessment	288 hours	288 hours	392 hours
Independent Study	912 hours	912 hours	808 hours
Placement	-	hours	-

### Learning Support

If you have a question or a problem relating to your course, your Course Administrator is there to help you. Course Administrators work closely with academic staff and can make referrals to teaching staff or to specialist professional services as appropriate. They can give you a confirmation of attendance letter, and a transcript. You may also like to contact your Course Rep or the Students' Union Advice team for additional support with course-related questions.

### Student Services

If you have any questions about life at our University in general, call into or contact the Student Advice Hub on either campus. This team, consisting of recent graduates and permanent staff, are available to support you throughout your time here. They will make sure you have access to and are aware of the support, specialist services, and opportunities our University provides. There is a Student Advice Hub on the ground floor of the Rose Bowl at City Campus and one in Campus Central at Headingley. You can also find the team in the Gateway in the Leslie Silver Building at City Campus. Email enquiries may be directed to [studentadvicehub@leedsbeckett.ac.uk](mailto:studentadvicehub@leedsbeckett.ac.uk).

## **Support and Opportunities**

Within MyBeckett you will see two tabs (Support and Opportunities) where you can find online information and resources for yourselves. The Support tab gives you access to details of services available to give you academic and personal support. These include Library Services, the Students' Union, Money advice, Disability advice and support, Wellbeing, International Student Services and Accommodation. There is also an A-Z of Support Services, and access to online appointments/registration.

The Opportunities tab is the place to explore the options you have for jobs, work placements, volunteering, and a wide range of other opportunities. For example, you can find out here how to get help with your CV, prepare for an interview, get a part-time job or voluntary role, take part in an international project, or join societies closer to home.