



Course Specification

BSc (Hons) Biomedical Science

BSc (Hons) Biomedical Science (Medical Biochemistry Pathway)

BSc (Hons) Biomedical Science (Medical Microbiology Pathway)

BSc (Hons) Biomedical Science (Molecular Biotechnology Pathway)

BSc (Hons) Biomedical Science (Pharmacological Sciences Pathway)

BSc (Hons) Applied Biomedical Science

Course Code: BIOMS

2024/25

leedsbeckett.ac.uk

BSc (Hons) Biomedical Science BIOMS C239

BSc (Hons) Biomedical Science (Medical Biochemistry Pathway) BIOMS C240

BSc (Hons) Biomedical Science (Medical Microbiology Pathway) BIOMS C241

BSc (Hons) Biomedical Science (Molecular Biotechnology Pathway) BIOMS C243

BSc (Hons) Biomedical Science (Pharmacological Sciences Pathway) BIOMS C242

BSc (Hons) Applied Biomedical Science BIOMS C244

Applicant Course Specification for 2024/25 Undergraduate Entrants

Confirmed at March 2024

General Information

Award	Bachelor of Science with Honours Biomedical Science Bachelor of Science with Honours Biomedical Science (Medical Biochemistry Pathway) Bachelor of Science with Honours Biomedical Science (Medical Microbiology Pathway) Bachelor of Science with Honours Biomedical Science (Molecular Biotechnology Pathway) Bachelor of Science with Honours Biomedical Science (Pharmacological Sciences Pathway) Bachelor of Science with Honours Applied Biomedical Science
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Contained Awards	Biomedical Science Certificate of Higher Education Medical Sciences Diploma of Higher Education Medical Sciences Bachelor of Science Medical Sciences
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All non-accredited

Medical Biochemistry Pathway

Diploma of Higher Education Medical Sciences (Medical Biochemistry Pathway)
Bachelor of Science Medical Sciences (Medical Biochemistry Pathway)

Medical Microbiology Pathway

Diploma of Higher Education Medical Sciences (Medical Microbiology Pathway)
Bachelor of Science Medical Sciences (Medical Microbiology Pathway)

Molecular Biotechnology Pathway

Diploma of Higher Education Medical Sciences (Molecular Biotechnology Pathway)
Bachelor of Science Medical Sciences (Molecular Biotechnology Pathway)

Pharmacological Sciences Pathway

Diploma of Higher Education Medical Sciences (Pharmacological Sciences Pathway)
Bachelor of Science Medical Sciences (Pharmacological Sciences Pathway)

BSc (Hons) Applied Biomedical Science

There are no contained awards for these routes 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	<p>Start dates are notified to students via their offer letter. The length of the course and mode of delivery are:</p> <ul style="list-style-type: none"> • 3 years (full time, campus based) • 6 years (part time, campus based) • 4 Years (with full-time one year placement for BScH Applied Biomedical Science route only)
Part Time Study	Part-time delivery is usually at half the intensity of the full-time equivalent course. Some modules may be delivered in a different sequence from that set out in this specification but the modules offered within each level are consistent.
Location of Delivery	The majority of teaching will be at City campus but on occasion may be at Headingley campus, plus location of placement for BScH Applied Biomedical Science route.
Entry Requirements	<p>Admissions criteria are confirmed in your offer letter. Details of how the University recognises prior learning and supports credit transfer are located here: https://www.leedsbeckett.ac.uk/student-information/course-information/recognition-of-prior-learning/</p> <p>Admissions enquiries may be directed to: AdmissionsEnquiries@leedsbeckett.ac.uk.</p>
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 .

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

The course follows the Academic Regulations except where noted below.

Students enrol in year one on BSc (Hons) Biomedical Science. At the end of year one, students can choose to continue the multidisciplinary studies on BSc (Hons) Biomedical Science or alternatively choose to specialise in a specific pathway as named above. For the BSc (Hons) Applied Biomedical Science award, students must successfully complete a 45 week placement in an NHS pathology laboratory after year two.

Must pass components of assessment and modules

IBMS requirements state that students must achieve a pass mark in all assessment components for modules that cover the clinical laboratory sciences subject areas. Condonement/compensation will not be permitted for these modules. Components and modules must be passed by at least 40% for the modules:

Level 5 Clinical Genetic and Clinical Immunology

Level 5 Clinical Microbiology

Level 5 Haematology and Transfusion Science

Level 6 Clinical Biochemistry

Level 6 Cellular Pathology

Contained awards

- Certificate HE Medical Sciences
- Diploma HE Medical Sciences: The specific award title will depend on the modules passed at level 5. If 50% of the credits of the specific pathway are in a specific discipline then the student will be eligible for an award with a pathway title. If not, the award will be Diploma HE Medical Sciences.
- BSc Medical Sciences: The specific award title will depend on the modules passed at level 5 and level 6. If 50% of the credits of the specific pathway are in a specific discipline then the student will be eligible for an award with a pathway title. If not, the award will be BSc Medical Sciences.
- There are no contained awards for BSc (Hons) Applied Biomedical Science, as students who fail the placement revert to their pathway.

BSc (Hons) Applied Biomedical Science

The exemptions below are for BSc (Hons) Applied Biomedical Science, for the placement module only, in order to achieve the award above there will be:

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

Students must comply with the University's fitness to practise policy: https://www.leedsbeckett.ac.uk/-/media/files/policies/student/ups_fitness_to_practise_policy_procedure.pdf

Key Contacts

Your Course Director	Dr Wayne Roberts
Your Academic Advisor	An academic member of the course team
Your Course Administrator	Sarah Kelly Sarah.Kelly@leedsbeckett.ac.uk

Sandwich Work Placement Information

Summary: Students who are successful in their application to our Applied Biomedical Science route will undertake a 10 month placement within an NHS lab. You will gain valuable work experience and training during your placement which will enable you to complete an IBMS registration portfolio while you study. When completed and verified, your portfolio will provide eligibility to apply for entry onto the HCPC register as a Biomedical Scientist after graduating. You will be able to do this without the need for further training. Please note, placements may be limited so will be subject to availability.

Length: Students are given the opportunity to apply to join the applied route after their second year of study. The applied route requires students to undertake a 10 month placement within an NHS lab.

Location: Students will apply for a specific placement in a local NHS lab. Further information on the allocation process is provided by the module leader prior to option choices being made.

Professional Accreditation or Recognition Associated with the Course

Professional Bodies

The Institute of Biomedical Science (IBMS) and The Royal Society of Biology (RSB)

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.

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.

Course Overview

Aims

The aims of the 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. 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

Teaching is in person and lectures and tutorials are on campus, although lectures will also be recorded so that students can refer back to this material.

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 practicals, online 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. 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.

Level 4 – All routes

Semester 1	Semester 2
Practical and Study skills (20 credits)	Genetics and Biotechnology (20 credits)
Cell Biology, Haematology and Immunology (20)	Biochemistry (20)
Physiology and Pharmacology (20)	Microbial World (20)

Level 5 BScH Biomedical Science

Semester 1	Semester 2
Professional and Scientific Practice (20)	Clinical Genetics and Clinical Immunology (20)
Clinical Microbiology (20)	Research Methods in Biosciences (20)
Biology of Common Diseases (20)	Haematology and Transfusion Science (20)

Level 5 BScH Biomedical Science (Medical Biochemistry Pathway)

Semester 1	Semester 2
Professional and Scientific Practice (20)	Clinical Genetics and Clinical Immunology (20)
Clinical Microbiology (20)	Research Methods in Biosciences (20)
Metabolic Biochemistry (20)	Haematology and Transfusion Science (20)

Level 5 BScH Biomedical Science (Medical Microbiology Pathway)

Semester 1	Semester 2
Professional and Scientific Practice (20)	Clinical Genetics and Clinical Immunology (20)
Clinical Microbiology (20)	Research Methods in Biosciences (20)
Medical and Environmental Microbiology (20)	Haematology and Transfusion Science (20)

Level 5 BScH Biomedical Science (Molecular Biotechnology Pathway)

Semester 1	Semester 2
Professional and Scientific Practice (20)	Clinical Genetics and Clinical Immunology (20)
Clinical Microbiology (20)	Research Methods in Biosciences (20)
DNA Technology (20)	Haematology and Transfusion Science (20)

Level 5 BScH Biomedical Science (Pharmacology Pathway)

Semester 1	Semester 2
Professional and Scientific Practice (20)	Clinical Genetics and Clinical Immunology (20)
Clinical Microbiology (20)	Research Methods in Biosciences (20)
Pharmacological Treatment of Disease (20)	Haematology and Transfusion Science (20)

Level 6 BScH Biomedical Science

Semester 1	Semester 2
Clinical Biochemistry (20)	Enterprise in Biomedical Science (10)
Biology of Cancer (20)	Cellular Pathology (20)
UG Biomed Research Project (40)	UG Biomed Research Project continues
	Pathobiology (10)

Level 6 BScH Biomedical Science (Medical Biochemistry pathway)

Semester 1	Semester 2
Clinical Biochemistry (20)	Enterprise in Biomedical Science (10)
Applied Biochemistry (20)	Cellular Pathology (20)
UG Biomed Research Project (40)	UG Biomed Research Project continues
	Pathobiology (10)

Level 6 BScH Biomedical Science (Medical Microbiology pathway)

Semester 1	Semester 2
Clinical Biochemistry (20)	Enterprise in Biomedical Science (10)
Global Topics in Infectious Diseases (20)	Cellular Pathology (20)
UG Biomed Research Project (40)	UG Biomed Research Project continues
	Pathobiology (10)

Level 6 BScH Biomedical Science (Molecular Biotechnology pathway)

Semester 1	Semester 2
Clinical Biochemistry (20)	Enterprise in Biomedical Science (10)
Medical Biotechnology (20)	Cellular Pathology (20)
UG Biomed Research Project (40)	UG Biomed Research Project continues
	Pathobiology (10)

Level 6 BScH Biomedical Science (Pharmacology pathway)

Semester 1	Semester 2
Clinical Biochemistry (20)	Enterprise in Biomedical Science (10)
Advances in Pharmacology (20)	Cellular Pathology (20)
UG Biomed Research Project (40)	UG Biomed Research Project continues
	Pathobiology (10)

BSc (Hons) Applied Biomedical Science

The BScH Applied Biomedical Science route 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 BScH Biomedical Science 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.

BScH Applied Biomedical Science 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 BScH Applied Biomedical Science award, any student who fails the placement would revert onto their chosen Biomedical Science 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.

Assessment Balance and Scheduled Learning and Teaching Activities by Level

The assessment balance and overall workload associated with this course are calculated from core and pathway modules. Applicants should note that the specific pathway choices students make may influence both assessment and workload balance.

A standard module equates to 200 notional learning hours, comprising teaching, learning and assessment and independent study. Modules may have more than one component of assessment.

Assessment

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

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

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

Workload

Overall Workload in hours	Level 4	Level 5	Level 6
Teaching, Learning and Assessment	288	288	292
Independent Study	912	912	908
Placement (for applied route students only)		1300	

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 University, call into our Student Services Centre at either campus or contact Student Advice directly. This team, consisting of trained officers and advisers 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. They also work on a wide range of projects throughout the year all designed to enhance your student experience and ensure you make the most of your time with us. Student Advice are located in the Student Services Centre in the Leslie Silver Building at City Campus and on the ground floor of the Priestley Building at Headingley Campus. The team can also be contacted via email at studentadvice@leedsbeckett.ac.uk, telephone on 0113 812 3000, or by accessing our online chat link, available on the student homepage.

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.