

Programme Specification

A Programme Specification provides a concise summary of the main features of a programme and its intended learning outcomes. It is intended to be used by prospective students, current students, academic staff and potential employers.

Programme Title:	
BSc (Hons) Paramedic Science	
Programme (AOS) Code(s):	BP1PMS1
UCAS Code:	B780
Name of Final Award:	Bachelor of Science with Honours, BSc (Hons)
Level of Qualification:	Level 6
Regime of Delivery:	Attendance
Mode(s) of Delivery:	Full Time
Typical Length of Study (Years):	3 years
Professional Body Recognition / Accreditation (including specific requirements where applicable):	Health and Care Professions Council College of Paramedics

Brief Description of the Programme

The BSc (Hons) Paramedic Science programme will provide a route to registration as a paramedic with the Health and Care Professions Council (HCPC). The role of the paramedic has changed significantly in recent years, requiring high quality degree level education to meet the needs of patients and service users. Patients will present with a wide range of illness and injury, some requiring emergency care, others with urgent and primary care needs, which must be reflected in the undergraduate curriculum. Paramedics are now working in a variety of clinical settings, including frontline ambulance, NHS walk-in-centre, GP surgeries and within the hospital environment. To allow the paramedic to function effectively in these different settings, the programme will combine academic theory, simulated care and frontline practice placements to provide the environment with which to develop the knowledge, skills and competencies to be an effective paramedic. Students will gain significant operational experience across a variety of settings, including NHS ambulance services, urgent care clinics, GP practices and within Acute Trusts.

Programme Aims

- 1 To produce graduates who are eligible to apply for registration as a paramedic with the Health and Care Professions Council.
- 2 To produce graduates who are reflective practitioners, with the required knowledge, skills and professional attributes to practise effectively as paramedics.
- 3 To provide a collaborative and innovative learning experience which puts the patient at the centre of delivering high quality care and to create a transformative learning experience for the student.

4	To produce graduates who can critically evaluate concepts and evidence from a wide range of credible sources with the ability to apply evidence-based thinking to in a range of clinical settings.
5	To provide a high-quality educational experience, which integrates theory and practice to enable students to achieve both theoretical outcomes and professional competence to become fit for purpose, practice and award.
6	To provide a range of clinical placement experiences to provide opportunities for students to acquire a range of skills enabling them to become flexible and adaptable paramedic practitioners.
7	To develop and foster a commitment to multi-disciplinary collaboration, continuing professional development and lifelong learning.

Programme Learning Outcomes

The Bucks Graduate Attributes focus on the development of innovative leaders in professional and creative capacities, who are equipped to operate in the 21st Century labour market and make a positive impact as global citizens. The attributes are developed through the programme.

On successful completion of the programme a graduate will be able to:

Graduate Attribute: Knowledge and its application (K)

K1	Describe current clinical problems and/or new insights, informed by the forefront of professional paramedic practice.
K2	Demonstrate a sound understanding of clinical and medical sciences, including human anatomy, physiology, pharmacology, public health and epidemiology, to underpin assessment, clinical decision making and management of patients across the lifespan.
K3	Perform a range of paramedic clinical skills, with proficiency, predicated on contemporary knowledge and the understanding of best practice.
K4	Evaluate mental, physical, cognitive, behavioural and social needs to identify the priorities and requirements for evidence-based, person-centred clinical interventions and support.
K5	Lead the care of people with complex healthcare needs to optimise independence, manage risk and reduce vulnerability across organisations and settings.

Graduate Attribute: Creativity (C)

C1	Formulate an appropriate clinical opinion and differential diagnoses based on the analysis of the history and clinical examination.
C2	Produce accurate, comprehensive and relevant clinical and professional records.
C3	Conduct safe and effective history taking, clinical examination, and consultation with patients across the lifespan and in a range of clinical settings.
C4	Critically evaluate research and associated methodologies in order to review clinical and research data and evaluate outcomes in professional paramedic practice.
C5	Critically apply clinical decision making and reasoning in the context of contemporary paramedic practice.

Graduate Attribute: Social and ethical awareness and responsibility (S)

S1	Communicate in a professional and effective manner with service users, colleagues, and others in accordance with professional standards.
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S2	Utilise information and communication technologies appropriate to their professional practice.
S3	Undertake service user encounters in a professional manner, demonstrating a critical awareness of legal, ethical, and professional issues.
S4	Manage time, prioritise workload, recognise and deal with personal emotions and stress whilst demonstrating decision making in complex, unpredictable and challenging situations.
S5	Critically reflect on their clinical experience to recognise and understand success or failure, demonstrating autonomy and the independent learning ability required for continuing personal and professional development.
Graduate Attribute: Leadership and self-development (L)	
L1	Utilise relationships across the scope of their practice to work effectively within the multi-professional team, with both direct and indirect supervision.
L2	Demonstrate appropriate and verbal, non-verbal and written communication skills in all professional situations.
L3	Lead the care of people with complex healthcare needs to optimise independence, manage risk, and reduce vulnerability across organisations and settings.
L4	Critically assess and manage risk in all aspects of professional practice.
L5	Apply critical thinking and leadership skills to support paramedic practice, encourage self-development and to promote service improvement.

Programme Structure

Programmes are structured in stages. The number of stages will vary depending on the mode (e.g., full-time, part-time), duration and location of study which will be detailed in the Programme Handbook.

Modules are set at a specific academic level and listed as either core (compulsory) or optional. The level indicates the relative academic difficulty which will increase through the programme. Passing modules will reward you with academic credit. The amount of credits will depend on the complexity of the module and the level of effort required, which is measured in 'notional learning hours'.

Our [Academic Advice webpages](#) provide more information on the structure of taught awards offered by the University.

Please note: Not all option modules will necessarily be offered in any one year. Other option modules may also be introduced at a later stage enabling the programme to respond to sector developments.

Level Four

Code	Module Title	Credit	Core / Option	Compensable (Normally Yes)
HE464	Academic Skills and Evidence Based Practice	15	Core	No
HE465	Critical Thinking and Philosophy	15	Core	No
HE467	Introduction to Anatomy and Physiology	15	Core	No
HE468	Social Health and Behavioural Science	15	Core	No
HE469	Fundamental Urgent & Emergency Care	60	Core	No

Level Five

Code	Module Title	Credit	Core / Option	Compensable (Normally Yes)
HE557	Applied Anatomy and Physiology	15	Core	No
HE558	Medical Emergencies, Trauma and Resuscitation	30	Core	No
HE559	Research Methods in Clinical Practice	15	Core	No
HE568	Applied Urgent & Emergency Care	60	Core	No

Level Six

Code	Module Title	Credit	Core / Option	Compensable (Normally Yes)
HE652	Pharmacology for Paramedic Practice	15	Core	No
HE653	Legal, Ethical and Professional Issues in Paramedic Practice	15	Core	No
HE654	Dissertation (Paramedic)	30	Core	No
HE655	Contemporary Paramedic Practice	60	Core	No

Learning and Teaching Activities

Please see the [Academic Advice pages](#) for a description of learning and teaching activities that are recognised by the University. Detailed information on this specific programme is outlined below:

The teaching and learning strategies employed will enable students to take a life-long approach to their learning to learn from and through practice. A variety of teaching methods will be employed including:

- **Keynote lectures** will be employed to launch fundamental theoretical aspects of the programme and will be led by lecturers and/or external speakers. Lectures will provide the foundation for student-led work within seminars and/or workshops.
- **Seminars** will offer a forum through which students can explore key areas and will combine the presentation of information and ideas, exploration of relevant issues, and the application of theory to practice.
- **Workshops** will be used to enable students to work through real-life scenarios and apply theory to practice.
- **Expert speakers:** leading paramedics, academics from other disciplines, clinicians, service users and stakeholders will be invited to participate in the teaching of the programme and ensures the experience remains dynamic and responsive.
- **Guest Lectures;** several **visiting/guest lecturer** appointments encompassing an array of specialities; these practitioners are active in the delivery of our current curricula.
- **Directed reading:** Students will be provided with relevant reading lists and will be encouraged to undertake independent reading to ensure they engage with a breadth of literature/evidence/theories relevant to paramedic practice.
- **Virtual Learning Platform (VLE);** Materials that are used to support the programme will be made available through the VLE, including presentations from keynote lectures, handouts, worksheets, assessment documents, website links, as well as other teaching materials. Students will be expected to undertake additional work through the VLE or assigned reading in support and /or preparation of taught or face-to-face sessions.

- An array of **Case Studies** will be used as a vehicle for enquiry-based learning to identify the key issues, processes, and systems inherent within them, and to learn from successful and unsuccessful care as well as being able to iterate the nature of good and bad experiences.
- **Group Work** is a key teaching and learning modality. It is recognised as an important pedagogic learning tool that enables students to engage in participatory learning and which encourages a team working approach to problem solving.
- **Reflection** in and on practice is central to the students developing emotional intelligence around skill development to enable their continued professional development. Reflecting on their experience and the experiences of others is a key feature of the programme. Reflection encourages the students to explore the application of new skills and knowledge to a given situation, critical appraisal of key events, development of emotional intelligence and problem-solving skills all of which are central to becoming a competent practitioner.
- Students will engage in **Simulated Learning** within the University's clinical skills laboratories, simulation ambulances and other settings to facilitate the development of paramedic specific skills, teamwork, decision-making ability, scene management and managing human factors. These are supported by a team of dedicated simulation technicians.
- **Objective Structured Clinical Examinations (OSCEs)** test the students' clinical skill and their level of competence, are structured to include a range of skills, and test the students' application of theory to practice.
- **Personal Development Planning (PDP)** is incorporated into the curriculum to assist students in the planning of their on-going personal and professional development. Students' PDP will sit within their e-portfolio, which will enable them to develop IT skills alongside their development as independent reflexive learners. The e-portfolio/PDP will be a personal record of their academic and professional development throughout their course and beyond.

Content and Structure

Level Four introduces the student to the role of the paramedic, firmly based on the HCPC Standards of Proficiency (Paramedics) and Standards of Conduct, Performance and Ethics. During this level, students will be exposed to clinical care in a variety of different contexts through a series of frontline ambulance placements and this will enable the development of the core clinical skills required for working within the prehospital environment. Where appropriate, interprofessional learning will take place with other pre-registration students to enable shared learning and understanding around the role of the multi-professional team in the care of patients at all stages of the pathway. The focus at Level Four is the introduction of principles and concepts that underpin paramedic practice, the fundamental knowledge and skills to operate in the urgent and emergency care setting and care for a broad range of patients. Students will explore critical thinking and philosophy, the biological and sociological determinants of health and develop academic skills in writing, appraisal, and evaluation to prepare them for their academic journey.

Level Five is designed to enable students to apply their clinical knowledge and skills to a wider range of patients, including patients with mental health needs, paediatric patient, end-of-life care, obstetric emergencies, medical emergencies, and trauma. A defining feature of paramedic practice is the ability to provide advanced, high-performance resuscitation, this will be explored in detail considering the science of resuscitation and the high-performance mindset required to operate efficiently and save more lives. Application of the anatomy and physiology study at Level 4 will provide students with a deep understanding of the manifestations and progression of disease, whilst also learning how to manage emergency presentations in the prehospital setting.

Level Six is designed to create a threshold practitioner that is prepared for professional practice. Knowledge is further developed within the context of the role to ensure the student achieves the

key attributes expected for autonomous practice and independent thinking. This approach to development supports the integration of the student within the multidisciplinary team to ensure the theory/practice link is promoted within care delivery. Contemporary paramedic practice requires a high degree of professionalism and throughout this final year, this will be bought together through exposure to additional clinical areas, to achieve competence and gain an autonomous foundation. Achievement will be gained through the inclusion of advanced clinical decision making, developing leadership techniques, and gaining exposure to the coaching and support of others. This readiness for registered clinical practice will be further enhanced with the inclusion of a major project rendering the student both theoretically, and practically, competent in preparation for professional paramedic practice.

Placement Learning

The University prides itself on strong links with practice partners. To ensure the programme remains current and responsive to the dynamic reformation of the NHS, practitioners from our partner trusts will be invited to be involved in the delivery and on-going enhancement of the programme. Our partners have been involved and will continue to be involved in the development of the curriculum, review and monitoring process, engagement in the joint working forum, clinical simulation sessions and the provision of patient pathways and patient scenarios for teaching and learning purposes. The students will be supported further by practice colleagues, learning and development leads, practice educators and link lecturers. **See Programme Handbook.**

Practice-based Learning

Practice-based learning will provide opportunities for students to learn alongside experienced, qualified practice educators in a range of clinical environments, who will guide their learning and facilitate the development of practice skills. Students will be considered supernumerary to the workforce and will concentrate on maximising their exposure to the professional situations they will encounter once registered. Complementary placement hours will be arranged in several different settings, which may include paediatric, general practice, theatres/anaesthetics, urgent care centres, maternity units, hospice care and the emergency department. Students will evidence 975 hours of practice-based learning in ambulance settings. There will be opportunities to evidence a further 300 hours in non-ambulance settings.

Learning with, and from, professionals and learners in other relevant professions

This is embedded throughout the programme, with opportunities to learn with and from professionals and learners in other relevant professions included in each practice-based learning module. The University is fortunate to have several other health and social care programmes, and students will engage in simulation activity and professional discussions with those learners. As well as health and social care interactions, students on this programme will engage and learn with and from colleagues in the other emergency services. This may be achieved through guest lectures, professional discussions, or scheduled activity such as joint-services simulation event. A range of professionals will take part in scheduled teaching for both theory and practical elements of the programme.

Additional Course Costs

There are costs associated with all studies, additional to the tuition fee, which require consideration, when planning and budgeting for expenditure. Costs are indicative and for the total length of the course shown unless otherwise stated and will increase with inflation; depending on the programme they may include equipment, printing, project materials, study trips, placement activities, DBS and/or other security checks.

Books = £300
 Stethoscope = £40-£120
 Printing costs = £50-£100
 Additional/replacement uniform = £15-50 (per item)
 Optional student membership of the College of Paramedics = £30/year (price subject to change)
 Placement travel and accommodation = student must pay upfront but can reclaim via Health Education England.
 DBS and Occupational Health costs are covered by the University.

Contact Hours

1 unit of credit is the equivalent of 10 notional learning hours. Full time undergraduate students will study 120 credits (1200 hours) and full-time postgraduate students will study 180 credits (1800 hours) per year or 'stage' of the course.

Course Stage	Scheduled Activities (Hours)	Guided Independent Study (Hours)	Placement / Study Abroad / Work Based Learning (Hours)
Year One	259	566	375
Year Two	372	528	300
Year Three	258	642	300

Assessment Methods

The [Assessment and Examination webpages](#) provide further information on how assignments are marked and moderated, including a description of assessment activities. These also include further information about how feedback on assessed work is provided to students, including our commitment to ensure this is provided to students within 15 working days (the 'three-week turnaround').

The following assessment activities are used on this programme:

- **Case studies:** Students will be encouraged to identify patients during the placement learning elements and to develop case studies on those presentations.
- **Objective Structured Clinical Examination (OSCE):** The OSCE has a long tradition in healthcare education and will be a major part of assessment on some modules. They will be video, and audio recorded to allow for reflective learning.
- **Examinations:** Written exams (short answer and multiple-choice question [MCQ] formats) will feature on certain modules to encourage students to develop broad knowledge of the subject matter being examined. Examinations may be seen/unseen and for medication-based exams students will have access to drug formularies (e.g., British National Formulary).
- **Academic Essays / Reports:** Essays/reports will encourage critical writing and academic development. They may be reflective in nature and assess a range of different learning outcomes or the research dissertation looking at a subject in greater detail.
- **Practical Skills Assessment:** Formative and summative assessment of students' practical skills will take place throughout the course. This may be achieved in simulation or on placement in clinical settings.
- **Presentations:** Formative and summative presentations which may include case presentations, 'grand rounds', presentation of findings from a written assessment.

- **Practice Placement* and Clinical Simulation Competencies:** As well as clinical and procedural skills, students will achieve several other professional competencies and capabilities through submission of evidence to their e-portfolio during clinical placements and in clinical simulation and skills sessions.

Formative opportunities will be embedded throughout each module.

*Students are expected to evidence a minimum of 975 hours of practice-based learning by the end of programme, further detail about this specific regulation is included below.

Classification

Calculation of final award:	Level 5 - 33%
	Level 6 – 67%

The programme will be subject to the following specific assessment regulations:

- There will be no compensation of failed elements.
- Students will be required to pass all elements of modules to complete the module.
- Students will be required to complete a minimum of 975 practice-based learning hours by the end of the programme with the expectation that:
 - 375 hours will be completed by the end of Level 4,
 - 300 hours by the end of Level 5, and,
 - 300 hours by the end of Level 6.
- At the discretion of the examination board, students may be able to trail a set number of practice-based learning hours between levels, provided the overall figure is achieved by the end of the programme.

For full details of assessment regulations for all taught programmes please refer to our [Results webpages](#). These include the criteria for degree classification.

Admission Requirements

Please see the [Application webpages](#) for more information on how to apply, including a statement on how we support students from a variety of backgrounds. Please also see our [general entry requirements](#) for taught programmes. Applicants who do not meet our published entry requirements are encouraged to contact our admissions team for further advice and guidance.

Typical applicant profile and any programme-specific entry requirements

The minimum entry requirements for the programme are as follows:

Academic Entry Requirements

- **BBC at A Level** (A natural science is strongly recommended)
- **DDM at BTEC** from courses in Science or Health subject areas
- **Access course** (must be health or science related, e.g., 'Access to Paramedicine') you will need to achieve 18 level 3 credits at distinction and 27 level 3 credits at Merit
- **5 GCSE** at grade C (level 4) or above (to include English, Maths and Science)
- **International Baccalaureate** – Must achieve 112 UCAS tariff points. 1 HL subject at grade 5 or above and 1 HL subject at grade 4 or above – to include a natural science. Remaining points to come from a combination of HL, SL and Core subjects.
- **UCAS points.** 112-136 points, though students without the required points (but have studied relevant subjects) may still be invited to attend the selection event.

Non-academic entry requirements (interview, portfolio, audition)

- Applicants must be physically capable of undertaking clinical placements, which will involve frontline ambulance duties. This includes (but is not limited to):
 - lifting and carrying of equipment
 - climbing flights of stairs
 - moving and handling patients
 - undertaking a variety of shifts, including night-work and weekends
- IELTS; if English is not the first language an overall IELTS score of 7 (or equivalent) is normally required with no one element below 6.5.
- Attend the compulsory interview and selection event for shortlisted candidates.

Desirable / Recommended

Full UK driving licence; *this is strongly recommended to allow students to operate a vehicle and attend practice placements. Whilst public transport is possible for some locations, this cannot be guaranteed. To gain employment with some ambulance services, a C1 category licence will be required.*

Do applicants require a Disclosure and Barring Service (DBS) Check?

Yes (Funded by the University)

Health Requirements

All offers are subject to a satisfactory occupational health. The Department of Health requires all new Exposure Prone Procedures (EPP) workers, including students, are tested for HIV, Hepatitis B and Hepatitis C. The consent, test and managed process of results will be carried out by our Occupational Health Department. This is funded by the University.

Opportunities for students on successful completion of the programme

Students will be eligible to register as a paramedic with the Health and Care Professions Council. Graduates will be ideally placed to gain employment within the NHS (e.g., NHS ambulance service) as there is growing demand for graduate paramedics across the United Kingdom.

Further opportunities include the ability to study for a postgraduate award and seek employment in specialist or advanced clinical practice roles, leadership, or management positions, education, and development, or as a research paramedic.

There are countless opportunities for the professional paramedic, across the globe, this programme will enable graduates to take up those opportunities and build a fantastic career.

Recognition of Prior Learning

Previous study, professional and / or vocational experiences may be recognised as the equivalent learning experience and permit exemption from studying certain modules. Please refer to our [Credit Accumulation webpages](#) for further guidance.

Student Support

During the course of their studies, students will be supported in the following ways:

- At the start of their studies all students will receive a full **induction** to the programme which will include introduction to the staff responsible for delivering the course, and access to library and IT facilities.
- The **Programme Handbook** will outline the exact nature of the course and how it is structured, including the availability of option modules.
- Each student will be allocated a **Personal Tutor** who will support their academic development, be able to advise and guide them with their studies and, where necessary, give advice on study options.
- Students will be able to access our full range of **support services**, including the Student Learning and Achievement Unit for skills and study support, the Library and Learning Resources, the Student Opportunities and Career Success Team, Student Finance Team, Accommodation and Counselling Services.

Appendices

Quality Assurance

Awarding Body:	Buckinghamshire New University
Language of Study:	English
QAA Subject Benchmark Statement(s):	Paramedics (2019)
Other sources used for Quality Assurance:	Development of the programme has been informed by: <ul style="list-style-type: none"> - HCPC Standards of Proficiency (Paramedics) - HCPC Standards of Conduct, Performance and Ethics - College of Paramedics Curriculum Guidance (5th Ed.) - IBTPHEM Curriculum and Assessment System
Assessment Regulations:	Academic Assessment Regulations, accessible via the Academic Advice webpages (https://bucks.ac.uk/students/academicadvice)
Does the Fitness to Practise procedure apply to this programme?	Yes
Ethics Sub-committee	Health Care and Social Work Ethics Committee
Date Published / Updated:	September 2021

Other awards available on the programme (Exit Qualifications)

Please refer to the *Academic Qualifications Framework* for Exit Qualifications recognised by the University and credit and module requirements.

Name of Exit Qualification:	Ordinary Degree
Full name of Qualification and Award Title:	Bachelor of Science – Emergency Healthcare Studies (Not eligible to apply for HCPC registration)
Credits requirements:	300 Credits
Module requirements:	ALL 120 Credits at Level 4 ALL 120 Credits at Level 5 PLUS Any 60 credits at Level 6
Learning Outcome	
In addition to the learning outcomes of the CertHE and DipHE Emergency Healthcare Studies , the student will also have met the following learning outcomes:	
Perform a range of paramedic clinical skills, with proficiency, predicated on contemporary knowledge and the understanding of best practice. (K3)	
Lead the care of people with complex healthcare needs to optimise independence, manage risk and reduce vulnerability across organisations and settings. (K5)	
Critically apply clinical decision making and reasoning in the context of contemporary paramedic practice. (C5)	
Undertake service user encounters in a professional manner, demonstrating a critical awareness of legal, ethical and professional issues. (S3)	

Manage time, prioritise workload, recognise and deal with personal emotions and stress whilst demonstrating decision making in complex, unpredictable and challenging situations. (S4)

Critically review their clinical experience in order to recognise and understand success or failure, demonstrating autonomy and the independent learning ability required for continuing personal and professional development. (S5)

Utilise relationships across the scope of their practice in order to work effectively within the multi-professional team, with both direct and indirect supervision. (L1)

Lead the care of people with complex healthcare needs to optimise independence, manage risk and reduce vulnerability across organisations and settings. (L3)

Critically assess and manage risk in all aspects of professional practice. (L4)

Apply leadership skills to support paramedic practice, to promote service improvement and quality enhancement. (L5)

Name of Exit Qualification:	Diploma of Higher Education (DipHE)
Full name of Qualification and Award Title:	DipHE – Emergency Healthcare Studies (Not eligible to apply for HCPC registration)
Credits requirements:	240 Credits
Module requirements:	ALL 120 Credits at Level 4 ALL 120 Credits at Level 5

Learning Outcome

In addition to the learning outcomes of the **CertHE Emergency Healthcare Studies**, the student will also have met the following learning outcomes:

Demonstrate a sound understanding of clinical and medical sciences, including human anatomy, physiology, pharmacology, public health and epidemiology, to underpin assessment, clinical decision making and management of patients across the lifespan. (K2)

Evaluate mental, physical, cognitive, behavioural and social needs to identify the priorities and requirements for evidence-based, person-centred clinical interventions and support. (K4)

Apply knowledge to develop patient management plans, demonstrating professionalism, autonomy and originality in problem solving. (C1)

Conduct safe and effective history taking, clinical examination, and consultation with patients across the lifespan and in a range of clinical settings. (C3)

Name of Exit Qualification:	Certificate of Higher Education (CertHE)
Full name of Qualification and Award Title:	CertHE – Emergency Healthcare Studies (Not eligible to apply for HCPC registration)
Credits requirements:	120 Credits
Module requirements:	ALL 120 Credits at Level 4
Learning Outcome	

Describe current clinical problems and/or new insights, informed by the forefront of professional paramedic practice. (K1)

Produce accurate, comprehensive and relevant clinical and professional records. (C2)

Communicate in a professional and effective manner with service users, colleagues and others. (S1)

Utilise information and communication technologies appropriate to their professional practice (S2)

Demonstrate appropriate and verbal, non-verbal and written communication skills in all professional situations. (L2)