

## Healthcare Science Practitioner

**Degree Apprenticeship** 



Degree

business links.

needs of industry and individuals.

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accredited courses at partner institutions



**Top university** in the UK for degree apprenticeships

RateMyApprenticeship Awards 2019, 2020, 2021, 2022

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merit or distinction at EPA in 2022

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apprentices recognised at regional and national awards

Winner University of the Year at the Multicultural **Apprenticeship Awards 2022** 

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540 **Employer** partners

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Rated \star 'Outstanding'

by Ofsted 2018 and 2022 

**Training Provider** of the Year **North West Apprenticeship** Awards 2023

# Award-winning **Apprenticeships**

Manchester Metropolitan University is one of the most popular universities in the UK, currently educating over 39,000\* students. The University takes its responsibility for creating work-ready graduates very seriously and maintains close industry and

Our Degree Apprenticeships are practice focused. They equip our apprentices with the skills to ensure they are ready to take on the industrial challenges of tomorrow and make their mark. We develop our programmes in partnership with employers, to meet the

As pioneers of degree apprenticeships, we have become industry leaders allowing us to build unrivalled partnerships with some of the UK's largest employers and innovative small and medium-sized enterprises (SMEs).

\*HESA data 2020/21, includes students on distance learning and

# About the **programme**

This a practice-focused route to qualification as a Healthcare Scientist combines workplace development, with the theory and professional skills to help apprentices succeed in a career in Physiological Sciences.

#### An innovative programme

Participants will build knowledge, clinical training and skills as they prepare to team up with other health professionals in the important work of diagnosing and treating disease.

#### The qualification

Upon successful completion of the programme, participants will achieve a BSc (Hons) Healthcare Science and a Level 6 apprenticeship qualification.

#### **Features and benefits**

- Both existing staff and new employees will develop skills and knowledge in providing excellent clinical service.
- Attract enthusiastic and talented students/ employees in this area of skills shortage.
- Assessments are tailored around the job role of the apprentice.
- Utilise targeted government funding and incentives to retain and prepare staff for a significant future within your organisation.

#### Who is the programme for?

This programme is suitable for those looking to build a career in healthcare sciences. The Healthcare Science Practitioner Degree Apprenticeship has a strong professional and practical focus, designed to help apprentices, in either NHS or private healthcare practices, move into roles in areas such as:

- Cardiac physiology
- Neurophysiology
- Respiratory and sleep physiology

## Core skills, knowledge and behaviours

On successful completion of the Healthcare Science Practitioner Degree Apprenticeship, apprentices will have developed a core set of skills, knowledge and behaviours, including:

#### Skills

Working to the standards of Good Scientific Practice (GSP) in their area of practice, apprentices will:

- Prevent discriminatory practice against patients/carers/colleagues.
- Ensure that the highest standards of person-centred care are practiced and each person is treated with dignity and respect.
- Develop effective partnerships and ensuring patients, carers and families are treated with kindness and compassion.
- Use appropriate language to share complex technical information.
- Critically reflect on technical/non-technical practice, keeping knowledge and skills updated and respond to feedback.
- Undertake delegated risk assessments and clinical technical audits and implement changes.
- Strategically plan clinical and quality management processes.
- Independently and accurately analyse/ interpret clinical technical data.
- Be responsible for the safety and functioning of equipment.
- Present/explain technical results to other professionals and patients.

- Evaluate and implement solutions to clinical technical problems.
- Ensure that responsibilities for safeguarding and protecting patient confidentiality are met.
- Conduct sensitive discussions with patients as required, including obtaining meaningful consent.
- Supervise the delivery of high quality clinical technical procedures.
- Use research, reasoning and problemsolving skills to support quality care improvements/innovation in their area of work.

#### Knowledge

In their scientific, technical and clinical practice apprentices will understand and apply knowledge of:

- How the NHS Constitution/GSP/ Healthcare Science Practitioner (HCPC) Standards are used to support person-centred care.
- Equality and diversity legislation, policies and local ways of working.
- Their department's impact on patient care.
- Factors impacting on mental health and how to promote mental health/wellbeing.
- Models of critical reflection and self- reflection to enhance quality of patient care.



- Legislation/policies/regulations relating to health and safety at work.
- The underpinning scientific principles of investigations offered by HCS services.
- How to draft and update SOPs.
- Critical evaluation of the evidence base that underpins clinical technical practice.
- 'Duty of care' and safeguarding.
- The role and importance of the key factors influencing dignity/rights/privacy/ confidentiality of patients and colleagues.
- Advanced concepts of leadership and their application to practice.

#### **Behaviours and Values**

Apprentices will be:

- · Compassionate.
- Honest.
- Conscientious.
- Adhere to the HCPC Standards of Conduct, Performance and Ethics, and GSP that are the standards of behaviour/practice/ personal conduct that underpin the delivery of those in HCSP roles.

## Success stories

I chose a degree apprenticeship because I thought it would be a great way of studying at university and working at the same time. This meant that I would gain both the hands-on practical skills, as well as the academic knowledge – which would ensure I was fully equipped with all the skills and knowledge that I would need to be successful.



What I enjoy most about my degree apprenticeship is being able to work alongside colleagues across the organisation, where I am able to learn from them and also build up professional relationships. I also really enjoy building relationships with fellow apprentices in my cohort at university. It's great to be able to learn from them and their experiences – which means I have a great network to lean on once I graduate.

I'm really proud of what I have achieved and I'm very grateful to my colleagues at The Walton Centre and Manchester Met for where I am today.

I would definitely recommend a degree apprenticeship to anyone. It doesn't matter where you are from or what your background is, degree apprenticeships are absolutely the way forward. Where else can you get fantastic work experience as well as the academic knowledge and theory that you need to become a fully employable and successful individual?

Melfield Cardozo Healthcare Science Practitioner degree apprentice The Walton Centre NHS Foundation Trust

We were attracted to the Healthcare Science **Practitioner Degree** Apprenticeship programme as the apprentice would be an employee during their training, which provides a difference to other training programmes, as there is a two-way commitment between the apprentice and the organisation. The apprentices are recruited directly by us, enabling us to ensure the apprentice is the correct fit for the role and the organisation.

In addition to learning clinical skills and developing academic knowledge, the apprentices have plenty of opportunities to learn about 'the world of work' as they are integrated into the team. This allows time to attend department and MDT meetings and understand how the service functions, and the wider challenges faced by NHS



organisations. Also, there is plenty of time to work alongside all of the team to allow our apprentices a chance to learn from Clinical Physiologists at various levels within their career.

#### After three decades in

Neurophysiology, I can see that degree apprenticeships promote quality within the profession, this is important as our apprentices are the Clinical Physiologists of the future!

Caroline Finnegan Neurophysiology Service Manager The Walton Centre NHS Foundation Trust

## Creating a supportive environment

In order to create an environment where apprentices will be able to achieve successful outcomes, both academically and within their organisations, the University has put in place a wide range of support.

#### **Apprentices**

#### Dedicated skills coach

A dedicated Skills Coach will conduct termly reviews with the apprentice and employer, advise on University regulations and procedures, and provide pastoral support.

#### Personal learning plan

Where additional learning support requirements are identified, they will be met through a Personal Learning Plan.

#### **University services**

Full access to University services – including disability services, wellbeing, the library, IT services and sports facilities.

#### **Cutting-edge facilities**

Our Department of Life Sciences boasts an international reputation, outstanding record in teaching and research, and state-of-the-art facilities. The department has a reputation for excellent academic programmes, high student satisfaction, internationally recognised research and strong links to partners like the NHS, and individual hospitals and clinicians. Our £3m building for biomedicine research houses one of the few magnetic resonance imaging (MRI) scanners to be found outside a hospital.

#### **Online study environment**

Our programme is designed to support learners who live and work outside of the North West. Study materials can be accessed 24/7 via our online study environment, Moodle. Moodle enables apprentices to access reading lists, download journal articles, contribute to online discussion groups, email tutors, listen to podcasts and submit assignments.

#### **University Library**

The main University Library is located on the All Saints Campus and is open 24/7 during the academic year.

The Library provides access to a wide range of books, texts, journals, business information and statistics. It also runs a number of workshops for mature students on study and research skills.

Many of the Library's resources are available online. For example, apprentices can search the library catalogue, renew and reserve books, download journal articles and research information.





# **Delivery** and **structure**

The Healthcare Science Practitioner Degree Apprenticeship at Manchester Met is designed to develop the knowledge and expertise for a career as a Healthcare Scientist.

#### Delivery

Apprentices will join a community of other like-minded students attending University regularly. During term time (typically 24 weeks a year), apprentices will study one day a week on campus in central Manchester and will be also be required to do some additional online learning. The programme is delivered by academic tutors from Manchester Met and clinical colleagues from physiological science departments in the NHS.

Apprentices will be part of an academic institution whose qualifications are approved by the National School of Healthcare Science, the Registration Council for Clinical Physiologists, the Institution of Biomedical Science and the Royal Society of Biology.

#### An integrated apprentice experience

While the majority of learning is undertaken through University seminars, lectures and lab sessions, the application of this new knowledge within the workplace is a vital component of the programme. Participants will be supported by a workplace mentor and a tutor who will extend apprentices' learning environment and ensure they are exposed to all areas of healthcare science practice relevant to their chosen specialism.

#### **Employer engagement**

Employers will extend the learning beyond the classroom by giving apprentices a work programme which allows them the opportunity to turn theory into practice.

As employees, apprentices are subject to normal terms of employment. It is expected that apprentices will be offered a competitive salary. A flexible work schedule will need to be designed, which allows time to study and attend University and our clinical partner institutions to develop knowledge, skills and behaviours. All apprentices will require a workplace mentor who will oversee their work and development.

#### **Specialist pathways**

Specialist pathways are available to align apprentices' learning with the requirements of their role. Within the Physiological Science programme are cardiac physiology, neurophysiology and respiratory and sleep physiology specialisms.

#### Assessment

The units on this programme will be assessed through a wide range of methods that are designed to meet a range of learning styles and include both assignments and examinations. Apprentices will also need to complete a clinical portfolio and an e-portfolio of their work-based development to support end-point assessment.



# Programme **content**

#### Year 1

#### Cell and molecular biology

This unit provides a knowledge and understanding of biochemistry including basic organic chemistry. Biological molecules and their importance in cell structure and function are also studied. Apprentices are introduced to micro-organisms, with focus on the importance of identification and classification of microbes, and the techniques and skills required for their isolation, enumeration and microscopic examination.

#### **Physiological systems**

The Physiological Systems unit introduces apprentices to principles of human physiology at the organ system level with appropriate links to anatomy, cell biology, biochemistry and metabolism, disease pathology, pharmacology and therapeutics.

## Professional practice, research skills and physiological measurements

This unit covers the generic skills essential for healthcare science apprentices, particularly in relation to the capture, analysis and interpretation of biological information, principles of physics and professional practice for healthcare science.

## Scientific basis of physiological sciences

This unit examines the application of science across the neurosciences or cardiac, vascular, respiratory and sleep science and safe working within the clinical healthcare setting.

#### Year 2

#### **Disease processes and statistics**

This unit concerns the concepts of health and disease and looks at various causes and mechanisms of a range of disease processes in humans. The unit allows apprentices to understand a range of statistical methods, applying them to real world situations.

### Professional practice, signal processing and instrumentation

This unit is designed to help apprentices continue to develop as safe, competent practitioners by introducing the themes of quality, leadership and safety. The physics element provides the knowledge to understand basic instrumentation and its use.

#### **Specialist studies 1**

This module ensures that apprentices have the knowledge and understanding of the breadth of the application of science within neuro, cardiac, respiratory and sleep sciences. They will be expected to develop their skills with respect to patient-centred care, ensuring that patient values guide all clinical decisions and build professional practice and practise safely in the workplace.

#### **Specialist studies 2**

This module ensures that apprentices understand the further aspects of the science within Neuro, Cardiac, Respiratory and Sleep Sciences, and its application. Apprentices will be expected to further build their professional practice and practice safely in the workplace, using critical reflection to review and improve their performance.



#### Year 3

## Applying specialist studies to practice 1

Apprentices will gain further in-depth knowledge of the range of physiological investigations in their chosen subject discipline and learn to apply this knowledge to enhance and develop their clinical skills with respect to patient-centred care.

## Applying specialist studies to practice 2

The unit further extends the learning in Applying Specialist Studies to Practice in the apprentice's chosen subject discipline.

#### Professional and evidencebased practice

This unit will give apprentices the knowledge required to progress in their professional development, understand the role of key bodies and policy, evaluate research and practice in a safe, patient-focused way.

#### Project

This unit allows all final year apprentices to plan and undertake either a laboratory-based research project or a library-based dissertation in an area of their own interest. Apprentices have the opportunity to develop a research question, plan an appropriate investigation and undertake that investigation under the guidance of an allocated supervisor.

#### **End-point assessment**

This unit will give apprentices the resources and guidance to consolidate and demonstrate their acquired academic and clinical skills. It will provide fulfilment of the apprenticeship standard. It consists of three elements:

- A one-hour written Readiness for Practice Test (RPT);
- A 40 minute face-to-face Professional Discussion between the apprentice and a trained Independent Assessor;
- A research presentation of up to 15 minutes based on the learners research project. This is then followed by a 15-minute discussion and review.

# **Application** information

#### **Entry requirements**

Candidates for the Healthcare Science Practitioner Degree Apprenticeship should have a minimum of 120 UCAS points at A2 (grades BBB), including biology or human biology A-Level at grade C or above, or acceptable alternatives.

Candidates who have previously completed a Foundation Degree in Healthcare Science may be considered for advanced entry depending on the content of their previously completed qualification.

However, we will assess individually those who do not have these qualifications but who have relevant work experience.

## Level 2 English and maths requirements

It is a condition of apprenticeship funding, at any level, that all applicants are able to evidence GCSE English Language and Maths passes at grade A\*-C/9-4 or commit to completing Functional Skills Level 2, in addition to the programme. If required, this is provided at no additional cost.

#### How to apply

Once an employer has confirmed that they will support their apprentice(s) on the programme, we will issue an application pack to interested applicants. The application form enables us to build up a picture of the candidate, their experience and the knowledge and skill areas they are looking to develop. We recommend that a CV is included, with a complete work history, and that the personal statement is used to highlight management strengths and work achievements.



#### **Off-the-job training**

Apprenticeship funding rules state that apprentices should spend at least 6 hours per week on developing relevant skills, knowledge and behaviours. This means that apprentices must undertake University tuition, online learning and assessments in combination with a range of other eligible activities undertaken in the workplace.

#### **Employer next steps**

If you would like to discuss how this programme could work for your organisation, or if you have any further questions, please contact our dedicated Apprenticeships Team. E: apprenticeships-employer@mmu.ac.uk T: 0161 247 3720



#### Get in touch

Our growing portfolio of undergraduate and postgraduate apprenticeships include programmes in the following areas:

- digital and technology
- digital marketing, creative design and UX
- health and social care
- leadership, management and HR
- retail

If you think one of our programmes could work for your organisation, please get in touch. We will be happy to provide further information and guide you through the next steps.

#### Contact us:

Apprenticeships team E: apprenticeships-employer@mmu.ac.uk T: 0161 247 3720 W: mmu.ac.uk/apprenticeships

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- in Degree Apprenticeships at Manchester Metropolitan University
- Degree Apprenticeships at Manchester Met
- O <u>manmetuni</u>

We are committed to ensuring that all of our materials are accessible. This brochure is available in a range of formats, such as large print, on request via marketing@mmu.ac.uk



