



## **Programme Specification**

### **Clinical Echocardiography [Frenchay]**

Version: 2024-25, v2.0, 29 Nov 2023

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## Section 1: Key Programme Details

### Part A: Programme Information

**Programme title:** Clinical Echocardiography [Frenchay]

**Highest award:** PGCert Clinical Echocardiography

**Awarding institution:** UWE Bristol

**Teaching institutions:** UWE Bristol

**Study abroad:** No

**Year abroad:** No

**Sandwich year:** No

**Credit recognition:** No

**School responsible for the programme:** CHSS School of Applied Sciences,  
College of Health, Science & Society

**Professional, statutory or regulatory bodies:**

**Modes of delivery:** Part-time

**Entry requirements:** Recruitment of students will be managed by the NSHCS with NHSE, with details being provided to UWE subsequently in order to compete the admissions process.

To be eligible for the ETP, all applicants must meet the following requirements:

- 1st or 2:1 in either an undergraduate honours degree (including an integrated master's degree) in Cardiac Physiology (PTP) or a relevant scientific subject (examples include Pure or Applied Physics, Biology or Human Biology, or Sports Science (if significant scientific content)).

- 2:2 undergraduate honours degree in Cardiac Physiology (PTP) or a relevant scientific subject plus cardiology experience and approval from the relevant HEI.

- Alternative/vocational qualification plus sufficient and relevant experience and appropriate underpinning knowledge and skills in cardiology – as evidenced for example by appropriate Voluntary Registration with the Registration Council for Clinical Physiologists or Academy for Healthcare Science and approval from the relevant HEI.

The ETP is not intended for people who already have an MSc in Echocardiography or who have already completed the Cardiac Science route through the STP, as they will already have covered the academic content.

**For implementation from:** 01 September 2023

**Programme code:** B81H00

## **Section 2: Programme Overview, Aims and Learning Outcomes**

### **Part A: Programme Overview, Aims and Learning Outcomes**

**Overview:** Professor Sir Mike Richards CBE published the 'Report of the Independent Review of Diagnostic Services for NHS England' in October 2020. This report recognised the ever-growing need of diagnostic investigations and stated that NHS services in England were at a tipping point with many patients waiting more than six weeks for a diagnostic test, breaching current referral to treatment (RTT) waiting times. It further recognised that demand for all diagnostic services had increased markedly between 2017 and 2019. In particular, it was found that echocardiography services in England had a growth of 5.7% per annum. The COVID-19 pandemic further impacted diagnostic activity, increasing the wait time for echocardiography by a further 21%. These findings made a very strong case for investment and reform of all diagnostic services, especially as the report discovered workforce capacity had not kept up with demand. This is particularly the case for diagnostic echocardiography who have a national workforce shortfall of approximately 34%.

To overcome this recognised shortfall in echocardiography provision, Health Education England (HEE) commissioned a pathway that will respond more rapidly to the urgent workforce needs for accredited echocardiographers. The University of the West of England (UWE) is one of three higher education institutes (HEIs) that have been commissioned to provide the Postgraduate Certificate (PGCert) in Clinical Echocardiography via the Echocardiography Training programme (ETP), which is specifically aimed at applicants who already hold an honours degree (1st or 2:1) in Cardiac Physiology or relevant scientific subject, or who have equivalent experience and appropriate underpinning knowledge and skills in cardiology. UWE is ideally placed to deliver this programme, as a modern civic university with a focus on partnership working to "transform futures: powering the future workforce, shaping the health of our communities" (UWE Strategy 2030).

This is an 18-month part-time postgraduate programme that integrates the fundamentals of cardiac science, echocardiography, and the physics of ultrasound. The graduate attribute-enabling programme will provide the theoretical and practical skills required to complete the PGCert, and to also undertake the assessments (Level II) required to gain accreditation with the British Society of Echocardiography (BSE). Using practiced clinical skills, participants will work with partners (e.g., local cardiac departments, HEE, National School of Healthcare Science (NSHCS), and others) to increase the national echocardiography workforce.

The programme is practice-led by design. Students will be employed within NHS Trusts across the south of England. Through their training within the workplace and education at UWE they will be provided with a wealth of opportunities to practice echocardiography as well as appropriate and professional patient interaction skills, with patient participation being embedded into teaching sessions.

Students will have access to extensive academic, scientific, and clinical experts who will be delivering the content of the programme thus ensuring that it is scholarly, evidence-based and relevant to current practice. UWE has close links with HEE and multiple NHS acute trusts both regionally and nationally, enabling us to work collaboratively in delivering the highest level of education in echocardiography.

Anticipated outcomes for the wider health system include:

- An increase in the national echocardiography workforce
- Stronger collaboration for building provision of quality education between academic institutes and the wider healthcare system
- The development of a recognised career pathway for graduates from multiple scientific disciplines

**Features of the programme:** Echocardiography Training Programme (ETP) integrating the clinically-focused subject area within diagnostic services. The programme will be delivered by specialist academic staff and echocardiography associate lecturers. Programme development has been informed by accredited clinical scientists, patients, carers and lay associates.

Students will study within the specialist areas of echocardiography imaging while maintaining academic breadth and depth of knowledge in the wider discipline.

A coherent, progressive curriculum ensuring competence in core knowledge, together with the personal and practical skills required to enhance the students' clinical competence and professional development.

Enthusiastic, accessible and committed academic and clinical staff that offer student support throughout their programme of study.

Teaching and learning informed by nationally recognised scholarship and professional expertise in clinical echocardiography.

Supporting learner development in clinical skills and interpretation within the simulated based learning environment.

**Educational Aims:** This programme aims to deliver an innovative, blended learning, flexible provision that enables students to develop, advance and maximise their theoretical and practical knowledge, skills and application in the field of clinical echocardiography. The programme is based on, and will deliver, the most current knowledge and evidence in the field of echocardiography. It aims to produce practitioners who are confident in the subject area and who are competent in applying skills with respect to completing practical echocardiography examinations

and applying clinical knowledge to interpret the data gathered during said examination.

### **Programme Learning Outcomes:**

On successful completion of this programme graduates will achieve the following learning outcomes.

### **Programme Learning Outcomes**

- PO1. Apply in-depth knowledge of the science of cardiac ultrasound to professional practice.
- PO2. Demonstrate the practical physical skills needed to perform echocardiography.
- PO3. Critically analyse images obtained when performing echocardiography, leading to clinical diagnosis in a variety of clinical scenarios.
- PO4. Evidence development in all academic and practical skills required to perform the role of an echocardiographer.

**Assessment strategy:** All assessments have been designed with a focus on a programmatic approach, to provide a varied experience for learners, whilst ensuring all key attributes and skills are appraised. Assessments have been designed to have an applied and practice-led focus, for example, the integrated portfolio within both modules provides key skills essential for learners to advance within their chosen field.

Key skills and knowledge will be developed and assessed within the first module, studied early in the programme, to aid learner progression and growth, and to allow both formative and summative feedback to feed forward into subsequent assessments.

The range of assessment types utilised within this programme is varied, aiming to accommodate different learner backgrounds and learning styles. A focus on applied, problem-based and scenario-based learning lends itself to hands-on assessments such as the poster presentation (explaining how arrhythmias diagnosed from

electrocardiographic assessment can affect and change the performance of echocardiography) and a work-based project. These will be completed alongside assessments such as written tasks, and innovative assessment types such as development and evaluation of service audits taken from the student's clinical placement.

Within planned assessments there are opportunities for flexibility, with learners able to adapt their studies according to their interests and career goals. For example, topics within an assessment can be focused on a particular speciality (valvular disease, systolic/diastolic functional disorders, and cardiomyopathies).

A strong link with professional bodies, most notably the BSE, is maintained throughout the programme, ensuring a focus on professionalism and key employability skills gained alongside academic skills.

**Student support:** The unique partnership between UWE, HEE, NHS, the British Society of Echocardiography will enable students to access support and guidance from all partners with varying expertise and backgrounds, as well as potentially from other sources, such as the student's own place of employment.

Alongside face-to-face support from academic staff and through the virtual learning environment, learners will be able to access study skills training through the library, in addition to disability support, student advisors, and employability and enterprise advisors.

Students on the programme are also supported by the ETP regional Practice Educator Leads who provide an effective link for UWE and the National School of Healthcare Science (NSHCS) in the region, clinical colleagues and to the wider NHS workforce nationally. They have thorough understanding of echocardiography services in the NHS, the structure of the healthcare science workforce, and the national drives for echocardiography education in the healthcare science workforce.

**Part B: Programme Structure****Year 1****Year 1 Compulsory Modules**

<b>Module Code</b>	<b>Module Title</b>	<b>Credit</b>
USSKJ6-30-M	Introduction to Clinical Echocardiography 2024-25	30
USSKJ8-30-M	Ultrasound Imaging in Cardiac Disease 2024-25	30

**Part C: Higher Education Achievement Record (HEAR) Synopsis**

Successful graduates will have developed an in-depth knowledge of echocardiography, set within the context of current regulatory frameworks, existing practise and real-world healthcare challenges. Graduates will have benefitted from working with both academic and practice-based leaders in the field. The applied nature of each module will have enabled analytical and critical evaluation skills to be developed, crucial for a range of careers. Development of transferrable and leadership skills will have equipped students with a skill set critical for many advanced echocardiography roles, fostering leaders of the future in this field.

**Part D: External Reference Points and Benchmarks**

The learning outcomes for this programme have been designed according to the UWE Enhancement Framework, QAA Framework for Higher Education Qualifications (FHEQ). In addition, the following have also been carefully considered:

- HCPC Standards of Education and Training (June 2017)
- QAA subject Benchmark Statement for Health Studies (November 2019)
- NSHCS Guidelines for Higher Education Institutions in England Commissioned to Provide New MSc Degree Programmes in Clinical Science (January 2016)



- UK Quality Code for Higher Education (October 2019)
- AHCS Good Scientific Practice Standards (April 2021)
- AHCS Standards of Education and Training for Undergraduate and Postgraduate Training Programmes (January 2023)
- BSE Guideline for Performing a Comprehensive Transthoracic Echocardiogram in Adults (2021)
- UWE Bristol Strategy 2030, aligning particularly with the inclusivity and collaborative focus, with this programme contributing to the key priority areas for course development in 'health and wellbeing'.

We worked closely with stakeholders (Health education England, the National School of Healthcare Science and British Society of Echocardiography) to ensure that the course provides students with the skills that employers are seeking.

### **Part E: Regulations**

Approved to University Regulations and Procedures: Academic regulations and procedures - Academic information | UWE Bristol