



Health & Care Futures at Strathclyde

Training & Learning opportunities for health and care professionals

The University of Strathclyde is a leading international technological university established in 1796 as the place of useful learning – with a mission to make the world better educated, prosperous, healthy, fair and secure.

Health & Care Futures at Strathclyde brings together the University's cross-disciplinary expertise to make an effective and sustained contribution to the future of health and care in the UK and beyond.

Our aim is to use state-of-the-art innovation and expertise in the fields of medicines innovation, health technologies, data analytics and artificial intelligence, and the workforce and leadership.

Through this, we'll promote the delivery of new models of care focusing on prevention, and empowering individuals and populations to live as well as possible at home and in their communities.

www.strath.ac.uk/workwithus/healthcarefutures/

Empowering Practitioners

Future health and care challenges require concerted effort across disciplines. Our Health & Care Futures initiative provides health and care practitioners with a unique blend of learning opportunities.

Studying with our Business School will train future leaders and managers in health and care. Our Strathclyde Institute of Pharmacy and Biological Sciences offers a broad range of practical and research based learning, and Humanities & Social Sciences offers education in psychology, counselling and psychotherapy.

Working with our Bioengineering, our Chemistry and Physics
Departments enables the learner to understand, to embrace and
ultimately to take a lead in the development and implementation of
novel detection, sensing and bionics techniques in the health sector.
Supported by our Mathematics and our Computer and Information
Sciences Departments, health and care practitioners become literate in
the safe use and application of personalised health data.

Your education, your career

Your training is provided in manageable modules. You might want to take a continuous professional development course to work on a special aspect of your career or you want to collect credit over time towards a degree. Many of our degree courses allow you to build up credit over time and thesis work can be arranged to suit your work and life commitments.

If you are working for the NHS or in the care sector, please enquire about discounts we can offer towards your training and education.

Provision of Courses from Health & Care Futures www.strath.ac.uk/workwithus/healthcarefutures/ Course list **MSc Autism* MSc Health History*** MSc Advanced Pharmacology* MSc/PgDip/PgCert Health Care Leadership MSc Advanced Pharmaceutical Manufacturing* Introduction to Clinical Gait Analysis* MSc Applied Statistics in Health Science* MSc Molecular Microbiology* MSc Applied Statistics in Health Science (online) MSc Neuroscience & Mental Health* **MSc Pharmaceutical Analysis*** MSc/PgDip/PgCert Biomedical Engineering Biomedical Engineering Innovation Workshop* MRes/MPhil/PhD Physical Activity for Health* MSc/PgDip/PgCert Biofluid Mechanics **MSc Safety and Risk Management MSc Biomedical Sciences** MPhil, PhD Speech and Language Therapy **MSc Cancer Therapies* COSCA Certificate in Counselling Skills** MSc Clinical Health Psychology The Power of Data in Health and Social Care* **MSc Counselling & Psychotherapy** Psychology with a specialisation in Health* **MSc Digital Health Systems*** MSc Child and Youth Care Studies by Distance Learning* MSc/PgDip/PgCert Digital Transformation MSc Research Methods in Psychology* **Gait Analysis in Neurological Conditions** # Statistics for NHS Staff (SFC funded) MSc Health Analysis, Policy and Management

EMPOWERING YOUR CAREER WITH DATA-DRIVEN HEALTH

The health care sector is experiencing an ever-increasing amount of data ranging from individual patient health monitoring to data recoding across hospitals and indeed populations. Data literacy is a key feature of career development and progression.

Statistics for NHS Staff

This module is for health care professionals with a desire to enhance their knowledge of statistics and data analysis.

Assuming no prior knowledge, it covers the basic statistical concepts necessary to address medical research questions, interpret the results, and make valid conclusions. By the end of the module, you'll have a good understanding of the basic concepts, and know how and when to use them. You'll also have the ability to apply them using a statistical software package.

The Power of Data in Health and Social Care

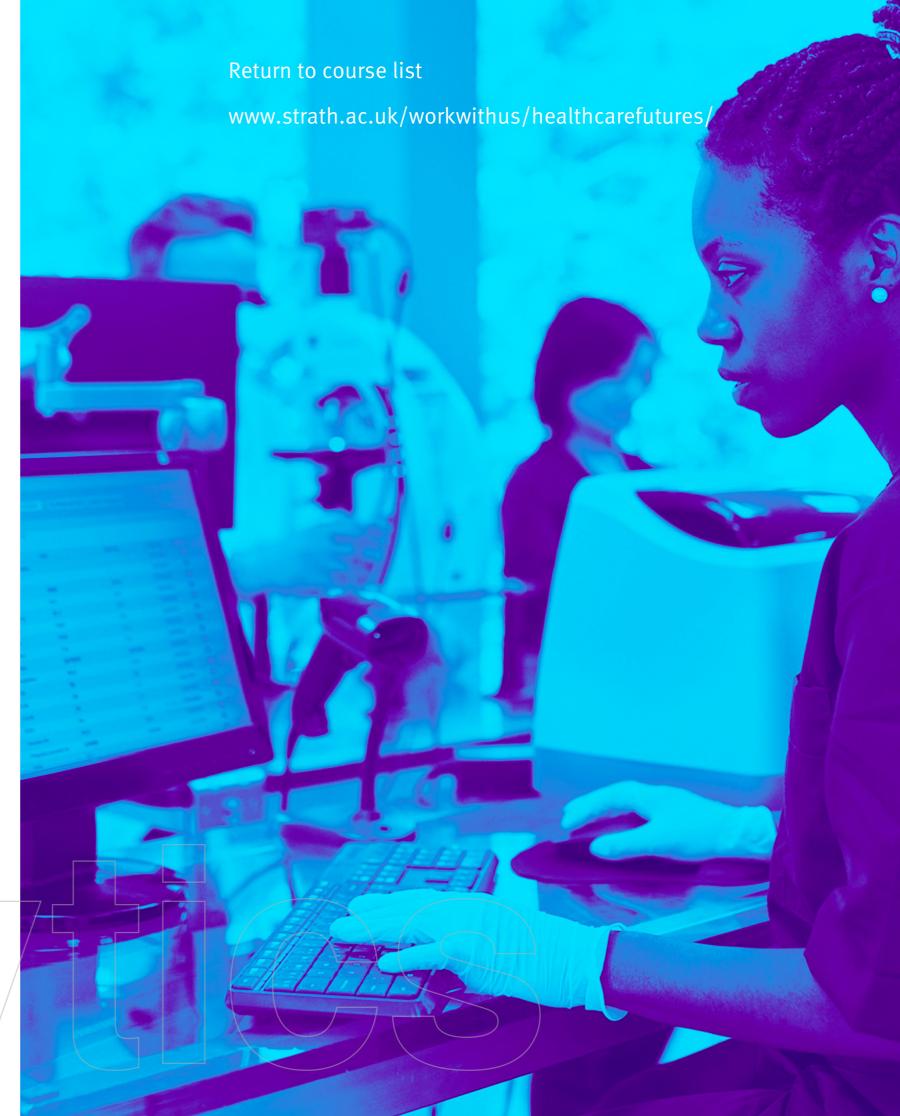
Three-week option

This is a free, three week course. In this course we teach how to make the most of data, how it should be gathered, data governance and methods for analysing data. By using real-world case studies, this course will provide you with tools you can use in your own work to create sustainable health and social care services.

Five-week option

This is a paid five-week course. It will equip participants with the ability to understand, communicate and manage:

- The value of data science and analytics for improving health and care service design and provision
- Data collection, preparation, and management
- Data analytics methods, tools, and their practical uses
- Ethics and information governance considerations
- How to generate and communicate meaningful insights using analytics



MSc Digital Health Systems

Digital Health is one of the fastest-growing economic sectors worldwide. It is creating jobs twice as fast as any other economic sector in Scotland and globally (Financial Times 2018). Digital Health arises from the intersection of health and care services, information technology and mobile technology, and encompasses digital products and systems that can monitor, analyse, educate and improve health and care (Deloitte 2015).

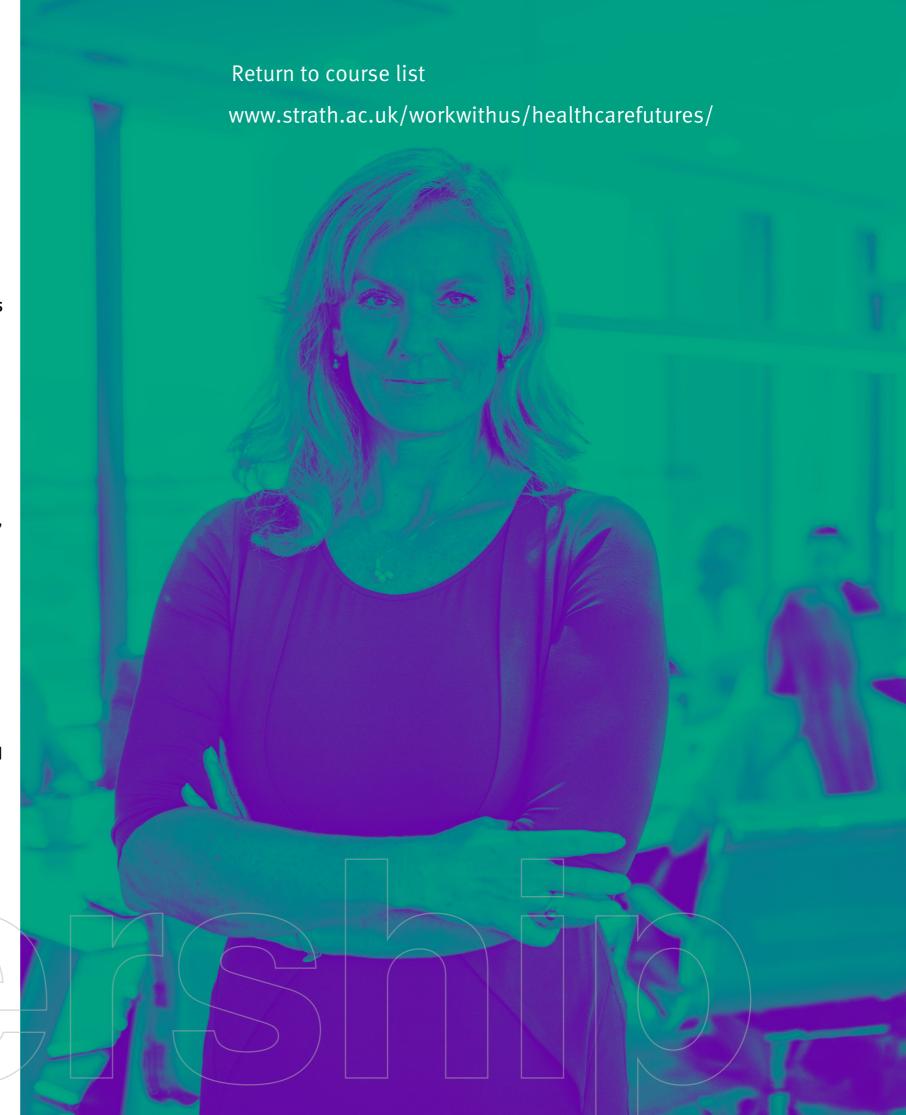
This one-year Master's degree (also available part-time over 24 months) is the perfect conversion pathway for recent graduates looking to move into the health and care sector. It is also ideal for existing health and social care practitioners looking to up-skill in digital innovation.

Our course is unique in that it's:

- delivered by a broad range of world experts in computing science, information science, clinical psychology, and health services research
- relevant to real world practice by being co-designed with the Scottish Government, their innovation centre (the Digital Health & Care Institute) the National Health Service, and health and care SMEs and third sector organisations
- takes a multifaceted whole systems approach involving people, technology, practice and policy.

You will learn about state-of-the-art devices (e.g. sensors, wearables, apps), systems (e.g. electronic health records, remote monitoring) and methods (e.g. co-design, machine learning and data analytics).

You will also learn about health and care implementations and innovation and how to deliver real world digital health solutions in context and scale.



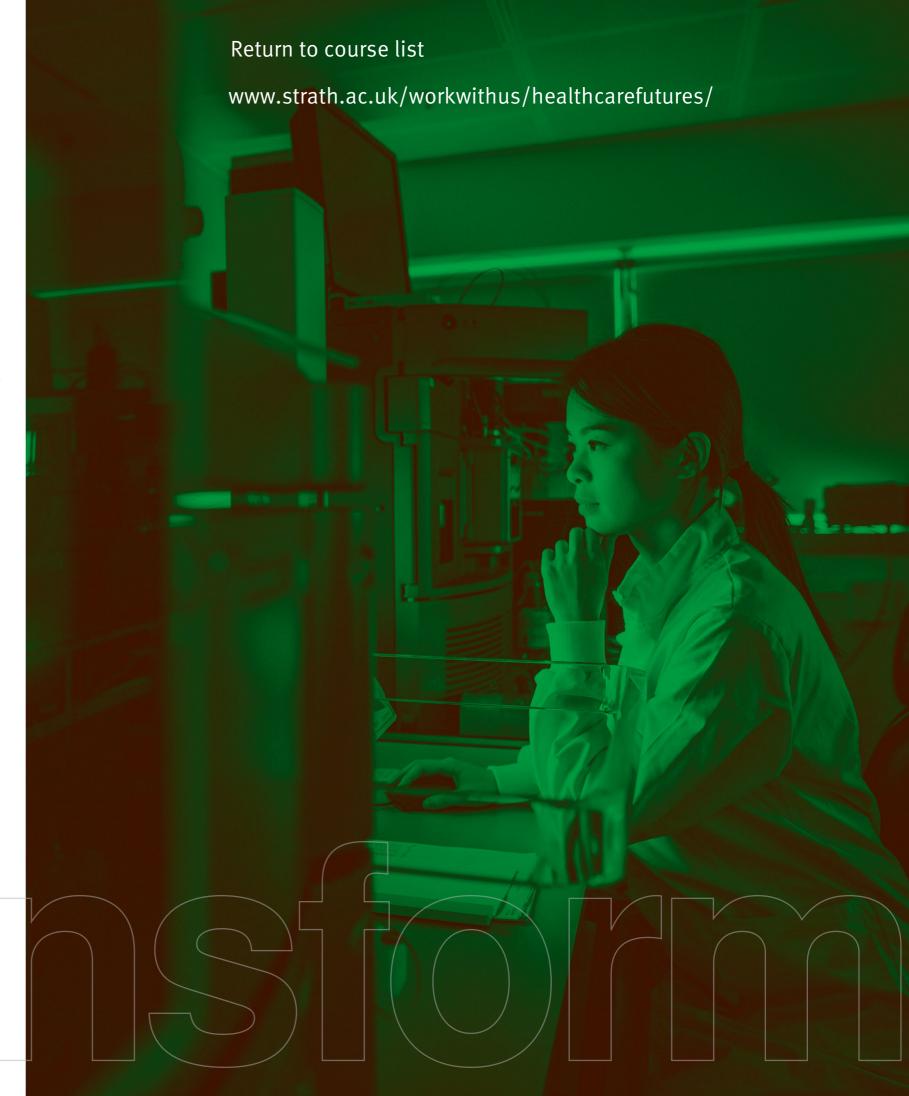
MSc Applied Statistics in Health Science MSc Applied Statistics in Health Science (online)

Our course is run by academics who work in the health sector as well as in higher education. Statisticians from the Animal and Plant Health Agency (APHA), an Executive Agency of the Department for Environment, Food & Rural Affairs (Defra) as well as those who have extensive experience in working with the National Health Service (NHS) in Scotland, will provide lectures based around real-life problems and data from the health sciences.

The course is delivered entirely online and access to a Windows PC is required. The course is ideally suited to those working full-time or with other commitments. You can study and complete the modules when it's most convenient for you – you do not need to be online at specific times.

The course has been designed by academics who also work as statisticians in the public sector and are experts in understanding real-life statistical problems, data, and relating theory to practice.

Although the programme is focused on health, the skills set provided will also equip you with the necessary training to work as an applied statistician in other areas such as insurance, finance and commerce.



CONTRIBUTE TO ENGINEERING SOLUTIONS TO GLOBAL HEALTHCARE CHALLENGES

The Department of Biomedical Engineering in the Faculty of Engineering uses state-of-the-art innovation, profound expertise and a collaborative 'can do' ethos, in the fields of diagnostics and wearables, digital health and AI, advanced rehabilitation and tissue engineering. Modernise your career with our courses in a learning environment which has collaboration at its heart and a passion for innovation.

We are experts in delivering high-quality engineering knowledge and understanding to those that do not necessarily have an engineering background.

Short Courses

We continue to develop short courses in response to the needs expressed by the biomedical community, including clinical, academic and commercial sectors. In addition to the courses below, we are keen to engage further with these sectors to develop new courses that meet emerging or unmet professional development needs. Please contact us if you have a specific request or need.

Introduction to Clinical Gait Analysis

This online course covers the practical and theoretical components of clinical gait analysis, including a qualitative and mechanistic description of the gait cycle, a discussion on the theories of gait (why we walk the way we do) and an introduction to gait abnormalities. The course uses a combination of video, audio supported powerpoint lectures, word documents, quizzes and weekly discussion forums.

Gait Analysis in Neurological Conditions

This online course builds on the introductory course and develops an understanding of 3D gait kinematics, kinetics, electromyography and energy through a series of clinical case studies featuring neurological conditions (stroke, polio and CP).

Return to course list

www.strath.ac.uk/workwithus/healthcarefutures/

Biomedical Engineering Innovation Workshop

A two-day hands-on workshop for clinicians, businesses and students in the medical device community looking to acquire and apply crucial skills for medical device technology development. The workshop incorporates interactive tutorials, seminars, case studies and demonstrations from biomedical engineering experts centered on:

- · Computer Aided Design (CAD) modelling skills
- Programming of external hardware systems
- Concepts and application of rapid prototyping (3D printing)

Longer Programmes

We offer a suite of postgraduate level taught courses in Biomedical Engineering both on campus and distance learning. The vast majority of our classes are also available on a modular basis via the Faculty of Engineering's Advanced Engineering Studies programme, should you wish to tailor your own bespoke curriculum. Please contact us for details.

Campus-based learning

The following programmes are available both full-time (12 months) and part-time (3 years).

MSc/PgDip/PgCert Biomedical Engineering

A highly respected and internationally reknowned postgraduate degree, established over 50 years ago, covers topics such as Biomedical Electronics, Biomedical Instrumentation, Biomechanics, Tissue Mechanics, Biomaterials and Biocompatibility, Medical Robotics, Numerical Methods in Biomedical Engineering, Medical Device Regulations, Regenerative Medicine and Tissue Engineering and Rehabilitation Technology.

MSc/PgDip/PgCert Biofluid Mechanics

Sharing many classes with the MSc Biomedical Engineering, this unique programme equips students with additional tools to conduct numerical analysis of blood flow the cardiovascular system.

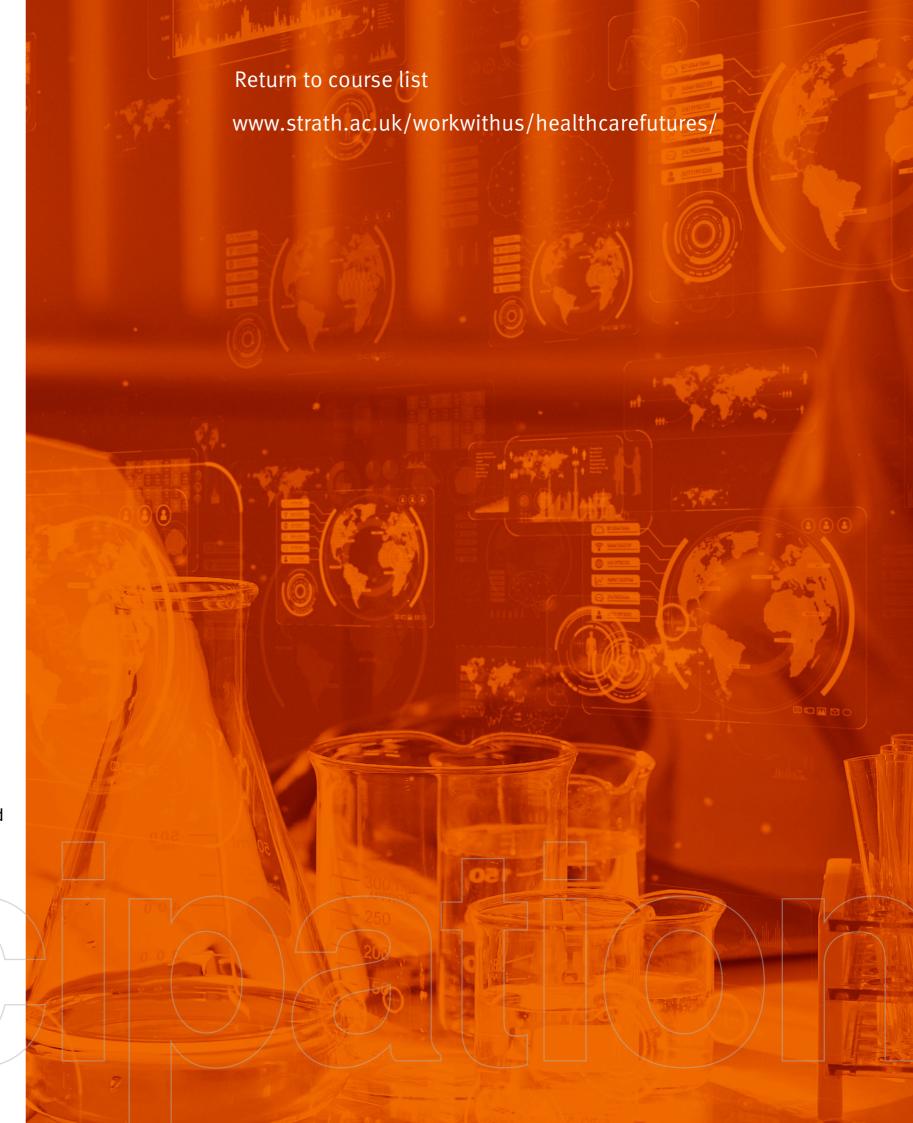
Distance Learning

Our suite of part-time, distance-learning postgraduate programmes are modular and designed for off-campus study. The programmes lead to an award of an MSc, Postgraduate Diploma or Postgraduate Certificate.

These have been designed for professionals already working in prosthetics, orthotics, healthcare, medicine or associated disciplines. They are offered by distance learning allowing you to study at your own pace, at times and places that are convenient for you.

- Rehabilitation Studies (suitable for healthcare professionals interested in rehabilitation)
- Prosthetic Rehabilitation Studies (for prosthetists and/or orthotists only)
- Orthotic Rehabilitation Studies (for prosthetists and/or orthotists only)
- Prosthetic & Orthotic Rehabilitation Studies (must already be qualified in prosthetics AND orthotics)

Depending on your background, these programmes may cover topic such as Prosthetic Studies, Orthotic Studies, Clinical Governance, Introductory Biomechanics, Lower Limb Prosthetic Biomechanics, Lower Limb Orthotic Biomechanics, Clinical Gait Analysis, Advanced Prosthetic Science, Advanced Orthotic Science, Research Methods and Data Analysis.



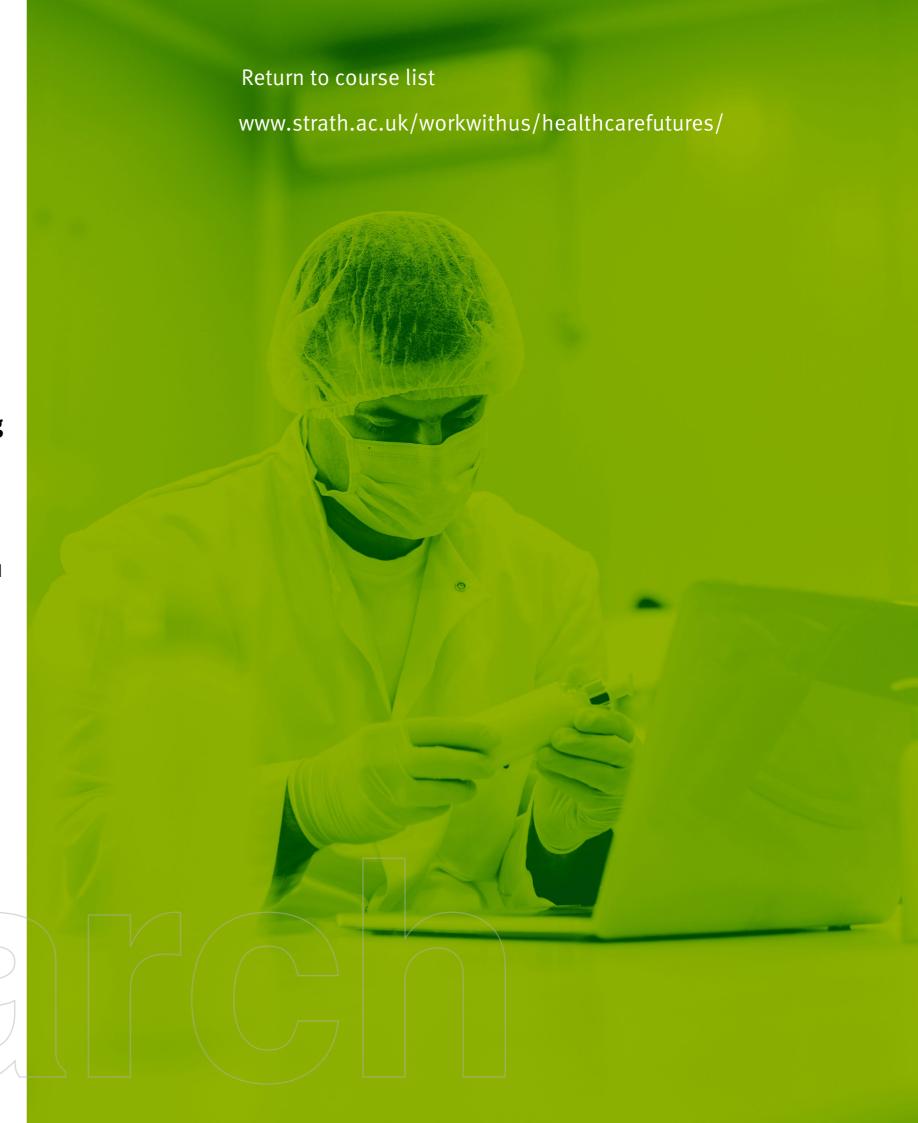
LEADING TRANSFORMATION THROUGH PHARMACY AND PHARMACEUTICAL DEVELOPMENT AND PRACTICE.

Whether you are already a professional pharmacist or you are developing pharmaceutical skills as an element of your career, we offer you a range of bespoke MSc courses.

MSc Advanced Pharmaceutical Manufacturing

This course is designed to produce highly-skilled graduates in continuous manufacturing science and technology to meet the growing demands for expertise in this area. You'll be trained to take up jobs in the food, chemical and pharmaceutical industries.

The course is aligned with the EPSRC Doctoral Training Centre in Continuous Manufacturing and Crystallisation (CMAC). It's supported by academic staff from across the University, six academic partners and CMAC's strategic partners (AstraZeneca, GlaxoSmithKline, Novartis).



MSc Pharmaceutical Analysis

The course provides specialised knowledge of the analytical techniques used to detect, identify and quantitatively determine drugs and related substances. You'll be introduced to techniques for evaluating analytical data and validating analytical methods and examine strategies for analytical research and development.

You'll gain practical experience in a wide range of modern instrumentation and techniques.

The course consists of four theory and two practical modules running between October and April followed by examinations.

If you wish to proceed to the MSc, you'll undertake a 10-week research project. This will be in the University or at an external company or organisation.

A 25% discount on course fees is available for NHS staff - please enquire about this on the course webpage.

MSc Advanced Pharmacology

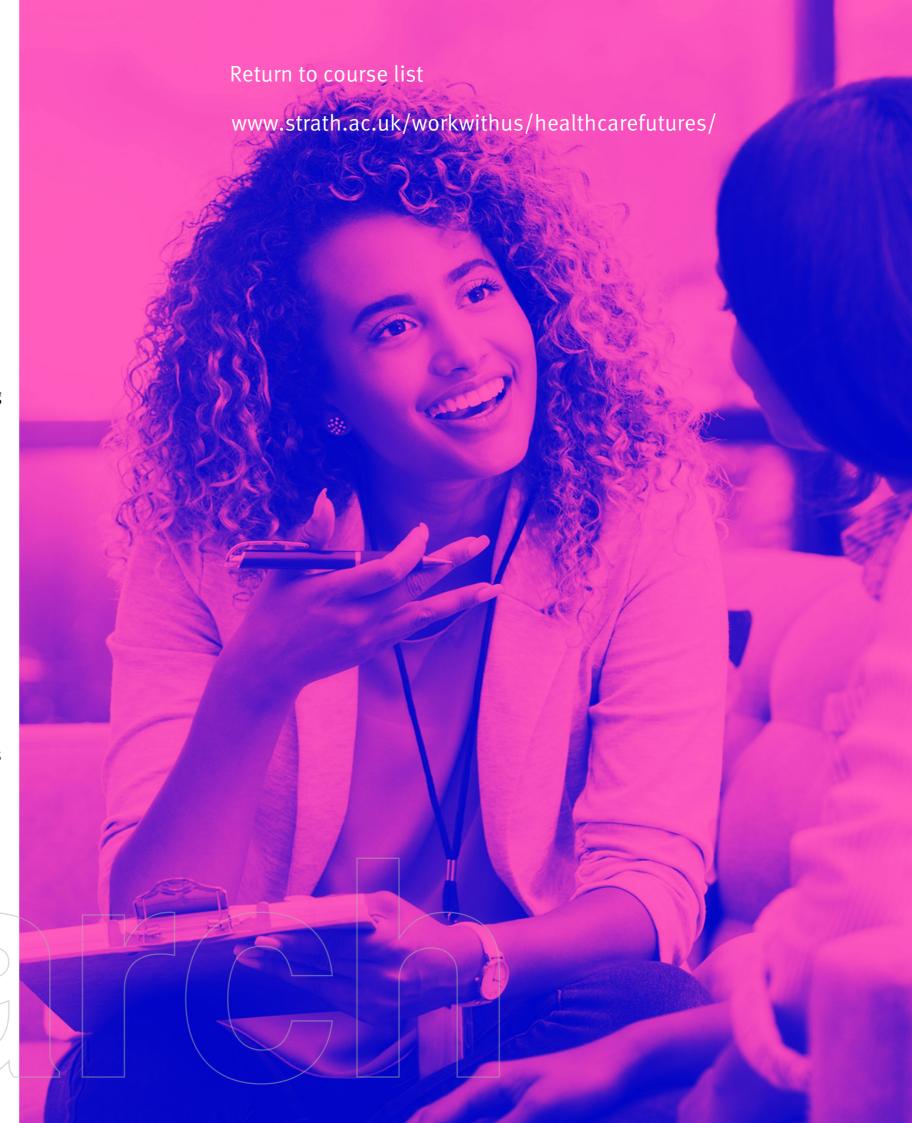
Our Masters in Advanced Pharmacology will provide you with a comprehensive three-part postgraduate life sciences training.

Firstly, unlike many Masters courses, we offer you dedicated training in a broad suite of practical laboratory skills.

Secondly, this is complemented by two unique classes that develop your transferrable skills in statistics, presentations, career development, and ethics, as well as honing your science writing skills and your ability to design experiments and analyse sophisticated datasets.

Thirdly, our taught classes capture the excitement of cuttingedge research fields and you'll be taught by active researchers or practising clinical professionals.

A choice of classes allows you to select a pathway to suit your future aspirations. The programme has a special focus on how drugs and other chemicals affect the body in health and disease. You'll explore the development of new and improved medicines and the treatment of disease.



PATIENT-CENTRED HEALTH CARE.

Working in the health and care sector, the wellbeing of your patients and your clients is central to your job satisfaction and to your ability to progress and develop your career.

COSCA Certificate in Counselling Skills

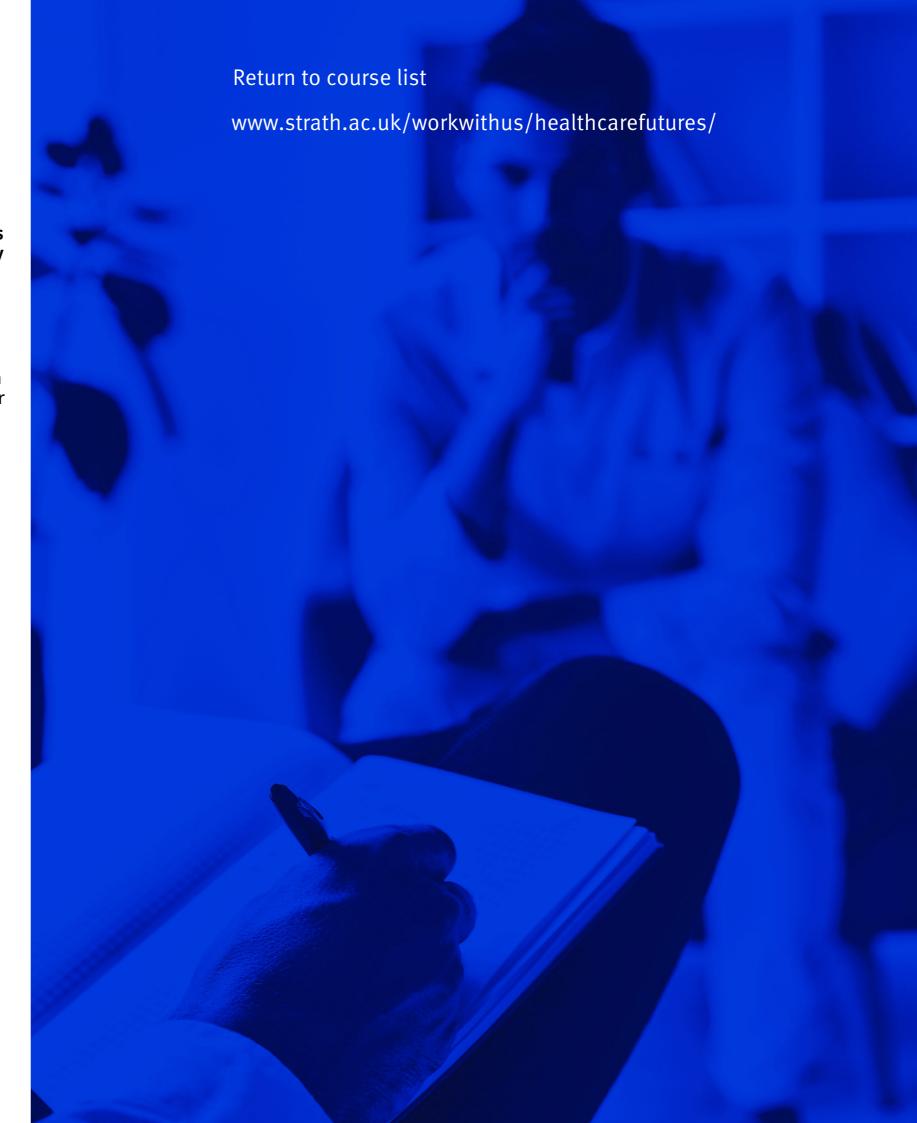
The Certificate in Counselling Skills course is designed, in association with Counselling & Psychotherapy in Scotland (COSCA), for people for whom counselling skills could be useful in their normal day-to-day work or as the starting point for a change in career.

As well as familiarising participants with the counselling approach and a range of counselling skills, the course will also examine a number of key theories of counselling practice. Successful participants will gain an enhanced understanding of the human condition and human problems.

This class will benefit a wide variety of people working in business, industry and the public sector, including:

- personnel & welfare officers
- nurses & NHS support staff
- social care and social workers
- mental health workers
- teachers
- workplace & employee counsellors

It is also suitable for people looking for personal or career development.



MSc Autism

This Masters-level course enables you to understand complex cognitive and affective theories essential to supporting the autism profile.

This knowledge will enable you to translate theory into practice and to critically evaluate evidence-based approaches to intervention. Our philosophy that autistic people require a holistic approach throughout their life journey means you can draw upon experiences of our multi-professional student cohort.

A 25% discount on course fees is available for NHS staff - please enquire about this on the course webpage.

MSc Counselling & Psychotherapy

Person-centred-experiential counselling and psychotherapy is internationally recognised. Evidence suggests it's one of the leading therapeutic approaches to mental health and wellbeing, and it continues to develop important practical applications and theoretical knowledge.

Our long-established postgraduate courses in counselling have offered a unique opportunity to gain in-depth experience of the person-centred-experiential methods applied in counselling and psychotherapy, to Masters level. Our courses have an international reputation and attract students from the UK, Europe, Canada, the USA, China, and India.

The MSc Counselling & Psychotherapy course has been restructured to meet evolving standards for evidence-based practice, rising educational standards, increased professional regulation, and rapid social and economic change. You'll gain a solid grounding and thorough integration of theory, research and practice, as well as a capacity to engage with the wider field of human distress and wellbeing, including private, public and third sector mental health agencies.

A 25% discount on course fees is available for NHS staff - please enquire about this on the course webpage.

Return to course list

www.strath.ac.uk/workwithus/healthcarefutures/

MSc Counselling & Psychotherapy

This course is accredited by the British Psychological Society. If you successfully complete this course and have no background, or an unaccredited background, in psychology, this course will provide the route to gain Graduate Basis for Chartered Membership (GBC) with the British Psychological Society (BPS).

The specialism helps to develop an understanding of the relevance and applications of psychology to real life, particularly in a health context.

A 25% discount on course fees is available for NHS staff - please enquire about this on the course webpage.

MSc Clinical Health Psychology

The course has been developed to offer theory, knowledge, and practical skills development across the areas of clinical, health and neuropsychology. In addition, you'll receive training in professional practice and research methods.

A 25% discount on course fees is available for NHS staff - please enquire about this on the course webpage.

Psychology with a specialisation in Health

This course is accredited by the British Psychological Society. If you successfully complete this course and have no background, or an unaccredited background, in psychology, this course will provide the route to gain Graduate Basis for Chartered Membership (GBC) with the British Psychological Society (BPS).

MSc Research Methods in Psychology

This course is for those aiming to develop careers in research or enter subsequent training for a scientist practitioner-oriented career such as clinical or educational psychology.

It also provides a basis for further postgraduate study such as a PhD and applications for research assistant posts.

MRes/MPhil/PhD Physical Activity for Health

Our research is focused on the development and testing of interventions that encourage people to participate in more physical activity and less sedentary behaviour throughout life.

We accept applications for postgraduate research study at any point throughout the year. You can study an MPhil/MRes over one year or a PhD over the course of three years, or part-time equivalents. PhD involves at least three years of independent research study supported by a number of members of academic staff. You'll complete a minimum of 60 credits of the Postgraduate Certificate in Research development programme (PgCert RPD) over the course of your PhD studies. MPhil involves at least one year of independent research study with academic supervision. As part of your MPhil, you'll participate in the PgCert RPD and will complete a minimum of 20 credits over the course of your studies.

MRes involves a minimum of 20 credits of taught element and 160 credits of independent research study supported by members of the academic research team.

You can study either degree in any of our research areas:

- Behaviour & behaviour change
- Health effects
- Globalisation & non-communicable disease (NCD)
- Measurement
- Technology

Return to course list

www.strath.ac.uk/workwithus/healthcarefutures/

PhD Public Health and Health Policy

A PhD in Public Health and Health Policy at Strathclyde may incorporate more than one of the following areas:

- Using theoretical perspectives from public health and social sciences to advance knowledge in associated areas.
- Identifying the impact of public policy on health outcomes.
- Exploring the impact of the social determinants of health of the health and well-being of vulnerable groups.
- Assessing and evaluating approaches to promote health and well-being and address health inequalities.

MSc Child and Youth Care Studies by Distance Learning*

Developed in partnership with the Centre for Excellence for Children's Care and Protection (CELCIS), the programme has a fresh, engaging curriculum that draws from a variety of disciplines and approaches including child and youth care, social pedagogy, sociology, psychology, health, education, social work and social policy.

You'll develop a theoretically informed, practice-based understanding of issues related to the social, political and cultural contexts of children and youth.

The programme considers and examines theoretical and policy contexts, child development in the lifespace, critical reflection, relational practice, management and leadership, intervention methods and research methods.

MANAGING CHANGE AND LEADING TRANSFORMATION.

Becoming a leader in your field required a broad and diverse range of skills and abilities. Our course provide you with a solution fitting your aspirations.

MSc Health Analysis, Policy and Management

The MSc Health Analysis, Policy & Management has been developed to equip you with practical, evaluative, and analytical skills to allow you to influence and develop strategy and performance in the healthcare sector.

The skills you will learn are sought after for roles at different levels in organisations across the health sector, including in hospitals, health systems, healthcare consulting firms, governments, and other local and international health organisations. They are also useful tools for beginning an academic research career in the area.

Our academics are actively engaged in research and consulting work for UK and international health organisations, including the English and Scottish National Health Services in the UK. You'll work on summer projects relevant in this context and where possible for these organisations.

This unique course takes a 'systems thinking' approach to improving decision-making in healthcare in the UK and internationally.



MSc/PgDip/PgCert Digital Transformation

Take your career to the next level and become fluent in the knowledge and skills needed to better leverage digital in your organisations and lead your way through a digital transformation in health and social care. Digital transformation is the process of using digital technologies to create new – or modify existing – business processes, culture, and patient experiences to meet changing healthcare requirements.

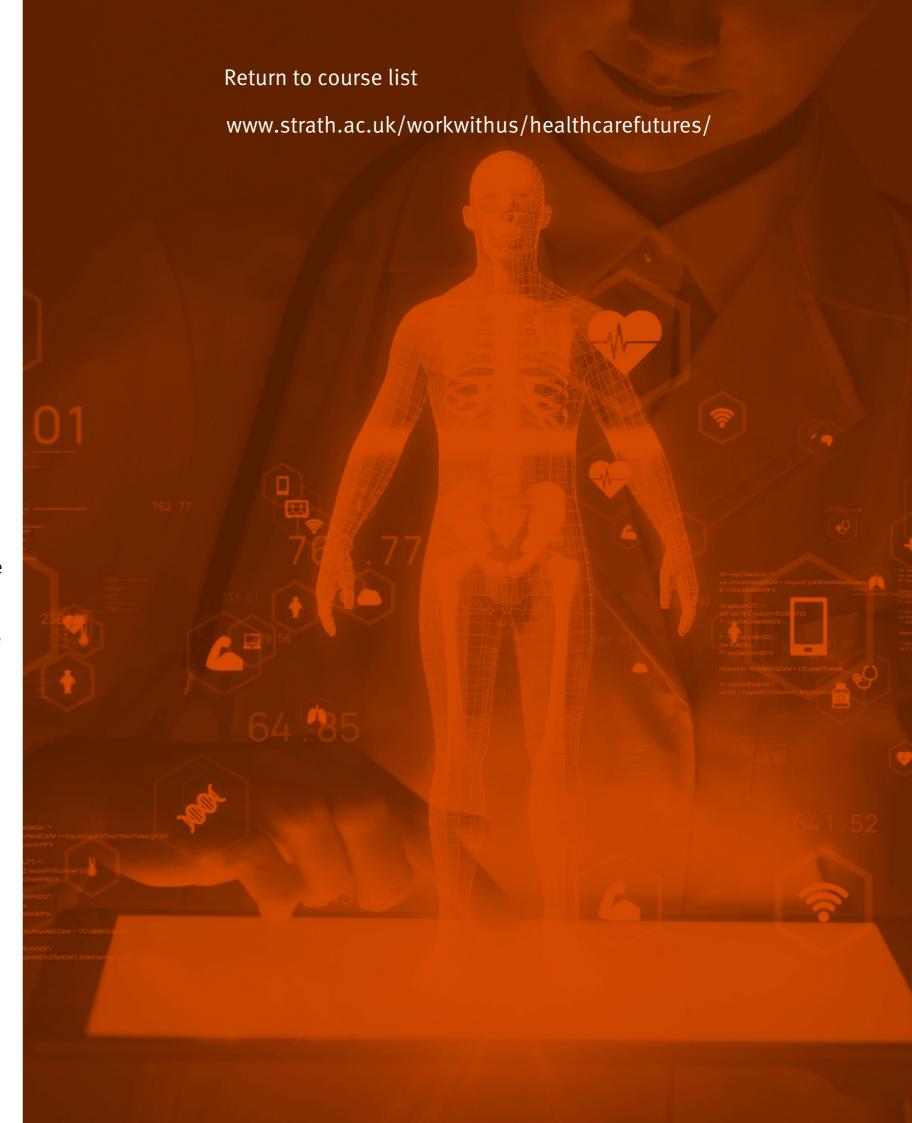
Throughout 2021, we will offer a portfolio of short Digital Transformation programmes delivered via our live virtual platform allowing you to gain a high quality, off-campus Strathclyde experience wherever you are based in the world.

Each programme will be scheduled over a six-week period and completion offers a certified programme of CPD study in the chosen subject area.

Each online programme integrates continuous assessment, rather than laborious essay completion at the end the study period. Our live sessions are held during selected evenings and weekends to avoid disrupting your work schedule.

You can select just a single certificated module through to a complete MSc in Digital Transformation within a year. For those of you keen to follow a more accredited path, we offer a qualification ladder which allows you to progress from a Postgraduate Certificate to a Postgraduate Diploma to an MSc Digital Transformation – all within one year of study.

You can combine any three of our six modules to achieve a Postgraduate Certificate, all six core modules for the award of a Postgraduate Diploma, and add Digital Transformation Practice and a Project to complete an MSc in Digital Transformation.



MSc/PgDip/PgCert Health Care Leadership

The MSc Health and Care Leadership (HCL) is an internationally recognised, interdisciplinary postgraduate degree that provides participants with the underpinnings for a successful leadership career in the Health and Care Sector.

The course is suitable for both established and aspiring leaders looking to lead within and across the health and care systems. HCL takes a system wide approach to the design of complex services, development of interdisciplinary departments, processes and pathways. The programme is likely to appeal to clinical and nurse leaders across any specialty, allied healthcare professionals, service managers and other system leaders across the health, care and third sector.

HCL give the opportunity to study core disciplines and develop the knowledge and skills required to succeed at the most senior levels. For aspiring leaders, the programme provides a springboard that enables a transition from more functionalist positions to more senior, strategic roles.

Drawing on the depth and breadth of expertise across the University and our extensive networks of sector experts, the HCL draws on the latest research and thought leadership, along with practice-based knowledge, insights and skills. Participants will develop and enhance the capabilities needed to work in partnership within and across organisational boundaries, leverage technology and deliver high value, service-user and patient- centred outcomes across complex environments.

Return to course list

www.strath.ac.uk/workwithus/healthcarefutures/

MSc Safety and Risk Management

Written and supported by a dedicated team of part-time tutors/ practitioners engaged in health and safety practice, the course offers a unique opportunity to acquire knowledge and expertise in a highly practical context.

The Postgraduate Certificate in Safety & Risk Management has been formally accredited by the Institution of Occupational Safety and Health (IOSH) as satisfying the academic requirements for Graduate Membership (GradIOSH). Following successful completion of the Certificate, there is an opportunity to progress to higher-level study and Chartered Membership (CMIOSH).

A 25% discount on course fees is available for NHS staff - please enquire about this on the course webpage.

MSc Health History

This research-led postgraduate programme seeks to introduce students to a range of issues, controversies, debates, and specialist topics in the history of health and medicine.

It provides specialist modules, taught by experts in the field; a sources and methods module which engages with both practical and intellectual issues in the history of medicine and of health and healthcare; and the opportunity to carry out an extended piece of original historical research and writing in the form of the dissertation.

WORKING AT THE FOREFRONT OF SCIENCE AND HEALTH INNOVATION.

Biomedical science is one of the key foundations of health and care. Through our dedicated courses, you can develop your own career path.

MSc Biomedical Sciences

Firstly, unlike many Biomedical Sciences Masters courses, we offer you dedicated training in a broad suite of biomedical, bioinformatics and practical laboratory skills. These will not only be great preparation for future research careers, but also a way to make the most of a summer research project.

Secondly, our taught classes capture the excitement of cutting-edge research fields.

The substantial choice of classes means that you'll get to select a clinical-oriented or basic life science research pathway to suit your future aspirations.

The course provides the perfect springboard to future training at PhD level or gives you a range of experience that will prove attractive to employers from industry or the health-care provision sector.

Return to course list

www.strath.ac.uk/workwithus/healthcarefutures/

MSc Cancer Therapies

The MSc in Cancer Therapies is combines courses on cancer biology, drug discovery, formulation and delivery with radiation biology.

You willgain an understanding of the practical, ethical and economic implications of personalised cancer therapy. The degree is for graduates seeking experience in the range of topics essential to the understanding and development of cancer therapies.

A 25% discount on course fees is available for NHS staff - please enquire about this on the course webpage.

MSc Molecular Microbiology

You will focus on the molecular biology of important microbial pathogens and industrial microorganisms and study the molecular mechanisms by which bacteria cause disease or can be exploited for the synthesis of biotechnologically important products.

The course content and research projects are driven by the expertise in microbial genomics, genetics and biochemistry research that exists within the Institute.

Studying a combination of compulsory and optional classes and a research project, you will gain vital transferable skills in statistics, communication, ethics, science writing and critical analysis of data.

MSc Neuroscience & Mental Health

The MSc Neuroscience & Mental Health has been designed, with feedback from industry, to fulfil a gap in the postgraduate market for a strong research-led neuroscience Masters degree.

The programme will allow students to build both a strong knowledgebase and a clear understanding of the practicalities involved in research, drug discovery and development of therapeutic interventions for disorders of the nervous system.

Students will have access to expertise and facilities for in vivo animal studies, such as models for different aspects of learning & memory. The course will include training in associated ethical & legal considerations.

A 25% discount on course fees is available for NHS staff - please enquire about this on the course webpage.

MSc Clinical Health Psychology

The course has been developed to offer theory, knowledge and practical skills development across the areas of clinical, health and neuropsychology. In addition, students will receive training in professional practice and advanced research methods.

The knowledge and skills you will develop will help prepare you for a PhD in a clinical or health-related area, or a career as a Practitioner Psychologist.

You can study full-time over one year or part-time over two years.

