

KEY PROGRAMME INFORMATION

Originating institution(s) Bournemouth University		Faculty responsible for the programme Faculty of Science and Technology				
Apprenticeship Standard ST1314		Assessment Plan ST1314				
End Point Assessment type Integrated	Main training provider Bournemouth University		Approved sub-contractors N/A			
Type of apprenticeship Integrated Degre						
Final award(s), title(s) and credit BSc (Hons) Applied Biomedical Science (Degree Apprenticeship) 120 (60 ECTS) Level 4 / 120 (60 ECTS) Level 5 / 120 (60 ECTS) Level 6 credits						
Intermediate award(s), title(s) a Dip HE Biological Sciences – 12 Cert HE Biological Sciences – 12	and credits 0 (60 ECTS) Lev 20 (60 ECTS) Le	vel 4 / 120 (60 ECTS) evel 4 credits) Level 5 credits			
UCAS Programme Code(s) N/A	HECoS (Higher Education Classification of Subjects) Code and balanced or major/minor load. 100270		LARS (Learning Aims Reference) code 719			
 External reference points UK Quality Code for Higher Education; Part A: Setting and maintaining academic standards; Chapter A1: UK and European reference points for academic standards (October 2013); Subject benchmark - Biomedical Sciences and Biomedical Sciences (2023); Accreditation standards of Institute of Biomedical Science; Institute for Apprenticesbing and Technical Education 						
Professional, Statutory and Re The Institute of Biomedical Scien	egulatory Body ace (IBMS) - To	(PSRB) links Be Confirmed				
Locations of off-the-job trainin Bournemouth University	g delivery					
Mode(s) of delivery Apprenticeship mode of delivery	– Day-Release					
Typical duration 3-year programme						
Date of first intake September 2025		Expected start dat September	es			
Maximum apprentice numbers Minimum of 10	;					
Partner(s)Partnership modelNot applicableNot applicable						
Date of this Programme Species March 2025	Date of this Programme Specification March 2025					
Version number v1.0-0925	Version number v1.0-0925					
Approval, review or modificati E2425AP07	on reference ni	umbers				
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PROGRAMME STRUCTURE

Programme Award and Title: BSc (Hons) Applied Biomedical Science (Degree Apprenticeship

Year 1/Level 4

Apprentices are required to complete all 7 core units

Apprentices are rec	Apprentices are required to complete all 7 core units.									
Unit Name	Core/	No. of	Assessment Element Weightings				htings	Expected	Unit	HECoS Code
	Option	Credits	Practi ce	Exam 1	Exam 2	Cwk 1	Cwk 2	hours per unit	No.	(plus balanced or major/ minor load)
Biomedical Laboratory Science	Core	20				50%	50%	10	v1.0	100417
Cell Biology	Core	20		30%		70%		40	v1.0	100822
Exploring and Understanding Science	Core	20		30%		70%		20	v1.0	100270
Human Anatomy and Physiology	Core	20		50%	50%			10	v1.0	100350
Human Genetics and Molecular Biology	Core	20		50%		50%		40	v1.0	100900
Introduction to Immunology	Core	20		100%				20	v1.0	100911
Work-Based Learning and Professional Development	Core	0	Pass					22	v1.0	100265

Progression requirements: 120 credits and a "Pass" in the Work-Based Learning and Professional Development unit.

Exit qualification: Cert HE Biological Sciences (requires 120 credits at Level 4)

Year 2/Level 5

Apprentices are required to complete all 7 core units.

Unit Name	Core/ Option	No. of Credits	Assessment Element Weightings					Expected Contact hours per	Unit Versio n No.	HECoS Code (plus
			Practic e	Exam 1	Exam 2	Cwk 1	Cwk 2	unit	balanced or major/ minor load)	
Advanced Cell Biology	Core	20				50%	50%	40	v1.0	100822
Biochemistry	Core	20		50%	50%			10	v1.0	100343
Blood Sciences	Core	20		50%		50%		40	v1.0	100265
Infection Sciences and Clinical Immunology	Core	20		50%		50%		20	v1.0	100911
Introduction to Pharmacology and Toxicology	Core	20		50%		50%		20	v1.0	100250

Programme Specification – Section 1

Mechanisms of Human Pathology	Core	20				50%	50%	10	v1.0	100276
Work-Based Learning and Professional Development	Core	0	Pass					22	v1.0	100265
Progression requirements: 120 credits and a "Pass" in the Work-Based Learning and Professional Development unit. Exit gualification: Dip HE Biological Sciences (requires 120 credits at Level 4 and 120 credits at Level 5)										

Year 3/Level 6 Apprentices are required to complete 5 core units.											
Unit Name	Core/ Option	No. of Credits	Asses	Assessment Element Weightings				Unit Version No.	HECoS (plus ba or majo	HECoS Code (plus balanced or major/ minor	
			Practice	Exam 1	Cwk 1	Cwk 2	per unit		loa	ıd)	
Independent Research Project	Core	40			100%		12	v1.0	100	270	
Advanced Topic in Genetics	Core	20		50%	50%		40	v1.0	100	259	
Diagnostic Medicine	Core	20		50%	50%		10	v1.0	100265 (70%)	10012 9 (30%)	
Pathophysiology	Core	20		50%	50%		10	v1.0	100	350	
Work-Based Learning and Professional Development	Work-Based Learning and Professional DevelopmentCore20100%52v1.0100265								265		
Apprentices are required to complete the IBMS Registration Training Portfolio as part of the Work-Based Learning and Professional Development unit and must achieve a pass, verified by an external assessor.											
End Point Assessment: This award is an integrated degree apprenticeship and includes an end-point assessment (EPA), which the apprentice must pass to complete the programme.											
Exit qualification	1: BSc (ŀ	- Hons) Ap	plied Biome	edical Scier	nce (Degree	Apprentic	eship)				

Please provide details of the Gateway and End Point Assessment requirements here: The EPA period must only start once the employer and BU are satisfied that the apprentice is demonstrating the knowledge, skills and behaviours of the apprenticeship standard, and all the pre-requisite gateway requirements for EPA as defined in the assessment plan and apprenticeship funding rules have been met.

Programme Structure Diagram

Level 4 Unit	Trimester 1	Trimester 2	Trimester 3
Human Genetics and Molecular Biology		Synchronous	
Exploring and Understanding Science	Blended Delivery		
Cell Biology		Synchronous	
Introduction to Immunology		Blended Delivery	
Biomedical Laboratory Science			Asynchronous Teaching
Human Anatomy and Physiology			Asynchronous Teaching
Work-Based Learning and Professional Development		Bi-weekly Tutorials	

Level 5 Unit	Trimester 1	Trimester 2	Trimester 3
Blood Sciences	Synchronous		
Introduction to Pharmacology and Toxicology	Blended Delivery		
Advanced Cell Biology		Synchronous	
Infection Sciences and Clinical Immunology		Blended Delivery	
Biochemistry			Asynchronous Teaching
Mechanisms of Human Pathology			Asynchronous Teaching
Work-Based Learning and Professional Development		Bi-weekly Tutorials	

Level 6 Unit	Trimester 1	Trimester 2	Trimester 3
Advanced Topics in Genetics	Synchronous		
Independent Research Project	Synch	ronous	
Diagnostic Medicine			Asynchronous Teaching
Pathophysiology			Asynchronous Teaching
Work-Based Learning and Professional Development		Weekly Tutorials	

AIMS OF THE DOCUMENT

The aims of this document are to:

- define the structure of the BSc (Hons) Applied Biomedical Science (Degree Apprenticeship);
- specify the programme award titles;
- articulate how the programme will enable apprentices to demonstrate the Knowledge, Skills and Behaviours of the apprenticeship standard;
- identify programme and level learning outcomes;
- articulate the regulations governing the awards defined within the document.

AIMS OF THE PROGRAMME

This programme aims to develop highly skilled, HCPC-registered Biomedical Scientists who:

- Are equipped with both the academic knowledge and practical laboratory skills necessary to perform essential diagnostic work in healthcare settings, contributing to the detection, diagnosis, and monitoring of diseases such as cancer, infections, and blood disorders.
- Have gained specialist expertise in key areas of biomedical science, including Clinical Biochemistry, Haematology, Microbiology, and Cellular Pathology, through a combination of structured university study and work-based learning in NHS-approved pathology laboratories.
- Are able to apply their academic learning in real-world contexts, ensuring that they can deliver accurate and timely diagnostic information that is critical for patient care.
- Demonstrate the necessary professional behaviours, knowledge, skills, and competencies as outlined in the apprenticeship standard, ensuring they are prepared for registration with the Health and Care Professions Council (HCPC).
- Have developed the confidence and adaptability needed to address workforce shortages in the healthcare sector, particularly in the Southwest.
- Are prepared to contribute to research and innovation in biomedical science through collaborative opportunities with local trusts, completing final-year projects that address real-world clinical challenges.

This programme has been designed with input from regional healthcare employers, including NHS pathology laboratories and healthcare trusts such as University Hospitals Dorset NHS Foundation Trust (UHD). This collaboration ensures the curriculum aligns with employers' practical requirements, equipping apprentices with the skills, knowledge, and competencies directly relevant to their future roles in the workforce. Employers play a key role in supporting work-based opportunities, mentoring apprentices, and offering valuable insights into the development of the programme to ensure it remains responsive to changing healthcare priorities.

This Level 6 apprenticeship integrates work-based learning with university study, allowing apprentices to gain practical, on-the-job experience that enhances their employability and prepares them to fill critical roles within the healthcare workforce. The programme ensures apprentices meet the Knowledge, Skills, and Behaviours (KSBs) required by the apprenticeship standard and aligns with IBMS accreditation, preparing them for registration with the Health and Care Professions Council (HCPC). By addressing local workforce demands and national healthcare priorities, this apprenticeship supports the sustainability and growth of the biomedical science profession.

ALIGNMENT WITH THE UNIVERSITY'S STRATEGIC PLAN

The Biomedical Science Apprenticeship is directly aligned with Bournemouth University's 2025 Strategic Plan (BU2025) and supports the university's Fusion Learning agenda, which emphasises the integration of education, research, and professional practice.

This programme reflects BU's values of excellence, inclusivity, responsibility, and creativity, by providing an innovative educational pathway that combines academic rigor with practical experience, responding to both regional workforce needs and national healthcare priorities.

By collaborating closely with NHS pathology laboratories and healthcare trusts, the programme ensures that apprentices gain skills and knowledge that meet current industry standards while preparing them for future roles in clinical diagnostics and research.

In line with BU's value of inclusivity, the programme offers an alternative route into the biomedical science profession, providing opportunities for individuals who may not meet traditional academic entry requirements. This inclusive approach broadens access to higher education and promotes lifelong learning, allowing individuals from diverse backgrounds to develop the skills necessary for a successful career in healthcare.

The programme also aligns with responsibility, addressing regional workforce shortages in healthcare and the growing demand for skilled biomedical scientists in the Southwest. By directly contributing to workforce development and collaborating with local NHS employers, the apprenticeship supports the sustainability of the healthcare sector and ensures that apprentices can make meaningful contributions to patient care and medical research.

Through the Fusion Learning approach, which integrates academic study with professional practice, the apprenticeship allows apprentices to "earn while they learn," gaining valuable hands-on experience in NHS-approved pathology laboratories. This integration ensures that apprentices not only acquire theoretical knowledge but also develop the practical skills and competencies required to meet the KSBs outlined in the apprenticeship standard and IBMS accreditation. The programme reflects BU's commitment to creating innovative and flexible learning environments that foster creative problem-solving and equip apprentices with the skills to adapt to the evolving needs of the healthcare sector.

This apprenticeship programme will support BU as it continues to fulfil its strategic objectives of promoting employability, addressing regional skills gaps, and enhancing the university's strong connections with the healthcare sector.

LEARNING HOURS AND ASSESSMENT

Bournemouth University taught programmes are composed of units of study, which are assigned a credit value indicating the amount of learning undertaken. The minimum credit value of a unit is normally 20 credits, above which credit values normally increase at 20-point intervals. 20 credits is the equivalent of 200 study hours required of the apprentice, including lectures, seminars, assessment and independent study. 20 University credits are equivalent to 10 European Credit Transfer System (ECTS) credits.

The assessment workload for a unit should consider the total time devoted to study, including the assessment workload (i.e. formative and summative assessment) and the taught elements and independent study workload (i.e. lectures, seminars, preparatory work, practical activities, reading, critical reflection, practice (if relevant)).

Assessment per 20 credit unit should normally consist of 3,000 words or equivalent. Dissertations and Level 6 and 7 Final Projects are distinct from other assessment types. The word count for these assignments is 5,000 words per 20 credits, recognising that undertaking an in-depth piece of original research as the capstone to a degree is pedagogically sound.

STAFF DELIVERING THE APPRENTICESHIP

Apprentices will usually be taught by a combination of senior academic staff with others who have relevant expertise including – where appropriate according to the content of the unit – academic staff, qualified professional practitioners, demonstrators/technicians and research apprentices.

KNOWLEDGE, SKILLS AND BEHAVIOURS MAPPING SCHEDULE

The knowledge, skills and behaviours (KSBs) of the apprenticeship standard are evaluated and assessed at the final level of the apprenticeship (e.g. level 5, 6 or 7 depending on the apprenticeship standard). This applies to all judgements made on the KSBs from the skills-scan at the start of the apprenticeship to the end point assessment.

KSB	Unit - Level 4	Unit - Level 5	Unit - Level 6
K1: The importance of continuing professional development throughout own career.	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development	Diagnostic Medicine
K2: The importance of safeguarding and relevant safeguarding processes.	Biomedical Laboratory Science	Blood Sciences	Diagnostic Medicine
K3: What is required by the Health and Care Professions Council, including but not limited to the Standards of conduct, performance and ethics.	Biomedical Laboratory Science	Work-Based Learning and Professional Development	Diagnostic Medicine
K4: The importance of valid consent which is voluntary and informed, has due regard to capacity, is proportionate to the circumstances and is appropriately documented.	Biomedical Laboratory Science	Mechanisms of Human Pathology	Advanced Topics in Genetics
K5: The importance of capacity in the context of delivering care and treatment.	Biomedical Laboratory Science	Blood Sciences	Advanced Topics in Genetics
K6: The scope of a professional duty of care and how to exercise that duty.	Biomedical Laboratory Science	Blood Sciences	Diagnostic Medicine
K7: The legislation, policies and guidance relevant to own profession and scope of practice.	Biomedical Laboratory Science	Mechanisms of Human Pathology	Diagnostic Medicine
K8: The British, European and International Standards that govern and affect pathology laboratory practice.	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development	Diagnostic Medicine
K9: The importance of own mental and physical health and wellbeing strategies in maintaining fitness to practise.	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development
K10: How to take appropriate action if own health may affect own ability to practise safely and effectively, including seeking help and support when necessary.	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development
K11: The need for active participation in training, supervision and mentoring in supporting high standards of practice, and	Biomedical Laboratory Science	Advanced Cell Biology	Diagnostic Medicine

personal and professional conduct, and the importance of demonstrating this in practice.			
K12: Equality legislation and how to apply it to own practice.	Biomedical Laboratory Science	Mechanisms of Human Pathology	Diagnostic Medicine
K13: The duty to make reasonable adjustments in practice and be able to make and support reasonable adjustments in own and others' practice.	Biomedical Laboratory Science	Advanced Cell Biology	Pathophysiology
K14: The characteristics and consequences of barriers to inclusion, including for socially isolated groups.	Human Genetics and Molecular Biology	Blood Sciences	Advanced Topics in Genetics
K15: That equality, diversity and inclusion needs to be embedded in the application of all HCPC standards and across all areas of practice.	Biomedical Laboratory Science	Advanced Cell Biology	Diagnostic Medicine
K16: When disclosure of confidential information may be required.	Biomedical Laboratory Science	Mechanisms of Human Pathology	Diagnostic Medicine
K17: The principles of information and data governance and the safe and effective use of health, social care and other relevant information.	Biomedical Laboratory Science	Mechanisms of Human Pathology	Diagnostic Medicine
K18: The need to ensure confidentiality is maintained in all situations in which service users rely on additional communication support, such as interpreters or translators.	Biomedical Laboratory Science	Mechanisms of Human Pathology	Independent Research Project
K19: Recognise that the concepts of confidentiality and informed consent extend to all mediums, including illustrative clinical records such as photography, video and audio recordings and digital platforms.	Biomedical Laboratory Science	Mechanisms of Human Pathology	Diagnostic Medicine
K20: The characteristics and consequences of verbal and non-verbal communication and how these can be affected by difference of any kind including, but not limited to, protected characteristics, intersectional experiences and cultural differences.	Exploring and Understanding Science	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development
K21: The need to support the communication needs of service users and carers, such as through the use of an appropriate interpreter.	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development

K22: The need to provide service users or	Work-Based Learning and	Work-Based Learning and	Work-Based Learning and
people acting on their behalf with the	Professional Development	Professional Development	Professional Development
information necessary in accessible formats to			
enable them to make informed decisions			
K23: The risks and possible serious	Work-Based Learning and	Introduction to Pharmacology and	Advanced Topics in Genetics
consequences of errors and omissions in both	Professional Development	Toxicology	
requests for, and results of, laboratory			
investigations			
KO4. The need to adhere to protocole of	Diamadical Laboratory Cajaraa	Diand Calenaaa	Independent Desearch Dreiset
K24: The need to adhere to protocols of	Biomedical Laboratory Science	Blood Sciences	Independent Research Project
specimen identification, including barcoding and			
electronic tag systems.			
K25: The importance of backup storage of	Biomedical Laboratory Science	Blood Sciences	Independent Research Project
electronic data.	•		
K26: The principles and practises of other	Biomedical Laboratory Science	Introduction to Pharmacology and	Pathophysiology
health and care professionals and systems and	Distributed Education Colonico	Toxicology	r allophyclology
health and care professionals and systems and		TOXICOlogy	
now they interact with own profession.			la la ser la st Dans ser la Daviest
K27: The need to build and sustain professional	Work-Based Learning and	work-Based Learning and	Independent Research Project
relationships as both an autonomous	Professional Development	Professional Development	
practitioner and collaboratively as a member of			
a team.			
K28: The qualities, behaviours and benefits of	Work-Based Learning and	Work-Based Learning and	Diagnostic Medicine
leadership.	Professional Development	Professional Development	
K29: Recognise that leadership is a skill all	Work-Based Learning and	Advanced Cell Biology	Diagnostic Medicine
professionals can demonstrate	Professional Development	/ availoca Coll Biology	Blaghostio Medicine
professionals can demonstrate.		Mark Desert Learning and	Made Deced Learning and
K30: The need to engage service users and	Work-Based Learning and	work-Based Learning and	work-Based Learning and
carers in planning and evaluating diagnostics	Professional Development	Professional Development	Professional Development
and assessment outcomes to meet their needs			
and goals.			
K31: The impact of pathology services on the	Biomedical Laboratory Science	Blood Sciences	Diagnostic Medicine
service user care pathway	Distributed Education Colonico		Diagnoodo modicino
service user care pairway.			
K32: The value of reflective practice and the	Biomedical Laboratory Science	Work-Based Learning and	Independent Research Proiect
need to record the outcome of such reflection to	5	Professional Development	,
support continuous improvement			
K33: The value of multi-disciplinary reviews,	Biomedical Laboratory Science	Work-Based Learning and	Diagnostic Medicine
case conferences and other methods of review.		Professional Development	
K34: The value of gathering and using data for	Human Genetics and Molecular	Mechanisms of Human Pathology	Independent Research Project
quality assurance and improvement	Biology		· · ·
programmes.			

K35: The structure and function of the human	Cell Biology	Biochemistry	Pathophysiology
body, together with knowledge of physical and			
mental health, disease, disorder and			
dystunction relevant to their profession.	Fundaria a su della denotora dia a Osiana a	Mashariana af Lluman Dathalam.	la den en dent Desseret Dreiset
K36: The principles and applications of scientific	Exploring and Understanding Science	Mechanisms of Human Pathology	Independent Research Project
enquiry, including the evaluation of treatment			
encacy and the research process.			
K37: The roles of other professions in health	Exploring and Understanding Science	Work-Based Learning and	Diagnostic Medicine
and social care and understand how they may		Professional Development	-
relate to the role of biomedical scientist.			
K38: The structure and function of health and	Biomedical Laboratory Science	Work-Based Learning and	Work-Based Learning and
social care systems and services in the UK.		Professional Development	Professional Development
K39: The theoretical basis of, and the variety of	Human Anatomy and Physiology	Introduction to Pharmacology and	Diagnostic Medicine
approaches to, assessment and intervention.		loxicology	
K40: The underpinning scientific principles of	Human Genetics and Molecular	Blood Sciences	Diagnostic Medicine
investigations provided by clinical laboratory	Biology		-
services.			
K41: The role of the following specialisms in the	Human Anatomy and Physiology	Advanced Cell Biology	Diagnostic Medicine
diagnosis, treatment and management of			
disease: cellular science, blood science,			
infection science, molecular and genetic science			
K42: The techniques and accoriated	Human Constins and Molecular	Machanisms of Human Pathology	Diagnostic Medicine
instrumentation used in the practice of	Biology	Mechanisms of Human Fathology	Diagnostic Medicine
biomedical science	Diology		
K43: The biological hazards groups and	Biomedical Laboratory Skills	Introduction to Pharmacology and	Diagnostic Medicine
associated containment levels.	,	Toxicology	
K44: Recognise a range of research	Biomedical Laboratory Science	Mechanisms of Human Pathology	Diagnostic Medicine
methodologies relevant to own role.			
K45: Recognise the value of research to the	Exploring and Understanding Science	Blood Sciences	Independent Research Project
critical evaluation of practice.	, , , , , , , , , , , , , , , , , , , ,		
K46: The implications of non-analytical errors.	Human Genetics and Molecular	Introduction to Pharmacology and	Independent Research Project
	Biology	Toxicology	
K47: The extent of the role and responsibility of	Biomedical Laboratory Science	Blood Sciences	Diagnostic Medicine
the laboratory with respect to the quality			
management of hospital, primary care and			

community based laboratory services for near- service user testing and non-invasive			
techniques.			
K48: The need to assess and evaluate new procedures prior to routine use.	Biomedical Laboratory Science	Introduction to Pharmacology and Toxicology	Advanced Topics in Genetics
K49: The need to maintain the safety of self and others, including service users, carers and colleagues.	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development	Independent Research Project
K50: Relevant health and safety legislation, local operational procedures and policies.	Introduction to Immunology	Introduction to Pharmacology and Toxicology	Independent Research Project
K51: The principles of good laboratory practice.	Biomedical Laboratory Science	Infection Sciences and Clinical Immunology	Diagnostic Medicine
K52: The role of own profession in health promotion, health education and preventing ill health.	Introduction to Immunology	Infection Sciences and Clinical Immunology	Pathophysiology
K53: How social, economic and environmental factors, wider determinants of health, can influence a person's health and well-being.	Biomedical Laboratory Science	Biochemistry	Pathophysiology
S1: Identify the limits of own practice and when to seek advice or refer to another professional or service.	Biomedical Laboratory Science	Advanced Cell Biology	Independent Research Project
S2: Recognise the need to manage own workload and resources safely and effectively, including managing the emotional burden that comes with working in a pressured environment.	Exploring and Understanding Science	Advanced Cell Biology	Independent Research Project
S3: Keep own skills and knowledge up to date.	Exploring and Understanding Science	Advanced Cell Biology	Independent Research Project
S4: Maintain high standards of personal and professional conduct.	Biomedical Laboratory Science	Mechanisms of Human Pathology	Independent Research Project
S5: Promote and protect the service user's interests at all times.	Biomedical Laboratory Science	Blood Sciences	Diagnostic Medicine
S6: Actively look for signs of abuse and engage in relevant safeguarding processes.	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development
S7: Respect and uphold the rights, dignity, values, and autonomy of service users, including own role in the assessment.	Biomedical Laboratory Science	Introduction to Pharmacology and Toxicology	Independent Research Project

diagnostic, treatment and/or therapeutic			
S8: Recognise that relationships with service users, carers and others should be based on mutual respect and trust, and maintain high standards of care in all circumstances	Biomedical Laboratory Science	Blood Sciences	Independent Research Project
S9: Obtain valid consent, which is voluntary and informed, has due regard to capacity, is proportionate to the circumstances and is appropriately documented.	Exploring and Understanding Science	Blood Sciences	Independent Research Project
S10: Exercise a professional duty of care.	Biomedical Laboratory Science	Infection Sciences and Clinical Immunology	Independent Research Project
S11: Apply legislation, policies and guidance relevant to own profession and scope of practice.	Biomedical Laboratory Science	Blood Sciences	Independent Research Project
S12: Recognise the power imbalance which comes with being a health care professional, and ensure it is not for personal gain.	Biomedical Laboratory Science	Blood Sciences	Independent Research Project
S13: Work in accordance with the British, European and International Standards that govern and affect pathology laboratory practice.	Biomedical Laboratory Science	Infection Sciences and Clinical Immunology	Pathophysiology
S14: Identify own anxiety and stress and recognise the potential impact on own practice.	Biomedical Laboratory Science	Advanced Cell Biology	Independent Research Project
S15: Develop and adopt clear strategies for physical and mental self-care and self- awareness, to maintain a high standard of professional effectiveness and a safe working environment.	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development	Independent Research Project
S16: Recognise that they are personally responsible for and must be able to justify their decisions and actions.	Biomedical Laboratory Science	Mechanisms of Human Pathology	Independent Research Project
S17: Use own skills, knowledge and experience, and the information available, to make informed decisions and / or take action where necessary.	Biomedical Laboratory Science	Blood Sciences	Independent Research Project
S18: Make reasoned decisions to initiate, continue, modify or cease treatment or the use of techniques or procedures, and record the decisions and reasoning appropriately.	Biomedical Laboratory Science	Mechanisms of Human Pathology	Independent Research Project

S19: Make and receive appropriate referrals,	Work-Based Learning and	Work-Based Learning and	Work-Based Learning and
S20: Exercise personal initiative	Cell Biology	Advanced Cell Biology	Independent Research Project
S21: Demonstrate a logical and systematic	Exploring and Understanding Science	Infection Sciences and Clinical	Independent Research Project
approach to problem solving.		Immunology	
S22: Use research, reasoning and problem solving skills when determining appropriate actions.	Human Anatomy and Physiology	Biochemistry	Advanced Topics in Genetics
S23: Respond appropriately to the needs of all different groups and individuals in practice, recognising this can be affected by difference of any kind including, but not limited to, protected characteristics, intersectional experiences and cultural differences.	Human Genetics and Molecular Biology	Blood Sciences	Diagnostic Medicine
S24: Recognise the potential impact of own values, beliefs and personal biases, which may be unconscious, on practice and take personal action to ensure all service users and carers are treated appropriately with respect and dignity.	Exploring and Understanding Science	Blood Sciences	Independent Research Project
S25: Actively challenge barriers to inclusion, supporting the implementation of change wherever possible.	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development
S26: Adhere to the professional duty of confidentiality.	Biomedical Laboratory Science	Mechanisms of Human Pathology	Diagnostic Medicine
S27: Respond in a timely manner to situations where it is necessary to share information to safeguard service users, carers and/or the wider public and recognise situations where it is necessary to share information to safeguard service users, carers and/or the wider public.	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development
S28: Use effective and appropriate verbal and non-verbal skills to communicate with service users, carers, colleagues and others.	Biomedical Laboratory Science	Biochemistry	Independent Research Project
S29: Communicate in English to the required standard for the profession.	Exploring and Understanding Science	Mechanisms of Human Pathology	Pathophysiology
S30: Work with service users and/or carers to facilitate the service user's preferred role in	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development

decision-making, and provide service users and carers with the information they may need where appropriate.			
S31: Modify own means of communication to address the individual communication needs and preferences of service users and carers, and remove any barriers to communication where possible.	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development
S32: Use information, communication and digital technologies appropriate to own practice.	Exploring and Understanding Science	Mechanisms of Human Pathology	Diagnostic Medicine
S33: Communicate the outcomes of biomedical procedures.	Human Genetics and Molecular Biology	Mechanisms of Human Pathology	Independent Research Project
S34: Keep full, clear and accurate records in accordance with applicable legislation, protocols and guidelines.	Exploring and Understanding Science	Biochemistry	Advanced Topics in Genetics
S35: Manage records and all other information in accordance with applicable legislation, protocols and guidelines.	Exploring and Understanding Science	Biochemistry	Advanced Topics in Genetics
S36: Use digital record keeping tools, where required.	Exploring and Understanding Science	Blood Sciences	Diagnostic Medicine
S37: Recognise and communicate the risks and possible serious consequences of errors and omissions in both requests for, and results of, laboratory investigations.	Human Genetics and Molecular Biology	Mechanisms of Human Pathology	Independent Research Project
S38: Use systems for the accurate and correct identification of service users and laboratory specimens.	Human Genetics and Molecular Biology	Mechanisms of Human Pathology	Diagnostic Medicine
S39: Work in partnership with service users, carers, colleagues and others.	Biomedical Laboratory Science	Biochemistry	Independent Research Project
S40: Contribute effectively to work undertaken as part of a multi-disciplinary team.	Work-Based Learning and Professional Development	Infection Sciences and Clinical Immunology	Independent Research Project
S41: Identify anxiety and stress in service users, carers and colleagues, adapting own practice and providing support where appropriate.	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development	Independent Research Project
S42: Identify own leadership qualities, behaviours and approaches, taking into account	Biomedical Laboratory Science	Work-Based Learning and Professional Development	Diagnostic Medicine

the importance of equality, diversity and inclusion.			
S43: Demonstrate leadership behaviours appropriate to own practice.	Biomedical Laboratory Science Advanced Cell Biology		Diagnostic Medicine
S44: Act as a role model for others.	Human Genetics and Molecular Biology	Blood Sciences	Pathophysiology
S45: Promote and engage in the learning of others.	Biomedical Laboratory Science	Blood Sciences	Pathophysiology
S46: Engage in evidence-based practice.	Exploring and Understanding Science	Introduction to Pharmacology and Toxicology	Independent Research Project
S47: Gather and use feedback and information, including qualitative and quantitative data, to evaluate the responses of service users to own care.	Exploring and Understanding Science	Biochemistry	Independent Research Project
S48: Monitor and systematically evaluate the quality of practice, and maintain an effective quality management and quality assurance process working towards continual improvement.	Exploring and Understanding Science	Introduction to Pharmacology and Toxicology	Independent Research Project
S49: Participate in quality management, including quality control, quality assurance, clinical governance and the use of appropriate outcome measures.	Biomedical Laboratory Science	Introduction to Pharmacology and Toxicology	Independent Research Project
S50: Evaluate care plans or intervention plans using recognised and appropriate outcome measures, in conjunction with the service user where possible, and revise the plans as necessary.	Work-Based Learning and Professional Development	Introduction to Pharmacology and Toxicology	Work-Based Learning and Professional Development
S51: Select and apply quality and process control measures.	Biomedical Laboratory Science	Introduction to Pharmacology and Toxicology	Independent Research Project
S52: Identify and respond appropriately to abnormal outcomes from quality indicators.	Biomedical Laboratory Science	Introduction to Pharmacology and Toxicology	Independent Research Project
S53: Apply the principles and applications of scientific enquiry, including the evaluation of treatment efficacy and the research process.	Biomedical Laboratory Science	Introduction to Pharmacology and Toxicology	Independent Research Project
S54: Evaluate analyses using qualitative and quantitative methods to aid the diagnosis, screening and monitoring of health and disorders.	Biomedical Laboratory Science	Introduction to Pharmacology and Toxicology Blood Sciences	Independent Research Project

S55: Change own practice as needed to take	Biomedical Laboratory Science	Advanced Cell Biology	Independent Research Project
changing contexts.			
S56: Gather appropriate information.	Biomedical Laboratory Science	Mechanisms of Human Pathology	Independent Research Project
S57: Analyse and critically evaluate the information collected.	Biomedical Laboratory Science	Mechanisms of Human Pathology	Independent Research Project
S58: Select and use appropriate assessment techniques and equipment.	Biomedical Laboratory Science	Blood Sciences	Independent Research Project
S59: Undertake and record a thorough, sensitive, and detailed assessment.	Biomedical Laboratory Science	Mechanisms of Human Pathology	Independent Research Project
S60: Undertake or arrange investigations as appropriate.	Biomedical Laboratory Science	Blood Sciences	Independent Research Project
S61: Conduct appropriate assessment or monitoring procedures, treatment, therapy or other actions safely and effectively.	Biomedical Laboratory Science	Introduction to Pharmacology and Toxicology	Independent Research Project
S62: Critically evaluate research and other evidence to inform own practice.	Biomedical Laboratory Science	Mechanisms of Human Pathology	Independent Research Project
S63: Engage service users in research as appropriate.	Exploring and Understanding Science	Blood Sciences	Independent Research Project
S64: Perform and supervise procedures in clinical laboratory investigations to reproducible standards.	Biomedical Laboratory Science	Blood Sciences	Independent Research Project
S65: Operate and utilise specialist equipment according to own discipline.	Biomedical Laboratory Science	Blood Sciences	Diagnostic Medicine
S66: Validate scientific and technical data and observations according to pre-determined quality standards.	Biomedical Laboratory Science	Introduction to Pharmacology and Toxicology	Independent Research Project
S67: Demonstrate proficiency in practical skills in cellular science, blood science, infection science, molecular and genetic science and reproductive science, where appropriate to the discipline.	Biomedical Laboratory Science	Mechanisms of Human Pathology	Pathophysiology
S68: Demonstrate practical skills in the processing and analysis of specimens including specimen identification, the effect of storage on specimens and the safe retrieval of specimens.	Biomedical Laboratory Science	Blood Sciences	Independent Research Project
S69: Demonstrate practical skills in the investigation of disease processes.	Human Genetics and Molecular Biology	Blood Sciences	Independent Research Project

S70: Work in conformance with standard	Biomedical Laboratory Science	Blood Sciences	Independent Research Project
operating procedures and conditions.			
S71: Work with accuracy and precision.	Introduction to Immunology	Biochemistry	Pathophysiology
S72: Perform calibration and quality control checks.	Introduction to Immunology	Biochemistry	Advanced Topics in Genetics
S73: Demonstrate operational management of laboratory equipment to check that equipment is functioning within its specifications and to respond appropriately to abnormalities.	Cell Biology	Blood Sciences	Pathophysiology
S74: Formulate specific and appropriate management plans including the setting of timescales.	Introduction to Immunology	Introduction to Immunology Mechanisms of Human Pathology	
S75: Select suitable specimens and procedures relevant to service users' clinical needs, including collection and preparation of specimens as and when appropriate.	Cell Biology	Blood Sciences	Independent Research Project
S76: Investigate and monitor disease processes and normal states.	Human Anatomy and Physiology	Advanced Cell Biology	Diagnostic Medicine
S77: Use standard operating procedures for analyses including point of care in vitro diagnostic devices.	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development
S78: Use statistical packages and present data in an appropriate format.	Exploring and Understanding Science	Mechanisms of Human Pathology	Independent Research Project
S79: Design experiments, report, interpret and present data using scientific convention, including application of SI units and other units used in biomedical science.	Cell Biology	Mechanisms of Human Pathology	Independent Research Project
S80: Safely interpret and authorise service user results.	Human Genetics and Molecular Biology	Blood Sciences	Independent Research Project
S81: Comply with all relevant health and safety legislation, local operational procedures and policies.	Biomedical Laboratory Science	Blood Sciences	Diagnostic Medicine
S82: Work safely, including being able to select appropriate hazard control and risk management, reduction or elimination techniques in a safe manner and in accordance with health and safety legislation.	Biomedical Laboratory Science	Infection Sciences and Clinical Immunology	Diagnostic Medicine

S83: Select appropriate personal protective equipment and use it correctly.	Biomedical Laboratory Science	Blood Sciences	Diagnostic Medicine
S84: Establish safe environments for practice, which appropriately manages risk.	Biomedical Laboratory Science	Blood Sciences	Diagnostic Medicine
S85: Empower and enable individuals, including service users and colleagues, to play a part in managing their own health.	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development	Work-Based Learning and Professional Development
S86: Engage in occupational health, including being aware of immunisation requirements.	Biomedical Laboratory Science	Infection Sciences and Clinical Immunology	Independent Research Project
B1: Demonstrate a logical and systematic approach to problem solving.	Exploring and Understanding Science	Introduction to Pharmacology and Toxicology	Independent Research Project
	Human Genetics and Molecular Biology	Mechanisms of Human Pathology	
B2: Treat people with dignity.	Human Anatomy and Physiology	Advanced Cell Biology	Work-Based Learning and Professional Development
B3: Show respect and empathy for those you work with.	Biomedical Laboratory Science	Infection Sciences and Clinical Immunology	Pathophysiology
B4: Be adaptable, reliable and consistent.	Cell Biology	Biochemistry	Advanced Topic in Genetics
B5: Uphold high quality and safe practice.	Introduction to Immunology Work-Based Learning and Professional Development	Blood Sciences Work-Based Learning and Professional Development	Diagnostic Medicine

During the programme, apprentices will integrate KSBs into work-based practice, aligning with the standards of proficiency set by the HCPC for Biomedical Scientists. This will be demonstrated and assessed through reflective practice, ensuring continuous development and adherence to professional proficiency and through completing the IBMS Registration Training Portfolio.

HCPC Standards:
1. Practice safely and effectively within their scope of practice
2. Practise within the legal and ethical boundaries of their practise.
3. Look after the health and well-being, seeking appropriate support where necessary.
4. Practise as an autonomous professional, exercising their own professional judgement.
5. Recognise the impact of culture, equality and diversity on practise in a non-discriminatory and inclusive manner.
6. Understand the importance of and maintain confidentiality.
7. Communicate effectively.
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8. Work appropriately with others.
9. Maintain records appropriately.
10. Reflect on and review practise.
11. Assure the quality of their practise.
12. Understand and apply the key concepts of the knowledge base relevant to their profession.
13. Draw on appropriate knowledge and skills to inform practise.
14. Establish and maintain a safe practise environment.
15. Promote health and prevent ill health.

ENGLISH, MATHS AND CAREERS INFORMATION, ADVICE AND GUIDANCE

Unit	English	Maths	Careers IAG
Biomedical Laboratory Science - L4	English skills are strengthened through scientific report writing, documentation, and presenting biomedical data.	Maths is applied through calculations in laboratory practices, risk assessments, quality control, and data interpretation.	This unit exposes apprentices to career pathways in clinical and biomedical sciences. It provides insight into professional roles, regulatory bodies (HCPC, IBMS, HTA), and industry standards, helping apprentices understand career options and professional responsibilities.
Cell Biology - L4	English skills are strengthened through scientific report writing, documentation, and presenting biomedical data.	Maths is applied through calculations in laboratory practices and data interpretation.	This unit exposes apprentices to career pathways in research and biomedical sciences.
Exploring and Understanding Science - L4	Apprentices will develop English skills through essay and reports writing and through academic literature analysis. Oral communication is also honed through discussions and feedback.	This unit incorporates data collection, manipulation, and presentation skills, including simple numeric calculations and interpreting data through graphs and Bayesian statistics.	This unit provides insights into research methodologies, encouraging apprentices to explore career paths in research, academia, and industry.
Human Anatomy and Physiology - L4	The unit enhances written communication through reports and essays on human body systems and disease processes.	Apprentices will apply mathematical skills in analysing data related to human health and disease, including measurements, calculations, and interpreting results from physiological techniques.	This unit offers insight into career paths in clinical diagnostics, physiology, and medical research.
Human Genetics and Molecular Biology - L4	The unit enhances literacy skills by reading complex genetic literature and writing reports explaining gene function, mutations, and clinical implications.	Apprentices will apply mathematical skills to genetic data analysis, quantitative result interpretation and through probabilities in genetic risk assessments.	The unit provides insight into clinical genetics and the role of geneticists in healthcare and research. It discusses genetic testing and data analysis in healthcare and introduces career pathways in genetics counselling, biomedical research, and clinical laboratory settings.
Introduction to Immunology - L4	The unit involves engaging with complex scientific literature and exercising writing skills through reports and presentations	Apprentices will apply data analysis skills when interpreting immune response data and using technology to study immune cells,	The unit provides insight into careers in immunology, biomedical research, and clinical laboratories by introducing technologies used in immune system

	explaining immune mechanisms and technologies.	which may involve basic calculations and statistical analysis.	studies, opening pathways to roles such as immunologists, laboratory technicians, and research scientists.
Work-Based Learning and Professional Development - L4	Apprentices will enhance their written communication skills through reflective logs and assessments.	Numeracy skills will be developed through laboratory-based activities and and quality control exercises as part of work-based learning.	This unit will support apprentices in developing essential employability skills, preparing them for HCPC registration and advancing their career. It will also provide exposure to professional expectations and career options within biomedical sciences.
Advanced Cell Biology - L5	The unit enhances reading and writing skills through literature review, report writing and presentations.	Apprentices will use mathematical skills to analyse experimental data, perform calculations and interpret results.	This unit exposes apprentices to career pathways in research and biomedical sciences.
Biochemistry - L5	The unit involves reading, understanding and engaging with complex biochemical processes.	Apprentices will use mathematical and quantitative skills to analyse experimental data and interpret results.	This unit exposes apprentices to career pathways in research and biomedical sciences.
Blood Sciences - L5	The unit will develop the apprentice's literacy skills through scientific writing, poster presentations, and oral Q&A sessions.	Apprentices will use numerical skills by performing calculations related to blood analysis, concentrations, and data interpretation in laboratory settings.	This unit introduces apprentices to career pathways in clinical diagnostics and biomedical research.
Infection Sciences and Clinical Immunology - L5	The unit will enhance scientific communication through report writing, poster presentations and oral discussions.	This unit will incorporate numerical skills to analyse immune responses, interpret infection data, and perform calculations related to diagnostic testing.	This unit introduces apprentices for careers in clinical immunology, medical microbiology, infection control, and biomedical research, developing both theoretical knowledge and practical laboratory skills relevant to NHS and research settings.
Introduction to Pharmacology and Toxicology - L5	The unit will develop the apprentice's scientific writing.	This unit will incorporate numerical skills of drug calculations and analysis.	This unit introduces career pathways in pharmacology, toxicology, drug development, and clinical trials.
Mechanisms of Human Pathology - L5	This unit involves developing literacy skills through scientific writing of lab reports and critical analysis of research papers.	This unit involves maths and statistics in experimental design and data testing and analysis.	This unit considers careers in biomedical research, clinical pathology, molecular medicine, and healthcare policy.
Work-Based Learning and Professional Development - L5	Apprentices will enhance their written communication skills through reflective logs and assessments.	Numeracy skills will be developed through laboratory-based activities and and quality control exercises as part of work-based learning.	This unit will support apprentices in developing essential employability skills, preparing them for HCPC registration and advancing their career. It will also provide exposure to professional expectations and career options within biomedical sciences.
Advanced Topics in Genetics - L6	The unit enhances literacy skills by reading complex genetic literature and writing reports explaining gene function, mutations, and clinical implications.	Apprentices will apply mathematical skills to genetic data analysis, quantitative results interpretation and through probabilities in genetic risk assessment.	The unit provides insight into clinical genetics and the role of geneticists in healthcare and research. It guides career pathways in genetics counselling, biomedical research, and clinical laboratory settings, while also discussing genetic testing and data analysis in healthcare.
Diagnostic Medicine - L6	English skills are developed through written communication through essays and report writing, ensuring clear articulation of scientific concepts.	This unit enhances maths skills through data interpretation and problem-solving skills through diagnostic test analysis.	The unit involves elements of biomedical science in laboratory diagnostics. It also provides insight into becoming a registered biomedical scientist and the roles in clinical diagnostics and research.

Independent Research Project – L6	This unit will develop written communication through structured research reports and academic writing.	The unit will significantly enhance data analysis skills through statistical evaluation and research interpretation.	The unit supports career progression by fostering independent research skills and developing the ability to critically analyse and interpret data, essential for professional practice. It also teaches research methodologies and academic report writing, preparing apprentices who wish to further their studies at master's and PhD levels.
Pathophysiology - L6	The unit develops Maths and English skills through evaluating laboratory results and writing them up.		This unit provides insight into biomedical careers and enhances understanding of disease prevention, diagnostics, and therapeutic strategies within healthcare.
Work-Based Learning and Professional Development - L6	Apprentices will enhance their written communication skills through reflective logs and assessments.	Numeracy skills will be developed through laboratory-based activities and and quality control exercises as part of work-based learning.	This unit will support apprentices in developing essential employability skills, preparing them for HCPC registration and advancing their career. It will also provide exposure to professional expectations and career options within biomedical sciences.

SAFEGUARDING, PREVENT AND FUNDAMENTAL BRITISH VALUES

Unit	Safeguarding	Prevent	British values
Biomedical Laboratory Science - L4	The unit reinforces safeguarding through GDPR, informed consent, and patient confidentiality, ensuring data protection and ethical handling of human samples.	Prevent Duty is contextualised by promoting critical thinking, ethical decision-making, and professional responsibility, helping apprentices recognise and challenge unethical situations.	This unit aligns with the Rule of Law through compliance with regulations such as GDPR, HCPC, IBMS, HTA, and COSHH, ensuring ethical and legal laboratory practices. Individual Liberty is reinforced through informed consent and ethical approval in biomedical research. Respect & Tolerance are promoted by fostering inclusivity in healthcare, understanding patient rights, and ensuring ethical considerations in laboratory work.
Cell Biology - L4	The unit reinforces safeguarding by emphasising ethical standards in research, including the proper handling of biological samples and ensuring the confidentiality and safety of data. It also promotes informed consent in experimental design, particularly when dealing with human tissue or biological data.	Prevent Duty is encouraged through critical thinking, ethical decision-making, and professional responsibility, helping apprentices recognise and challenge unethical situations.	This unit promotes Respect and Tolerance through ethical considerations of scientific research. It reinforces the Rule of Law by adhering to ethical guidelines, research regulations, and laboratory safety standards. Individual Liberty is encouraged through critical thinking and ethical decision-making in experiments and research.
Exploring and Understanding Science - L4	The unit reinforces safeguarding by emphasising ethical standards in research.	Prevent Duty is encouraged through critical thinking, ethical decision-making, and professional responsibility, helping apprentices recognise and challenge unethical situations.	This unit promotes Respect and Tolerance through ethical considerations of scientific research. It reinforces the Rule of Law by adhering to ethical guidelines, research regulations, and laboratory safety standards. Individual Liberty is encouraged

			through critical thinking and ethical decision-making in experiments and research.
Human Anatomy and Physiology - L4	The unit reinforces safeguarding by emphasising ethical standards in research.	Prevent Duty is encouraged through critical thinking, ethical decision-making, and professional responsibility, helping apprentices recognise and challenge unethical situations.	This unit promotes Respect and Tolerance through ethical considerations of scientific research. It reinforces the Rule of Law by adhering to ethical guidelines, research regulations, and laboratory safety standards. Individual Liberty is encouraged through critical thinking and ethical decision-making in experiments and research.
Human Genetics and Molecular Biology - L4	The unit reinforces safeguarding by emphasising ethical standards and confidentiality of genetic data, ensuring sensitive information is protected.	Prevent Duty is encouraged through critical assessing ethical implications of genetic research in healthcare.	This unit promotes Respect and Tolerance through ethical considerations of genetic research and through promoting respect for genetic diversity and ethical treatment of information in clinical settings. It reinforces the Rule of Law by exercised through ethical guidelines in genetic research, informed consent, and confidentiality.
Introduction to Immunology - L4	The unit emphasises ethical standards and confidentiality when handling sensitive and ensuring patient protection in clinical research.	Prevent Duty is encouraged through critical thinking in evaluating immune system studies and to challenge any unethical practices or misinformation related to immunology.	Apprentices will learn about ethical guidelines and regulations in the study of immunity, including patient consent and privacy in clinical and research settings. They will also develop an understanding of the immune system's role in personal health, empowering them to make informed decisions regarding healthcare. The unit promotes respect for human diversity and understanding of individual immune responses, particularly in the context of allergies and autoimmunity.
Work-Based Learning and Professional Development - L4	This unit introduces apprentices to Safeguard recognise and respond to potential risks withir frameworks, apprentices will begin to develop protecting vulnerable individuals. Reflective pr their ability to identify signs of harm, neglect a communication skills in this unit will empower and contribute to a safe and inclusive work en conduct.	ing and Prevent duties by helping them n practice. Through legal and ethical an understanding of their responsibilities in ractice and self-management will also enhance nd radicalisation. Additionally, teamwork and apprentices to report concerns appropriately vironment while upholding professional codes of	This unit will develop Fundamental British Values by fostering respect, professionalism and ethical responsibility within biomedical science. Apprentices will explore Individual Liberty through reflective practice and by managing their professional growth and well-being. They will develop an understanding of the Rule of Law by adhering to professional and regulatory standards and ethical frameworks. Mutual Respect and Tolerate will be promoted through teamwork and effective communication with a diverse setting. Additionally, the unit will enhance awareness of Democracy through structured learning, mentoring and professional accountability, ensuring responsible engagement within the workplace and the wider healthcare community.
Advanced Cell Biology - L5	The unit emphasises ethical standards and confidentiality in clinical research.	Prevent Duty is encouraged through critical thinking in evaluating scientific studies and to	This unit involves ethical guidelines and confidentiality in biological data. It also adopts inclusive approaches

		challenge any unethical approaches in research	to developing medical solutions, acknowledging ethical diversity in research
Biochemistry - L5	The unit promotes safeguarding of samples used in biochemical and medical research.	Prevent Duty is encouraged through critical thinking in evaluating scientific studies and to challenge any unethical approaches in research.	This unit involves ethical guidelines and confidentiality in experimental reagents and material.
Blood Sciences - L5	The unit promotes patient safety, confidentiality and infection control in handling blood samples.	Prevent Duty is encouraged through critical thinking to challenge misinformation related to transfusion science and ensure ethical biomedical practices.	This unit involves ethical guidelines and regulations of patient confidentiality of blood samples, particularly regarding transfusion safety. The unit fosters appreciation for diverse patient needs and the importance of ethical decision-making in clinical and research settings.
Infection Sciences and Clinical Immunology - L5	The unit focuses on biosafety, infection control protocols, and the ethical handling of patient data and samples.	Prevent Duty is encouraged through critical thinking to challenge misuse of biological research and ensure ethical scientific practices in immunology and infection sciences.	This unit involves ethical guidelines and legal responsibilities in handling infectious materials and immune-related treatments. It also highlights the importance of ethics, diverse patient care and global health challenges in infection control.
Introduction to Pharmacology and Toxicology - L5	The unit focuses safeguarding through safe drug administration and toxicology awareness.	Prevent Duty is encouraged through critical evaluation of drug misuse and ethical awareness in pharmaceutical practices.	This unit involves drug regulations, ethical guidelines and safe prescribing. It also covers informed consent and patient rights in pharmacology, thereby exercising Individual Liberty and Respect.
Mechanisms of Human Pathology - L5	The unit emphasises ethical medical research, patient safety, and disease prevention	Prevent duties are encouraged through critical thinking on bioethics and misuse in molecular research.	This unit reinforces Rule of Law through focus on ethical research, medical regulations, and policies in molecular medicine, ensuring apprentices understand legal frameworks governing biomedical science. It also promotes Democracy and Individual Liberty by exploring patient rights, funding allocation, and public health decision-making.
Work-Based Learning and Professional Development - L5	This unit introduces apprentices to Safeguard recognise and respond to potential risks withir frameworks, apprentices will begin to develop protecting vulnerable individuals. Reflective pr their ability to identify signs of harm, neglect a communication skills in this unit will empower and contribute to a safe and inclusive work en conduct.	ing and Prevent duties by helping them n practice. Through legal and ethical an understanding of their responsibilities in ractice and self-management will also enhance ind radicalisation. Additionally, teamwork and apprentices to report concerns appropriately invironment while upholding professional codes of	This unit will develop Fundamental British Values by fostering respect, professionalism and ethical responsibility within biomedical science. Apprentices will explore Individual Liberty through reflective practice and by managing their professional growth and well-being. They will develop an understanding of the Rule of Law by adhering to professional and regulatory standards and ethical frameworks. Mutual Respect and Tolerate will be promoted through teamwork and effective communication with a diverse setting. Additionally, the unit will enhance awareness of Democracy through structured learning, mentoring and professional accountability, ensuring responsible

			engagement within the workplace and the wider healthcare community.
Advanced Topics in Genetics - L6	The unit reinforces safeguarding by emphasising ethical standards and confidentiality of genetic data, ensuring sensitive information is protected.	Prevent Duty is encouraged through critical assessing ethical implications of genetic research in healthcare.	This unit promotes Respect and Tolerance through ethical considerations of genetic research and through promoting respect for genetic diversity and ethical treatment of information in clinical settings. It reinforces the Rule of Law by exercised through ethical guidelines in genetic research, informed consent, and privacy when handling genetic data.
Diagnostic Medicine - L6	The unit emphasises Safeguarding and Prevent by highlighting the importance of patient data handling and confidentiality in clinical diagnostics, while also addressing ethical considerations in biomedical research and diagnostics to promote responsible practices.		The unit upholds Fundamental British Values by reinforcing the Rule of Law, ensuring adherence to medical regulations and ethical standards in diagnostics, and promoting Democracy & Individual Liberty by encouraging apprentice engagement in discussions around ethical dilemmas in clinical diagnostics.
Independent Research Project - L6	The unit supports Safeguarding and Prevent by emphasising data security, confidentiality, and informed consent in research. It also highlights ethical considerations, ensuring responsible and safe research practices.		The unit embeds Fundamental British Values by reinforcing adherence to ethical research practices and data confidentiality (Rule of Law). It promotes academic freedom, encouraging critical discussions on research impact (Democracy & Individual Liberty). Additionally, it fosters professional collaboration and respect for diverse perspectives in research (Mutual Respect & Tolerance).
Pathophysiology - L6	This unit emphasises the ethical handling of patient data and biomedical research.		The unit reinforces the Rule of Law by emphasising the importance of policies on disease prevention and management, aligning with legal frameworks for public health. It also promotes Democracy & Individual Liberty by encouraging discussions on ethics and engages critical thinking.
Work-Based Learning and Professional Development - L6	This unit introduces apprentices to Safeguarding and Prevent duties by helping them recognise and respond to potential risks within practice. Through legal and ethical frameworks, apprentices will begin to develop an understanding of their responsibilities in protecting vulnerable individuals. Reflective practice and self-management will also enhance their ability to identify signs of harm, neglect and radicalisation. Additionally, teamwork and communication skills in this unit will empower apprentices to report concerns appropriately and contribute to a safe and inclusive work environment while upholding professional codes of conduct.		This unit will develop Fundamental British Values by fostering respect, professionalism and ethical responsibility within biomedical science. Apprentices will explore Individual Liberty through reflective practice and by managing their professional growth and well-being. They will develop an understanding of the Rule of Law by adhering to professional and regulatory standards and ethical frameworks. Mutual Respect and Tolerate will be promoted through teamwork and effective communication with a diverse setting. Additionally, the unit will enhance awareness of Democracy through structured learning, mentoring and professional accountability, ensuring responsible

	engagement within the workplace and the wider
	healthcare community.

INDICATIVE TIMELINE FOR DELIVERY OF ACTIVE LEARNING

This is an indicative timeline of when apprentices might typically undertake activities to develop the Knowledge, Skills and Behaviours described in the apprenticeship standard. For day release delivery models there must be activity planned for each calendar month.

Start Month	End Month	Unit	Level in Programme	Taught OTJ Hours	Non-Taught OTJ Hours	Learning Outcomes
1	4	Exploring and Understanding Science	4	20	32	All ILOs
1	4	Human Genetics and Molecular Biology	4	40	32	All ILOs
1	11	Work-Based Learning and Professional Development	4	22	0	All ILOs
5	8	Cell Biology	4	40	32	All ILOs
5	8	Introduction to Immunology	4	20	32	All ILOs
9	12	Human Anatomy and Physiology	4	10	32	All ILOs
9	12	Biomedical Laboratory Science	4	10	32	All ILOs
1	4	Blood Sciences	5	40	32	All ILOs
1	4	Introduction to Pharmacology and Toxicology	5	20	32	All ILOs
1	11	Work-Based Learning and Professional Development	5	22	0	All ILOs
5	8	Advanced Cell Biology	5	40	32	All ILOs
5	8	Infection Sciences and Clinical Immunology	5	20	32	All ILOs
9	12	Biochemistry	5	10	32	All ILOs
9	12	Mechanisms of Human Pathology	5	10	32	All ILOs
1	8	Independent Research Project	6	12	83	All ILOs
1	4	Advanced Topics in Genetics	6	40	32	All ILOs
1	11	Work-Based Learning and Professional Development	6	52	52	All ILOs
9	12	Diagnostic Medicine	6	10	32	All ILOs
9	12	Pathophysiology	6	10	32	All ILOs

INTENDED LEARNING OUTCOMES – AND HOW THE PROGRAMME ENABLES APPRENTICES TO ACHIEVE AND DEMONSTRATE THE INTENDED LEARNING OUTCOMES

PROGRAMME AND LEVEL 6 INTENDED PROGRAMME OUTCOMES

A: Subject knowledge and understanding This programme provides opportunities for apprentices to develop and demonstrate knowledge and understanding of:	The following learning and teaching and assessment strategies and methods enable apprentices to achieve and to demonstrate the programme learning outcomes:
 A1 Theories, concepts and principles relevant to a range of different fields within biomedical science; A2 The wider application of biomedical science to address societal needs as well as contemporary and emerging issues in the field; A3 The limitations of current knowledge and practice, and the role of research in addressing these limitations; 	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): lectures (A1 – A5); seminars (A1 – A5); directed reading (A1 - A3); use of the VLE (A1-A5); tutorials and research project (A1-A5).
 A4 The moral and ethical dimensions of their professional actions and investigations and the need for ethical standards and professional codes of conduct. A5 The role and impact of intellectual property within a research environment 	 Assessment strategies and methods (referring to numbered Intended Learning Outcomes): Examinations including practical examinations (A1-A3); coursework including written and oral assessments (A1 – A5); research project (A1-A5).
B: Intellectual skills This programme provides opportunities for apprentices to:	The following learning and teaching and assessment strategies and methods enable apprentices to achieve and to demonstrate the programme outcomes:
 B1 Develop skills to critically evaluate relevant scientific knowledge to understand how evidence-based decisions may be made in biomedical sciences; B2 Develop skills to obtain and integrate relevant evidence from a range of sources to formulate and test hypotheses; B3 Analyse how familiar and unfamiliar problems can be addressed using subject knowledge and understanding ; 	 Learning and teaching strategies and methods: lectures (B1 – B3); seminars (B1 – B4); directed reading (B1 – B4);use of the VLE (B2 – B4); tutorials and research project (B1 – B4).
B4 Plan, execute and report on original or directed research of relevance to biomedical sciences.	 examinations (B1-B3); coursework (B1 – B3); research project (B1 – B4).
C: Practical skills This programme provides opportunities for apprentices to:	The following learning and teaching and assessment strategies and methods enable apprentices to achieve and to demonstrate

C1 C2	Identify and use appropriate laboratory and other practical techniques in a responsible, safe and ethical manner (includes awareness of quality management; animal welfare and informed consent); Conduct and interpret biomedical science research and report this in a range of formats;	 Learning and teaching strategies and methods: lectures, seminars and tutorials (C1 – C4); practical and laboratory teaching (C1-C4); tutorials and research project (C1-C4)
C3 C4	Make effective use of academic literature, databases and other relevant information; Make effective use of IT relevant to the discipline.	 Assessment strategies and methods: examinations (C3); coursework (C1 – C4); research project (C1-C4).
D: 1 Thi to:	Fransferable skills s programme provides opportunities for apprentices	The following learning and teaching and assessment strategies and methods enable apprentices to achieve and to demonstrate the programme learning outcomes:
D1	Communicate effectively by oral, written and visual means;	Learning and teaching strategies and methods:
D2 D3	Use digital technology with competence including a wide-range of software packages; Solve numerical problems and understand the application and interpretation of statistical	 lectures (D1 – D3); seminars and tutorials (D1- D5); use of the VLE (D1 - D5); directed reading (D1, D3, D5).
D4	analyses of data; work in collaboration with others with a professional manner;	Assessment strategies and methods: • coursework (D1 - D5); • examinations (D1, D3, D5);
D5	manage their own motivation, tasks and behaviour in enterprising, innovative and professionally appropriate ways - working towards personal, career and academic development.	 research project (D1- D5).

LEVEL 5/DipHE INTENDED LEVEL OUTCOMES

A: Knowledge and understanding		The following learning and teaching and
This level provides opportunities for apprentices to		assessment strategies and methods enable
develop and demonstrate knowledge and		apprentices to achieve and to demonstrate
understanding of:		the level learning outcomes:
 A1 Fundamental princ	ples and concepts relevant to	Learning and teaching strategies and
biomedical science A2 An introduction to p	s and its applications.	methods:
or anatomy;	harmacology and to toxicology	 lectures (A1- A5); tutorials and seminars (A1 – A5); directed reading (A1-A5); use of the VLE (A1-A5).

A3	Advanced understanding of biochemistry, immunology and cell biology;	 Assessment strategies and methods: examinations (A1-A5); coursework (A1 – A5).
A4	Theoretical and practical knowledge for the areas of clinical microbiology and clinical biochemistry	
A5	The complexity and uncertainties within the field of biomedical sciences.	
B: I	ntellectual skills	The following learning and teaching and
This	e level provides opportunities for apprentices to:	assessment strategies and methods enable apprentices to achieve and to demonstrate the level learning outcomes:
B1	Develop skills to evaluate and use information and data sets appropriate to biomedical sciences;	Learning and teaching strategies and methods: • lectures (B1 - B4);
B2	Applying key knowledge and concepts to biomedical problem solving;	 tutorials and seminars (B1 – B4); directed reading (B1 – B4); use of the VLE (B2 – B4).
B3	Develop skills in selecting and using analytical techniques;	Assessment strategies and methods: • examinations (B2 - B4);
B4	Develop skills in synthesising and integrating scientific knowledge.	 research project (B1 – B4).
C: Practical skills This level provides opportunities for apprentices to:		The following learning and teaching and assessment strategies and methods enable apprentices to achieve and to demonstrate the level learning outcomes:
C1 C2	Continue to develop safe and responsible laboratory skills across a range of techniques; Become proficient in obtaining, citing and	Learning and teaching strategies and methods: lectures (C2 - C3); tutorials and seminars (C1 – C4); practical (C1-C4)
	referencing materials including literature and published data relevant to biomedical sciences;	Assessment strategies and methods: • examinations (C2, C3)
С3	Learn fundamental techniques for data analysis, reporting and interpretation.	• coursework (C1, -C4).
C4	Learn to use software relevant to the discipline.	
D: 1 This	Fransferable skills level provides opportunities for apprentices to:	The following learning and teaching and assessment strategies and methods enable apprentices to achieve and to demonstrate the level learning outcomes:
D1	Further develop abilities in effective communication by oral, written and visual means;	Learning and teaching strategies and methods:

D2 D3	Develop skills in a range of digital technologies; Gain confidence and skills in a range of methods	 lectures (D1 – D5); tutorials and seminars (D1- D5); use of the VLE (D1 – D5).
	for data analysis and interpretation;	Assessment strategies and methods:
D4	Learn to work independently and in groups with an active and reflective approach to their studies.	 coursework (D1 – D5); examinations (D1, D3).
D5	Managre their own motivation, tasks and behaviour in enterprising, innovation and professionally appropriate ways – working towards personal, career and academic development.	

LEVEL 4/Cert HE OR INTENDED LEVEL OUTCOMES

A: I This dev und	Knowledge and understanding is level provides opportunities for apprentices to elop and demonstrate knowledge and erstanding of:	The following learning and teaching and assessment strategies and methods enable apprentices to achieve and to demonstrate the level learning outcomes:								
A1 A2	A basic knowledge of cell chemistry and biology to underpin requirements of Level 5 units; A foundation in human anatomy and physiology, immunology and clinical genetics;	Learning and teaching strategies and methods: lectures (A1- A5); tutorials and seminars (A1 – A5); directed reading (A1- A5); use of the VLE (A1-A5). 								
A3 A4 A5	A basic understanding of sampling, investigative and clinical and research laboratory techniques; An appreciation and basic knowledge of a range of techniques for quantitative analysis and interpretation of data in biomedical sciences. The complexity and uncertainties within the field of biomedical sciences.	 Assessment strategies and methods: examinations (A1, A2); coursework (A1 – A5). 								
B: I This	ntellectual skills s level provides opportunities for apprentices to:	The following learning and teaching and assessment strategies and methods enable apprentices to achieve and to demonstrate the level learning outcomes:								
B1	Basic ability to identify and use appropriate sources of information;	Learning and teaching strategies and methods:								
B2 B3	Basic awareness of the scientific method; Their ability to critically evaluate data and other evidence;	 tutorials and seminars (B1 – B4); directed reading (B1 – B4); use of the VLE (B1 – B4). 								
B4	Their ability to analyse and interpret information.	Assessment strategies and methods: • examinations (B2 - B4);								

	• coursework (B1 – B4).								
C: Practical skills This level provides opportunities for apprentices to:	The following learning and teaching and assessment strategies and methods enable apprentices to achieve and to demonstrate the level learning outcomes:								
 C1 Develop safe laboratory skills relevant to biomedical sciences; C2 Learn how to obtain relevant literature and published data and how to cite and reference this appropriately; 	Learning and teaching strategies and methods: Lectures (C1 – C4); Practicals (C1-C4); Tutorials and seminars (C1- C4)								
C3 Develop underpinning skills in data handling and display;	 coursework (C1 – C4). 								
C4 Learn basic skills in data analysis and selection of suitable statistical tools relevant to the discipline.									
D: Transferable skills This level provides opportunities for apprentices to:	The following learning and teaching and assessment strategies and methods enable apprentices to achieve and to demonstrate the level learning outcomes:								
D1 Develop skills and confidence in effective communication by oral, written and visual means;	Learning and teaching strategies and methods: lectures (D1 – D3);								
D2 Develop abilities in use of digital technology;D3 Basic understanding and abilities in the application and interpretation of data analysis;	 tutorials and seminars (D1- D5); use of the VLE (D1 – D5); directed reading (D1- D5). 								
D4 Develop as independent, active and reflective learners.	 Assessment strategies and methods: coursework (D1 – D5); examinations (D1, D3, D4). 								
D5 Manage their own motivation, tasks and behaviour in enterprising, innovation and professionally appropriate ways – working towards personal, career and academic development.									

ADMISSION REGULATIONS

Entry requirements for this course are available on the university website: <u>Courses | Bournemouth</u> <u>University</u>

PROGRESSION ROUTES

Recognition arrangements provide formally approved entry or progression routes through which apprentices are eligible to apply for a place on a programme leading to a BU award. Recognition does not guarantee entry onto the BU receiving programme only eligibility to apply. In some cases, additional entry criteria such as a Merit classification from the feeder programme may also apply. Please see the <u>recognition register</u> for a full list of approved Recognition arrangements and agreed entry criteria.

ASSESSMENT REGULATIONS

The regulations for this programme are the University's <u>Standard Undergraduate Assessment</u> <u>Regulations (6A)</u> with the following approved exceptions to clauses 6.1, 7.1 and 7.2 which align the programme with the requirements of the Institute of Biomedical Science (IBMS) and the IfATE apprenticeship standard (<u>https://www.instituteforapprenticeships.org/apprenticeship-standards/st1314-v1-1</u>):

Pass Mark

The pass mark for each core unit will be 40%. Where a core unit is assessed by more than one formal element, the mark for each formal element of assessment will not be less than 40%.

The non-credit-bearing unit requires a passing mark for the workbook each year. Additionally, the IBMS Registration Training Portfolio must be completed between Level 5 and Level 6 for progression.

Compensation

Compensation does not apply to any Core units.

The following approved exception to the Principles of Assessment Design: Policy (6C) applies which aligns the programme with the requirements of the Institute of Biomedical Science (IBMS):

Exams with no invigilation and/or open book exams at home are not allowed.

BU OFF-THE-JOB TRAINING DELIVERY

The apprenticeship programme follows a day-release model and includes a blend of teaching methods. Synchronous units will involve in-person teaching, tutorials and laboratory workshops, while blendeddelivery units will combine self-directed learning with online resources accessed via Brightspace. Any laboratory workshops or tutorials associated with these units will require in-person attendance. Two units per year will be delivered asynchronously during the summer term, with laboratory workshops scheduled in-person.

The minimum off-the-job (OTJ) training requirement is 278 hours per year in addition to completing minimum 30 hours in employment per week.

L4 and L5 comprises of six core units, baring 20 credits each. Trimesters 1 and 2 will include two units delivered synchronously, each with 40 contact hours and two units will follow a blended learning format, each offering 20 contact hours. The final two units, delivered in trimester 3, will be taught asynchronously and will include 10 contact hours of laboratory workshops and tutorials.

The Work-Based Learning and Professional Development unit—although non-credit-bearing at L4 and L5—will feature biweekly tutorials, totalling 22 contact hours.

In total, L4 and L5 includes 162 contact hours and 356 hours of OTJ training per year.

L6 is made up of four core units, worth 20 credits. The synchronous unit has 40 contact hours, and the two asynchronous units have 10 contact hours of laboratory workshops.

The Work-Based Learning and Professional Development unit at L6 carries 20 credits and includes 52 contact hours of weekly tutorials, providing apprentices with dedicated time to develop HCPC standards, engage with academic tutors, receive tailored guidance, and monitor their progress.

The Independent Research Project is a 40-credit unit, commencing at the start of the Level 6 academic year and continuing through to the end of the second trimester. This unit includes 12 contact hours.

In total, Level 6 comprises of 124 contact hours and 355 hours of Off-The-Job (OTJ) training.

APPROVED SUB-CONTRACTORS

Not applicable.

Programme Skills Matrix

Units		Programme Intended Learning Outcomes																	
		A	A	A	A	A	B	В	В	B	C	C	C	C	D	D	D	D	D
L6	Independent Research Project	X	X	X	4 X	X	X	X	3 X	4 X	X	X	3 X	4 X	X	X	3 X	4	э Х
L6	Pathophysiology	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х
L6	Advanced Topics in Genetics	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х		Х	Х
L6	Diagnostic Medicine	Х	Х	Х	Х	Х	Х	Х	Х		Х		Х	Х	Х	Х	Х	Х	Х
L6	Work-Based Learning and Professional Development	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
L5	Blood Sciences	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
L5	Biochemistry	Х		Х	Х		Х	Х	Х		Х	Х	Х	Х	Х	Х		Х	
L5	Introduction to Pharmacology and Toxicology	Х	х			Х	х	х	Х	Х		х	х		х		Х	х	
L5	Infection Sciences and Clinical Immunology	Х	Х	Х			Х		Х	Х	Х	Х	Х		Х	Х		Х	
L5	Advanced Cell Biology			Х			Х	Х			Х	Х			Х			Х	
L5	Mechanisms of Human Pathology	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	х
L5	Work-Based Learning and Professional Development															Х			Х
L4	Exploring and Understanding Science			Х	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	
L4	Biomedical Laboratory Science	Х	Х	Х	Х	Х	Х	Х	Х	Х	х	Х	х	х	Х	Х	Х	Х	Х
L4	Human Anatomy and Physiology		Х				Х		Х			Х			Х		Х	Х	
L4	Cell Biology	Х		Х	Х			Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	
L4	Human Genetics and Molecular biology	Х	Х	Х		Х	Х	Х			Х	Х			Х	Х		Х	
L4	Introduction to Immunology	Х	Х	Х			Х	Х			Х	Х			Х	Х		Х	
L4	Work-Based Learning and Professional Development															Х			Х