Bournemouth University

KEY PROGRAMME INFORMATION

Originating institution(s) Bournemouth University	**Faculty responsible for the programme** Faculty of Science and Technology
Final award(s), title(s) and credits BSc (Hons) Medical Science 120 (60 ECTS) Level 4 / 120 (60 ECTS) Level 5 / 120 (60 ECTS) Level 6 credits	
Intermediate award(s), title(s) and credits Dip HE Medical Science - 120 (60 ECTS) Level 4 / 120 (60 ECTS) Level 5 credits Cert HE Medical Science - 120 (60 ECTS) Level 4 credits	
UCAS Programme Code(s) (where applicable and if known) B100	**HECoS (Higher Education Classification of Subjects) Code and balanced or major/minor load.** 100350 (85%) Human Biology 100272 (10%) Neuroscience 100184 (5%) Engineering
External reference points The programme as written has no single QAA benchmark statement to follow as there are several areas interlinked. The following subject benchmarks were used for guidance Biomedical Science Health Studies Health Care Professionals (Clinical Science) Psychology These were found within the UK Quality Code for Higher Education. National occupational standards - Skills for Health Standards were also reviewed.	
Professional, Statutory and Regulatory Body (PSRB) links None	
Places of delivery Talbot Campus, Bournemouth University	
Mode(s) of delivery Full Time Full Time Sandwich Part Time Part Time Sandwich	**Language of delivery** English
Typical duration Full-time – 3 years (1 year for each level) Part-time – 6 years (2 years for each level) Full-time with Sandwich Placement – 4 years (1 year for each level) Part-time with Sandwich Placement – 8 years (2 years for each level)	
Date of first intake September 2023	**Expected start dates** September
Maximum student numbers Not applicable	**Placements** Optional short placement (minimum 2 weeks) or 30 week optional placement year (sandwich)
Partner(s) Not applicable	**Partnership model** Not applicable
Date of this Programme Specification	

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PROGRAMME STRUCTURE

Programme Award and Title: BSc (Hons) Medical Science

Year 1/Level 4
Students are required to complete all core units

Unit Name	Core/ Option	No. of Credits	Assessment Element Weightings				Expected Contact hours per unit	Unit Version No.	HECoS Code (plus balanced or major/ minor load)
			Exam 1	Exam 2	Cwk 1	Cwk 2			
Chemistry	Core	20	50	50			40	2.0	100417
Introduction to Immunology	Core	20	100				40	2.0	100911
Exploring and Understanding Science	Core	20			30	70	20	1.0	101031/ 100270 Balanced
Biological and Cognitive Psychology	Core	20	50		50		30	5.1	100497
Cell Biology	Core	20	30		70		40	2.0	100822
Introduction to Medical Science	Core	20			50	50	40	2.0	100350

Progression requirements: Requires 120 credits at Level 4

Exit qualification: Cert HE Medical Science (requires 120 credits at Level 4)

Year 2/Level 5
Students are required to complete all core units and choose ONE of TWO optional units.

Unit Name	Core/ Option	No. of Credits	Assessment Element Weightings				Expected Contact hours per unit	Unit Version No.	HECoS Code (plus balanced or major/ minor load)
			Exam 1	Exam 2	Cwk 1	Cwk 2			
Biochemistry	Core	20	50	50			40	2.0	100344
Introduction to Pharmacology	Core	20	50		50		40	2.0	100250
Biological Psychology	Core	20	50		50		30	1.1	100497
Functional Anatomy	Core	20			50	50	40	1.0	100276
Introduction to Medical Physics and Technology	Core	20			40	60	40	1.0	100419
Advanced Cell Biology	Option	20			50	50	40	2.0	100822
Advanced Immunology	Option	20	50		50		40	2.0	100911

Progression requirements: Requires 120 credits at Level 5

Exit qualification: Dip HE Medical Science (requires 120 credits at Level 4 and 120 credits at Level 5)

Optional placement year in industry/business:
Optional Placement year (minimum 30 weeks)

Progression requirements: Satisfactory completion of a minimum 30-week placement in industry/business. Students who do not choose to undertake the optional sandwich placement may progress directly from Level 5 to Level 6.

Optional short placement (minimum 2 weeks) is not a progression requirement.

Year 3/Level 6
Students are required to complete all core units. Students will have a choice of four of seven option units. Option choice may be constrained by the semester units are delivered in

Unit Name	**Core/ Option**	**No. of Credits**	**Assessment Element Weightings**			**Expected Contact hours per unit**	**Unit Version No.**	**HECoS Code** (plus balanced or major/ minor load)
			Exam 1	**Cwk 1**	**Cwk 2**			
Neuroimaging	Core	20	50	50		30	1.1	100996
Medical Science Project	Core	20		30	70	12	2.0	100869
Pathophysiology	Option	20	50	50		40	2.0	100346
Advanced Topics in Genetics	Option	20	50	50		40	2.0	100259
Current Trends in Cognitive and Clinical and Neuroscience	Option	20	50	50		30	1.1	101381
Parasitology and Epidemiology	Option	20		50	50	40	2.0	100826
Advanced Pharmacology and Toxicology	Option	20		70	30	40	2.0	100250
Advanced Systems Biology	Option	20		100		40	2.0	100865
Diagnostic Medicine	Option	20	50	50		40	1.0	100265 (70%) / 100129 (30%)

Exit qualification: BSc (Hons) Medical Science

Sandwich UG award: Requires 120 credits at Level 4, 120 credits at Level 5, 120 credits at Level 6 and successful completion of a placement year

Full-time UG award: Requires 120 credits at Level 4, 120 credits at Level 5 and 120 credits at Level 6.

Optional Full Time UG award: Short placement (minimum 2 weeks duration) at any point within the programme (Non-credit bearing assessed on a Pass/Fail basis)

AIMS OF THE DOCUMENT

The aims of this document are to:

- define the structure of the programme;
- specify the programme award titles;
- 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 resourceful graduates who:

- Have demonstrable scientific skills within the broad area of Medical Science and the ability to disseminate them;
- Have a critical understanding of the scientific basis of Medical Science;
- Are aware of the ever-evolving field of Medical Science and how aspects of new technologies/advancement of science are creating new discoveries;
- Are trained independent researchers with a full understanding of the research process, alongside the importance of Continuing Professional Development.

BSc Medical Science at BU will prepare graduates for working in the many different professional environments and/or the healthcare sector and make contributions within the areas of diagnosis, and treatment and prevention of diseases. The undergraduate programme here at BU takes a broad approach to Medical Science which will provide an overarching view of the current landscape in terms of medical/healthcare practices and research associated with medical science.

The programme fuses aspects of Healthcare Sciences such as functional anatomy, immunology, cell biology, and pharmacology with topics in Psychology such as biological psychology and neuroimaging. This combination provides a unique opportunity for our graduates as it offers a platform for either further study in areas such as neuropsychology, medical imaging or enrolment onto a Scientific Training Programme (STP) through the National School of Health Sciences (NHS). Graduates may also apply for Post-Graduate Entry Medicine / Dentistry.

ALIGNMENT WITH THE UNIVERSITY'S STRATEGIC PLAN

BU identified a number of strategic investment areas as part of its 2025 strategic plan, with medical science forming one of these key areas, in recognition of the growth of the subject area. Investment is on-going and will encompass research, education and professional practice across a range of health / medical, scientific and technological areas. This investment will complement the broad range of medical-related expertise already spread across the University. This medical science programme forms an important component of the BU vision that can be used to support/ inform/ improve human health care and medicine.

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 student, 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).

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 PROGRAMME

Students 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 students.

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

PROGRAMME AND LEVEL 6 INTENDED PROGRAMME OUTCOMES

A: Subject knowledge and understanding This programme (and level) provides opportunities for students to develop and demonstrate knowledge and understanding of*:*	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme and level learning outcomes:
A1 Theories, concepts and principles relevant to a range of different pathways within medical sciences; **A2** The wider application of medical sciences to address societal needs as well as contemporary and emerging issues in the field; **A3** The extent and limitations of current knowledge, practice and technological solutions used in medical science. **A4** The understanding of specific methodologies within the programme **A5** The moral and ethical dimensions of their professional actions and investigations and appreciate the need for ethical standards and professional codes of conduct.	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • lectures (A1 – A4); • seminars (A1 – A4); • directed reading (A1, A3); • use of the VLE (A4, A5); • independent research (for dissertation) (A5). Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • examinations (A1-A5) • coursework (A1 – A5) • Research project (A1-A5).
B: Intellectual skills This programme and level provides opportunities for students to:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme and level outcomes:
B1 Critically evaluate relevant scientific knowledge to understand how evidence-based decisions may be made in medical sciences; **B2** Understand how to obtain and integrate relevant evidence from a range of sources to formulate and test hypotheses;	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • lectures (B1 - B4); • seminars (B1 – B4); • directed reading (B1 – B5); • use of the VLE (B2 – B5);

B3 Apply subject knowledge and understanding to address familiar and unfamiliar problems; **B4** Plan, execute and report on original or directed research of relevance to medical sciences.	• independent research (for dissertation) (B1 - B5). Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • examinations (B1- B3); • coursework essays (B1 – B3); • Research Project (B1 – B4).
C: Practical skills This programme and level provides opportunities for students to:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme and level learning outcomes:
C1 Identify and use within appropriate laboratory, workshop, computing or visualization suite practical techniques in a responsible, safe and ethical manner (includes awareness of quality management; subject welfare and informed consent); **C2** Conduct, observe and record medical science research and report this in a range of formats; **C3** Make effective use of academic literature, databases and other relevant information; **C4** Make effective use of IT relevant to the discipline.	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • lectures, seminars, and tutorials (C1 – C4); • practical and laboratory teaching (C1-C4); • tutorials and research project preparation (C1-C4) Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • examinations (C3); • coursework essays (C1-C4) • research project (C1-C4).
D: Transferable skills This programme and level provides opportunities for students to:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme and level learning outcomes:
D1 Communicate effectively by appropriate oral, written and visual means; **D2** Use digital technology with competence including a wide-range of software packages; **D3** Solve numerical problems and understand the application and interpretation of statistical analyses of data; **D4** work in collaboration with others with a professional manner; **D5** manage their own motivation, tasks and behaviour in enterprising, innovative and professionally appropriate ways - working towards personal, career and academic development	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • lectures (D1 - D5); • seminars (D1- D5); • use of the VLE (D1 - D5); • directed reading (D1- D5). Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • essays (D1 - D5); • examinations (D, D3, D5); • research project (D1- D5).

LEVEL 5/DipHE INTENDED LEVEL OUTCOMES

A: Knowledge and understanding This programme/level/stage provides opportunities for students to develop and demonstrate*:*	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:
A1 a developing understanding of the concepts used in the various fields of medical science **A2** basic understanding of the specific areas of pharmacology, psychology, medical technology for medical science **A3** higher level understanding of the base subjects introduced in level 4 **A4** understanding of the ever changing needs of medical science and how this is supported by the academic skills obtained	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • lectures (A1- A4); • seminars (A1 – A4); • directed reading (A1, A3); • use of the VLE (A1-A4); • independent research (A1-A4) Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • examinations (A1- A4); • coursework (A1 – A4); • Practical assessment (A1-A3)
B: Intellectual skills This level provides opportunities for students to:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:
B1 Become competent in collating, evaluating and using appropriate sources of information **B2** Apply theoretical knowledge and concepts **B3** learn to exercise judgement in choosing and using appropriate skills **B4** develop the appropriate knowledge based skills appropriate to the chosen field in medical science	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • lectures (B1 - B4); • seminars (B1, B3, B4); • directed reading (B1 – B4); • use of the VLE (B1 – B4); Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • examinations (B1- B4); • coursework (B1 – B4);
C: Practical skills This level provides opportunities for students to:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:
C1 Demonstrate their development of practical skills used in Laboratories or workshops **C2** Be proficient in obtaining, citing and referencing materials relevant to Medical Science **C3** Become more advanced in data handling and analysis skills building on the introduction obtained in Level four **C4** Developing computing, engineering or knowledge based practical skills	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • lectures (C1 – C3); • coursework (C1 – C4); • group exercises (C1, C3, C4). Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • examinations (C2, C3, C4); • coursework (C1-C4);

	• Practical assessment (C1, C4)
D: Transferable skills This level provides opportunities for students to:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:
D1 Develop skills and confidence in effective communication by oral, written and visual means; **D2** Develop abilities in use of digital technology; **D3** Develop abilities in the application and interpretation of data analysis; **D4** Develop as independent, active and reflective learners.	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • lectures (D1 – D3); • seminars (D1- D4); • use of the VLE (D1 – D4); • directed reading (D1- D4).
	Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • coursework essays (D1 – D4); • open book examinations (D1 – D4)

LEVEL 4/Cert HE INTENDED LEVEL OUTCOMES

A: Knowledge and understanding This level provides opportunities for students to develop and demonstrate knowledge and understanding of*:*	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:
A1 some fundamental themes in the development and practice medical science **A2** the basic principles underlying, chemistry, biology of cells, immunology and medical science **A3** the skills required in modern medical science **A4** the moral and ethical dimensions of medical sciences	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • lectures (A1- A4); • seminars (A1 – A4); • directed reading (A1, A3); • use of the VLE (A4, A4); • practical work (A1-A3)
	Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • examinations (A3, A4); • written coursework (A2 –A4); • Online tests (A2, A3)
B: Intellectual skills This level provides opportunities for students to:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:
B1 Analyse numerical data and identify appropriate statistical tests **B2** Identify key issues affecting the understanding of the components of medical science	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • lectures (B1 - B4); • seminars (B1 – B4);

B3 Identify and utilise appropriate information sources **B4** Demonstrate awareness of the scientific method	• directed reading (B1 – B4); • use of the VLE (B1 – B4); • practical activities (B1, B2, B4)
	Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • examinations (B1- B4); • written coursework (B1 – B4)
C: Practical skills This level provides opportunities for students to:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:
C1 Observe, accurately record and report laboratory activity **C2** Use laboratory equipment to generate data **C3** Use appropriate data handling systems on experimental data **C4** Write appropriately structured reports	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • Practical Activity (C1 - C3); • On-line activities (C1 - C3), • independent research (C1 – C4); • group exercises (C1-3).
	Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • examinations (C1, C3); • coursework reporting (C1, C3); • data and statistical reporting (C1- C4).
D: Transferable skills This level provides opportunities for students to:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:
D1 communicate effectively by oral, written and visual means **D2** use IT including the Web, spreadsheets and word processing **D3** apply a range of basic statistical tests to experimental and supplied data **D4** work in collaboration with others, including staff and students **D5** demonstrate problem-solving skills and the application of knowledge across the discipline areas	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • lectures (D1 - D5); • seminars (D1- D5); • use of the VLE (D1 - D5); • Directed reading (D1- D5).
	Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • coursework (D1 - D5); • examinations (D1 - D5); • Presentations (D1- D5).

Programme Skills Matrix

Units		Programme Intended Learning Outcomes																
		A 1	A 2	A 3	A 4	A 5	B 1	B 2	B 3	B 4	C 1	C 2	C 3	C 4	D 1	D 2	D 3	D 4	D 5
LEVEL 6	Neuroimaging	X	X	X			X	X	X		X		X	X	X				X
	Medical Science Project	X	X	X	X	X	X	X	X	X		X	X	X	X	X			X
	Pathophysiology	X	X		X		X	X	X		X		X		X	X	X	X	X
	Advanced Topics in Genetics	X	X	X	X	X	X	X					X	X	X		X		X
	Parisitology and Epidemiology	X	X	X	X		X	X	X		X	X	X		X	X	X	X	X
	Advanced Pharmacology and Toxicology	X	X		X		X	X	X				X		X			X	X
	Advanced Systems Biology	X	X				X	X	X		X		X	X	X				X
	Current Trends in Cognitive and Clinical Neuroscience	X	X	X	X	X	X	X					X		X				X
	Diagnostic Medicine	X	X	X	X	X	X	X	X		X		X	X	X	X	X	X	X
LEVEL 5	Advanced Immunology	X		X			X		X	X	X	X	X		X	X		X	
	Advanced Cell Biology	X		X			X	X			X		X		X		X	X	
	Introduction to Pharmacology	X	X				X	X	X	X	X	X	X		X		X	X	
	Biochemistry	X		X			X	X	X		X	X	X	X	X		X	X	
	Introduction to Medical Physics and Technology	X	X	X	X				X	X	X	X	X	X	X	X	X		
	Functional Anatomy	X		X	X		X	X	X		X	X		X	X	X		X	
	Biological Psychology	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
LEVEL 4	Exploring and Understanding Science	X	X	X		X	X	X	X				X	X	X	X	X		
	Cell Biology	X		X				X	X		X	X	X		X		X		
	Chemistry	X		X				X	X		X	X	X	X	X	X	X	X	
	Introduction to Immunology	X	X	X	X	X	X	X			X	X			X	X		X	
	Biological and Cognitive Psychology	X		X	X	X	X	X			X	X		X	X			X	
	Introduction to Medical Science	X	X	X	X	X	X	X			X	X	X	X	X	X	X		X

ADMISSION REGULATIONS

Please refer to the BU website for further information regarding admission regulations for this programme. https://www.bournemouth.ac.uk/

PROGRESSION ROUTES

Partnership arrangements provide formally approved progression routes through which students are eligible to apply for a place on a programme leading to a BU award. Please find information on Global Partnerships here: Global partnerships | Bournemouth University

ASSESSMENT REGULATIONS

The regulations for this programme are the University's Standard Assessment Regulations: https://www.bournemouth.ac.uk/students/help-advice/important-information

WORK BASED LEARNING (WBL) AND PLACEMENT ELEMENTS

The programme will include an optional 30-week placement year in the third year of study. Those students who successfully complete the one-year placement will be eligible for the award of full-time sandwich degree.