



COURSE SPECIFICATION

BSc (Hons) Applied Biomedical Science Degree Apprenticeship

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Please refer to the [Course Specification Guidance Notes](#) for guidance on completing this document.

Course Title	BSc (Hons) Applied Biomedical Science Degree Apprenticeship
Final Award	<i>BSc (Hons)</i>
Exit Awards	<i>CertHE, DipHE, BSc. Applied Medical studies</i>
Course Code / UCAS code (if applicable)	<i>U2849FDD</i>
Mode of study	<i>Full-time</i>
Mode of delivery	<i>Campus and Distance Learning</i>
Normal length of course	<i>3 years</i>
Cohort(s) to which this course specification applies	<i>September 2025 onwards</i>
Awarding Body	<i>University of Portsmouth</i>
Teaching Institution	<i>University of Portsmouth</i>
Faculty	<i>Faculty of Science and Health</i>
School/Department/Subject Group	<i>School of Medicine, Pharmacy and Biomedical Sciences</i>
School/Department/Subject Group webpage	https://www.port.ac.uk/about-us/structure-and-governance/organisational-structure/our-academic-structure/faculty-of-science-and-health/school-of-pharmacy-and-biomedical-sciences
Course webpage including entry criteria	https://www.port.ac.uk/study/courses/undergraduate/bsc-hons-applied-biomedical-science-distance-learning-degree-apprenticeship#entry-requirements
Professional and/or Statutory Regulatory Body accreditations	<i>Institute of Biomedical Science (IBMS)</i>
Quality Assurance Agency Framework for Higher Education Qualifications (FHEQ) Level	<i>Level 6</i>

This course specification provides a summary of the main features of the course, identifies the aims and learning outcomes of the course, the teaching, learning and assessment methods used by teaching staff, and the reference points used to inform the curriculum.

This information is therefore useful to potential students to help them choose the right course of study, to current students on the course and to staff teaching and administering the course.

Further detailed information on the individual modules within the course may be found in the relevant module descriptors and the Course Handbook provided to students on enrolment.

Please refer to the [Course and Module Catalogue](#) for further information on the course structure and modules.

Educational aims of the course

General Aims

- To provide a challenging, enterprising, coherent and contemporary programme of study that enables apprentices to develop the knowledge, skills and behaviours necessary to fulfil the requirements of the Biomedical Scientist level 6 apprenticeship standard.
- To create a cohesive and integrated programme of study involving a tripartite agreement between the university, employers and apprentices to fulfil the requirements of the Institute of Biomedical Science (IBMS) and Health and Care Professions Council (HCPC) such that graduate apprentices can apply to the HCPC, register as Biomedical Scientists, and use this protected title.
- To develop the apprentice's professional and scientific skills necessary to meet the current and future requirements of a professional biomedical scientist.
- To equip apprentices with the academic and transferable skills necessary to engage with independent life-long learning, ensuring that all apprentices can maintain a contemporary understanding of their subject, progress within their chosen career path, and have the potential to become the healthcare leaders of the future.

Subject specific aims

- To develop the apprentice's knowledge of the roles of Biomedical Scientists and their scope of practice within a contemporary healthcare setting.
- To ensure the apprentice knows the HCPC standards of proficiency and is able to consistently apply these within the healthcare setting.
- To develop a contemporary understanding of human disease and to understand the principles of a range of laboratory and non-laboratory-based approaches used to research, screen, diagnose and monitor selected disease states.
- To demonstrate competency in a range of laboratory-based techniques relevant to their scope of professional practice.
- To accurately and consistently interpret data in different forms and to apply this to relevant areas of biomedical science.
- To develop the apprentice's skills of critical reflection and to demonstrate how, through reflective practice, the apprentice can become a more effective biomedical scientist.
- To develop the apprentice's awareness, understanding and application of the ethical considerations and constraints of their work in both clinical practice and research.
- To equip apprentices with the transferable skills necessary for lifelong independent learning.

Course Learning Outcomes and Learning, Teaching and Assessment Strategies

The [Quality Assurance Agency for Higher Education \(QAA\)](#) sets out a national framework of qualification levels, and the associated standards of achievement are found in their [Framework for Higher Education Qualifications](#) document.

The Course Learning Outcomes for this course are outlined in the tables below.

A. Knowledge and understanding of:			
LO number	Learning outcome	Learning and Teaching methods	Assessment methods
A1	the appropriate use of biomedical terminology and nomenclature such that anatomy, physiology, histology, haematology, biochemistry, genetics, immunology, microbiology and molecular biology can be related to human disease.	A broad foundation of knowledge is established at Level 4 to underpin the remainder of the apprenticeship and to develop fundamental study skills. Critical skills for success in both the apprenticeship and the biomedical science profession include independent and group working, scientific writing, literature searching and referencing, the safe and judicious use of artificial intelligence, mathematical and statistical proficiency, and laboratory competence. Apprentices will develop an understanding of human biology and physiology across multiple levels, from chemical and molecular interactions to cellular structures, tissues, organs, and systems, including the renal, cardiovascular, gastrointestinal, and nervous systems (A1, A2). Apprentices will also be introduced to the professional conduct requirements outlined in the IBMS Registration Training Portfolio (A5). As they progress through Levels 5 and 6, they will develop more advanced and specialised knowledge. At Level 5, the focus shifts to the main pathological disciplines, ensuring a broad understanding of human disease and detection, with consideration of evolving theoretical and practical advances in healthcare	The assessment strategy is designed to ensure apprentices can contextualise theoretical knowledge within a pathology setting and demonstrate interdisciplinary understanding. A variety of assessment methods are employed, including onsite examinations, practical skills assessments, individual and collaborative case studies, and contributions to interprofessional educational experiences, allowing apprentices to engage with and represent the biomedical science profession (A1 - A3, A5). Written assignments and reflective portfolio-based assessments further support knowledge consolidation and professional development (A1 - A5). Formative assessments are embedded throughout the programme, including online multiple-choice quizzes (MCQs), audience response systems, and feedback on draft assignments. As an integrated degree, apprentices must complete the IBMS Registration Portfolio throughout their apprenticeship, undergoing verification as part of the module Becoming a Biomedical Scientist: Professional
A2	how diseases develop and affect the normal function of the human body, and the application of interventions that can be utilised for their management.		
A3	the quantitative and qualitative evaluation of analytes employed to aid the screening, diagnosis and monitoring of health and disease.		
A4	the planning, design and execution of a clinically orientated project demonstrating the application of good laboratory practice, data analysis - using appropriate statistical approaches - and ethics.		
A5	theoretical principles that underpin practical skills required to meet: The standards included within the IBMS registration portfolio and the Biomedical Scientist standards.		

		(A2, A3). At Level 6, the curriculum encompasses genetics, the biology of disease, and research methods, culminating in a clinically oriented research project (A4). The IBMS Registration Portfolio remains integral throughout the final year, ensuring apprentices meet the Biomedical Scientist standards by the point of graduation (A5). Core knowledge is delivered through university-led synchronous and asynchronous teaching, including seminars, problem-based and flipped learning workshops, and directed study. Workplace-based learning is facilitated through workshops, tutorials, practical demonstrations, and competency assessments. Following the demonstration of proficiency, apprentices will be able to perform a range of practical techniques relevant to their employment (A3, A5). The three-year workplace learning structure ensures sufficient opportunity for apprentices to complete the IBMS Registration Portfolio and meet the coinciding Biomedical Scientist apprenticeship standards.	Practice (A5). Workplace-based tutors play a key role in monitoring apprentice engagement during tripartite meetings with training officers, ensuring apprentices remain on track to meet the 20% off-the-job training requirement.
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B. Cognitive (Intellectual or Thinking) skills, able to:			
LO number	Learning outcome	Learning and Teaching methods	Assessment methods
B1	formulate and test hypotheses	Intellectual skills are developed throughout the apprenticeship in both university and workplace settings. Asynchronous learning materials, including bespoke pre-recorded and subtitled resources, are organised into structured lessons and supplemented with formative exam questions to enhance understanding and retention of subject content . Where relevant, signposting between university-based and work-based activities is provided via Moodle, ensuring apprentices can effectively link fundamental and abstract concepts (B3, B5). The application of knowledge is primarily facilitated through coursework and synchronous activities, including workshops, practical sessions, and work-based learning (B3). The integration of data analysis tools allows apprentices to interpret both complete and incomplete datasets, drawing legitimate, evidence-based conclusions (B1, B4). Student-centred activities such as problem-based learning exercises, data-rich clinical case studies, presentations, and projects foster apprentices' ability to conduct research, evaluate and synthesise information, and apply theoretical principles to real-world biomedical science contexts (B1, B2, B3, B5). These activities also enhance awareness of current healthcare issues and the	Assessment of individual student abilities is achieved through a varied approach, including: Unseen examinations (B4, B5) and practical skills assessments (B1, B4), Data analysis, interpretation, and critique (B4), Oral and digital poster presentations (B5), Reports and clinical case studies (B2, B3, B4). Given the integration of theory and practice within the apprenticeship, coursework often adopts a portfolio-style approach or written reports, incorporating photographic and multimedia evidence to integrate university and workplace learning (B3, B5). At Level 5, the focus is on pathological disciplines, with a standardised assessment approach designed to optimise efficiency and minimise cognitive load (B3, B4). Cross-cutting themes that extend across all Level 5 modules enable apprentices to explore discrete areas of biomedical science through a multi-disciplinary lens, encouraging a holistic understanding of biomedical practice (B3 - B5). The final-year research project is assessed through an extended report and
B2	plan, conduct, evaluate and report on a programme of research.		
B3	research, select, synthesise and apply information, theoretical principles and practical procedures to a variety of situations.		
B4	analyse, evaluate, interpret and integrate data in a number of formats and from a variety of sources to make evidence-based decisions.		
B5	marshal thoughts to demonstrate an in-depth knowledge of selected topics and apply them to familiar and unfamiliar problems.		

		evolving practice of biomedical science (B3, B4, B5). In the final year, apprentices undertake a work-based research project, often focusing on service improvement. This project develops hypothesis formulation and testing skills (B1), as well as the ability to conduct a structured research programme (B1, B2). Data analysis, interpretation, and evaluation skills are progressively developed throughout the programme: general data analysis is introduced at Levels 4 and 6, while discipline-specific data analysis is embedded within Level 5 modules (B4).	presentation (B1 - B5), while a series of workplace-based portfolios demonstrates the apprentice's development of knowledge, skills, and behaviours in line with Biomedical Scientist apprenticeship standards (B2 – B5).
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C. Practical (Professional or Subject) skills, able to:			
LO number	Learning outcome	Learning and Teaching methods	Assessment methods
C1	proficiently perform biomedical investigations in compliance with good laboratory practice, health and safety, quality assurance and quality control guidelines in the laboratory.	The development of practical skills and the application of theory to practice is facilitated through a combination of work-based and university-based training. The university component primarily focuses on the application of practical skills and equipment to clinical practice, alongside the analysis of data in the context of human disease (C3, C4). A range of teaching methods—including demonstrations, workshops, videos, and simulations—ensures apprentices develop a strong awareness of the tools and technologies available to biomedical scientists, although it is the employing laboratory that trains the apprentice how to work safely and effectively within their environment (C1, C2). Training will also cover critical appraisal of research papers, including evaluating methodological approaches, considering ethical dimensions, assessing results, and integrating findings from multiple sources to develop a comprehensive and informed understanding of biomedical topics (C3, C4). Apprentices will learn how to plan and conduct a research investigation, from conducting a literature review to reporting research outcomes to a relevant audience (C3 - C5). Work-based learning focuses on how individual technologies operate within the workplace, ensuring	Assessment is conducted through a range of assignments, including: Practical portfolios demonstrating knowledge and proficiency (C1, C2), interactive workplace-based exercises (C2), and a capstone research project report (C5). At Level 4, practice-based proficiency testing ensures apprentices acquire basic laboratory skills to work safely and effectively in a professional biomedical setting (C1, C2). At Levels 5 and 6, these skills are refined and extended, equipping apprentices with the competencies required to function independently as biomedical scientists at the point of graduation (C2). Continuous assessment of practical skills is conducted by qualified NHS training laboratory staff, with bench skills relevant to the final-year project taught and assessed by the work-based project supervisor (C2, C5). The academic rigour of the project is assessed by
C2	to demonstrate competence in a range of procedures and protocols to meet the requirements of the Biomedical Scientist degree apprenticeship standards.		
C3	critically appraise literature, analyse primary and secondary data and prepare referenced scientific outputs to a professional standard.		
C4	evaluate published claims through a variety of means to inform decisions and make judgements in an evidence-based manner.		
C5	formulate and conduct a research investigation in accordance with ethical guidelines and by following appropriate protocols.		

		apprentices understand their application in meeting the needs of all service users . Apprentices will receive training in good laboratory practice, including quality control and quality assurance procedures, which are fundamental for the validation and authorisation of results within the workplace (C1, C2). Health and safety regulations underpin all practical activities in both university and workplace settings. During Level 6, apprentices undertake an independent work-based research project and complete verification of their IBMS Registration Portfolio, demonstrating their ability to function as independent practitioners (C5).	university-based academics. Engagement with scientific literature and data analysis is assessed through professional reports (C3), case studies (C4) and verification of the IBMS Registration Portfolio (C1,C2). The ability to critique research papers, consider ethical implications, and execute an independent research project is evaluated through a final-year research project presentation (C5) and a journal-style research submission (C3, C4, C5)
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D. Transferrable (Graduate and Employability) skills, able to:			
LO number	Learning outcome	Learning and Teaching methods	Assessment methods
D1	take responsibility for the planning and execution of their own current and future learning.	The development and refinement of transferable skills are embedded throughout the apprenticeship and facilitated by academic staff, work-based tutors, laboratory trainers, mentors, and student engagement officers. Guidance for apprentices managing their own time, developing their own study schedules and maintaining a healthy work-life balance are introduced in Level 4 (D1), whereas project management tools are introduced and employed at Level 6 (D1, D6). Basic IT proficiency, including word processing, mathematics, statistics, and the safe, effective, and judicious use of Artificial Intelligence, is introduced at Level 4, with sequential skill development and application across Levels 5 and 6 in both university and workplace settings (D2, D3). Apprentices engage with a range of technological tools and multimedia resources through synchronous and asynchronous learning activities, delivered online and face-to-face. These experiences provide first-hand exposure to communication technologies, which apprentices are encouraged to incorporate into their own assessments to demonstrate their	A variety of assessment methods are employed to evaluate transferable skills, including Peer-assessed group work reports at Levels 4 and 6 (D4, D5), individual professional documents (D1, D2, D3), worksheets within practice-based portfolios (D1, D3, D5) and the final project thesis (D1, D2, D3, D5). Apprentices must plan their practice-based research projects, identify appropriate resources, and propose action plans before project commencement. These proposals undergo summative assessment, ensuring effective resource management and strategic planning (D1, D5). Numerical and written skills are assessed through multiple formats, including: Data interpretation and critique (D3), written and oral reports (D2, D3), Digital poster presentations (D2, D3) and professional reports and clinical case studies (D2, D3).
D2	communicate effectively using a range of media and information technology.		
D3	demonstrate numerical and written skills appropriate to a scientist.		
D4	work effectively both independently and as part of a team.		
D5	Identify and use appropriate human and physical resources to enable successful completion of a task.		

		learning (D2, D3). Interactive multimedia-enabled posters are a required component of assessments at Levels 4 and 6, while Level 5 disciplinary modules require the integration of suitable laboratory-derived sources to enhance the apprentice's submissions and to communicate with an appropriate audience (D2, D3). Independent learning is a core expectation, although apprentices also develop team working skills through collaborative case studies embedded within the Study Skills and Pathobiology and Genetics modules (D1, D4). Exposure to career-enhancing activities and careers awareness initiatives throughout the programme supports apprentices in identifying and utilising appropriate human and physical resources to achieve successful outcomes (D5).	
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Academic Regulations

The current University of Portsmouth [Academic Regulations: Examination & Assessment Regulations](#) will apply to this course. Approved course exemptions can be found [here](#).

Support for Student Learning

The University of Portsmouth provides a comprehensive range of support services for students throughout their course, details of which are available at the [MyPort](#) student portal.

Evaluation and Enhancement of Standards and Quality in Learning and Teaching

The University of Portsmouth undertakes comprehensive monitoring, review and evaluation of courses within clearly assigned staff responsibilities. Student feedback is a key feature in these evaluations, as represented in our [Policy for Listening to and Responding to the Student Voice](#) where you can also find further information.

Reference Points

The course and outcomes have been developed taking account of:

- [University of Portsmouth Curriculum Framework Specification](#)
- [University of Portsmouth Vision](#)
- [Office for Students Conditions of Registration](#)
- [University of Portsmouth Code of Practice for Work-based and Placement Learning](#)
- [Quality Assurance Agency UK Quality Code for Higher Education](#)
- [Quality Assurance Agency Qualification Characteristic Statements](#)
- [Quality Assurance Agency Subject Benchmark Statement](#)
- [Biomedical Science V1.1 level 6 apprenticeship standard](#)
- Quality Assurance Agency Framework for Higher Education Qualifications Requirements of Professional and/or Statutory Regulatory Bodies: **Institute of Biomedical Science (IBMS)**
- Vocational and professional experience, scholarship and research expertise of the University of Portsmouth's academic members of staff
- National Occupational Standards

Changes to your course/modules

The University of Portsmouth has checked the information provided in this Course Specification and will endeavour to deliver this course in keeping with this Course Specification. However, changes to the course may sometimes be required arising from annual monitoring, student feedback, and the review and update of modules and courses.

Where this activity leads to significant changes to modules and courses there will be prior consultation with students and others, wherever possible, and the University of Portsmouth will take all reasonable steps to minimise disruption to students.

It is also possible that the University of Portsmouth may not be able to offer a module or course for reasons outside of its control, for example, due to the absence of a member of staff or low student registration numbers. Where this is the case, the University of Portsmouth will endeavour to inform applicants and students as soon as possible, and where appropriate, will facilitate the transfer of affected students to another suitable course.

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