

BSc (Hons) Paramedic Science

Programme Specification

<https://www.bradford.ac.uk/courses/ug/paramedic-science-bsc/>

Academic Year:	2025-26
Degree Awarding Body:	University of Bradford
Partner(s), delivery organisation or support provider (if appropriate):	Yorkshire Ambulance Service
Final and interim award(s):	BSc (Honours) Paramedic Science [Framework for Higher Education Qualifications (FHEQ) level 6] BSc Ambulance Care (Aegrotat) (FHEQ) level 6] BSc (Ordinary) Ambulance Care (FHEQ) level 6] Diploma of Higher Education in Ambulance Care [Framework for Higher Education Qualifications (FHEQ) level 5] Certificate of Higher Education in Ambulance Care [Framework for Higher Education Qualifications (FHEQ) level 4]
Programme accredited by (if appropriate):	Health and Care Professions Council
Programme duration:	4 years full time Sandwich Degree
UCAS code:	B950
QAA Subject benchmark statement(s):	Paramedics (2019)

Minor Modifications Schedule

1. Clarification of sandwich year commencing in July. Clarification that the supplementary assessment of the blue light training module is at the discretion of YAS.
2. May 2021: Annual changes for 2021 academic year
3. May 2022: Annual changes for 2022 academic year
4. Amendments to intro/aims/Curriculum/Learning and Teaching Strategy/Assessment Strategy based on new curriculum guidance from HCPC, CoP and the Bradford Curriculum; changes to module codes; T Levels added to entry requirements; references updated
5. August 2025: Addition of an alternative (supernumerary) placement module. Removal of the University Diploma in Professional Studies

Please note: This programme specification has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but changes may occur given the interval between publishing and commencement of teaching. Any change which impacts the terms and conditions of an applicant's offer will be communicated to them. Upon commencement of the programme, students will receive further detail about their course and any minor changes will be discussed and/or communicated at this point.

Introduction

The University of Bradford BSc (Hons) Paramedic Science programme was originally approved in 2016 and was created in response to a national recruitment shortfall for paramedics which was causing sustained workforce issues for NHS Ambulance Services. Whilst traditionally seen as the transport arm of the NHS, the more contemporary view of the paramedic is one involving a well-educated and highly trained individual fulfilling the function of a care navigator at the very heart of the healthcare system, acting as an interface between, public health, public safety, emergency, urgent, primary, and community care to ensure patients are treated in the right place, at the right time, first time. In order to equip a professionalised paramedic workforce with the requisite clinical capabilities and enhanced clinical decision-making skills necessary for truly autonomous practice requires a robust approach to education and training. The University of Bradford BSc (Hons) Paramedic Science programme meets this requirement and is designed to ensure that upon successful completion of the degree graduates capable of practising safely and effectively as an independent autonomous paramedic. Accordingly, graduates will be able to meet the regulatory standards expected of a paramedic applying for registration with the Health and Care Professions Council (HCPC) and will be able to demonstrate the skills, attributes, attitudes, and behaviours expected of a newly qualified paramedic (NQP) at the point of registration. It is at this threshold point of registration and entry into the workforce, where anxieties are traditionally greatest for NQPs, that the benefits of this programme will be truly realised. The University of Bradford, together with our long-term partners the Yorkshire Ambulance Service (YAS) NHS Trust, have developed a unique four-year sandwich degree programme incorporating the opportunity for student's to apply for a fixed term contract of employment as a lead clinician during the third year. If successful, the student will be paid for undertaking work in a frontline clinical role for a period of up to 12 months. This will give them an unrivalled opportunity to gain first-hand experience of clinical practice within the ambulance service, working with and

alongside other members of the frontline clinical workforce, whilst earning a salary commensurate with the role. This is intended to remove the theory-to-practice gap and to ultimately allay some of those anxieties present upon registration and when transitioning into employment as an NQP. As well as the obvious benefits derived from early clinical responsibility in terms of confidence and capability, they will possess a distinct advantage over others at the point of registration from the perspective of demonstrable practise experience and the acquisition of the recognised emergency blue light driving qualification which they will have attained at the outset of sandwich year. Where a student is unable to complete the blue light driving qualification, an alternative progression route is available. The student will complete an alternative sandwich year that does not attract a fixed term employment contract. The placement year will be undertaken in a supernumerary role, for example being a third person on an ambulance.

In addition to the foregoing, they can be reassured that they will be taught by an academic team which entirely comprises of paramedics with a wealth of operational and specialist practice experience not only in traditional frontline roles but also as air ambulance paramedics, advanced clinical practitioners, clinical educators, clinical supervisors, emergency/urgent, and primary care practitioners.

The University of Bradford BSc (Hons) Paramedic Science programme continues to receive the enthusiastic endorsement of its student body with a consistently high rating in the National Student Survey (NSS). All provision has been mapped against the Health & Care Professions Council (HCPC) Standards of Proficiency for Paramedics (HCPC, 2023), the Quality Assurance Agency for Higher Education Subject Benchmark Statement for Paramedic Science (QAA, 2019), the Framework for Higher Education Qualifications (QAA, 2024), the College of Paramedics Curriculum Guidance (CoP, 2019), and with reference to the HCPC Standards of Conduct, Performance and Ethics (HCPC, 2016) and the HCPC Standards of Education and Training (HCPC 2017). On successful completion of the four-year, full-time sandwich degree programme, graduates are eligible to apply for registration with the HCPC as a Paramedic and can apply for full membership of the College of Paramedics. The title of 'Paramedic' is protected by law and anyone using the title must be registered with the HCPC. It is a criminal offence for someone to claim that they are registered when they are not, or to use a protected title that they are not entitled to use.

The employment opportunities for graduates of this programme are excellent with almost all previous graduates exclusively entering the employ of our partner organisation the Yorkshire Ambulance Service (YAS) NHS Trust or occasionally the employ of another NHS ambulance service. As outlined in the Post Registration Paramedic Career Framework (College of Paramedics 2018), the evolution and development of paramedic practice academically and clinically, has led to the introduction of the four pillars of advanced practice (clinical practice, leadership & management, research and development, and education) into the paramedic curriculum. These four pillars represent the career pathways available to paramedics with each pathway providing threshold levels of attainment, including higher education descriptor levels for progression into more advanced domains, for example, paramedic to specialist paramedic would require the undertaking and

acquisition of a post graduate diploma, and progression to advanced paramedic a full MSc. This has led to graduates of our programme continuing in higher education and engaging with level 7 study to access opportunities in advanced clinical practice settings such as emergency departments, ambulatory care and acute medical assessment units, speciality wards, primary care, but also as educators, researchers, and managers.

The Faculty of Health and Social Care is a major provider of education and training for individuals working within health, social, independent, and community/voluntary sector organisations across Yorkshire and Humber and the wider region. The faculty focus is on excellence through knowledge, practice, research, leadership, and management and aims to support the future sustainability of individuals through lifelong learning and improved employability. Through supporting individuals, we hope to influence the future sustainability and adaptability of service delivery and individual organisations. Here at Bradford our approach emphasises the integration and application of theory and practice to produce an adaptable and innovative graduate with excellent professional skills who can use a research based, evaluative, problem-solving approach to clinical practice. Students will be equipped with the skills to enable them to be a life-long learner and to embrace technology and technology-enhanced learning, vital in modern healthcare.

Programme Aims

The University of Bradford BSc (Hons) Paramedic Science programme aims to develop individuals who, upon completion of the programme of study, are capable of practising safely and effectively as an independent autonomous practitioner operating within a defined scope of contemporary paramedic practice. As such, graduates will be able to meet the regulatory standards expected of a paramedic applying for registration with the Health and Care Professions Council (HCPC) and will be able to demonstrate the skills, attributes, attitudes, and behaviours expected of a newly qualified paramedic (NQP) at the point of registration. At this threshold, the concerns and anxieties typically reported by NQPs entering the workforce will be mitigated through the benefits derived from having completed this unique four-year sandwich degree programme, incorporating a fixed-term contract of employment¹ as a lead clinician with our ambulance service partner organisation, intended to remove the theory-to-practice gap and to improve transition into employment. The programme will have equipped the student with the skillset necessary to be able to competently perform holistic patient assessments and to make both evidence- and values -based clinical decisions for the benefit of the patient and their families/carers taking account of the legal, ethical and professional issues common to the complex and often unpredictable contexts which present across the breadth of public health, public safety and health care delivery in the out of hospital environment. The student will also possess the requisite interpersonal skills and emotional intelligence to allow them to both contribute and, where appropriate, lead collaborative, multi-disciplinary approaches to

¹ This will be the primary route through the programme. For students unable to gain a paid employment contract an alternative placement year is available.

working. Learned analytical techniques and methods of enquiry will allow them to address situations of uncertainty, ambiguity, and knowledge limitation through the evaluation of data, abstract concept and contemporary research evidence, and they will be able to communicate their findings, solutions, and argument to both public and professional audiences as appropriate, adopting an ethos of lifelong learning. To this end, the programme seeks to develop the student into a self-directed lifelong learner who is motivated to sustain and advance their own knowledge base in response to the ever-changing healthcare landscape and to encourage them to become committed to the future development of the paramedic profession.

Programme Learning Outcomes

To be eligible for the award of Certificate of Higher Education at FHEQ level 4, students will be able to:

1. Apply knowledge of the underlying concepts and principles associated with the clinical, social, and psychological care of individuals and interpret these within the professional context of ambulance care.
2. Reflect on and evaluate the appropriateness of different approaches to solving problems related to clinical, social, and psychological needs within the professional context of ambulance care.
3. Communicate the results of practice and written work accurately and reliably, using evidence and structured coherent arguments -evaluation.
4. Adopt an ethos for lifelong learning through reflexivity, action planning and self-evaluation.
5. Recognise the qualities and transferable skills necessary for employment including accountability, autonomy, and responsibility for professional practice.
6. Practice safely under the direct supervision of qualified clinicians whilst adhering to HCPC guidance on standards of conduct and ethics for students.

Additionally, to be eligible for the award of Diploma of Higher Education at FHEQ level 5, students will be able to:

1. Evaluate knowledge and critical understanding of the well-established principles for the care for individuals within the professional context of ambulance care, and of the way in which those principles have developed.
2. Apply underlying concepts and principles of illness and wellbeing to complex scenarios within the professional context of ambulance care and deploy key techniques of ambulance care effectively, whilst considering the limits of their knowledge and the need for appropriate referral to other health and care professionals.

3. Critique qualitative and quantitative data, in order to develop lines of argument and make sound judgements in accordance with basic theories and concepts of ambulance care.
4. Use a range of established techniques to initiate and undertake critical analysis of information, and to propose solutions to problems arising from that analysis.
5. Effectively and professionally communicate information, arguments, and analysis in a variety of forms to individuals, specialist and non-specialist audiences through a variety of media.
6. Practice safely under direct and indirect supervision of qualified clinicians and acquire necessary competences to enable them to assume significant responsibility and practice autonomously within a defined scope of clinical practice.

Additionally, to be eligible for the award of Honours Degree of Bachelor at FHEQ level 6, students will be able to:

1. Critically evaluate the management of complex undifferentiated clinical situations using a systematic understanding of biological, behavioural, and clinical science.
2. Apply and critically evaluate research evidence at the forefront of contemporary paramedic practice to inform and improve the quality of care and service delivery and to initiate and carry out projects.
3. Apply conceptual understanding of complex ethical, organisational, political, professional, and social principles in order to promote safe systems of working in the context of multidisciplinary working in contemporary paramedic practice.
4. Critically reflect upon decision making demonstrating initiative, personal responsibility, and accountability in the context of contemporary paramedic practice.
5. Assess and manage own learning, contributing to self and peer development through collaborative working with multi-professional groups.
6. Practice safely as an autonomous practitioner and acquire the necessary competences to enable them to apply for registration with the HCPC as a paramedic.

Curriculum

Stage 1/Level 4

To facilitate the student's transition into higher education, they are provided with teaching which offers the foundations essential for lifelong learning. We will help them to build a

portfolio of skills which are transferable across the degree and beyond whilst introducing them to the paramedic programme at Bradford. In the skills-based elements of the stage they will be introduced to practical approaches and theories relevant to the psychology of learning. The student will also develop skills which are relevant to studying in higher education and to employability such as creating action plans, teamworking, personal resilience, through the critical evaluation of theories and the debating of topics in group settings. Key areas of concern will be addressed such as the avoidance of plagiarism and the importance of adherence to referencing guidelines and they will be encouraged from the outset to engage with personal development planning and adopt reflective practices along with critical self-awareness.

Considerable time is dedicated across two semesters to the study of the biopsychosocial sciences model so that the student gains a broad understanding of the interconnection between biology, psychology, and socio-environmental factors, and how these play a role in both health status, disease, and human development. Knowledge of the underlying theories and concepts relevant to human biology, clinical sciences and public health and wellbeing are essential in the day-to-day practice of a paramedic, and this provides the necessary foundation for them to begin to appreciate some of the patient presentations that they will encounter during strategic placement opportunities which are provided during stage 1.

The student will also begin the journey towards professional registration with teaching and learning activities dedicated to the acquisition of knowledge appertaining to the nature of ethics and moral reasoning, the relationship between ethics and law, ethics and religion, and ethics and culture. The student will explore the impact of ethical values on professional behaviours and responsibility and will be introduced to the basic concepts of medical ethics and medical law including consent, confidentiality, prejudice, disclosure, and rights. Allied to the foregoing will be the investigation of contemporary issues surrounding the use of health technologies and digital footprints. The development of knowledge of governance structures including the National Health Service, UK Ambulance Services, and the Health and Care Professions Council will be integral. Teaching on human factors theory and effective communication within and between teams illustrated through exemplars of good and bad practice will help them to translate these concepts into practice.

The practical will provide skills teaching in basic airway management, basic life support (BLS) for paediatrics and adults, moving and handling techniques with and without ambulance equipment/aids, infection control, safe use of clinical and communications equipment, basic patient assessment, personal safety, conflict resolution and the appropriate use of personal protective equipment. The student will then be provided with the opportunity to consolidate and contextualise their learning within a diverse range of practice environments under the supervision of appropriately experienced and qualified practitioners. These placements may involve exposure to shift working to reflect the nature of service delivery. The student will experience how professional multi-disciplinary

teams work together and they will begin to use the knowledge, skills, and behaviours they have learned in a supportive patient/service user facing role.

FHEQ Level	Module Title	Type	Credits	Semester (s)	Module Code
4	Introducing Paramedic Science	Core	60	ACYR	PAS4001-E
4	Paramedic Professional Practice 1	Core	30	ACYR	PAS4002-C
4	Paramedic Professional Practice 2	Core	30	ACYR	PAS4003-C

ACYR – Starts in September and ends in or before May.

At the end of stage 1, a student will be eligible to exit with the award of Certificate of Higher Education if the student have successfully completed at least 120 credits and achieved the award learning outcomes.

THIS AWARD DOES NOT CONFER ELIGIBILITY TO REGISTER WITH THE HEALTH AND CARE PROFESSIONS COUNCIL

Stage 2/Level 5

Stage 2 of the programme will prepare the student for sandwich year and employment with the Ambulance Service as a lead clinician practising with limited levels of autonomy. Building upon the introduction to the biopsychosocial sciences in Stage 1, they will further enhance their knowledge of anatomy, physiology, and pathophysiology with bespoke study packs and activities focused upon the physical examination, assessment, and management of specific patient/service user groups including undifferentiated paediatric, obstetric, medical and trauma patients. Enhancement of interpersonal skills will be a key area for development to ensure that they are able to effectively establish the needs of the aforementioned groups across the age continuum and competently manage the therapeutic relationship. The student will develop a more structured and comprehensive approach to obtaining health histories and they will learn to conduct more advanced diagnostic and monitoring procedures, treatments, and therapies, learning to modify and adapt their practise to meet the clinical needs of the patient, producing accurate, comprehensive, and legally robust records of all patient / service user interactions. To underpin the foregoing, further time will be spent on enhancing their understanding and application of the theoretical bases of assessment, problem-solving, clinical reasoning, and clinical decision-making, integrating this with consideration of existing health and social circumstances, interpretation of clinical and other data, and the evidence-base.

As with Stage 1 of the programme, the student will engage with placement activities across a range of settings to allow for the consolidation of learning under the supervision of appropriately experienced and qualified practitioners. Again, they will experience how professional multi-disciplinary, multi-professional, and multi-agency teams work together leading to a critical understanding of healthcare systems, the delivery of healthcare provision, and the contribution made by paramedics. In undertaking placement, students are prepared for and will begin to consider the impact of contextualised learning opportunities from a perspective of the educational theories and the importance of supportive roles such as mentors and practice educators in bridging the theory-practice gap.

The student will also be helped to become more research-minded through expanding their understanding of research design and conduct. The aim is to encourage them to become more analytical and inquiring and to think more critically. The student will learn how to recognise the various research methodologies and how to critique research literature to evaluate methodological rigour, validity, and credibility.

Importantly, the student will also return to the fundamental skills involved in resuscitation building upon already acquired basic life support skills to add more advanced airway management techniques, tracheostomy / laryngectomy management, capnography / end tidal CO2 monitoring, mechanical ventilation, manual defibrillation, and management of patients where a return of spontaneous circulation has been achieved.

FHEQ Level	Module Title	Type	Credits	Semester (s)	Module Code
5	Developing Paramedic Science	Core	60	ACYR	PAS5001-E
5	Paramedic Professional Practice 3	Core	60	ACYR	PAS5005-E
Route A:					
	Blue Light Training	Core – to route A	0	3	PAS5004-Z

ACYR – Starts in September and ends in or before May.

At the end of stage 2, students will be eligible to exit with the award of Diploma of Higher Education if they have successfully completed at least 240 credits and achieved the award learning outcomes.

This award does not confer eligibility to register with the Health and Care Professions Council (HCPC) as a Paramedic.

Stage 3

Sandwich Placement Year – Route A

The sandwich year placement will be undertaken with the Yorkshire Ambulance Service (YAS). Prior to the start of this year the student will apply for a position to undertake a fixed term contract in a frontline clinical role, for up to a period of 12 months. While undertaking this sandwich year the student will remain a student at the university and retain the relevant benefits and responsibilities that this status provides. The student will also be professionally engaged by YAS and subject to relevant contractual obligations as an NHS employee. Prior to commencement of the sandwich year all students must undertake and successfully complete the nationally recognised 'Blue Light Training' course. This is arranged by YAS and can be facilitated during the summer break or immediately prior to commencement of the sandwich year. Due to demand students will attend a driving course in smaller cohorts, these will be staggered throughout Semester 3. Those students unable to successfully complete this course at first attempt may be offered supplementary attempts at the discretion of YAS.

During the sandwich year the student will undertake a placement module which requires them to evidence achievements in clinical practice. This will involve a full range of shift working to reflect the nature of service delivery. The student will complete a portfolio of evidence demonstrating their ability to provide safe and appropriate clinical care and undertake tripartite meetings involving their workplace mentor and university link lecturer. These meetings provide an opportunity to plan, review and validate the portfolio of evidence which supports achievement of the module learning outcomes and eligibility for progression into the final stage of the programme.

This clinical placement year is summatively assessed. The module is not credit bearing; and does not count towards the final degree classification calculation. Students who fail the sandwich year are entitled to one supplementary assessment. Where this requires additional clinical practice placement time, this will not attract a salary.

Sandwich Placement Year – Route B

Should a student be unable to meet the contractual obligations for employment, for reasons such as long-term ill health, the loss of their driving license, or the inability to meet 'blue light' driving requirements, they may be offered a supernumerary placement during Stage 3, which would not attract a salary. However, a supernumerary placement would not be guaranteed. Therefore, should the situation arise, negotiations could be held between the student, Programme Leader and placement provider. Completion of the sandwich year is required both to meet professional, statutory and regulatory body requirements and to complete their degree of BSc (Hons) Paramedic Science.

During the sandwich year a reduced fee is paid. Full details of the current fees at the University of Bradford can be found by following this link:

<https://www.bradford.ac.uk/money/fees/>

This programme currently provides no option for students to undertake a work placement or period of study abroad.

FHEQ Level	Module Title	Type	Credits	Semester (s)	Module Code
Route A					
5	Paramedic Professional Sandwich Year	Core – to route A	0	FLYR	PRP5015-Z
Route B					
5	Paramedic Professional Sandwich Year – alternative	Core – to route B	0	FLYR	PAS5006-Z

FLYR – This code denotes that the teaching period for the module. The code normally covers the period September to (or before) August, in the case of the Paramedic Professional Sandwich Year module, this will usually commence in July.

Stage 4/Level 6

At this final stage of the programme, the student will extend their existing knowledge and skills base to a more advanced level where they will be capable of undertaking entirely holistic assessments of undifferentiated patient presentations. This will involve them

acquiring the knowledge and expertise to obtain a comprehensive patient health history including performing a focused systems enquiry, and undertaking an independent, structured, and focused physical examination of patients utilising a taught systems-based approach. Through the synthesis of information arising from the health history with the practical findings of physical examination, the student will be capable of discriminating abnormal from normal features and should be able to identify the presence of an altered health status and relate this to common illnesses, providing a working diagnosis and justifiable differential diagnoses. The student's clinical judgement and clinical decision-making skills relevant to patient treatment, management, referral, or discharge will take account of contemporary practice guidelines and the research evidence base, and students will be capable of documenting the outcome of patient encounters through the production of accurate, comprehensive, and legally robust records of holistic assessment. This is facilitated through a blended approach to teaching and learning comprising a combination of a hybrid form of team-based learning (TBL) and research informed lectures and workshops to deliver the core content. Practical classes and workshops involving patient examination skills will be supported with live demonstrations and pre-recorded video demonstration materials. During practical classes and workshops, they will be afforded immediate corrective feedback on their examination techniques. Work-based learning provides further opportunity for supervised practice and enhancement of consultation and physical examination skills in environments which afford occasions for learning to be contextualised such as in primary care, ambulatory care units, minor injury units, and alongside specialist paramedics in urgent care.

Similarly, they will develop their knowledge, skills and expertise in dealing with critically unwell patients of any age, utilising both evidence-based pharmacological and non-pharmacological interventions. The student will access interactive teaching resources to aid the acquisition of extended paramedic skills including intraosseous cannulation, needle cricothyroidotomy, needle thoracocentesis, cardioversion, transcutaneous pacing, advanced 12-lead ECG interpretation etc., and this will be further integrated within practical classes, workshops and scenario-based simulation exercises designed to equip them with the knowledge and skills required to lead and manage situations involving adult and paediatric advanced life support and advanced trauma life support. Work-based learning will offer the opportunity to contextualise the learning and practice these skills in relevant environments such as emergency departments alongside resus doctors and in the out-of-hospital phase of care with specialist paramedics (critical care).

The student will continue their development from dependent to independent learners. The student will develop their existing knowledge around research evidence and become capable of searching and accessing data from a wide range of sources, evaluating primary research evidence, and synthesising academic ideas and argument to formulate their own conclusions to research questions, and provide their recommendations for future practice, communicating the same in a concise written review with a view to potential co-publication with their academic supervisor in a peer reviewed journal.

The student will also build their professional practice through engagement with a workshops and seminars intended to allow them to examine the professional, legal, and ethical frameworks that inform safe and effective contemporary paramedic practice. As a

result the student will be able to formulate decisions that serve the best interests of the patient as they will be required to do upon registration as a newly qualified paramedic.

FHEQ Level	Module Title	Type	Credits	Semester (s)	Module Code
6	Integrating Paramedic Science and Practice	Core	60	ACYR	PAS6003-E
6	Physical Assessment and Clinical Decision-Making Skills	Core	30	ACYR	PAS6002-C
6	Applied Pathophysiology and Pharmacology for Paramedics	Core	30	ACYR	PAS6004-C

ACYR – Starts in September and ends in or before May.

Students will be eligible for the award of Honours Degree of Bachelor if they have successfully completed at least 360 credits and achieved the award learning outcomes.

This award confers eligibility to apply for registration with the Health and Care Professions Council (HCPC) as a Paramedic.

A student prevented by illness or other good cause from taking all assessments required for the final Stage of a course of study may as are prescribed in the Regulations, may be granted an Aegrotat award. This award is the BSc Ambulance Care.

This Aegrotat award does not confer eligibility to register with the Health and Care Professions Council (HCPC) as a Paramedic.

Programme and placement overview

As partners with the University of Bradford, some elements of the programme are taught by Yorkshire Ambulance Service staff. All external teaching staff are quality assured according to the University's standards for learning and teaching excellence.

Clinical practice placement may be divided into two distinct categories:

- Ambulance Placement: this is undertaken exclusively on ambulance service emergency response vehicles.
- Non-Ambulance placement: undertaken at a range of sites which may include ambulance service communications or non-emergency transport teams and other specialist clinical areas, such as A&E units, maternity units, hospital theatres, coronary care units, as well as a range of primary care areas, such as nursing homes, minor injury units and community mental health teams.

During the course of the programme clinical practice placement is divided to ensure that at least 60% of clinical practice placement undertaken is 'Ambulance Placement'.

Learning and Teaching Strategy

The programme is informed by the principles of the Bradford Curriculum (University of Bradford, 2022). It seeks to ensure that students leave the programme confident, connected, critical and creative. To this end, the programme has been designed with the following learning principles in mind:

1. **Coherent:** There is a strong programme vision which provides students with a clear learning journey from recruitment to graduation and beyond.
2. **Challenging:** Clear programme and level learning outcomes encourage aspirational thinking, stimulate learning and accurately describe what students should be able to do at each milestone.
3. **Progressive:** Key themes and activities are visited at each level with increasing complexity and assessment and feedback (individual/peer) is used in meaningful ways that enable students to critically evaluate the quality of their work and potential to succeed.
4. **Co-owned:** All stakeholders cultivate a strong programme team identity with shared responsibility for providing a high-quality learning experience.
5. **Experiential:** Practical learning experiences and interactions with employers, alumni, community organisations, or other stakeholders, promote future-oriented thinking around the world of work and responsible citizenship.
6. **Authentic:** Work-based experiences, real-world challenges, and opportunities to develop one's own career are embedded in the programme.
7. **Systematic:** The programme enables students to build critical understanding of the robust nature of research and inquiry within the subject discipline and to identify the knowledge gaps.
8. **Stimulating:** The programme provokes students to develop wider perspectives, respond positively to difference and engage in respectful debate where differences occur.

Our curriculum design has been developed to enable the student to learn in different ways. Consideration was given to advocating one pedagogical approach throughout, and whilst this could offer continuity and familiarity for students, it is our experience that this can stifle creativity and often lead to students becoming fatigued by the monotony of a single approach, limiting their engagement and capacity to learn. We would like students to try different learning approaches so that they can see what works best for them and their future lifelong learning, and indeed they will be encouraged in the programme curriculum to explore the psychology of learning and the various learning theories. Essentially, our curriculum utilises a mixed methodology throughout, but students will find that for evidence-based reasons, there is emphasis upon team-based learning (TBL). TBL is a structured type of small group learning which places emphasis preparation work outside of class and the application of knowledge within class. Students will be organised into strategically designed diverse teams or 'learning communities' of around 5-7 students and they will work together during class on carefully constructed application exercises. Before

each TBL session, students will be given directed reading in the form of learning packages which will inform the application exercises and at the outset of the TBL session they will participate in a 'Readiness Assurance Process' or RAP which involves them first completing a multiple-choice individual readiness assurance test (iRAT) and then completing the same test as part of a team readiness assurance test (tRAT) with their team. Both the individual scores and the team scores contribute to their grades. This particular approach to learning and teaching has significant benefits from a perspective that in-class collaborative problem-solving activities create situations which promote the development of their individual personal and social skills, graduate attributes desired by employers, and quickly allow the growth of friendships and supportive relationship networks. Such collaborative approaches to teaching and learning are recognised within the literature as inclusive and student-centred. For reasons already articulated, TBL is not used to the exclusion of all other teaching and learning methods and the programme of study will expose students to a range of different research informed learning and teaching strategies.

Teaching strategies may include:

1. **Facilitated seminars and group discussion:** where learning will be through the interpretation and critical application of information and group learning.
2. **Lectures:** to a group of students where research informed information will be presented and discussed whilst informed by the core values.
3. **Tutorial:** where a small group of students reflect and discuss issues related to their learning.
4. **Simulation and clinical skills:** The opportunity to practice clinical assessment and skills in a controlled environment.
5. **Use of Web based resources:** This enables access to information, the opportunity for remote learning and interaction with other students undertaking group work.
6. **Self-Directed learning:** Where students are expected to develop their own learning by identifying areas of interest and areas in which knowledge needs to be developed.
7. **Clinical practice placement:** Where students will learn whilst under the supervision of clinical practitioners.
8. **Sandwich year clinical practice placement:** Where students will apply and consolidate learning as a professional member of the clinical team

There is a strong emphasis on work-based learning in the practice setting to promote the application of theory to practice and the development of clinical reasoning skills. Professional practice, or work-based learning, runs throughout the programme and meets the regulatory body requirements for practice placements in paramedic programmes. This forms an integral part of the learning process offers students the opportunity to reflect both in, and from practice. Practice modules take place predominantly within the Yorkshire Ambulance Service, but also include periods of placement in a range of clinical settings mainly in the Bradford, Airedale, Calderdale, Leeds, and Wakefield regions. The programme is structured in a format that allows students to build profession specific background knowledge and skills during years one and two with the emphasis moving

towards problem solving and reasoning skills ready for professional practice during the sandwich year placement and for autonomous practice by the end of the programme.

Assessment Strategy

The Paramedic Science programme uses a diverse range of assessment strategies that accommodate different learning styles. This varied approach seeks to facilitate the development of competent clinical practitioners and graduates with the flexible and transferrable skills that are valued both in higher education and in employment.

Assessment methodologies include:

1. Written essays
2. Reflective Case studies
3. Multiple Choice Question examinations
4. Single Best Answer examinations
5. Short answer examinations
6. Seminar or poster presentations
7. Objective Structured Clinical Examinations (OSCEs)
8. Contemporaneous skills assessments
9. Portfolio based assessments
10. Dissertation
11. Laboratory reports
12. Team and group assessments
13. Peer reviewed assessments
14. Video assessments
15. Interviews and viva voces

Where possible students are presented with a choice of assessment foci or methodologies that best suit their individual learning style.

Assessment, Continuation and Award Regulations

This programme follows the Assessment, Continuation and Award regulations published on the University's website (<https://www.bradford.ac.uk/media-v8/ageo/regulations/Regulation-2-Undergraduate-Assessment-Continuation-and-Award-1.0b.pdf>) for undergraduate courses (Regulation 2) with variance from the regulation as outlined below and documented in the Variance Register:

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- Variance from 4.2 - Students must achieve at least the pass mark stated in the module descriptor for all individual components within each module, to pass all modules on the programme.
- Variance from 5 - Where a student fails the Blue Light Training course module (PAS5004-Z) a further attempt (2nd attempt) will not be offered as an automatic right. If a student is unsuccessful at the Blue Light Training module (PAS5004-Z) after the initial attempt, students will, subject the approval of the Professional Lead for Paramedic Science, be transferred to route B of the programme and move onto the Paramedic Professional Sandwich Year Alternative (PAS5006-Z) module.
- Variance from 6.1 and 6.2 - Students must pass 120 credits to continue to the next stage of their programme.
- Variance from 6.5 - If a student is unsuccessful at the Paramedic Professional Sandwich Year (PRP5015-Z) after the initial attempt or reassessment attempt, they will, subject the approval of the Professional Lead for Paramedic Science, substitute the module for the Paramedic Professional Sandwich Year Alternative (PAS5006-Z) module.

Programme Operational Plan

- Modules that do not carry academic credit (PAS5004-Z, PRP5015-Z, PAS5006-Z) may be referred into the next stage of study if the following criterion is met:
 - a. Students can refer the Blue Light Training course (module PAS5004-Z) into block 3 of study if they meet the following:
 - A pass has been achieved in all modules carrying academic credit and only the blue light training course module is outstanding;
 - b. Students can refer the placement module PRP5015-Z into block 4 of study if they meet the following:
 - A pass mark in component 001 must be achieved (Progress Report/ interview);
 - Placement hours should not have a deficit of more than 150 hours;
 - Component 002 must not carry a fail grade that is due to professional issues, unsafe practice or failure of competencies that require an additional placement hours that exceed 150 hours.
- Students can refer the alternative placement module PAS5006-Z into block 4 of study if they meet the following:
 - Placement hours should not have a deficit of more than 150 hours;
 - Component 002 must not carry a fail grade that is due to professional issues, unsafe practice or failure of competencies that require an additional placement hours that exceed 150 hours.
- 2. Students undertaking the BSc (Hons) Paramedic Science who may be considered for an Aegrotat award must only be eligible for the fall-back award of 'Ambulance Care'.

Admission Requirements

We take into consideration a number of factors when assessing an application. It's not just about grades; we take the time to understand the applicant's personal circumstances and make decisions based on an applicant's potential to thrive at university and beyond. Consideration of applications will be based on a combination of formal academic qualifications and other relevant experience.

The minimum entry requirements for the programme are as follows:

Typical offer: ABB / 128 UCAS points

A levels:

- ABB from three A levels to include at least one science subject. Please note that, where a science A level is taken, the University will require applicants to pass the practical element (for A levels awarded from August 2017 onwards).

BTEC Extended Diplomas:

- DDM in a relevant Health or Science subject.

T Levels:

- Distinction in Health or Healthcare Science.

Applicants on Access Programmes:

- 128 UCAS tariff points from an Access to Higher Education Diploma in Health Professions or Science - at least 12 credits in Science must be at minimum grade Distinction.

International Baccalaureate requirements:

- 128 UCAS tariff points from 3 HL subjects at 6,6,5 to include one HL in Maths or a Science subject. Plus, HL 3 or SL 4 in Maths, Science and English Language and Literature A or English B.

Plus, minimum of:

- 5 GCSEs at grade 4 or above (previously Grade C), including GCSE English Language and Maths (note: GCSE English Language and Maths equivalences will not be accepted) and a science subject.
- Those studying Access to HE Diplomas are required only to have GCSE grade C or above in English Language and Maths.

Students with a non-traditional education background are considered with a range of qualifications, even if they do not fulfil the above criteria provided that there is evidence of successful level 3 study in a relevant subject within the last 5 years. Applicants with level 4 (or above) qualifications will be considered on a case-by-case basis.

Additional entry requirements

In addition to academic entry requirements candidates must also demonstrate an understanding of the diverse nature of paramedic practice. This may be demonstrated through research into the profession via the internet, publications, or appropriate work experience. As part of the selection process, we interview short-listed candidates prior to making offers. Offers are only made after detailed consideration of each individual application and subsequent interview. Interview will give the applicants the opportunity to discuss and demonstrate values related to the NHS Constitution.

In addition to meeting the academic entrance requirements all places are offered subject to satisfactory occupational health screening. This will involve completing an on-line occupational health questionnaire and possible attendance at a medical appointment. There is also a physical capability assessment requirement for employment with Yorkshire Ambulance Service. This assessment could be discussed at interview and physical capability assessment may be a requirement of entry to the sandwich year.

The offer of a place is also subject to a satisfactory enhanced Disclosure and Barring Service (DBS) check. These are to ensure students' the requirements of the School's Learning and Development agreement with Health Education England, Yorkshire, and Humber for protection of the public.

Where issues are identified during application in the DBS or occupational health assessment the results will be notified to the applicant with the case being referred to a multi-professional panel for consideration.

Driving License requirements

All Applicants require a full, clean UK driving license with at least provisional C1 entitlement at point of entry onto the programme. Licenses with any endorsements will not be accepted. All students will be required to pass the C1 test prior to enrolment on to year 2 of the programme. Without this qualification they will be unable to progress further on the programme. Applicants should be aware that it is their responsibility to maintain a full, clean UK driving license throughout the duration of the programme and that failure to do so may prevent them from completing the sandwich year and therefore they may be unable to progress further on the programme.

All students are reminded that the ability to progress onto the sandwich year is **ABSOLUTELY** contingent upon having the appropriate licence. All are reminded that it is the students' own responsibility to achieve the appropriate licence and that this should be done before entry into year two of the programme.

English language requirements:

- Minimum IELTS at 6.5 or the equivalent with a minimum of 6.0 in each sub-test.

To apply to be admitted to the HCPC register, students' must be able to communicate to the standard of Level 7 of the IELTS (or equivalent) with no element less than 6.5. One of the programme aims is to ensure that students' meet the requirements of the Health and Care Professions Council (HCPC) for eligibility to register as a Paramedic. As such the named award is linked to eligibility to apply for registration with the HCPC; we cannot therefore grant the named award unless students' meet this requirement. Students' may

be asked therefore, to provide evidence of English language proficiency (this may include undertaking further testing via IELTS). Failure to meet this programme aim will result in the fall-back award being conferred.

The UCAS tariff applicable may vary and is published here:

<http://www.brad.ac.uk/study/courses/info/paramedic-science-bsc>

Recognition of Prior Learning

If applicants have prior certificated learning or professional experience which may be equivalent to parts of this programme, the University has procedures to evaluate and recognise this learning in order to provide applicants with exemptions from specified modules or parts of the programme.

References

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