

# PROGRAMME SPECIFICATION

Part 1: Information	
Awarding Institution	University of the West of England, Bristol
Teaching Institution	University of the West of England, Bristol
Delivery Location	Frenchay Campus
Study abroad / Exchange / Credit recognition	N/A
Faculty responsible for programme	Health and Applied Sciences
Department responsible for programme	Applied Sciences
Professional Statutory or Regulatory Body Links	N/A
Highest Award Title	FdSc Healthcare Science
Default Award Title	
Interim Award Titles	Cert. HE Healthcare Science
UWE Progression Route	BSc (Hons) Healthcare Science (Life Sciences) BSc (Hons) Healthcare Science (Physiological Sciences) BSc (Hons) Healthcare Science (Clinical Engineering)
Mode of Delivery	FT/PT
ISIS code/s	C992
For implementation from	September 2017

#### Part 2: Description

The FdSc Healthcare Science programme is part of the University's extensive Healthcare Science provision to provide the principle training route for Healthcare Science Associates. This exciting course is delivered through a unique collaboration between the University of the West of England and NHS providers, and has been developed in direct response to the Modernising Scientific Careers programme at the Department of Health. This has been established to develop a common career pathway, education and training standards within the fields of Life Science, Physiological Science, Clinical Engineering and Medical Physics. The degree programme enables students to develop the knowledge and skills required of a healthcare scientist whilst also completing the extensive work-based training that forms an integral and significant proportion of a two year course, and to demonstrate specified standards of practice. The unique delivery of the course allows NHS staff to complete the qualification whilst remaining in-post through a combination of innovative online materials and focused block-release at UWE.

## The programme provides:

- Opportunities for students from a wide range of backgrounds to develop and realise their potential in a supportive and responsive teaching and learning environment.
- Added value for learners in their specialised, subject-specific knowledge and transferable skills.
- Development of the necessary skills and attributes for further professional development, through academic study and continual lifelong learning as a healthcare science professional.

## More specifically it provides:

- Cutting edge healthcare sciences using state of the art equipment and learning materials
- An understanding of the importance of patient-centered care, evidence based practice, clinical audit and multidisciplinary team working.
- Practical experience of working in NHS or private laboratories enabling the student to perform a range of relevant methods and techniques, and to undertake a project in a working context.
- The underpinning knowledge, skills and professional attitude to prepare students to work as a scientist, with research skills modules at all levels.
- A broad knowledge base in biosciences and medical physical science with specific areas of deeper understanding relevant to healthcare sciences.

On graduation, students will be able to access Level 3 of the Healthcare Science programmes:

- BSc (Hons) Healthcare Science (Life Sciences)
- BSc (Hons) Healthcare Science (Physiological Sciences)
- BSc (Hons) Healthcare Science (Clinical Engineering)

as dictated by their chosen specialism with the FdSc Healthcare Sciences, and subsequently further develop their careers as Healthcare Science Practitioners.

## Programme requirements for the purposes of the Higher Education Achievement Record (HEAR)

Graduates will have a broad knowledge base in healthcare sciences, with specific areas of deeper understanding relevant to their role within the health services, and will have developed specialist skills and knowledge through work-based learning within science laboratories, clinical environments or community practices. They will understand the importance of effective communication, patient-centred care, evidence-based practice, clinical audit and multidisciplinary team working. The degree is an excellent preparation for work as a Healthcare Science Associate, and provides the opportunity for graduates to access further specialist skills and knowledge training for a career as a Healthcare Science Practitioner.

### Regulations

A: Approved to <u>University Regulations and Procedures</u>

No modules can be considered for condonation due to the progression requirements into Level 3 of

- BSc (Hons) Healthcare Science (Life Sciences)
- BSc (Hons) Healthcare Science (Physiological Sciences)
- BSc (Hons) Healthcare Science (Clinical Engineering)

on graduation from the FdSc Healthcare Science.

# Part 3: Learning Outcomes of the Programme

The award route provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas:

Specialist pathway modules are highlighted in bold  Life Sciences [LS]  Physiological Sciences [PS]  Clinical Engineering [CE]  Medical Physics [MP]	USSJT6-30-1 Principles in Healthcare Science	USSJT8-30-1 Anatomy and Physiology	USSJT7-30-1 Pathophysiology of Disease [LS, CE, MP]	USSJT5-30-1 Scientific Basis of Life [LS, PS]	USSKL6-30-1 Scientific Basis of Clinical Engi. [CE]	USSKLJ-30-1 Scientific Basis of Med. Physics [MP]	USSKA9-30-1 Intro to Phys. Sci. and Pat. Care [PS]	USSJT9-30-2 Scientific Practice	USSJTC-30-2 Prof. Aspects of Healthcare Science	USSKL7-30-2 Advanced Life Sciences [LS]	USSKL8-30-2 Applied Life Sciences [LS]	USSKL9-30-2 Pathophysiological Sciences A [PS]	USSKLA-30-2 Pathophysiological Sciences B [PS]	USSKLK-30-2 Advanced Medical Physics [MP]	USSKLL-30-2 Applied Medical Physics [MP]	USSKLB-30-2 Advanced Clinical Engineering [CE]	USSKLC-30-2 Applied Clinical Engineering [CE]	
A) Knowledge and understanding of:		.i	<u>i</u>		1			.i	<u>i</u>		i	i	i	i			İ	
Demonstrate an underpinning knowledge of anatomy, physiology, cell biology, genetics, pharmacology and pathology that provides the foundations for study in any of the divisions of Healthcare Science		x	x	x			x			x	x	x	x					
Understand the scientific basis of clinical engineering					Х											Х	Х	
Understand the scientific basis of medical physics						Х								Х	Х			
Understand the context of healthcare sciences and their application to practical problems	х		х				х		х	х	x	x	х	х	x	x	х	
Understand the importance of patient-centred care, evidence-based practice, clinical audit and multidisciplinary team working	X						x		х									

3: Learning Outcomes of the Programme																	
Understand a broad range of diagnostic and therapeutic measurement techniques including the rationale for the investigation, modification of the investigation, interpretation of test results and treatment of disease	x		x				X			х	x	х	х				
Demonstrate competence in specific areas of scientific measurement with an understanding of the clinical principles underlying the techniques used	X	x	х			x	х		х	x	x	x	x	x	X	x	x
Demonstrate an understanding of the research, development and innovation across the NHS, specifically in HCS	х							х	х								
(B) Intellectual Skills											·····			<b></b>			
Actively question and seek relevant information.	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Compare and contrast information from different sources online and offline.	х	х	х	х	х	х	х	х		х	х	х	х	х	х	х	х
Critically evaluate information against hypotheses in a range of research scenarios.	х							х									
Actively analyse and apply problem-solving strategies.	Х		Х		Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	х
Demonstrate independent self-directed learning, and skills for life-long learning.	x	х	х	x	x	х	х	х	х	х	x	х	х	х	х	x	х
Develop reflective skills (C) Subject/Professional/Practical Skills	Х								Х								
Understand the importance of evidence based practice and multidisciplinary team working.	х							х	х			х	х				
Apply practical approaches to the study of selective aspects of laboratory and physical science and demonstrate an awareness of safety and good workplace practice.	x	х	х	x	x	х	x	x	x	x	x	x	x	X	X	x	Х
Communicate effectively scientific data and concepts using a range of communication strategies.	х	х	х	х	х	х	х	х		х	х	х	х	х	х	x	х
Develop discipline-specific interests by specialising within the programme in relation to subject and/or career aspirations.									х	х	х	х	х	х	х	х	х
Obtain, record, collate and critically analyse data using appropriate practical techniques, working as an individual or within a group.	x	х	х	х	x	х	х	х		x	x	х	х	x	x	x	х
Demonstrate an understanding of the research process, including the current ethical and legal frameworks within which research can be conducted in the UK, through the execution of a research project								x	x								
(D) Transferable skills and other attributes														4	4		
Communicate information, advice, instruction and professional opinion effectively and appropriately to	x						x		х			х	х				

t 3: Learning Outcomes of the Programme																	
Analyse data arising from various means of biological or physical science inquiry	х				х	х		х		х	х	х	х	х	х	х	х
Undertake active learning and development.	х	х	Х	Х	Х	Χ	Х	Х	Χ	Χ	Х	Χ	Χ	Χ	Χ	Х	Х
Apply information management skills to their learning and practice.	х	х	х	х	х	х	х	х	х	х	х	х	x	х	x	х	х
Practice effective time management	х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Work effectively as a team member.	Х								Х								
Demonstrate an autonomous and reflective approach to lifelong learning.	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х

## **Part 4: Programme Structure**

This structure diagram demonstrates the student journey from Entry through to Graduation for a typical **full time student**, including:

- level and credit requirements
- interim award requirements
- module diet, including compulsory and optional modules

Every student is allocated to a specific pathway on the programme as articulated by a Learning Contract agreed by UWE, the student and their employer. Due to professional portfolio requirements students are not be able to transfer between pathways within either Level 1 or Level 2.

## **ENTRY**

	Compulsory Modules	Optional Modules	Interim Awards
Year 1	USSJT6-30-1 Principles in Healthcare Science  USSJT8-30-1 Anatomy and Physiology	<ul> <li>Life Sciences Pathway</li> <li>USSJT7-30-1 Pathophysiology of Disease</li> <li>USSJT5-30-1 Scientific Basis of Life</li> <li>Physiological Sciences Pathway</li> <li>USSJT5-30-1 Scientific Basis of Life</li> <li>USSKA9-30-1 Introduction to Physiological Sciences and Patient Care</li> <li>Clinical Engineering Pathway</li> <li>USSJT7-30-1 Pathophysiology of Disease</li> <li>USSKL6-30-1 Scientific Basis of Engineering</li> <li>Medical Physics Pathway</li> <li>USSJT7-30-1 Pathophysiology of Disease</li> <li>USSKLJ-30-1 Scientific Basis of Medical Physics</li> </ul>	Cert. HE Healthcare Science Credit requirements: 120

	Compulsory Modules	Optional Modules	Interim Awards
Year 2	USSJT9-30-2 Scientific Practice  USSJTC-30-2 Professional Aspects of Healthcare Science	<ul> <li>Life Sciences Pathway</li> <li>USSKL7-30-2         Advanced Life Sciences</li> <li>USSKL8-30-2         Applied Life Sciences</li> <li>Physiological Sciences Pathway</li> <li>USSKL9-30-2         Pathophysiological Sciences A</li> <li>USSKLA-30-2         Pathophysiological Sciences B</li> </ul>	N/A

<ul> <li>Clinical Engineering Pathway</li> <li>USSKLB-30-2         Advanced Clinical Engineering     </li> <li>USSKLC-30-2         Applied Clinical Engineering     </li> </ul>	
<ul> <li>Medical Physics Pathway</li> <li>USSKLK-30-2     Advanced Medical Physics</li> <li>USSKLL-30-2     Applied Medical Physics</li> </ul>	

### **GRADUATION**

#### Part time:

Part-time students can select an appropriate selection of modules for each year of study subject to pre-requisites and advice from the Programme Leader.

#### Part 5: Entry Requirements

The University's Standard Entry Requirements apply with the following additions/exceptions:

- Candidates must be in employment in a relevant role in a pathology laboratory, clinical
  physiology, clinical engineering or clinical medical physics department which will facilitate student
  engagement with the <u>Practitioner Training Portfolio</u> (and <u>IBMS Registration Training Portfolio</u> for
  the Life Sciences pathway).
- Equivalent qualifications and/or work experience may also be acceptable (refer to UWE website for requirements) and would be judged on individual merit.

Tariff points as appropriate for the year of entry - up to date requirements are available through the courses database.

Health assessment/declaration/vaccinations. Applicants must be in good health and be up-to-date with routine immunisations e.g. tetanus, diphtheria, polio and MMR. Applicants who are offered a place will be required to complete a questionnaire and must be prepared to undergo a medical examination. Applicants will also be required to confirm their status in respect of a number of infectious diseases and immunisations (tuberculosis, measles, mumps, rubella, chicken pox, varicella, hepatitis B, hepatitis C, HIV antibodies) and be prepared to have all required vaccinations. If vaccinations are not up-to-date this will affect ability to continue on the course. Concerns with regards to vaccinations should be raised at the point of application.

Disclosure of Criminal Background - the Rehabilitation of Offenders Act 1974 does not apply and all convictions, including those which are spent, must be disclosed. This is in accordance with the Rehabilitation of Offenders Act 1974 (Exceptions) Order 1975. Applicants who are offered a place must undergo a Disclosure and Barring Service (DBS) check and will be required to complete a Disclosure Application Form. All information will be treated in confidence and only taken into account when absolutely necessary.

## Part 6: Reference Points and Benchmarks

#### QAA UK Quality Code for HE

- -Framework for higher education qualifications (FHEQ)
- -Subject benchmark statements
  - Biomedical Science (2015) [All pathways]

### Part 6: Reference Points and Benchmarks

- Biosciences (2015) [Life Sciences pathway]
- Engineering (2015) [Clinical Engineering pathway]
- Physics, Astronomy and Astrophysics (2016) [Medical Physics pathway]

<u>UWE Strategy 2020</u> UWE academic policies

To facilitate entry into Level 3 of

- BSc (Hons) Healthcare Science (Life Sciences)
- BSc (Hons) Healthcare Science (Physiological Sciences)
- BSc (Hons) Healthcare Science (Clinical Engineering)

on graduation from the FdSc Healthcare Science, the programme is consistent with the standards outlined by:

- National School of Healthcare Science [All pathways]
- Institute of Biomedical Science [Life Sciences pathway]
- Health & Care Professions Council [Life Sciences pathway]
- <u>Institute of Physics and Engineering in Medicine</u> [Clinical Engineering & Medical Physics pathways]

# FOR OFFICE USE ONLY

2016-17

First CAP Approval Date 21st November 2012										
Revision CAP Approval Date			Version	1	Link to MIA - MIA 10627					
Revision CAP Approval Date	31/05/2	2017	Version	3	Link to RIA 12275					
Revision CAP Approval Date	20/07/2	2017	Version	4	Link to RIA 12355					
Next Periodic Curriculum Review due date										
Date of last Periodic Curriculum Review										