Programme Specification

Health Technology [Frenchay]

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Section 1: Key Programme Details

Part A: Programme Information

Programme title: Health Technology [Frenchay]

Highest award: MSc Health Technology

Interim award: PGCert Health Technology

Interim award: PGDip Health Technology

Awarding institution: UWE

Teaching institutions: UWE

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

Contributing schools: CATE School of Engineering

Professional, statutory or regulatory bodies: Not applicable

Modes of delivery: Full-time, Part-time

Entry requirements:

For implementation from: 01 September 2025

Programme code: I59000

Section 2: Programme Overview, Aims and Learning Outcomes

Part A: Programme Overview, Aims and Learning Outcomes

Overview: The MSc in Health Technology has been developed to address key strategic drivers from the Industrial Strategy and Topol Review, that call for graduates with multidisciplinary skills to use data, artificial Intelligence (AI) and digital Technology/innovation to transform the prevention, early diagnosis and treatment of chronic disease. At UWE, this programme is ideally placed given our already thriving collaborative network between the Health Tech Hub, the Bristol Robotics Laboratory (BRL), Schools of Engineering, Computing and Creative Technologies and Applied Sciences. We are located in the hub of the South West and the centre of numerous small to medium enterprises (SMEs), allowing access to novel and emerging technologies. You will therefore benefit from strong industry links on our doorstep, within Bristol's thriving technology centre.

Specifically, this programme is a one-year full-time postgraduate programme (2 year part-time) that integrates biosciences, AI, robotics and Healthcare, inviting students from a broad range of disciplines to diversify and expand their knowledge cross discipline. A core strength of this programme is that it emphasizes and values the importance of inter-disciplinary and collaborative approaches that will drive the future of Health Technology. It provides the core knowledge to allow you to apply AI and data analysis to formulate novel approaches to address key challenges in the Healthcare sector. The degree also offers flexibility to choose more in-depth training in AI and robotics, where you will learn state-of-the art deep machine vision learning with world-leading experts. There is also an exciting opportunity to develop skills in Health Technology business development taking an idea through design, development and implementation.

The integration of a multi-disciplinary research project that spans several Schools offers you a unique experience of world-leading research at the cutting edge of new technologies. Together, the skills developed and mastered throughout this programme will enhance employability across a wide range of sectors.

Features of the programme: The MSc Health Technology is designed to bridge the gap between healthcare practice and digital innovation, equipping students with the

skills to drive transformation in health systems. With a strong emphasis on interdisciplinary learning, the programme brings together expertise from health, science, and digital sectors. Students engage in hands-on projects and industry-informed teaching, gaining practical experience in areas such as digital health tools, assistive robotics, data analytics, and health-focused product development. The programme supports professional growth through close links with health technology companies, opportunities for applied research, and access to UWE's thriving innovation ecosystem, including Future Space Bristol. A key feature is its strong alignment with workforce needs, making it ideal for healthcare professionals and aspiring innovators looking to make a meaningful impact in the health tech sector.

Educational Aims: This programme aims to provide:

A multi-disciplinary degree that provides the skills required to interchange from "Health to Tech" and "Tech to Health".

A culture of inclusivity and diversity with a goal towards innovative Health Tech design, driven by the inter-disciplinary teams leading this programme.

An understanding of how new advances in technology are governed by regulatory bodies and frameworks.

A comprehensive account of how AI, robotics and cyber security can be applied to address challenges in the diagnosis and treatment of chronic disease conditions.

A multi-faceted approach to Health Technology development, supporting collaborative and leadership skills.

An extended research project that supports a multi-disciplinary approach to address technological gaps in the Health sector that embraces the importance of independent and group learning.

Programme Learning Outcomes:

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

Programme Learning Outcomes

PO1. Apply a machine learning approach to better utilise digital data that demonstrates a wider knowledge of basic programming and algorithms.

PO2. Critically evaluate regulatory frameworks that govern the Health Sector landscape and apply to the design of new innovative technologies.

PO3. Critically evaluate the clinical utility of current diagnostic and prognostic tools and synthesize innovative solutions using advances in AI and digital technologies.

PO4. Apply quantitative research methodology and statistical techniques in empirical research.

PO5. Appreciate the importance of Research Governance and how it must inform and influence the design of Health Technology

PO6. Employ cross-disciplinary skills that promotes collaborative approaches using AI and digital technology that addresses Health Technology challenges.

PO7. Develop strategic proposals, such as business plans or research grants, and effectively communicate innovative ideas and leadership insights through professional presentations.

Assessment strategy: Collectively, the assessment will deliver real world, practical experience in the latest facilities, including our new engineering building and virtual simulation labs. Our overall goal will be to fluidly integrate “Health to Tech” and “Tech to Health”. Our aim was to ensure that the skills identified were clearly evidenced throughout the programme. This programme offers a range and variety of assessments that answer to the diversity within the student cohort that both complements and stretches students. Here, we designed assessments that instil confidence, curiosity and enthusiasm for their subject. Throughout the programme the strategy was to remove barriers between disciplines and encourage cross disciplinary interaction.

To this end we have designed assessments that encourage practice-led outputs, which showcase current technological challenges in the Health and well-being field. The selected assessments have a focus on problem-based learning approaches that will empower students to have confidence in searching out solutions to world-wide health issues. These skills are underpinned by the core knowledge in the fields of AI, robotic and disease analysis, which are evaluated through examination and case studies. We were also mindful that skills developed early in the programme would be further embedded in subsequent modules. Our strategy was to ensure that assessment timelines were realistic and complementary. The assessment strategy was also informed through our student consultation events.

A strong focus on regulatory frameworks, governance and ethical values resonate throughout the assessments in the core modules, which highlights the importance of integrity and human factors in the design of Health Technology.

This programmatic approach ensures that assessments complement and stretch students to reach their potential.

Student support: Distinctive features of the programme include:

•This programme is one of the first programmes that offers a multi-disciplinary approach to address Healthcare challenges. It provides an extensive experience that equips the graduates with skills that promote creativity, innovation and a forward-thinking approach to future careers. Throughout the degree, there is a strong focus on ‘learning by doing’, related to current issues in the field.
•The environment is distinctive, the students will be at the centre of several Research and Business Facilities that support the projects and curriculum. This access to innovative projects should drive business and enterprise, offering added value to the degree.
•The expertise available to the programme spans all areas detailed in the programme from Biosciences, to Robotics to AI, offering an excellent structure to the programme design. The programme was co-designed with all relevant stakeholders, including external review and student consultation.

•Creating space to develop innovative technologies that address Health challenges. Through modules like Enterprise and Innovation, students have access to academics with experience in the development of small to medium enterprise (SMEs), taking students from concept to completion.
•The research project is attractive in its concept of using an ‘umbrella’ research question but engaging several students to address individual elements whilst working as a collaborative.

Part B: Programme Structure

Year 1

Full time students must take 180 credits from the modules in Year 1.
Part time students must take 90 credits from the modules in Year 1.

Year 1 Compulsory Modules (Full Time)

Full time students must take 150 credits from the modules in Compulsory Modules (Full Time).

Module Code	Module Title	Credit
UFMFEV-30-M	AI and Computer Vision, Application in Healthcare 2025-26	30
USSJKX-15-M	Disease, Diagnosis and Monitoring 2025-26	15
USSJLJ-60-M	Extended Research Project 2025-26	60
USSJLF-30-M	Innovative Technology in Healthcare 2025-26	30
UFMFGV-15-M	Research Methods 2025-26	15

Year 1 Compulsory Modules (Part Time)

Part time students must take 90 credits from the modules in Compulsory Modules (Part Time).

Module Code	Module Title	Credit

UFMFEV-30-M	AI and Computer Vision, Application in Healthcare 2025-26	30
USSJKX-15-M	Disease, Diagnosis and Monitoring 2025-26	15
USSJLF-30-M	Innovative Technology in Healthcare 2025-26	30
UFMFGV-15-M	Research Methods 2025-26	15

Year 1 Optional Modules (Full Time)
Full time students must take 30 credits from the modules in Optional Modules (Full Time).

Module Code	Module Title	Credit
UFCFFV-15-M	Advanced AI, Computer Vision and Cyber Security 2025-26	15
UFMFSR-15-M	Assistive Robotics 2025-26	15
USSJM6-15-M	Enterprise and Innovation 2025-26	15
USSJLH-15-M	Smart Sensing 2025-26	15

Year 2
Part time students must take 90 credits from the modules in Year 2.

Year 2 Compulsory Modules (Part Time)
Part time students must take 60 credits from the modules in Compulsory Modules (Part Time).

Module Code	Module Title	Credit
USSJLJ-60-M	Extended Research Project 2026-27	60

Year 2 Optional Modules (Part Time)
Part time students must take 30 credits from the modules in Optional Modules (Part Time).

Module Code	Module Title	Credit

UFCFFV-15-M	Advanced AI, Computer Vision and Cyber Security 2026-27	15
UFMFSR-15-M	Assistive Robotics 2026-27	15
USSJM6-15-M	Enterprise and Innovation 2026-27	15
USSJLH-15-M	Smart Sensing 2026-27	15

Part C: Higher Education Achievement Record (HEAR) Synopsis

Successful graduates will have an in-depth knowledge of the application of AI, robotics and cyber security to address chronic health challenges. Their knowledge of the Healthcare landscape, regulatory frameworks and how new innovative technology has to be designed in a manner that considers human factors (mechanical and psychological) will be fundamental when employed in the NHS, small to medium enterprises (SMEs) or related industries. Graduates will have benefited from working with world-leading experts in Biosciences, AI and Robotics in state-of-the art facilities. The analytical and practical underpinning that is core through every module will provide the students with transferrable skills adaptable to numerous career points. The inter-disciplinary group project that promotes leadership and collaboration across disciplines and consequently will be excellent preparation for careers in this complex and highly connected arena.

Part D: External Reference Points and Benchmarks

The learning outcomes have been designed with the QAA Framework for Higher Education Qualifications in mind. Moreover, the following has also been considered:

QAA UK Quality Code for HE (October 2019)
Framework for higher education qualifications (FHEQ)
Subject benchmark statement for Higher Education qualifications in engineering (Feb 2015)
Strategy 2030
University policies

Staff research projects.

As there is not a specific QAA benchmark statement for the MSc in Health Technology, the programme team has referred to the QAA benchmark for Biomedical Science, Masters Level for Engineering and Health Studies. These benchmarks offer guidance on the level of practice-led skills, communication skills that can be expected of graduates in these disciplines, which is inclusive of the cross-disciplinary nature of the programme. The important elements from these Benchmark statements have been collated in the Benchmarks document, and attached as an appendix to the programme record.

Part E: Regulations

A: Approved to University Regulation and Procedures.