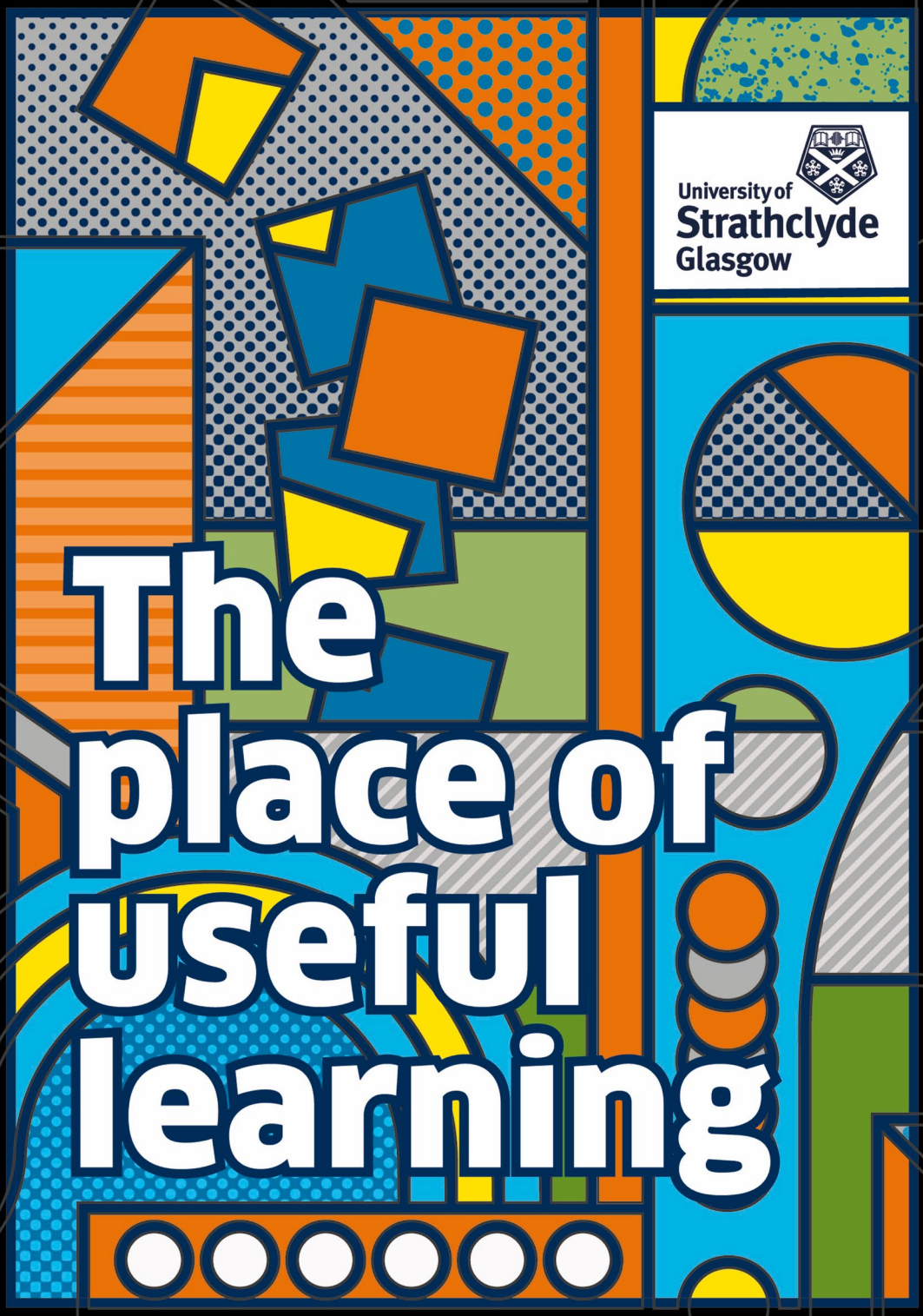
POSTGRADUATE PROSPECTUS 2021 ENTRY



University of Strathclyde Glasgow

The place of useful learning

THE AWARDS 2019 | UK UNIVERSITY OF THE YEAR

THE AWARDS 2019

University of the Year

The University of Strathclyde has become the first university to win the coveted University of the Year title twice.

We have also been recognised as **Scottish University of the Year 2020** by The Sunday Times Good University Guide, and were awarded the **Queen's Anniversary Prize**, the highest national honour awarded to our sector. Strathclyde received a five-star rating in a QS audit of universities' key performance areas.

THE SUNDAY TIMES GOOD UNIVERSITY GUIDE 2020 SCOTTISH UNIVERSITY OF THE YEAR

THE QUEEN'S ANNIVERSARY PRIZES FOR HIGHER AND FURTHER EDUCATION 2019

QS STARS RATED FOR EXCELLENCE 2020

Contents

Take a look through our prospectus and visit www.strath.ac.uk for more information

the place of useful learning

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@unistrathclyde
@UniStrathclyde
@UniversityofStrathclyde
YouTube
TikTok

The place of useful learning

The University of Strathclyde is a leading international technological university located in the heart of Glasgow - one of the UK's largest cities – and has a vibrant, international community with almost 23,000 students from over 100 countries.

For more than 200 years Strathclyde has been delivering academic excellence through world-class research and teaching, providing students with flexible, innovative learning in preparation for their chosen career path.

We're delighted to have won Times Higher Education University of the Year 2019 – the only university to be awarded the UK-wide award for a second time. We have also been recognised as Scottish University of the Year 2020 by the Sunday Times Good University Guide, and were awarded the Queen's Anniversary Prize, the highest national honour awarded to our sector.

Strathclyde received a five-star rating in a QS audit of universities' key performance areas.

We are investing in your future

We are transforming our campus by investing £1 billion to create a first-class working and learning environment for you, our students.

Our new £31 million sports centre, Strathclyde Sport, brings state of the art training, fitness and wellbeing facilities to the heart of the University's campus.

Strathclyde students are set to enjoy our new £60 million Learning & Teaching building, which is located in the centre of the campus. Designed with students and staff in mind, the hub includes leading-edge teaching facilities as well as provide a new home for student support services and the Students' Union.

Tackling global problems

Research is of central importance in everything we do. It informs our teaching and helps us to make a difference to business, industry and society as a whole.

One of the UK's top 20 universities for research intensity, according to the Times Higher Education's analysis of REF2014, we are transforming the way academics, business, industry and the public sector work in partnership. We are in the UK top five for industry research income (Times Higher Education World University Ranking 2018).

Each of our four faculties – Engineering, Humanities & Social Sciences, Science, Strathclyde Business School – work closely with business, industry, government and policy-makers, supporting our enviable track record of making technologies and innovation applicable for the benefit of society.

Our world-class researchers are working with international partners to find solutions to challenges in areas of global importance and to support sustainable development goals – from providing access to reliable electrical power in The Gambia to improving health, water supplies and sanitation in Malawi.

At Strathclyde, we are committed to developing researchers who are both highly skilled and employable. To support you on your research journey, our Researcher Development Programme provides professional and personal development training and opportunities, through a tailored suite of courses, events, workshops and resources.

Strathclyde is home to Scotland's first Innovation District

Bringing together ambitious, forward-thinking people, the District is tackling societal and global challenges and driving inclusive economic growth.

Located in the heart of Glasgow City Centre, the District is home to many innovative companies and organisations who've located here to nurture and accelerate growth, improve productivity, and access world-class research and technology from the University.

Number one in the UK for Physics research, based on the Research Excellence Framework (REF) 2014 Grade Point Average scores, according to the Times Higher Education

Strathclyde's Advanced Forming Research Centre, a partnership with industry including Rolls-Royce and Boeing, is setting new standards in manufacturing and design

We are the anchor University for the NATIONAL MANUFACTURING INSTITUTE FOR SCOTLAND.

We have launched the world's first maritime safety research centre

Strathclyde academics were part of a team which detected gravitational waves 100 years after Einstein's prediction

Researchers at the University of Strathclyde have developed an innovative, low cost test for earlier diagnosis of sepsis which could save thousands of lives.

Researchers at the University of Strathclyde have received the Association for Information Science & Technology (ASIS&T) Best Paper Award for 2019 for their study of young first-time mothers seeking information and support online.

PhD Study at Strathclyde

At Strathclyde, we aim to fully equip our doctoral researchers with the skills and knowledge needed to become future leaders through careers in research, academia, business, industry, government, and social sectors.

With access to first-rate facilities and an excellent research environment, our Strathclyde doctoral programmes include the following research opportunities:

- **PhDs**
- **Collaborative and industrial PhDs and Doctorates**
- **Professional Doctorates**
- **Centres for Doctoral Training**

Students are also able to join the Strathclyde Doctoral School, a community of more than 1,800 doctoral researchers from over 80 countries. The School encompasses our four Faculties and is committed to enhancing the student experience, intensifying research outputs and opportunities and ensuring training is at the highest level.

Work alongside world-class academics

Our leading-edge research and close links with business, industry and the public sector makes us the University of choice for a growing number of doctoral researchers. Working side-by-side with world class researchers, our doctoral researchers are addressing local, societal and global challenges.

For a full list of our research and doctorate opportunities visit www.strath.ac.uk

My PhD is giving an extensive understanding about how the healthcare system in the UK works... I like that I have an opportunity to make a real change and hopefully help improve people's lives"

Linda Lapp
PhD: Healthcare Analytics, Computer & Information Sciences,
Digital Health & Wellness Research Group

Glasgow

Scotland's largest city will be the backdrop to your studies, giving you instant access to world-class architecture and attractions, a diverse culinary scene, vibrant nightlife and outstanding shopping.

Known as the 'Dear Green Place', Glasgow boasts more than 90 parks and is a UNESCO City of Music, home to the SSE Hydro – one of the world's busiest concert venues. The world's top travel guides have consistently named Glasgow as a must-visit destination – and we couldn't agree more!

To find out more visit:
www.peoplemakeglasgow.com

Explore Scotland

Home to some of the most magnificent landscapes in the UK, and with Glasgow as a base, you are only a short journey from exploring everything Scotland has to offer.

You can enjoy activities ranging from hill walking, snow sports, world-class mountain bike trails and water sports to climbing. Or for those who want to discover Scotland's past, you can visit the country's many historic castles and monuments and explore the thriving arts and culture scene of the surrounding towns and cities.

To find out more visit:
www.visitscotland.com

#strathlife

Starting at university, meeting new people, living on campus and discovering a new way of learning is exciting.

Whether you are living on or off campus we want you to have the best experience while studying at Strathclyde. If you need a helping hand, we'll be here to support you. Get a glimpse of what student life is like at the University of Strathclyde:

@unistrathclyde

@UniStrathclyde

@UniversityofStrathclyde

YouTube TikTok

Make lifelong friends and feel at home in our student accommodation.

Home from home

Located on campus and only a short walk from the main University buildings, our Campus Village houses more than 1,440 students, with a further 300 living in our off-campus residences just 10 minutes' walk away.

We provide secure accommodation for students, and our application process ensures that we match you up with people we think you'll get along with, creating lifelong friendships.

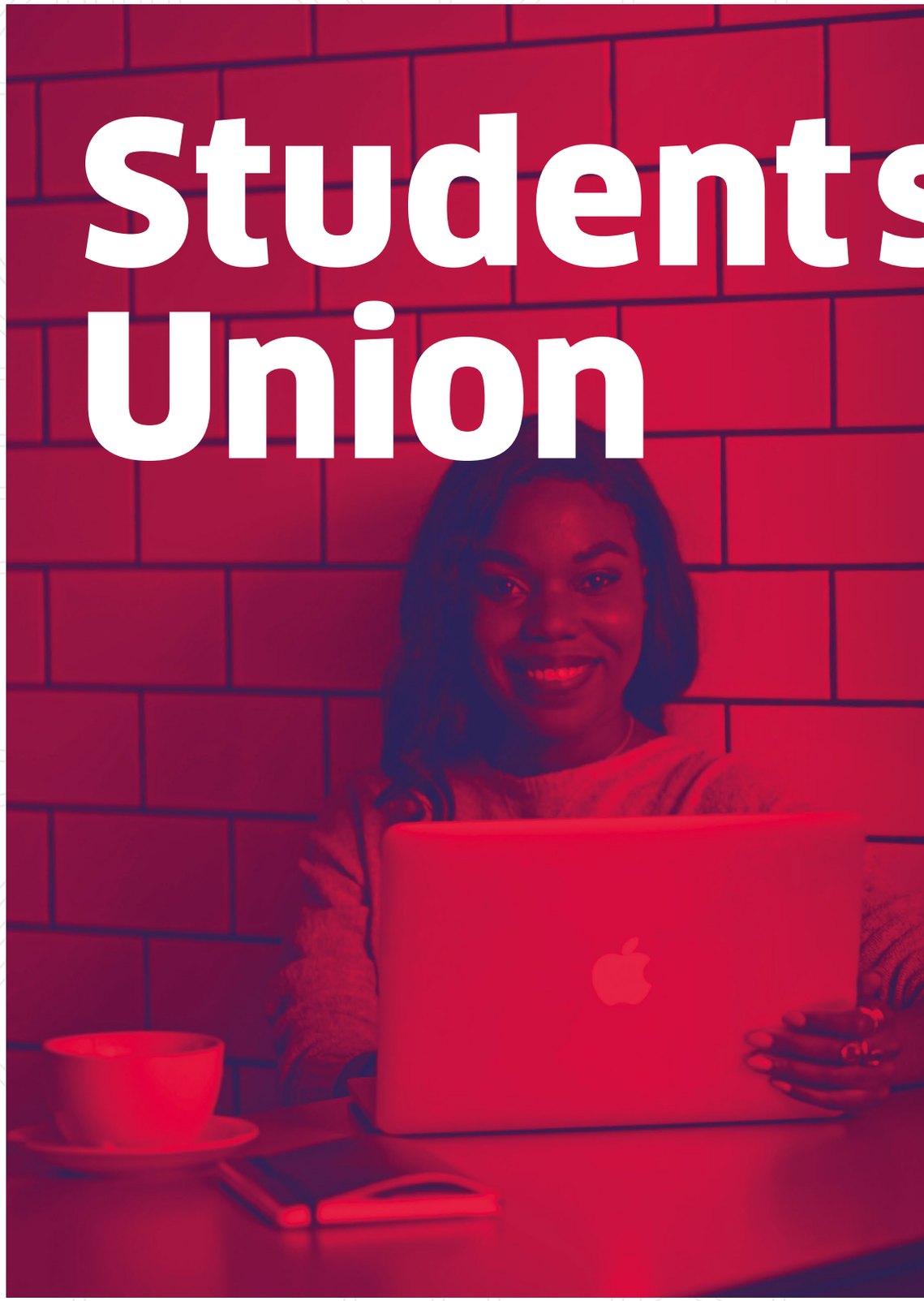
Your home in Glasgow

All the accommodation in the Campus Village is self-catered, with a dedicated on-site management team and a night porter outside office hours. Weekly cleaning of communal areas in each flat is included in your rent, making your 'Strathliving' experience even easier!

The campus village includes an open study area, a Santander bank, Todds Bar, laundrette, and is situated close to the shops, restaurants, cafés, bars and other entertainment in the city centre and Merchant City.

Search 'accommodation' at **www.strath.ac.uk**

Students' Union



Your Students' Union promotes, represents and supports the interests and welfare of all our students, making sure your time at Strathclyde is the best it can be.

Every penny made goes into improving services for you. Whatever you choose to take part in at the Union, it will be the best decision you'll ever make at University!

Visit **strathunion.com** to find out more.

Great nights happen at Strath Union
Take your pick of three venues each offering a selection of food, drink, events and activities, all designed to fit within your budget and timetable

Clubs & Societies
We have over 206 Clubs & Societies for you to choose from, all offering you the opportunity to get involved in something you feel passionately about.

Strath Sports
Strathclyde Sports Union proudly hosts over 50 sports clubs; outdoor or indoor, competitive or recreational, everyone can take part and be **#WeBleedMaroon | #StrathSports | strathsports.co.uk**

Opportunities
We offer opportunities for you to develop skills alongside your course work and help others through volunteering.

Advice & Support
Our Advice hub is here to advise and support all students for free, in full confidentiality. Ask them anything - no matter how big or small.

Student Voice
At Strathclyde, great value is placed on ensuring the student voice is heard. Your Union is led by six student officers who are elected by you to represent all aspects of University life.

Representation
We believe in a democracy shaped by the student voice - this is why we encourage everyone to become a Student Rep and be part of University discussions.

Strathclyde Sport

Our £31 million Strathclyde Sport building provides a range of sport and wellbeing facilities for students, staff and the local community.

The Centre offers state-of-the art training facilities, including a 25-metre swimming pool, fitness suite with capacity for over 180 people, sports halls, squash courts, dance studio and treatment rooms.

The new Strathclyde Sport facility has already attracted partnerships with Netball Scotland, including the University's sponsorship of the Strathclyde Sirens netball team, and Glasgow Warriors Rugby Union Club.

We offer a number of performance sport scholarships to enable talented student-athletes to achieve their degree, whilst simultaneously reaching their sporting potential.

Whether you are an elite athlete or a complete beginner, we have opportunities here for all.

Search 'Strathclyde Sport' at **www.strath.ac.uk**

Only a ONE-hour flight from London, Glasgow also has great transport links from the rest of the UK, Europe and the world.

Truly Global

Approx flight times:

Amsterdam	1h 25
Paris	1h 50
Berlin	2h 15
Milan	2h 30
Barcelona	2h 45
Budapest	2h 55
Dubrovnik	3h 15
Dubai	7h 15

The heart of the city

In the heart of the city, our campus is a short walk from two mainline railway stations, bus station and the subway to help you get around the city and to visit the rest of the UK.

Merchant City
Home to lively bars, restaurants and concert venues.

Glasgow Green
Oldest of the city's 90 parks and green spaces.

Gallery of Modern Art
Offering exhibitions, library, café and a shop.

Buchanan Street
Glasgow's style mile offering the best of high-street and designer shopping.

Campus Guide

1. Royal College Building
2. Technology and Innovation Centre
3. Learning and Teaching Building
4. Students' Union
5. Strathclyde Institute of Pharmacy and Biomedical Sciences
6. Strathclyde Business School
7. Strathclyde Sport
8. Andersonian Library
9. Lord Hope Building
10. James Weir Building
11. Campus Village

"By far the best thing about studying at Strathclyde was making lifelong friends and meeting students from all around the world."

Hunter Bennett
Exchange student, USA

The Faculty of Engineering

We are internationally renowned for our research, teaching quality and strong links with industry.

We provide high-quality advanced training, with an unrivalled portfolio of almost 70 innovative, industrially-focused postgraduate taught courses, and leading research programmes.

We are one of the largest, best equipped engineering faculties in the UK and the largest in Scotland. Multimillion-pound investment in our facilities gives students access to state-of-the-art equipment and work space in which to study. We offer a number of University-wide, faculty and departmental funded scholarships.

Multimillion-pound investments by the research councils, government and industry, are testament to the quality and relevance of the Faculty's growing research portfolio. Our interdisciplinary research themes bring together expertise in Advanced Materials and Manufacture, Aerospace and Marine Technologies, Energy, Sustainability and the Environment, and Health Engineering.

These integrated themes are underpinned by core strengths in areas such as telecommunication technologies, control systems, signal and image processing, non-destructive testing and enabling engineering.

Our close connections with industry ensure that our degrees remain relevant to the needs of employers and provide students with opportunities to work in cross-disciplinary teams, solving real engineering problems.

Through our collaborative links with overseas partners, we have a growing international community of students, researchers and staff from around 100 countries.

Contact
Faculty Admissions Team
t: +44 (0)141 547 5484
e: eng-admissions@strath.ac.uk

Sustainable Engineering Programme

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

- Cross-disciplinary programme with input from industry
- Satisfy key requirements to attain Chartered Engineer status
- Develop sought-after understanding of sustainable approaches and practices

COURSE STRUCTURE

- Instructional classes (including a Sustainability class taken by all students)
- Group project (on a topic related to environmental, social, or economic sustainability)
- Individual project

Step One: Select Your Specialist Theme
- Advanced Construction Technology and Building Information Management
- Architecture and Ecology (Glasgow/Arizona)
- Offshore Renewable Energy
- Renewable Energy Systems and the Environment
- Chemical Processing
- Marine Technology

Step Two: Select Generic Classes
- Design Management
- Financial Engineering
- Project Management
- Risk Management
- Environmental Impact Assessment
- Knowledge and Information Management for Engineers

You will take at least two generic classes which meet employers' requirements for comprehensive engineering skills and satisfy key requirements to attain Chartered Engineer status.

Step Three: Select Specialist Modules
You also take up to five classes relevant to your selected specialist theme (see next page).

Step Four: Complete a Group Project
You work within a group of students from different specialist themes to produce sustainable solutions for real-life industry problems. Site visits, field trips and regular progress reports to industry partners are an integral part of the process.

You will develop valued skills in team-working, problem-solving, report writing and presentation.

Step Five: Complete an Individual Project
Students study a selected topic in depth and submit a thesis. Substantial industry input in the form of project ideas brings together engineering graduates and business representatives.

Successful completion of eight instructional modules, a group project and an individual project leads to the award of an MSc.

COURSE DURATION

12 months full-time; 24 months part-time (minimum)

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in a relevant engineering, technology or science discipline. Entry may be possible with other qualifications provided there is evidence of relevant experience and of the capacity for postgraduate study.

Specialist Theme Classes

Advanced Construction Technology and Building Information Management
- Building Information Management
- Advanced Construction Technologies
- Facilities Management
- Contract Administration and Practice
- The Construction Industry Client

Architecture and Ecology
- Urban Design History
- Ecology, Sustainability and the Built Environment
- Arcology
- Architectural and Construction History
- Energy Resources and Policy

Offshore Renewable Energy
- Energy Resources and Policy
- Electrical Power Systems
- Renewable Marine Energy Systems
- Finite Element Analysis of Floating Structures
- Physical Testing of Offshore Renewable Energy Devices

Renewable Energy Systems and the Environment
- Energy Resources and Policy
- Energy Systems Analysis
- Electrical Power Systems
- Energy Modelling and Monitoring

Chemical Processing
- Process Design Principles
- Advanced Process Design
- Petroleum Engineering
- Clean Combustion Technologies
- Safety Management Practices
- Programming and Optimisation
- Molecular and Interfacial Science
- Electrochemical Energy Devices
- Molecular Simulation in Chemical Engineering

Marine Technology
- Maritime Safety and Risk
- Risers and Mooring Lines
- Advanced Marine Structures
- Sustainability
- Design and Construction of FPSOs
- Theory and Practice of Marine CFD

Contact
Faculty Admissions Team
t: +44 (0)141 547 5484
e: eng-admissions@strath.ac.uk

Advanced Engineering Studies

MSc/PgDip/PgCert by stand-alone modules (part-time distance learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Flexible and modular framework offering a tailored study experience with the opportunity to explore blended, high quality, multidisciplinary learning across a broad spectrum of engineering disciplines

Ideal for students seeking professional development opportunities

Study stand-alone modules or transfer credits towards a PgCert, PgDip or MSc degree

COURSE STRUCTURE

Students should undertake an approved curriculum as follows:
- For the Postgraduate Certificate no fewer than 60 credits.
- For the Postgraduate Diploma no fewer than 120 credits.
- For the degree of MSc no fewer than 180 credits including a project.

Students can select any classes taught by any Department within the Faculty of Engineering. Students who have accumulated at least 60 credits may, upon meeting specific course requirements, be transferred to any appropriate existing postgraduate programme and be considered for an award of MSc, PgDip or PgCert. This allows students to build their own curriculum bespoke to their interests. Your curriculum must be approved by the Programme Director.

Students can select to study any optional class across all eight engineering departments (with the exception of certain MSc projects and classes with clinical elements or pre-requisites).

Students who progress to the MSc, will be required to undertake an individual research project in their final year, the theme of which can be industry related or aligned to engineering research at the University.

COURSE DURATION

MSc: Up to 60 months part-time distance learning
PgDip: Up to 48 months part-time distance learning
PgCert: Up to 24 months part-time distance learning
Individual modules: 4-8 months

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in engineering or physical sciences, or equivalent professional qualification. A lower-class degree may be considered with relevant work experience. Consideration will be given to those from differing backgrounds based on their experience on a module by module basis.

Department of Architecture

RESEARCH DEGREES

MRes, MPhil, PhD

Contact for Research Degrees

t: +44 (0)141 548 3248
e: contact-architecture@strath.ac.uk

TAUGHT COURSES

Advanced Architectural Design
Architectural Design (International)
Architectural Design for the Conservation of Built Heritage
Urban Design
Sustainable Engineering: Advanced Construction Technology and Building Information Management (part of Sustainable Engineering Programme, see pg 30)
Sustainable Engineering: Architecture and Ecology (part of Sustainable Engineering Programme, see pg 30)

Contact for Taught Courses

Faculty Admissions Team
t: +44 (0)141 547 5484
e: eng-admissions@strath.ac.uk

Our research in architecture reflects the multi- and trans-disciplinary nature of architecture and urbanism and focuses on real-world problems and improving peoples' lives. We are leading the way to a more sustainable future in response to government, industry and societal needs and are at the forefront of research on how people and cities interact in a rapidly urbanising world.

In keeping with the University's strategic aims, we have developed strong links with industry, numerous European and international connections, and a capability to undertake trans-disciplinary research that integrates sustainable design, engineering and technology and cultural enquiry from local, regional, and global perspectives.

Research activities within the Department of Architecture are centred on two key areas:

- Sustainability and the Built Environment
- Urbanism and Global Cities

Our research groups continue to evolve, reflecting emerging issues in architectural design, cultural enquiry, sustainability and urbanism.

Research clusters and units

- Our competence manifests in the international reputation of our research leaders within our key research areas

Architectural Design & Conservation

- We deal with the challenges of properly conserving our built heritage while allowing changes to adapt it to contemporary uses. We deal with the design of new buildings which contribute to the conservation of our environment, learning from traditional strategies and technological innovations.

Construction Law

- We actively engage in research related to the legalities of the construction process including dispute resolution, regulatory enforcement, professional ethics and corporate corruption.

Architecture & Urbanism in the Global South

- Our research encompasses the themes of knowledge economy and sustainable urban qualities in Global South cities, socio-spatial practice of migrant and minority communities, cultural identity and architectural design pedagogy.

Design & Sustainability

- We draw together research expertise in sustainable architecture and urbanism, the identification of social ecologies and environmental systems for supporting resilient communities, innovations in solar design technology and improvements in health for sustainable development.

Digital Construction

- We evaluate and develop advanced technologies, methodologies and approaches for cutting-edge Information and Communication Technologies (ICT) to improve the performance of the construction industry.

Urban Design

- We study cities, their form, functions and impact, with the goal of making them more resilient. We aim to understand the major interrelated dynamics posed by recent urbanization processes, in both informal settlements and established cities.

ENTRY REQUIREMENTS FOR RESEARCH DEGREES

First- or upper second-class Honours degree, or equivalent overseas qualification, in any discipline.

Advanced Architectural Design

MArch/PgDip (ARB and RIBA Part 2 Course)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Diploma is final stage to Part 2 professional qualification
Option to convert Diploma into MArch
ARB/RIBA Part 2 exemption
Develop critical, formal and technical architectural skills
Benefit from our fully-networked design studios

COURSE STRUCTURE

The course reviews current theoretical approaches to architectural and urban design, assessing and exemplifying their relevance in existing and proposed contexts. You will:

- Undertake a comprehensive architectural and/or urban design project
- Demonstrate awareness of management procedures relevant to design practice
- Carry out research and critical analysis of a topic to produce a dissertation
- Carry out a detailed examination and resolution of an issue or issues of particular architectural and/or urban significance

The course comprises studio design work, lectures, a dissertation, special projects and workshops. Taught classes are under the broad topics of Culture and the City, Society, Environment and Technology and include cultural studies, an international workshop, professional studies, sustainability, environmental assessment, culture and behaviour, the history and theory of urbanism and conservation and building information management. Studies are predominantly project-based and demand a high level of design ability.

COURSE DURATION

MArch: 24 months full-time
PgDip: 21 months full-time

Students entering Year 2 of the programme:

MArch: 12 months full-time
PgDip: 9 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree in architecture from a UK or EU university.

An academic portfolio will be required, containing all relevant design work from your previous course of study.

Architectural Design (International)

MArch/PgDip (RIBA Part 2 Course)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop skills in advanced design, analysis and critique
Meets RIBA Part 2 educational criteria
Two-year course for international students
Validated & recognised by LAM/PAM Lembaga Arkitek Malaysia/Board of Architects Malaysia
Develop projects related to your own interests in contemporary architecture

COURSE STRUCTURE

This two-year course is for international students. It runs parallel to the MArch/PgDip in Advanced Architectural Design and shares the same curriculum.

The first year is divided equally between the design studio and a set of taught classes including Cultural Studies and an elective option. The studio projects are designed to develop the ability to deliver a considerable degree of architectural resolution and technical competence. In Cultural Studies, students develop academic and intellectual rigour in an area of personal study into a dissertation, which can be the foundation for further work in the second year.

Year 2 is centred on a series of design workshops, studios and taught classes designed to engage with a particular architectural, environmental and cultural theme set for the year. This requires students to take a stance on contemporary architectural issues and through this medium pursue an agenda that reflects their own interests and creative ambitions. Taught classes are under the broad topics of Culture and the City, Society, Environment and Technology and include cultural studies, an international workshop, professional studies, sustainability, environmental assessment, culture and behaviour, the history and theory of urbanism and conservation, and building information management.

COURSE DURATION

MArch: 24 months full-time
PgDip: 21 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree in architecture, or overseas equivalent.

An academic portfolio will be required, containing all relevant design work from your previous course of study.

Architectural Design for the Conservation of Built Heritage

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Fully recognised by the Institute of Historic Building Conservation (HBC)

Design-orientated and research-based course

Gain skills and knowledge to produce an architectural conservation and design project

Benefit from teaching by leading experts

COURSE STRUCTURE

Compulsory Classes
- Theory of Conservation
- Architectural and Construction History
- Legilsation and Regulations
- Survey, Preliminary Studies and Investigations in Architectural Heritage
- Materials and Decay
- Conservation Design Project
- Structural Repairs and Strengthening
- Conservation Materials Technology
- Dissertation Project

Optional Classes
- Urban Design History
- Sustainability
- Building Information Management
- Urban Landscape Design
- Cultural and Behavioural Factors in Architecture and Urbanism

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in architecture, structural or civil engineering. Consideration will also be given to candidates with other relevant professional qualifications in a discipline related to the built environment and/or professional experience.

Evidence of motivation will be sought and, from studio-based first qualification holders, a portfolio of project work may be required.

Urban Design

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

The course is based on the Urban Design Studies Unit's cutting-edge research in design, urban analytics, morphology and theory.

You will study theories and approaches to the design and management of the city, with a particular focus on the UDSU's approach called 'Masterplanning for Change' and apply this later in response to current and predicted urban change.

By the end of the programme, you will have the skills to design the 'resilient city' and in particular you will be able to: appreciate its complexity, develop long term strategies for its development and design in detail portions of such city, paying attention to the experience of its users and residents.

You will work in a multidisciplinary, international and design-centred learning environment where ideas and theories will be tested through design, via live commissions with clients.

COURSE STRUCTURE

Compulsory Classes
- Studio (Analysis, Strategy, Framework and Coding, Masterplanning and Place Design)
- Urban Design History
- Urban Theory
- Sustainability
- Dissertation Project (MSc students only)
- Business Models, Financing and Urban Business Case Analysis
- Public Policy, Governance and Strategic Change in Cities

Optional Classes
- Sustainability
- Building Information Management
- Urban Landscape Design
- Cultural and Behavioural Factors in Architecture and Urbanism

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in a discipline related to the built environment and the city (e.g. architecture, planning, engineering, and other built environment disciplines). Candidates with alternative professional experience may also be considered.

Department of Biomedical Engineering

RESEARCH DEGREES

MPhil, PhD (Biomedical Engineering)
MRes Biofluid Mechanics
MRes Biomedical Engineering

Contact for Research Degrees

t: +44 (0)141 548 3294
e: biomedeng-pg-admissions@strath.ac.uk

TAUGHT COURSES

Biofluid Mechanics
Biomedical Engineering
Prosthetics and Orthotics
Rehabilitation Studies in Prosthetics and/or Orthotics

Contact for Taught Courses

Faculty Admissions Team
t: +44 (0)141 547 5484
e: eng-admissions@strath.ac.uk

The Department of Biomedical Engineering provides high-quality research and postgraduate training in bioengineering that gives our graduates the skills and knowledge to provide unique and innovative technological solutions to modern-day health problems. As a centre of excellence for prosthetics and orthotics, we also provide courses specifically tailored for advanced education for professionals.

External research is supported by funding from the research councils, the Scottish Government, charities, commerce and industry within the UK, EU and internationally in countries such as the US and Japan.

Biomedical Engineering

Biomedical Engineering takes a multidisciplinary approach to solving problems in medicine and biology, based on the application of advances in science, engineering and technology. A major focus is to improve the quality of life of people with medical conditions that restrict independent living and integration within the community. The Department is a key centre for the development of research projects in biomedical engineering and in the development and testing of medical devices.

Research Groups

Rehabilitation Engineering
Rehabilitation Engineering applies scientific and engineering principles to research related to the musculo-skeletal system. The main areas of research within the group are Biomechanics and Medical Robotics, Prosthetics and Orthotics, and Motor Control and Neuroprosthetics.

Medical Devices and Diagnostics
Research activities range from minimally-invasive patient monitoring or rapid point of care (POC) diagnosis to the development of new innovative interventional technologies including heart valves, life support systems and implantable cardiovascular devices. The main areas of research are:

- Minimally-Invasive Diagnostics
- Sensors for Cell and Tissue Engineering/ Implanted Devices
- POC Patient Monitors

Cell, Tissue and Organ Engineering
Research within the group looks at cellular intractions, cell and tissue engineering and the development of artificial organs. The main areas of research are:

- Cellular Interactions with Material/Chemicals
- Cell/Tissue Engineering
- Hybrid Artificial Organs
- Modelling of Artificial Organs
- Microbial Decontamination and Sterilisation

National Centre for Prosthetics and Orthotics

The National Centre for Prosthetics and Orthotics (NCPO) has a wide network of collaborative links with departments across the Faculty of Engineering and the Faculty of Humanities & Social Sciences, and also with clinical and research facilities across the UK and overseas. Our purpose-built facilities include fully-equipped workshops and clinic rooms.

Within the Department of Biomedical Engineering, NCPO has an active and expanding research portfolio of fundamental and applied research projects. Research activities are grouped under the following main themes:

- Clinical Activities
- Development and Evaluation of Clinical Techniques
- Evaluation of Prosthetic and Orthotic Interventions
- Development and Evaluation of Outcome Measures
- Quality of Life Products
- Clinical Evaluation Tools
- Components
- Technologies
- Clinical Simulation for Prescription
- Shape Capture

Scholarship Programmes

International Excellence Awards
The Department offers four prestigious competitive scholarships for full-time international applicants to the MSc and MRes in Biomedical Engineering. Recipients will benefit from an award of up to £4,000. Successful recipients will be notified at the beginning of term.

The China-Scotland Friendship Award
The Department will offer this award worth £4,000 to a Chinese applicant of outstanding ability applying for the MSc in Biomedical Engineering. The successful recipient will be notified at the beginning of term.

Biomedical Engineering Malaysia Award
The Department will offer this award worth £4,000 to a Malaysian applicant of outstanding ability applying for the MSc in Biomedical Engineering. The successful recipient will be notified at the beginning of term.

Biomedical Engineering Award for India
These awards are open to well-qualified applicants from India joining the one-year full-time MSc in Biomedical Engineering. The value of each award is £6,000 which will be deducted from the fee on registration. Applicants should apply by email (see below) by the end of May, including a short paragraph on why they should receive an award. Applicants will be advised of the outcome in June.

Contact for Scholarship Information
Faculty Admissions Team
t: +44 (0)141 547 5484
e: eng-admissions@strath.ac.uk

Biofluid Mechanics

MRes

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Learn to apply engineering, mathematical and physical principles of fluids to problems in biology and medicine

Opportunity to focus on multidisciplinary research throughout the course

Benefit from visiting speakers from industry

COURSE STRUCTURE

Compulsory Classes
- Professional Studies in Biomedical Engineering
- Research Methodology
- Project

Optional Classes (minimum of two)
- Biofluid Mechanics
- Industrial Software
- Medical Science for Engineering
- Haemodynamics for Engineers
- Numerical Modelling in Biomedical Engineering
- Cardiovascular Devices
- The Medical Device Regulatory Process
- Entrepreneurship and Commercialisation in Biomedical Engineering
- Introduction to Biomechanics
- Finite Element Methods for Boundary Value Problems and Approximation
- Mathematical Biology and Marine Population Modelling
- Design Management
- Risk Management

Research Project
Students also undertake a research/development project, chosen from a pool of relevant industrial or clinical projects, and submit a thesis.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in engineering, physical science, or mathematics.

Biomedical Engineering

MRes

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Conversion course for graduates interested in developing a research career

Benefit from our collaborative clinically-driven research output, training and knowledge transfer

Undertake a research/development project

COURSE STRUCTURE

Compulsory Classes
- Engineering Science OR Medical Science
- Professional Studies in Bioengineering
- Research Methodology

Optional Classes (minimum of two)
- Biomedical Electronics
- Biomedical Instrumentation
- Introduction to Biomechanics
- Clinical and Sports Biomechanics
- Tissue Mechanics
- Biomaterials and Biocompatibility
- Regenerative Medicine and Tissue Engineering
- Cardiovascular Devices
- Prosthetics and Orthotics
- Haemodynamics for Engineers
- Numerical Modelling in Biomedical Engineering
- Medical Robotics

Research Project
Students also undertake a research/development project, chosen from a pool of relevant industrial or clinical projects, and submit a thesis.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in engineering, physical science, life science, medicine, or a profession allied to medicine.

Biofluid Mechanics

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain hands-on experience of industrial software on real biofluid mechanics problems

Benefit from an innovative teaching and learning environment

First one-year course dedicated to biofluid mechanics

COURSE STRUCTURE

Compulsory Classes
- Biofluid Mechanics
- Industrial Software
- Medical Science for Engineering
- Research Methodology
- Professional Studies in Biomedical Engineering

Optional Classes (two to four to be chosen)
- Haemodynamics for Engineers
- Numerical Modelling in Biomedical Engineeirng
- Cardiovascular Devices
- The Medical Device Regulatory Process
- Entrepreneurship and Commercialisation in Biomedical Engineering
- Introduction to Biomechanics
- Finite Element Methods for Boundary Value Problems and Approximation
- Mathematical Biology and Marine Population Modelling
- Design Management
- Risk Management

Research Project
Students also undertake a research/development project, chosen from a pool of relevant industrial or clinical projects, and submit a thesis.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in engineering, physical science, or mathematics.

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Biomedical Engineering

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Accredited by the Institute of Physics and Engineering in Medicine

Conversion course to help you develop a career in research, industry or the NHS

Contribute to solutions for clinically-relevant problems

COURSE STRUCTURE

Compulsory Classes
- Engineering Science OR Medical Science
- Professional Studies in Bioengineering
- Anatomy and Physiology (for students taking Engineering Science but who do not have the prerequisite background in Anatomy and Physiology)
- Biomedical Electronics
- Biomedical Instrumentation
- Research Methodology
- Project

Optional Classes (six to be chosen)
- Clinical and Sports Biomechanics
- Tissue Mechanics
- Introduction to Biomechanics
- Biomaterials and Biocompatability
- Prosthetics and Orthotics
- Cardiovascular Devices
- Regenerative Medicine
- Haemodynamics for Engineers
- Numerical Modelling in Biomedical Engineering
- Medical Robotics

Research Project
Students also undertake a research/development project.

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in engineering, physical science, life science, medicine, or a profession allied to medicine.

“The MSc in Prosthetics & Orthotics combines knowledge of the engineering and medical sciences with advances in technology and practice to generate applications and solutions to clinically-relevant problems.

It’s one of the few programmes in the world that offers a specific degree in prosthetics and orthotics and our graduates have progressed to managerial or specialist clinical roles. Others become educators of new practitioners in their home country.”

Dr Tony Mcgarry,
Senior Teaching Fellow
Department of Biomedical Engineering

Prosthetics and Orthotics

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Undertake a clinically-relevant project in the rehabilitation area of prosthetics and/or orthotics

Develop your career as a health professional

Experience laboratory demonstrations, practical exercises and clinical visits

COURSE STRUCTURE

Compulsory Classes
- Engineering Science OR Medical Science
- Professional Studies in Biomedical Engineering
- Research Methodology
- Disability and Societal Effects

Optional Classes
- Introduction to Biomechanics
- Regenerative Medicine
- Tissue Mechanics
- Clinical and Sports Biomechanics
- Bio-signal Processing and Analysis
- Biomaterials and Biocompatibility
- Cardiovascular Devices
- Haemodynamics for Engineers
- Numerical Modelling in Biomedical Engineering
- Medical Robotics

Research Project
Students also undertake a research/development project.

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in prosthetics and orthotics.

Rehabilitation Studies in Prosthetics and/or Orthotics

MSc/PgDip/PgCert (part-time distance learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Suitable for professionals working in prosthetics, orthotics, therapy, surgery or associated disciplines

Study by distance learning at your own pace

Use your healthcare-focused research skills to plan and deliver a work-based research project

COURSE STRUCTURE

- Postgraduate Certificate – three Optional and Restricted classes
- Postgraduate Diploma – six from the list of Optional and Restricted classes
- MSc – classes in Research Methodology and Data Analysis, research project and dissertation

Optional Classes
- Clinical Governance
- Orthotic Studies*
- Prosthetic Studies*
- Introductory Biomechanics
- Lower Limb Prosthetic Biomechanics
- Lower Limb Orthotic Biomechanics
- Clinical Gait Analysis

* not available to Prosthetists or Orthotists

Restricted Classes (for professional Prosthetists/ Orthotists)
- Advanced Prosthetic Science
- Advanced Orthotic Science

COURSE DURATION

MSc: 36 months part-time
PgDip: 24 months part-time
PgCert: 12 months part-time

ENTRY REQUIREMENTS

Second-class Honours degree or acceptable academic or professional qualification.

The content of some courses may require a basic knowledge of trigonometry and the ability to handle simple algebraic equations.

Department of Chemical and Process Engineering

RESEARCH DEGREES

MPhil, PhD

Contact for Research Degrees
t: +44 (0)141 548 5319
e: chemeng-pg-admissions@strath.ac.uk

TAUGHT COURSES

Full-time Courses
Advanced Chemical Engineering
Energy Systems Innovation
Sustainable Engineering: Chemical Processing (see page 30)

Contact for Full-time Taught Courses
t: +44 (0)141 547 5484
e: eng-admissions@strath.ac.uk

Part-time Distance Learning
Process Technology and Management
Chemical Technology and Management
Advanced Chemical Engineering

Contact for Part-time Distance Learning
t: +44 (0)141 548 2148
e: chemeng-online@strath.ac.uk

Research Profile
Research in the Department of Chemical and Process Engineering spans the boundaries of science and engineering. Our research applies advances in science and mathematics to develop solutions to challenges faced by industry and society, such as manufacturing medicines, delivering clean water and providing renewable energy. We research areas from controlled assembly of nanostructured materials to design of advanced reactors, and from combating global warming with novel energy storage and gas separation technology to understanding protein aggregation in degenerative diseases.

We have strong links with other engineering and science departments within Strathclyde and externally. We also work with many industrial partners.

Research Themes
Our cutting edge research aligns with the following University-wide strategic themes:

Advanced Manufacturing & Materials
We design, develop, and manufacture new nanostructured materials that can be used to address problems of global significance. We're working on solutions to energy generation and storage, water purification, carbon capture and pharmaceutical manufacture.

Our key areas of research include the manufacture and application of porous materials and metal-organic frameworks; the properties and processing of polymeric materials; the nucleation, growth and separation of crystals; the applications of electrochemistry to coatings, metal ion recovery, and water clean-up.

Energy
The development, well-being and progress of society is closely linked to the availability of energy. We're developing more effective methods for the extraction of conventional energy resources, as well as researching ways to make alternative energy sources, such as biomass, more economically competitive. In addition, we're actively developing novel chemical processes that more efficiently and more cleanly use current energy resources.

Health & Wellbeing
We're active innovators in pharmaceutical processing, monitoring technology, and process development. A number of our academics are research partners within the National Centre for Continuous Manufacturing and Crystallization (CMAC) which focuses on transitioning the pharmaceutical industry from batch to continuous operation. We've developed crystallization and isolation process development workflows and offer training in their industrial application. Our modelling team has simulated molecules to understand and design new therapeutics.

Measurement Science & Enabling Technologies
Optimisation of chemical processes often depends on the application of advanced measurement capabilities, leading to improved understanding and control. Often there's a synergy between instrumentation developed for experimental work in laboratory systems and the application to industrial processes. Our research in this area covers an array of measurement techniques and industry sectors but a recurrent theme is its application to minimise pollution and reduce waste as well as making more efficient use of energy.

Society & Policy
Engineering and technology should benefit society and ensure its well-being. This is why much of our research is devoted to enabling sustainable development and minimising the impact of industry on the environment. We're also leveraging advances in social and behavioural sciences with our technical expertise and experience to incorporate human factors in improving methods of engineering education and in designing effective safety systems.

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Advanced Chemical Engineering

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop your career in chemical and process industries

Meets accreditation requirements for the Institute of Chemical Engineers

Gain experience of best industry practice

COURSE STRUCTURE

- Design Principles
- Advanced Process Design
- Petroleum Engineering
- Clean Combustion Technologies
- Safety Management Practices
- Programming and Optimisation
- Project Scoping
- Molecular and Interfacial Science
- Electrochemical Energy Devices
- Molecular Simulation in Chemical Engineering

Multidisciplinary Skills Classes
- Project Management
- Risk Management
- Environmental Assessment
- Financial Engineering

Research Project
All students undertake an individual research project working with our high-quality researchers on cutting-edge chemical engineering challenges.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in a relevant engineering, technology or science discipline. Entry may be possible with other qualifications provided there is evidence of relevant experience and the ability to study at an advanced level.

Research Environment
Our research students come from all over the world to participate in an active research programme. A number of studentships are available for well-qualified applicants. The Department oversees the operations of ARCHIE-WeSt, the University's regional supercomputer centre for research computing. It also has access to the Advanced Materials Research Laboratory and facilities of CMAC. In addition, departmental research and experimental facilities include:

- Differential Scanning Calorimetry (DSC), Thermogravimetric Analysis (TGA), Intelligent Gravimetric Analysis (IGA) and Brunauer, Emmett and Teller Instrument (BET) systems
- Electrochemical deposition and etching systems for nanofabrication
- High resolution optical microscopes with image analysis and digital cameras
- Hollow fibre and membrane gas testing equipment
- Rheometer and high pressure viscometer
- UV-Vis Spectrophotometers
- High-performance gas and liquid chromatograph
- Static and dynamic light scattering instruments
- High-power laser systems
- High-temperature furnaces

I chose my course because I wanted to study an area related to my background in chemical engineering in order to expand my knowledge.

I enjoyed being involved in real research for my individual project and being able to take advantage of the laboratory facilities and equipment to use in my investigations."

Xavier Ortega Pardo
MSc Advanced Chemical and Process Engineering

Energy Systems Innovation

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Students are encouraged to carry out projects in an industrial environment

Students currently employed in a relevant industrial setting may carry out the project at the employer's site

COURSE STRUCTURE

- Petroleum Engineering
- Clean Combustion Technologies
- Electrochemical Energy Devices
- Project Scoping

Multidisciplinary Skills Classes
- Energy Systems Analysis
- Systems Engineering Concepts
- Entrepreneurship, Innovation and Communications
- Strategic Technology Management
- Sustainable Product Design and Manufacture
- Knowledge and Information Management
- Project Management
- Risk Management
- Environmental Assessment
- Financial Engineering

Research Project
All students undertake an individual research project working with our high-quality researchers on cutting-edge chemical engineering challenges.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in a relevant engineering, technology or science discipline. Entry may be possible with other qualifications provided there is evidence of relevant experience and the ability to study at an advanced level.

Process Technology and Management

MSc/PgDip/PgCert (part-time distance learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Accredited by the Institution of Chemical Engineers

A project and work-based approach is supported by online tutorials in which students and tutors participate

Opportunity to choose classes to meet your own learning objectives

COURSE STRUCTURE

Year 1
Semester 1
- Process Design Principles
- Process Analysis in Chemical Engineering

Semester 2
- Understanding Financial Information
- Project Management
- Advanced Process Design

Year 2
Semester 1 (three to be chosen)
- Safety Management Practices
- Programming and Optimisation
- Molecular and Interfacial Science
- Petrochemical Engineering
- Molecular Simulation in Chemical Engineering
- Clean Combustion Technologies
- Electrochemical Energy Devices

Semester 2
- IT Strategy
- Business and Technology Strategy
- Ethics, Sustainability & Environmental Engineering

Year 3
Individual Project
You'll explore an advanced technical issue and a business case within your industrial workplace.

COURSE DURATION

MSc: 36 months part-time
PgDip: 24 months part-time
PgCert: 12 months part-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent)in chemical engineering or a relevant engineering, technology or science discipline. Entry may be possible with other qualifications provided there is evidence of relevant experience and the ability to study at an advanced level.

Chemical Technology & Management

MSc/PgDip/PgCert (part-time distance learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Meets the management and technical development needs of those working in the chemical, pharmaceutical and process industries

Directed at people working as chemists in research and development, manufacturing and business management roles

COURSE STRUCTURE

Year 1
- Analytical Techniques for Industry
- Multivariate Analysis and Process Analysis for Industry
- Understanding Financial Information
- Project Management

Year 2
Semester 1 core class
- Process Design Principles

Semester 1 core class
- Process Design Principles

Semster 1 optional classes
- Safety Management Practices
- Programming and Optimisation
- Petroleum Engineering
- Molecular Simulation in Chemical Engineering
- Electrochemical Energy Devices
- Molecular and Interfacial Science
- Clean Combustion Technologies

Semester 2 core classes
- Managing People
- Business and Technology Strategy
- Ethics, Sustainability & Environmental Engineering

Year 3
Individual Project
You'll explore an advanced technical issue and a business case within your industrial workplace.

COURSE DURATION

MSc: 36 months part-time
PgDip: 24 months part-time
PgCert: 12 months part-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) from a related BEng or BSc degree subject. Other qualifications will be considered if they meet the same standard. Please note that due to the large variety of qualifications, a definite answer can only be given once a full application has been received.

Advanced Chemical and Process Engineering

MSc/PgDip/PgCert (part-time distance learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

A project and work-based approach is supported by online tutorials in which students and tutors participate

Opportunity to choose classes to meet your own learning objectives

COURSE STRUCTURE

Year 1
Semester 1
- Process Design Principles
- Safety Management Practices
- Programming and Optimisation

Semester 2
- Project Management
- Advanced Process Design
- Ethics, Sustainability and Environment Engineering

Year 2
6 optional classes to be chosen in an approved plan based on IChemE breadth and depth
(some typical options below)

- Molecular and Interfacial Science
- Petroleum Engineering
- Molecular Simulation in Chemical Engineering
- Clean Combustion Technologies
- Electrochemical Energy Devices
- Emerging Technologies
- Hydralics
- Introduction to Open Source CFD
- Understanding financial information
- Business and Technology Strategy

Year 3
Individual Project
You'll explore an advanced technical issue and a business case within your industrial workplace.

COURSE DURATION

MSc: 36 months part-time
PgDip: 24 months part-time
PgCert: 12 months part-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent, in chemical engineering or a closely relevant engineering, technology or science discipline.

Department of Civil and Environmental Engineering

RESEARCH DEGREES

MPhil, PhD
MRes Climate Change Adaptation
MRes Geoenvironmental Engineering
MRes Integrated Pollution Prevention and Control

Contact for Research Degrees

t: +44 (0)141 548 2827
e: contact-civeng@strath.ac.uk

TAUGHT COURSES

Civil Engineering
Civil Engineering with Industry
Environmental Engineering
Environmental Entrepreneurship
Hydrogeology
Sustainability and Environmental Studies

Contact for Taught Courses

t: +44 (0)141 547 5484
e: eng-admissions@strath.ac.uk

Distance Learning/Continuing Professional Development

Distance Learning: MSc courses in Environmental Engineering, Hydrogeology, Sustainability and Environmental Studies are available through part-time, online distance learning over 36 months, offering students a flexible learning mode of study. All MRes courses are offered via online distance learning. Continuing Professional Development: UK-based students can take individual classes for Continuing Professional Development. Those who complete single modules successfully may have the opportunity to progress towards a Postgraduate Certificate, Postgraduate Diploma or MSc. UK-based students have up to five years to complete an MSc via this route.

Contact for Flexible Learning

t: +44 (0)141 548 3251
e: civeng-pgt@strath.ac.uk

Placements

As part of the elective class Independent Study in Collaboration with Industry, all MRes and MSc students can apply to work on industry projects.

The Department of Civil and Environmental Engineering has a unique combination of multidisciplinary expertise, reflected in its portfolio of Masters courses, dynamic PhD programmes and internationally-renowned research. The Department combines the strengths of civil engineering, sustainability and environmental studies, providing the highest quality professional training, linking the built environment with the natural environment.

The Department holds an Athena SWAN silver award – the only civil engineering department in the UK to hold a silver award. The award recognises its "advancement of gender equality: representation, progression and success for all".

The Department's research groups support a wide range of international research collaborations. In addition, research is underpinned by strong links with industry including high-profile visiting professors, an active industrial advisory board, seminar series with speakers from industry, and directly contributing to industrially relevant projects.

Research Areas

Our researchers work across three main interdisciplinary centres:

Centre for Ground Engineering & Energy Geosciences
The centre specialises in multidisciplinary research at the boundaries between biology, earth sciences and engineering. The Centre has a current research portfolio in excess of £4 million and leads a number of major multi-partner EPSRC and European Commission research projects. Our researchers have expertise in a range of disciplines, including:

- Ground Barrier Technologies
- Experimental Geomechanics
- Geotechnical Engineering
- Geophysics
- Site Investigation
- Structural Geology
- Constitutive and Numerical Modelling of Geomaterials

Centre for Water, Environment, Sustainability and Public Health
The centre undertakes fundamental and applied research to provide novel solutions to some of the most pressing environmental challenges, working both locally and internationally. Our expertise includes:

- Water
- Public and Environmental Health
- Soil Contamination, Restoration and Remediation
- Environmental Assessment
- Waste, Energy and Circular Economy
- International Development
- Hydrogeology

Centre for Intelligent Infrastructure
The Centre is committed to transforming traditional structural engineering through cross-disciplinary research, recognising and transposing the recent radical innovations in material science, communication and sensor technology.

We use techniques from chemistry, computer science, electronic engineering, physics, biochemistry and management science to solve societal problems surrounding the safety and resilience of structures that support energy generation, waste storage, transport and urban infrastructure.

We combine fundamental research with industrial engagement, working across sectors such as construction, transportation, oil and gas, heritage buildings, renewables and nuclear, in collaboration with UK and EU government agencies and national laboratories. Our research outputs include industrial patents and a spin-out company. Our expertise includes:

- Intelligent Infrastructure and Artificial Intelligence
- Sensors and Automation
- Sustainable Construction Materials
- Safety, Resilience and Economic Assessment
- Computational Modelling

Scholarship Programmes

Research Scholarships

PhD Studentships
Each year, the Department has a limited number of fully-funded PhD scholarships available to first-class applicants. Prospective students who hold (or expect to hold) the equivalent of a first-class Honours degree or an MSc with Distinction are encouraged to make an informal expression of interest between November and January.

Scholarships for Taught Courses

MSc Scholarships
Holders of a first-class Honours degree (or equivalent overseas qualification) are eligible to apply.

- Faculty of Engineering International Scholarships – self-funded, international (non-EU) fee-paying students with excellent academic qualifications may be eligible for a Faculty of Engineering International Scholarship towards their tuition fees
- Santander Scholarship
- Commonwealth Shared Scholarship for MSc Environmental Engineering

Postgraduate Funding: Student Awards Agency for Scotland
Scottish and EU postgraduate applicants can apply to the Student Awards Agency for Scotland (www.saas.gov.uk) for a tuition fee loan plus living cost loan.

Contact for Scholarship Information

t: +44 (0)141 547 5484
e: eng-admissions@strath.ac.uk

MRes Programmes in Civil and Environmental Engineering

(full-time, part-time, or distance learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Tailor your studies to suit your research interests and/or career objectives

Choose two elective classes from a range of postgraduate taught courses

Design and undertake a supervised thesis project on a topic that interests you most

Contribute new knowledge at the frontiers of your discipline

MRes Climate Change Adaptation

The programme is the first of its kind, and tackles a critical and growing topic for research and innovation. The course provides advanced study of key issues related to action to mitigate and adapt to climate change, and particularly around the circular economy, the design of engineering options for sustainable development, and infrastructure adaptation.

Compulsory Classes

- Air Pollution, Climate Change & Human Health
- Environmental Impact Assessment
- Research Protocols for Science & Engineering
- Circular Economy and Transformations Towards Sustainability

MRes Geoenvironmental Engineering

The programme is unique in Scotland and the UK for being taught by a group of professionally-qualified civil engineers, chemists, microbiologists and geoscientists.

Compulsory Classes

- Contaminated Land
- Hydrogeology
- Research Protocols for Science and Engineering
- Site Investigation and Risk Assessment

MRes Integrated Pollution Prevention and Control

The programme provides applied multidisciplinary skills which are not typically provided by undergraduate courses. The course provides advanced study of key issues related to environmental pollution, and opportunity to undertake research as the frontiers of this critical field.

Compulsory Classes

- Environmental Chemistry
- Environmental Pollution Management
- Research Protocols for Science and Engineering
- Waste Management and Landfill Design

COURSE DURATION

12 months full-time; 24 months part-time; 36 months online distance learning

MRES ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in an engineering, life science, earth science or any other relevant discipline.

Civil Engineering (with Optional Specialist Streams)

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain specialist skills to lead future developments

Choose to follow a specialist named stream

Benefit from our purpose-built laboratory facilities

Carry out an industrial project

COURSE STRUCTURE

Participants can graduate with an MSc in Civil Engineering or choose to follow one of four specialist streams which incorporate Civil Engineering and Project Management with Structural Engineering/Geotechnical Engineering/Geoenvironmental Engineering.

Compulsory Classes

All students take the compulsory classes: Group Design Project and Qualitative and Quantitative Research Methods. Those on the specialist streams (see below) also take the class Project Management, plus three compulsory classes, two optional classes from List A and three from List A or B.

MSc in Civil Engineering

Six classes from List A and three classes from List A or B

MSc in Civil Engineering with Structural Engineering and Project Management

- Advanced Structural Analysis and Design
- Pre-stressed Concrete, Composite Materials and Structural Stability
- Ground Improvement and Reinforcement

MSc in Civil Engineering with Geotechnical Engineering and Project Management

- Ground Improvement and Reinforcement
- Rock Mechanics, Tunnelling and Groundwater
- Slopes and Walls

MSc in Civil Engineering with Geoenvironmental Engineering and Project Management

- Site Investigation and Risk Assessment
- Contaminated Land
- Waste Management and Landfill Design

Optional Classes

List A (10 credits unless indicated otherwise)

- Advanced Structural Analysis and Design
- Building Information Management
- Contaminated Land
- Engineering Hydrology
- Ground Improvement and Reinforcement
- Hydrogeology
- ICT Integrated in AEC
- Pre-stressed Concrete, Composite Materials and Structural Stability
- Project Management
- Renewable Energy Marine Systems
- Rock Mechanics, Tunnelling and Groundwater
- Site Investigation and Risk Assessment
- Slopes and Walls
- Structural Health Monitoring
- Waste Management and Landfill Design
- Water and Environment Management
- Water and Wastewater Treatment Design

List B (10 credits)

- Air Pollution, Climate Change and Human Health
- Circular Economy and Transformations Towards Sustainability
- City Systems and Infrastructure
- Design Management
- Environmental Impact Assessment
- Environmental Pollution Management
- Financial Engineering
- Fundamentals of Environmental Forensics
- Geographical Information Systems
- Global Water Policy
- Independent Study in Collaboration with Industry
- Information Management
- Pollution and Rehabilitation of Degraded Ecosystems
- Principles of Environmental Microbiology
- Public Health Studies
- Risk Management
- Work, Wellbeing and New Technologies

Within the Independent Study in collaboration with Industry class you carry out an industrial project.

COURSE DURATION

12 months full-time; 24 - 36 months part-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in any civil engineering discipline. Applicants with a degree in environmental engineering, maths, physics and mechanical engineering may also be considered.

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Civil Engineering with Industry (18 months)

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Undertake an industrial placement or an industry-linked project during June to August

Gain specialist skills and practical experience

Choose to follow a specialist named stream

Integrate your knowledge in a major design project

COURSE STRUCTURE

Students can choose to follow one of the specialist named streams, following the curriculum listed opposite, and also incorporating the industrial placement or the industrial design and construction class.

Year 1
- Semester 1, January to May: taught classes
- June to September: industrial project
- Semester 2, October to December: taught classes

Year 2
- Semester 3, January to June: dissertation

Compulsory Classes
- Group Design Project
- Research Protocols for Science and Engineering
- Industrial Placement

Optional Classes
- Six modules from List A and three modules from List A or List B (see opposite)

Industry-linked Project or Placement
You'll complete the Industrial Design and Construction class or industrial placement in the period from June to September. The University offers students various support mechanisms when making applications for placements.

START DATE

January

COURSE DURATION

18 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in any civil engineering discipline. Applicants with a degree in environmental engineering, earth sciences, maths, physics or mechanical engineering may also be considered.

Environmental Engineering

MSc (full-time, part-time or distance learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop an interdisciplinary perception of environmental problems and the ability to work towards finding solutions

Study challenging real-world issues

Carry out an industrial project

COURSE STRUCTURE

Compulsory Classes
- Environmental Geochemistry
- Principles of Environmental Microbiology
- Qualitative and Quantitative Research Methods
- Site Investigation and Risk Assessment
- Waste Management and Landfill Design

Optional Classes (seven to be chosen)
- Air Pollution, Climate Change and Human Health
- Contaminated Land
- Engineering Hydrology
- Environmental Economics
- Environmental Impact Assessment
- Environmental Pollution Management
- Fundamentals of Environmental Forensics
- Geographical Information Systems
- Global Water Policy
- Hydrogeology
- Pollution and Rehabilitation of Degraded Ecosystems
- Water and Environmental Management
- Water and Wastewater Treatment Design
- Circular Economy & Transformations Towards Sustainability
- City Systems and Infrastructure
- Public Health Studies
- Project Management
- Financial Engineering
- Independent Study in Collaboration with Industry

MSc students undertake a dissertation from June to August.

COURSE DURATION

12 months full-time; 24 - 36 months part-time (on-campus study); 36 months part-time (distance learning); 60 months (Professional Development route)

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in engineering, earth sciences, environmental management, or a background in the chemical, physical, biological or mathematical sciences.

Environmental Entrepreneurship

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Suitable programme for graduates of any background

Develop skills to contribute to environmental improvement and the circular economy

Learn how to identify business opportunities

Carry out a four-month project for a client

COURSE STRUCTURE

Compulsory Classes
- Client-Based Environmental Entrepreneurship in Practice
- Qualitative and Quantitative Research Methods
- Creativity and Opportunity Development
- New Venture Creation

Optional Classes (seven to be chosen, examples include)
- Air Pollution, Climate Change and Human Health
- Contaminated Land
- Environmental Impact Assessment
- Environmental Pollution Management
- Global Water Policy
- Pollution and Rehabilitation of Degraded Ecosystems
- Games of Strategy
- Waste Management and Landfill Design
- Energy Resources and Policy
- Environmental Economics
- Energy Economics
- International Environmental Law
- Sustainable Product Design and Manufacturing
- Water and Environmental Management
- Entrepreneurial Management and Leadership
- Geographical Information Systems
- Public Health Studies
- Circular Economy and Transformations Towards Sustainability
- Independent Study in Collaboration with Industry
- Introduction to Entrepreneurial Finance
- Advanced Entrepreneurial Finance
- Social Entrepreneurship
- Financial Engineering

MSc students undertake a dissertation from June to August.

COURSE DURATION

12 months full-time; 24 - 36 months part-time; 6-60 months (Professional Development route, depending on exit degree)

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in any discipline (engineering, sciences, arts, law, business, education, languages, social sciences). No previous technical knowledge is required.

Hydrogeology

MSc (full-time, part-time or distance learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Builds upon your undergraduate degree towards a career in a highly interdisciplinary field of Hydrogeology

Contribution to on-going, internationally-linked projects in sustainable water development

Opportunity to work with industrial partners

COURSE STRUCTURE

Compulsory Classes
- Aquifer Mechanics
- Contaminated Land
- Global Water Policy
- Groundwater Flow Modelling
- Environmental Geochemistry
- Hydrogeology
- Qualitative and Quantitative Research Methods
- Site Investigation and Risk Assessment

Optional Classes
- Environmental Impact Assessment
- Fundamentals of Environmental Forensics
- Geographical Information Systems
- Waste Management and Landfill Design
- Water and Environmental Management
- Engineering Hydrology
- Principles of Environmental Microbiology
- Environmental Chemistry
- Vertically Integrated Project WASH
- Independent Study in Collaboration with Industry

MSc students undertake a dissertation from June to August.

COURSE DURATION

12 months full-time; 24 - 36 months part-time (on-campus study); 36 months part-time (distance learning); 60 months (Professional Development route)

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in earth sciences, civil engineering, environmental engineering or related disciplines.

Sustainability and Environmental Studies

MSc (full-time, part-time or distance learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Carry out an industrial project

Suitable for graduates of any background

Examine strategies and policy options for achieving sustainable development

COURSE STRUCTURE

Compulsory Classes
- Circular Economy and Transformations Towards Sustainability
- Qualitative and Quantitative Research Methods
- Environmental Impact Assessment

Optional Classes (nine to be chosen, examples include)
- City Systems and Infrastructure
- Contaminated Land
- Energy Economics
- Environmental Economics
- International Environmental Law
- Environmental Pollution Management
- Geographical Information Systems
- Global Water Policy
- Pollution and Rehabilitation of Degraded Ecosystems
- International Development
- Principles of Environmental Microbiology
- Public Health Studies
- Waste Management and Landfill Design
- Water and Environmental Management
- Work, Wellbeing and New Technology
- Independent Study in Collaboration with Industry
- Air Pollution, Climate Change & Human Health
- Energy Resources and Policy
- Water and Wastewater Treatment Design
- Games of Strategy

MSc students undertake a dissertation from June to August.

COURSE DURATION

12 months full-time; 24 - 36 months part-time; 36 months part-time (distance-learning); 6-60 months (Professional Development route, depending on exit degree)

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in any discipline (engineering, sciences, arts, law, business, education, languages, social sciences). No previous technical knowledge is required.

Department of Design, Manufacturing and Engineering Management

RESEARCH DEGREES

MPhil, PhD
EngD Advanced Manufacturing: Forging and Forming

Contact for Research Degrees

t: +44 (0)141 548 2015
e: dmem-pgr@strath.ac.uk

TAUGHT COURSES

Advanced Manufacture: Technology and Systems
Autonomous Robotic Intelligent Systems
Design Engineering/Design Engineering with Advanced Product Development/with Sustainability
Digital Manufacturing
Engineering Management for Process Excellence
Global Innovation Management
Innovation and Marketing Management
Industrial Engineering
Mechatronics and Automation
Product Design
Supply Chain and Logistics Management/Procurement Management/Sustainability Management
Systems Engineering Management
Technology Ventures
Engineering Project Management by Online Learning

Contact for Taught Courses

t: +44 (0)141 547 5484
e: eng-admissions@strath.ac.uk

The Department of Design, Manufacturing and Engineering Management (DMEM) conducts broad-based education and research of relevance to the needs of industry and commerce, as well as public sector policy.

Our research is centred on the vision of 'Delivering Total Engineering'. We investigate processes, systems and technology to support and enable engineering from concept to remanufacture.

We host the Advanced Forming Research Centre – a partnership between the University of Strathclyde and global industrial manufacturing companies, the Centre for Precision Manufacturing, the Design Research Group, the Robotics and Autonomous Systems Group (which includes SMesTech), the Sustainability and Remanufacturing Group and the Engineering Management Group (which is involved in the Strathclyde Institute for Operations Management, which brings together the leading experts in Operations Management from Strathclyde's Business School and the Engineering Faculty). We are also involved in the Advanced Manufacturing Industrial Doctorate Centre, Continuous Manufacturing and Crystallisation, the High Value Manufacturing Catapult, and the Weir Advanced Research Centre.

The National Manufacturing Institute Scotland (NMIS) is operated by the University of Strathclyde. The University is also the base for the Scottish Institute for Remanufacturing (SIR) and hosts the Maritime Research and Innovation centre UK (MarRI-UK).

Research Areas

Creativity and Innovation – our research investigates the creative design process and how this can be optimised to ensure innovative products are delivered that meet user requirements. We look at how the product and engineering design process can best be employed to ensure through-life information and knowledge management, optimised decision-making, systems integration, and successful collaborative and distributed design.

Materials – we use multi-scale modelling techniques to investigate materials behaviours at different length-scales and to predict the performance of materials during both manufacturing processes and service conditions. Material types include metal alloys, composites and ceramics for industrial applications in sectors such as aerospace, automotive, nuclear, and oil and gas. We have developed techniques to manipulate the compositions and grain-sizes of metals to improve their mechanical properties. We have equipment, tools and techniques for destructive and non-destructive testing of materials to determine inherent material characteristics with a view to optimising performance and manufacture.

Operations – our research is focused on supporting the development and sustained performance of engineering businesses through the optimisation of their engineering operations. This includes design, manufacture and end of life. We work in close partnership with engineering organisations, including food and drink, oil and gas, utilities, aerospace and automotive, who directly benefit from our research outputs through real and lasting impacts to their performance.

Sustainability – sustainability underpins all our research from the point of view of: longevity and optimisation of products and systems; continued business performance; reducing environmental impact of the processes; tools and technologies used to design and manufacture products and systems; reducing resources; through-life product support strategies. We focus on sustainable manufacturing practices and contribute to developing smart, efficient and sustainable factories of the future. The work in this area is focused around the activity of the Sustainability and Remanufacturing Group which supports the Scottish Institute for Remanufacture (SIR).

Technology – research spans various areas within DMEM, including manufacturing processes, precision engineering, micro- and nano-manufacturing, robotics and autonomous systems, and digital manufacturing. We also investigate the use of digital technologies to support manufacturing research such as digital factory and virtual manufacturing.

Advanced Manufacturing: Forging and Forming

EngD

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Offered by the Advanced Manufacturing Industrial Doctorate Centre

Undertake world-leading research in manufacturing techniques, working with global industry

Gain industrial experience

COURSE STRUCTURE

Year 1
Compulsory Classes
- Manufacturing Automation
- Micro- and Nano-Manufacturing
- Strategic Technology Management
- Advanced Materials and Production Technology
- Advanced Forming Technology and Systems
- Research Methodology

Optional Classes (six to be chosen)
- Product Design Techniques
- Strategic Supply Chain Management
- Project Management
- Design of Experiments for Process Optimisation
- Sustainable Product Design and Manufacturing
- Fundamentals of Lean Six Sigma
- Systems Thinking and Modelling

Years 2 - 4
You develop a research thesis based on manufacturing challenges while based within the sponsoring company.

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent), or a Masters qualification in a science or engineering discipline.

FUNDING

Funding support may be available to EU and UK students to cover university tuition fees and also provide an annual stipend of around £15,000, tax free, for four years.

Contact
t: +44 (0)141 548 3771
e: dmem-pgr@strath.ac.uk

Advanced Manufacture: Technology and Systems

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain the skills to develop a new career in the manufacturing industry sector

Undertake an individual and group project

Manage a project with an industrial client to address a practical problem

Triple accredited programme

COURSE STRUCTURE

Compulsory Classes
- Advanced Materials and Production Technology
- Micro- and Nano-Manufacturing
- Advanced Forming Technology Systems
- Manufacturing Automation
- Strategic Technology Management
- Group Project
- Individual Project

Optional Classes (three to be chosen)
- Project Management
- Design of Experiments for Process Optimisation
- Sustainable Product Design and Manufacturing
- Fundamentals of Lean Six Sigma
- Systems Thinking and Modelling
- Strategic Supply Chain Management
- Mechatronic Systems Design Techniques

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in a science or engineering discipline.

Autonomous Robotic Intelligent Systems

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Learn about the technologies for autonomous control and machine learning, with applications spanning robotics, sensor networks and digital manufacturing

Study the new emerging self-sustaining and intelligent devices for IOT and industry 4.0 environments

COURSE STRUCTURE

This programme is delivered jointly with the Department of Electronic & Electrical Engineering.

Compulsory Classes
- Autonomous Sensing, Learning and Reasoning
- Digital Manufacturing Concepts
- Manufacturing Automation
- Design for Industry 4 and Smart Products
- Mechatronic System Design Techniques
- Robotics and Control Systems
- Assignment and Professional Studies
- MSc Project (MSc students only)

Optional Classes (one to be chosen)
- Systems Thinking and Modelling
- Micro and Nano-Manufacturing
- Advanced Forming Technology Systems
- Advanced Materials and Production Technology
- Advanced Microcontroller Applications
- Image and Video Processing
- Control Principles
- Advanced Digital Signal Processing Principles
- Embedded System Design
- Design Management
- Knowledge and Information Management for Engineers
- Strategic Technology Management
- Product Modelling and Visualisation
- Design Methods

You also undertake a three-month summer research project on a topic of your choice.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in electronic, electrical, communications or design manufacture engineering, or a relevant science-related subject, from a recognised academic institution.

Design Engineering/ with Advanced Product Development/ Sustainability

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Choose to follow the Advanced Product Development or Sustainability stream

Enhance your knowledge and practical design skills

Graduates from a variety of technical disciplines will be able to address the demands for better products

Triple accredited programme - IET, IED, IMechE

COURSE STRUCTURE

Compulsory Classes
- Global Design
- Group Project
- Design Management
- Product Modelling and Visualisation
- Design Methods
- Individual Project

Specialist Classes by Theme (compulsory)
- Design Engineering (choose 3 from)
- Sustainability, Mechatronic Systems Design Techniques
- Engineering Risk Management
- Sustainable Product Design and Manufacturing
- Advanced Materials and Production Technology
- Remanufacturing

Design Engineering with Advanced Product Development (compulsory 3)
- Engineering Risk Management
- Mechatronic Systems Design Techniques
- Advanced Materials and Production Technology

Design Engineering with Sustainability (compulsory 3)
- Sustainable Product Design and Manufacturing
- Remanufacturing
- Sustainability

Further Optional Class (all students to choose 1)

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in a relevant engineering, technology or science discipline.

Digital Manufacturing

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain insight into cyber-physical technologies and developing business models

Prepare for a career within the global digital technologies-driven manufacturing sector

Apply your skills in a practical industry-linked project

COURSE STRUCTURE

Compulsory Classes
- Digital Manufacturing Concepts
- Manufacturing Automation
- Design for Industry 4.0 and Smart Products
- Mechatronic Systems Design Techniques
- Knowledge and Information Management for Engineers
- Group Project
- Individual Project

Optional Classes (three to be chosen)
- Sustainable Product Design and Manufacturing
- Systems Thinking and Modelling
- Micro- and Nano- Manufacturing
- Advanced Materials and Production Technology
- Management of Innovation

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in engineering, technology, or a business-related discipline.

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Engineering Management for Process Excellence

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Combine process performance with strategic business analysis

Focus on the use and application of techniques that enable production and operational effectiveness

Contribute to organisational competitiveness

COURSE STRUCTURE

Compulsory Classes
- Supply Chain Operations
- Enterprise Resource Planning
- Management of Total Quality and Continuous Improvement
- Fundamentals of Lean Six Sigma
- Management of Innovation
- Project Management
- Performance Measurement and Management
- Group Project
- Individual Project

Optional Classes (one to be chosen)
- People, Organisation and Technology
- Strategic Supply Chain Management
- Systems Thinking and Modelling
- Design of Experiments for Process Optimisation
- Spreadsheet Modelling and Demand Forecasting

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in engineering, technology, science, business or a similar discipline.

Global Innovation Management

MSc (jointly awarded)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Unique two year programme offered in English jointly with Strathclyde, and Hamburg University of Technology (Germany)

Focus on challenges in innovation global enterprise

Gain skills in technology management, research and development and product/service development

Accredited by the Institute of Engineering and Technology (IET)

COURSE STRUCTURE

The common first year at Strathclyde includes practical experience of working within globally-distributed teams and with an industrial client. The first semester of Year 2 is spent undertaking either in-depth study of innovation management in Germany. In the final semester all students undertake a thesis project, supervised by the second-year host institution.

Compulsory Classes
- Management of Innovation
- Global Design
- Design Management
- Strategic Technology Management
- Supply Chain Operations
- Group Project

Optional Classes (three to be chosen)
- People, Organisation and Technology
- Design Methods
- Mechatronic System Design Techniques
- Strategic Supply Chain Management
- Engineering Risk Management
- Enterprise Resource Planning
- Management of Total Quality and Continuous Improvement
- Fundamentals of Lean Six Sigma
- Product Costing and Financial Management
- Sustainable Product Design and Manufacture
- Systems Thinking and Modelling
- Product Modelling and Visualisation
- Strategic Supply Chain Management
- Advanced Materials and Production Techniques
- Design Form and Aesthetics
- Human Centred Design

COURSE DURATION

24 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in an engineering, science or technology subject.

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Innovation and Marketing Management

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Only course in Europe that integrates marketing and engineering in a single course

Understand how technology and innovation open the way to new business opportunities

Opportunity to work on a group project within industry

COURSE STRUCTURE

The programme is offered jointly with the Department of Marketing.

Compulsory Classes
- Brand Management and Strategy
- Strategic Marketing
- Strategic Technology Management
- Design Management
- Product Costing and Financial Management
- Strategic Procurement Management

Optional Classes (two from each department to be chosen)
Marketing
- International Marketing Research
- Export Marketing
- International Services Marketing
- B2B and Key Account Management

Design, Manufacturing & Engineering Management
- Strategic Supply Chain Management
- Management of Total Quality and Continuous Improvement
- Design Methods
- Supply Chain Operations

Business Works: Group Project
Students work in small groups as consultants to tackle a real-life problem for a local or national company.

Dissertation: Individual Research Project
The research project allows students to pursue an area of specific interest, providing scope for original thought, research and presentation.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in business, economics, engineering or science.

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Mechatronics and Automation

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain knowledge and skills to develop multidisciplinary products with an integrated approach

Benefit from the facilities of our digital design and manufacture studio and prototype workshops

Contribute to future mechatronic product development

Triple accredited programme - Institution of Engineering and Technology (IET), Institution of Engineering Designers (IED) and Institution of Mechanical Engineers (IMechE)

COURSE STRUCTURE

Compulsory Classes
- Manufacturing Automation
- Mechatronic Systems Design Techniques
- Engineering Risk Management
- Product Modelling and Visualisation
- Project Management
- Group Project
- Individual Project

Optional Classes (3 to be chosen)
- Systems Thinking and Modelling
- Design Methods
- Control Principles
- Robotics: Systems and Control

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in a science or engineering discipline.

Product Design

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain enhanced skills in creative product design

Learn about products aesthetics and human-centred design, digital modelling and rapid prototyping

Suitable for graduates from industrial/product design or innovation-related courses

Accredited by the Institution of Engineering Designers (IED) and the Institution of Engineering and Technology (IET)

COURSE STRUCTURE

Compulsory Classes
- Global Design
- Design Methods
- Design Management
- Product Modelling and Visualisation
- Management of Innovation
- Design Form and Aesthetics
- Human-Centred Design
- Group Project
- Individual Project

Optional Classes (one to be chosen)
- Sustainability
- Sustainable Product Design and Manufacturing
- Remanufacturing
- Advanced Material and Production Technology
- Engineering Risk Management
- People, Organisation and Technology
- Strategic Technology Management
- Supply Chain Operations
- Strategic Supply Management
- Enterprise Resource Planning
- Management of Total Quality and Continuous Improvement
- Fundamentals of Lean Six Sigma
- Product Costing and Financial Management
- Systems Thinking and Modelling
- Design for Experiments for Process Optimisation
- Mechatronic Systems Design Techniques

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in a relevant design or innovation discipline.

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Supply Chain & Logistics Management/Procurement Management/ Sustainability Management

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain an in-depth understanding of the strategic and operational issues relating to supply chain management

Contribute towards making organisations competitive

Accredited by the Chartered Institute for Procurement and Supply

COURSE STRUCTURE

The programme is delivered in collaboration with the Department of Management Science.

Compulsory Classes
- Strategic Supply Chain Management
- Supply Chain Operations
- Enterprise Resource Planning
- Advanced Project Management
- Case Studies in Supply Chain Management
- People, Organisation and Technology
- Performance Measurement and Management
- Individual Project

Specialist Classes by Theme
- Logistics Management – Management of Total Quality and Continuous Improvement, Lean and Green Logistics, Spreadsheet Modelling and Demand Forecasting
- Procurement Management – Strategic Procurement Management, Spreadsheet Modelling and Demand Forecasting, Organisation Buying Behaviour and Structures
- Sustainability Management – Sustainable Product Design and Manufacturing, Lean and Green Logistics, Remanufacturing

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in engineering, technology or business-related discipline.

Systems Engineering Management

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain skills to manage technical systems and the people responsible for their development

Learn to apply a systems-thinking approach to address complex management situations

Understand the role of technology in business strategy

COURSE STRUCTURE

Compulsory Classes
- Systems Architectures and Design
- People, Organisation and Technology
- Engineering Risk Management
- Systems Thinking and Modelling
- Design Management
- Individual Project
- Group Project

Optional Classes (two to be chosen)
- Design Methods
- Product Modelling and Visualisation
- Strategic Technology Management
- Sustainable Product Design and Manufacture
- Product Costing and Financial Management
- Strategic Supply Chain Management
- Business Simulation Methods
- Knowledge and Information Management for Engineers

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in any discipline.

Innovation Engineering

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Prepare for a career within the global manufacturing sector

Gain industrial experience to add to your CV through the Postgraduate Group Project

Manage a project with an industrial client to address a practical problem

COURSE STRUCTURE

Compulsory Classes
- People, Organisation and Technology
- Strategic Technology Management
- Strategic Supply Chain Management
- Postgraduate Group Project
- Engineering Risk Management
- Management of Total Quality and Continuous Improvement
- Digital Manufacturing
- Individual Project

Optional classes (two to be chosen)
- Sustainable Product Design & Manufacturing
- Systems Thinking and Modelling
- Micro- and Nano-Manufacturing
- Advanced Materials & Production Technology
- Remanufacturing

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in engineering, technology, science or a business-related discipline.

Technology Ventures

MSc (jointly awarded)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Dual degree offered jointly with Strathclyde, and Carnegie Mellon University in America

Gain a truly international experience by learning and living in two countries

Focus on challenges in technology entrepreneurship to launch products that will change the world with expertise in Engineering design, Systems Engineering Management or Digital Manufacturing

COURSE STRUCTURE

The structure of the dual degree requires one subject to be taken in the first year at Carnegie Mellon University and the option to choose for your second year to be with us.

In the first year at Carnegie Mellon University students will undertake Technology Ventures internship with a company in Silicon Valley.

Study is organised in 3 core areas:
- Business and Engineering Management
- The Leadership challenge
- Financial Fundamentals for New Ventures
- Agile Marketing for New Ventures
- Dynamic Global Teams
- Product Management
- Business models and Strategy
- Product Innovation
- Enterprise Innovation
- Innovation & Entrepreneurship I & II
- Venture Management
- Venture Governance
- Legal Issues in New Venture Creation

Candidates will also select elective courses from an approved list.

The second year at Strathclyde will allow students to choose from the following subject options:
- Design Engineering
- Digital Manufacturing
- Systems Engineering Management

COURSE DURATION

24 months full-time

ENTRY REQUIREMENTS

Minimum cumulative GPA 3.0 from an accredited institution (Accreditation Board for Engineering and Technology, Inc., Higher Learning Commission or U.S. Dept. of Education), or international equivalent, in a technical engineering discipline (Examples include: Biomedical Engineering, Chemical Engineering, Civil & Environmental Engineering, Electrical & Computer Engineering, Material Sciences and/or Mechanical Engineering).

Engineering Project Management

MSc/PgDip/PgCert (part-time online learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Developed with the student in mind, and in close partnership with industry experts, this degree provides both the flexibility and in-demand skillset for graduates aiming to competitively propel their career forward in industry

Unique combination of advanced engineering skills, project management expertise, and industry-linked project work for real-world experience

Gain a range of project management skills, including procurement knowledge, financial engineering competency and strategic awareness

COURSE STRUCTURE

Compulsory Classes
- Project Management
- Financial Information
- Engineering Risk Management
- Management of Total Quality and Continuous Improvement
- People, Organisation and Leadership
- Strategic Procurement Management
- Introduction to Systems Thinking Modelling and Optimisation
- Technology and Innovation Management
- Group Project
- Individual Project (MSc students only)

COURSE DURATION

MSc: 36 months part-time
PgDip: 24 months part-time
PgCert: 12 months part time

ENTRY REQUIREMENTS

MSc: Normally a first-class or second-class honours degree (or international equivalent) in engineering, technology, science, business or a similar discipline.

PgDip/PgCert: Degree, or good HND or equivalent; other qualifications with relevant industrial experience will be considered on an individual basis. Depending on satisfactory progress, students may transfer from the Diploma to the Masters course.

Department of Electronic and Electrical Engineering

RESEARCH DEGREES

MPhil, PhD, EngD

Contact for Research Degrees

t: +44 (0)141 548 2170
e: eee-pgr@strath.ac.uk

TAUGHT COURSES

5G Advanced Communications
Advanced Electrical Power & Energy Systems
Autonomous Robotic Intelligent Systems
Electrical Power & Energy Systems
Electronic and Electrical Engineering
Machine Learning & Deep Learning
Offshore Wind Energy
Wind Energy Systems

With partners:
Renewable Energy in the Marine Environment
Smart Grids

Contact for Taught Courses

t: +44 (0)141 547 5484
e: eng-admissions@strath.ac.uk

We combine research excellence with global industry engagement and first-class teaching to deliver an outstanding student experience.

From creating future low carbon smart grids and next generation wireless communications, to designing enhanced surveillance and defence systems, our research delivers industrial, economic and societal impact.

Our activities are driven by two research institutes, supported by 70 academic staff and 300 researchers:

- Institute for Energy and Environment
- Institute for Sensors, Signals and Communications

These Institutes work closely with key UK and global industry, business and government partners, and are home to several world-class research and experimental facilities. These include five EPSRC Centres for Doctoral Training, the Power Networks Demonstration Centre (PNDC), the Advanced Nuclear Research Centre, Hyperspectral Imaging Centre, Whitespace Wireless Communications Centre and Scotland 5G Centre, and FIRST, a key UK laboratory for non-destructive testing and evaluation.

The Institutes' activities also underpin our taught programmes and knowledge exchange initiatives.

Our Graduate School offers specialist research and taught MSc programmes. These are enhanced by an extensive scholarship scheme providing bursaries, internships and industry engagement, ensuring you gain an education relevant for today's job market and in the future.

Research Activities

Institute for Energy and Environment
We are among Europe's leading and largest electrical power systems and energy technology university research groups. Our fundamental, strategic and applied research portfolio addresses the key technical, policy and economic aspects of energy systems. This is underpinned by four core areas of expertise:

- **Advanced Electrical Systems** – specialises in research, development and demonstration activities on all aspects of power systems, spanning energy, aerospace and the marine sectors. Expertise includes protection and automation, power system analysis and renewables integration, active network management, demand side management, intelligent systems and data analytics, energy markets and economics, and sensing and condition monitoring applications. Particular emphasis is placed on future power networks and smart grids, encompassing renewable generation, energy storage and flexible demand.
- **High-Voltage Technologies** – has international expertise in the fields of electrical plant, high-voltage materials and components, pulsed-power technologies, discharges from gases and fluids, and non-thermal plasma. It houses the world-class Robertson Trust Laboratory for Electronic Sterilisation Technologies (ROLEST), established to develop electrical technology to meet disinfection and sterilisation requirements in the healthcare and biomedical sectors.
- **Wind Energy and Control** – is an international leader in all aspects of wind energy, advanced control theory and its application. Research activities focus on renewable energy technologies to tackle climate change and create sustainable clean energy systems. These include dynamic turbine analysis, modelling and simulation, systems engineering methods, non-linear control system design and their optimisation, along with resource assessment and condition monitoring.
- **Power Electronics, Drives and Energy Conversion** – is renowned for its research, development and experimental expertise in all aspects of power conversion, including renewable energy, smart grid, automotive, aerospace, and electric machine drive applications. Activity ranges from the development of individual power converters, to bespoke hardware and software control platforms and the design, testing and real-time simulation of power electronic systems. Research is supported by world-class simulation and design facilities, and three specialist power electronics laboratories.

Institute for Sensors, Signals and Communications
From fundamental theory to practical applications, our research supports the advancement of technologies and systems in sectors including healthcare, defence, telecommunications, and oil and gas. Our expertise is focused in four core research centres:

- **Centre for Signal and Image Processing** – is renowned for its research on the creation of new algorithms, architectures and applications. It provides a platform for the development of tools, techniques and systems used for the acquisition, analysis and extraction of information. Research work spans biomedical signal and image processing, robotics, MIMO systems, RF signals and systems, wireless communication technologies, and video analytics and surveillance.
- **Centre for Intelligent Dynamic Communications** – brings together internationally-respected groups in advanced communications technology and digital signal processing (DSP). It has three core areas of expertise: broadband networks, mobile communications and DSP-enabled communications. Their activities focus on optical sub-systems and devices, FPGA systems, security for future networks, routing protocols, wireless network regulation and legislation, infrastructure protection, IIOT, 5G Advanced Systems, Dynamic spectrum access and TV White Space Radio.
- **Centre for Microsystems and Photonics** – has extensive expertise in photonics sensor technology, microsystems and lab-on-a-chip. Research generates sensor solutions driven by industrial optical metrology requirements and bio-medical optics, while the lab-on-a-chip activities support biological, medical and pharmaceutical science. Research opportunities in MEMS design, characterisation and manufacture, optical sensors technology, fibre lasers, and microfluidic devices for biological and healthcare applications are available.
- **Centre for Ultrasonic Engineering** – is internationally renowned for its expertise in the design and implementation of ultrasonic transducers and transducer systems. Its multidisciplinary research combines work on engineering, materials, simulation and biology to deliver innovative transducer systems. It addresses markets in non-destructive evaluation, robotics and automation, bioacoustics, industrial process ultrasound,biomedical applications and transduction.

Scholarship Programmes

Research Scholarships

Each year, the Department and University have a number of fully-funded research opportunities available to first-class applicants. Search 'postgraduate research opportunities' at www.strath.ac.uk.

MSc Scholarships

Applicants of outstanding academic calibre are eligible to apply for a range of scholarships offered by the Department, Faculty of Engineering and the University.

For International Applicants

- Commonwealth Shared Scholarship Scheme
- Palestinian Scholarship Scheme
- Scotland's Saltire Scholarships
- Santander Scholarships
- Faculty of Engineering International Scholarships
- Beit Scholarship Strathclyde
- Fulbright – Strathclyde Award
- Commonwealth Scholarship

For Scottish/EU Applicants

- Postgraduate Funding: Tuition fee loans available from the Student Awards Agency for Scotland (saas.gov.uk)

Contact for Scholarships Information

t: +44 (0)141 547 5484
e: eng-admissions@strath.ac.uk

5G Advanced Communications

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop expertise in the software, hardware, systems integration and management aspects of 5G systems

Understand 5G mobile and wireless systems, with applications in autonomous and cyber-physical systems, IoT, spectrum management and big data

COURSE STRUCTURE

Compulsory Classes
- Digital Signal Processing Principles
- Information Transmission and Security
- 5G Communications Networks
- Assignment and Professional Studies

Optional Classes (minimum of two to be chosen)
- Software Engineering
- Advanced Digital Signal Processing
- Image and Video Processing
- Embedded System Design
- Sensor Technologies

You also undertake a three-month summer research project on a topic of your choice. Opportunities exist to conduct this through the Department's competitive MSc industrial internships. BT, Selex ES, Xilinx, Texas Instruments, MathWorks, NXP/Qualcomm, Cisco and Vodafone are just some of the industry partners working with Strathclyde. You will have the opportunity to engage with them throughout your study.

The course is fully accredited by the UK professional body, the Institution of Engineering and Technology.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in electronic, electrical or communications engineering, or a related physical sciences subject.

Advanced Electrical Power & Energy Systems

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Industry-defined electrical power programme

Gain expertise in electrical energy and power systems – from fundamental technologies, application and user requirements, to the business and regulatory landscape within which power and utility companies work

Professionally accredited two-year degree

COURSE STRUCTURE

Compulsory Classes
- Advanced Power & Energy Systems
- High Voltage Technology and Electromagnetic Compatibility
- Power Electronics for Energy and Drive Control
- Power System Economics, Markets and Asset Management
- Wind Energy and Distributed Energy Resources
- Assignment and Professional Studies

Optional Classes (minimum of two to be chosen)
- Digital Signal Processing Principles
- Information Transmission and Security
- 5G Communications Networks
- Control Principles
- Wind Turbine Technology
- Software Engineering
- Offshore & Pan European Supergrids
- Hardware IoT Communication System Design
- Data Analytics and AI for Energy Systems

In Year 1, you complete a selection of taught classes and a mini practical project, to develop research and professional engineering skills.

Year 2 combines a major research project within the electrical power and energy disciplines, with a selection of advanced classes designed to broaden your understanding of the topic chosen.

The course is fully accredited by the UK professional body, the Institution of Engineering and Technology.

COURSE DURATION

24 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in electronic, electrical, power or energy engineering.

Autonomous Robotic Intelligent Systems

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Learn about the technologies for autonomous control and machine learning, with applications spanning robotics, sensor networks and digital manufacturing

Study the new emerging self-sustaining and intelligent devices for IOT and industry 4.0 environments

COURSE STRUCTURE

This course is delivered jointly with the Department of Design, Manufacturing & Engineering Management.

Compulsory Classes
- Intelligent Sensing, Reasoning and Deep Learning
- Digital Manufacturing Concepts
- Manufacturing Automation
- Design for Industry 4 and Smart Products
- Mechatronic System Design Techniques
- Robotics and Control Systems
- Assignment and Professional Studies

Optional Classes (minimum of one to be chosen)
- Advanced Forming Technology Systems
- Advanced Materials and Production Technology
- Advanced Microcontroller Applications
- System Thinking and Modelling
- Micro and Nano-Manufacturing
- Image and Video Processing
- Control Principles
- Advanced Digital Signal Processing
- Embedded System Design
- Design Management
- Knowledge and Information Management for Engineers
- Strategic Technology Management
- Design Methods
- Product Modelling and Visualisation

You also undertake a three-month summer research project on a topic of your choice.

Opportunities exist to conduct this through the Department's competitive MSc Industrial internships.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in electronic, electrical, communications or design manufacture engineering, or a relevant science-related subject.

Electrical Power & Energy Systems

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop the design, planning and operational expertise needed for careers in the global electricity and renewable energy sectors

Engage with our industry partners on real-world energy challenges

COURSE STRUCTURE

Compulsory Classes
- Advanced Power and Energy Systems
- Power System Economics, Markets and Asset Management
- Assignment and Professional Studies

Optional Classes (minimum of three to be chosen)
- High Voltage Technology and Electromagnetic Compatibility
- Wind Energy and Distributed Energy Resources
- Power Electronics for Energy and Drive Control
- Sensor Technologies
- Offshore and Pan European Supergrids
- Data Analytics and AI for Energy Systems
- Power Electronics Devices, Drives & Machines

You also undertake a three-month summer research project on a topic of your choice. Opportunities exist to conduct this through the Department's competitive MSc industrial internships which are offered with industry partners such as SSE, ScottishPower and PNDC.

The course is fully accredited by the UK professional body, the Institution of Engineering and Technology.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in electronic, electrical, power or energy engineering, or a related subject.

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Electronic and Electrical Engineering

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Advanced subject options across the entire electronic and electrical engineering discipline

Tailor the course to match your career interests

Benefit from purpose-built study and learning facilities, and the chance to engage with industry partners

COURSE STRUCTURE

Compulsory Class
- Assignment and Professional Studies

Optional Classes (minimum of five to be chosen)
- Power Electronics, Machines and Applications
- Power System Design, Operation and Protection
- Digital Signal Processing Principles
- Information Transmission and Security
- 5G Communications Networks
- Control Principles
- Advanced Power and Energy Systems
- High Voltage Technology and Electromagnetic Compatibility
- Power Electronics for Energy and Drive Control
- Power System Economics, Markets and Asset Management
- Wind Energy and Distributed Energy Resources
- Advanced Digital Signal Processing Principles
- Embedded Systems Design
- Image and Video Processing
- Sensor Technologies
- Software Engineering

You also undertake a three-month summer research project on a topic of your choice. Opportunities exist to conduct this through the Department's competitive MSc industrial internships.

The course is fully accredited by the UK professional body, the Institution of Engineering and Technology.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in electronic, electrical or communications engineering, or a related subject.

Machine Learning & Deep Learning

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop expert knowledge of, and the ability to design, complex machine learning and deep neural networks systems for use in industry

Focus on architectures, algorithms & novel engineering and software technologies

The Data Lab scholarships for eligible Scottish applicants

COURSE STRUCTURE

This course is delivered jointly with the Department of Computer & Information Sciences.

Compulsory classes
- Intelligent Sensing, Reasoning and Deep Learning
- Digital Signal Processing Principles
- Big Data Technologies
- Machine Learning for Data Analytics
- Assignment and Professional Studies

Optional classes (a minimum of one to be taken)
- Image and Video Processing
- Information Access and Mining

You also undertake a three-month summer research project on a topic of your choice. Opportunities exist to conduct this through the Department's competitive MSc industrial internships. These are offered in collaboration with selected industry partners.

COURSE DURATION

12 months full time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in electronic or electrical engineering, or a computer science subject.

"The University, for me, is a place where there's an air of people coming from lots of different countries and the diversity is just perfect. It's a very welcoming environment where everyone is approachable, and you have no limits to what you can do here."

David Shomuyiwa,
Electronic & Electrical Engineering
MSc graduate

Offshore Wind Energy

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

The offshore wind energy market is booming, and it urgently needs qualified people to further succeed in being the leading sustainable energy source.

COURSE STRUCTURE

This programme is delivered in collaboration with the Department of Naval Architecture, Ocean & Marine Engineering.

This programme has three components
- Instructional Modules
- Group Project
- Individual Project

Compulsory Classes
- Wind Turbine Technology
- Offshore Wind Turbines Dynamics Modelling
- Offshore Structural Integrity
- Principles of Generator Modelling and Control
- Risk and Reliability Engineering
- Offshore Wind Farms Operation

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in a relevant engineering or technical subject.

Wind Energy Systems

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop the expertise to strengthen, lead and transform the high-growth global wind energy industry

Study within Europe's largest and leading university electrical power and energy technology research group

COURSE STRUCTURE

Compulsory Classes
- Wind Turbine Technology
- Power Systems and Wind Integration
- Assignment and Professional Studies

Optional Classes (minimum of three to be chosen)
- Power Electronics, Machines and Applications
- Power System Design, Operation and Protection
- Advanced Power and Energy Systems
- Power Electronics for Energy and Drive Control
- Power System Economics, Markets and Asset Management
- Control Principles
- Inspection and Security
- Geographical Information Systems
- Environmental Impact Assessment
- HVT and EMC
- Energy Economics
- Renewable Marine Energy Systems

You also undertake a three-month summer research project on a topic of your choice. Opportunities exist to conduct this through the Department's competitive MSc industrial internships.

The course is fully accredited by the UK professional body, the Institution of Engineering and Technology.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent), in electronic, electrical or mechanical engineering, or a related discipline (physics, mechatronics, control or systems engineering).

Renewable Energy in the Marine Environment

MSc (Jointly Awarded)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Jointly delivered by four leading universities in the UK, Spain, France and Norway

Industry-based internships

Erasmus Mundus scholarships for eligible applicants

Gain the skill set for a career in offshore renewable energy

COURSE STRUCTURE

This MSc is delivered in partnership by the University of Strathclyde (UK), University of the Basque Country (Spain), Ecole Centrale de Nantes (France) and the Norwegian University of Science & Technology, with funding support from the EU Erasmus+ Programme.

Two pathway specialisms (A or B) are available, and classes studied vary according to the specialism chosen.

A – Renewable Offshore Energy Systems Engineering
B – Power Electronics and Control for Offshore Renewable Energy Engineering

All classes are delivered in English and student mobility is compulsory as study involves enrolment in at least three of the four universities.

Erasmus Mundus scholarships, covering full tuition fees, participation costs, travel and installation contributions and a monthly allowance, are available for eligible applicants.

Further information and details on how to apply at: http://master-rem.eu/about-rem/

Year 1
Semester 1 – University of Strathclyde, UK
- Inspection and Survey (A)
- Control Principles (B)
- Wind Energy and Distributed Energy Resources (B)
- Marine Renewable Energy Systems (A/B)
- Power Electronics Devices, Drives, Machines and Applications (B)
- Physical Testing for Offshore Renewable Energy Devices (A)
- Energy Economics (A/B)
- Environmental Impact Assessment for Offshore Renewable Energy (A/B)
- Finite Element Analysis of Floating Structures (A)

Semester 2 – Universidad del Pais Vasco, Spain
- Ocean Wave Energy and Offshore Wind Energy (A/B)
- Modelling of Wind/Marine Current Generators (B)
- Wave to Wire Control (B)
- Power Electronics in Offshore Power Systems (B)
- Advanced Fluid Dynamics Modelling (A)
- Theoretical Aspects of Fluid Dynamics (A)
- Computational Fluid Dynamics for Turbulent Flow (A)
- Integration of Renewable Energy (A/B)
- Operation of Transmission and Distribution Grids (A/B)
- Environmental Conditions for Marine Renewables (A/B)
- Operations and Maintenance of Marine Arrays (A/B)
- Basque Language and Culture (A/B)

Semester 3 – Ecole Centrale de Nantes (A), France OR Norwegian University of Science and Technology (B)
- Water Waves and Sea States Modelling (A)
- General Concepts of Hydrodynamics (A)
- Numerical Hydrodynamics (A)
- Experimental Hydrodynamics (A)
- Marine RE: Offshore Wind Turbines (A)
- Marine RE: Tidal Turbines (A)
- Marine RE: Wave Energy Converters (A)
- Wave-structure Interactions and Moorings (A)
- French Language and Culture (A)
- Applied Electromagnetics in Power Engineering (B)
- Power Electronics (B)
- Power System Analysis (B)
- Power Electronics in Future Power Systems (B)
- Wind Power in Electric Power Systems (B)
- Quality of Supply in Electrical Power Systems (B)

Semester 4 – at any of the four universities
- MSc Thesis (A/B)

COURSE DURATION

24 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in electronic, electrical, mechanical or systems engineering, geosciences, oceanography, mathematics, physics or environmental sciences.

UKVI-recognised English language qualification at B2 level (IELTS 6.5) for non-native English speakers.

Smart Grids

MSc (Jointly Awarded)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Double degree in partnership with Comillas Pontifical University, Spain and Iberdrola

Paid industrial internships in the UK/USA/Spain/Brazil

Build the skillset to meet the needs of the power sector

Gain expertise in electrical power and smart grids

COURSE STRUCTURE

You will study at two leading universities for electrical power systems and smart grids in Spain and the UK, then complete a short paid internship with multinational industry partner, Iberdrola at one of their branch offices in the UK, USA, Spain or Brazil. The MSc is fully delivered in English.

Semester 1 (Sept - Dec, Comillas Pontifical University)
Compulsory Classes

- Fundamentals of Power Systems OR Fundamentals of Telecommunications
- Regulation and New Business Models
- Operation and Planning of Future Distribution Networks
- Telecommunications for Smart Grids
- Leadership, Change Management and Corporate Responsibility

Semester 2 (Jan - mid-May, University of Strathclyde)
Compulsory Classes

- Control and Protection of Future Networks
- Hardware IoT Communication System Design
- 5G Communications Networks
- Offshore and Pan European Supergrids
- Data Analytics and AI for Energy Systems
- Power Electronics for Transmission and Distribution

Semester 3 (mid-May - mid Sept, Iberdrola)
Individual project – industry defined paid internship

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in electronic, electrical or telecommunications engineering, or a related physical sciences subject.

UKVI-recognised English language qualification at C1 level (IELTS 7.0) for non-native English speakers.

Studying at Strathclyde has been a great experience. It has helped me grow as an architect and changed my mind-set. It has helped me handle and cater to design problem in a better way. The freedom to pursue the topic of your choice, research about it and arrive at a positive solution has been my favourite thing to do."

Shubham Jain
MArch Advanced Architectural Design

Department of Mechanical and Aerospace Engineering

RESEARCH DEGREES

MPhil, PhD

Contact for Research Degrees

t: +44 (0)141 548 2846
e: mae-r@strath.ac.uk

TAUGHT COURSES

Advanced Mechanical Engineering
Advanced Mechanical Engineering with Specialist Pathways: Aerospace/Energy Systems/Materials/Power Plant Technologies
Advanced Mechanical Engineering with Industrial Placement
Advanced Mechanical Engineering with Pilot Training
Advanced Mechanical Engineering by Modular Study
Advanced Mechanical Engineering by Online Learning
Sustainable Engineering: Renewable Energy Systems and the Environment (see page 30)
Satellite Applications
Satellite Applications with Data Science

Contact for Taught Courses

t: +44 (0)141 547 5484
e: eng-admissions@strath.ac.uk

The Department is one of the biggest and best of its kind in the UK. We apply our knowledge and understanding in mechanical and aerospace engineering to solve challenges facing industry and society. We host the Energy Systems Research Unit, the Aerospace Centre of Excellence, the James Weir Fluids Laboratory, and the Mechanics and Materials Research Centre.

Research Themes

Energy
Research takes place within the Energy Systems Research Unit. We develop and test new methods and technologies for energy reduction and supply, and help designers create clean and sustainable solutions. We offer consultancy services that include the laboratory testing of new products, the performance appraisal of proposed new designs or retrofits, and the field monitoring of energy systems in use. Our research goals include:

- improving the accuracy of the mathematical models and numerical methods used to represent heat, mass and power flow
- applying simulation to optimise energy component/system performance and promote energy efficiency measures
- evolving software engineering techniques that increase researcher efficiency and programme robustness
- improving confidence in predictions through the development of programme validation, calibration and accreditation procedures
- constructing knowledge-based design support environments to enable application interoperability and effective teamwork

Aerospace
Research in the Aerospace Centre of Excellence delivers new approaches to systems engineering, flight mechanics and computational intelligence to underpin new concepts and technologies for the sustainable exploration and exploitation of space, space situational awareness, remote sensing, robotics and autonomy, space services and cost-effective, efficient and reliable global transport and access to space. The Centre is part of the Strathclyde Ocean, Air and Space University research theme which looks at key challenges in space systems and satellite application, space science and exploration, remote sensing and Earth observation, quantum technology, sustainable transport, risk, reliability and resilience engineering, robotics and autonomy, and ocean engineering.

Fluids
At the James Weir Fluids Laboratory, we explore the fundamental flow physics for new fluids technologies in the fields of energy, sustainability, nanotechnology, health and transport. We have developed simulation tools to test new concepts, products and designs. We have experimental platforms for the analysis of complex fluids, various forms of thermal convection and microfluidics, and we are skilled in industrial computational fluid dynamics on local and National high-performance computers. Our current projects cover particle dynamics in fluid flow, nanoliquids, interfacial dynamics, and microgravity phenomena.

Materials
Materials for energy conversion applications, renewable and nuclear conversion and bio-mechanics are among the areas explored by the Mechanics and Materials Research Centre. Our research focuses on mechanics (including solid mechanics), polymers and polymer composites, and tribology and tribo-corrosion. Our department also hosts the Tribo-Corrosion Network and is home to the Advanced Materials Research Laboratory.

Facilities

The Department's large-scale laboratory facilities include:

- High Speed Computer (1088 cores)
- 1.5m low-speed/0.9m environmental wind tunnel
- facilities for carrying out vibration and shock tests
- machinery condition diagnosing from vibration signals
- polymer processing laboratory
- optical strain measurement facility
- autoclave with 10 bar pressure capacity and temperatures up to 650°C

Scholarship Programmes

Research Scholarships

Each year, the Department has a limited number of fully-funded PhD scholarships available to first-class applicants. Internal applications normally take place in March and June each year. Prospective UK/EU students who hold (or expect to hold) a first-class Honours degree or an MSc with Distinction are encouraged to make an informal expression of interest between November and January to take advantage of potential scholarships.

MSc Scholarships

Applicants of outstanding calibre (usually holders of a first-class Honours degree or equivalent overseas qualification) may be eligible to apply for a range of international scholarships offered by the University:

- Commonwealth Shared Scholarship
- Faculty of Engineering International Scholarship
- ScottishPower/Iberdrola Foundation Scholarship
- Scotland's Saltire Scholarships
- Dean's Excellence Award for India

Scottish/EU Applicants
Scottish/EU postgraduate applicants may be eligible to apply to the Student Awards Agency for Scotland (www.saas.gov.uk) for a tuition fee loan to help towards the cost of their fees.

Contact for Scholarship Information

t: +44 (0)141 547 5484
e: eng-admissions@strath.ac.uk

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Advanced Mechanical Engineering with Optional Specialist Streams

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Study at one of the oldest, largest and most respected Mechanical Engineering departments in the UK

Extensive range of technical modules offers students choice and flexibility when learning advanced mechanical topics

Gain industry relevant skills, such as project management and risk analysis

Accreditation by the Institution of Mechanical Engineers

SPECIALIST PATHWAYS

In addition to the Advanced Mechanical Engineering (AME programme), the following specialist pathways are offered at MSc level only:

- MSc Advanced Mechanical Engineering with Aerospace
- MSc Advanced Mechanical Engineering with Energy Systems
- MSc Advanced Mechanical Engineering with Materials
- MSc Advanced Mechanical Engineering with Power Plant Technologies

COURSE STRUCTURE

Compulsory Modules
Two academic semesters consisting of nine technical modules, plus at least three commercial skills modules. On completion of these modules, students will progress to their individual research project. Students on the Advanced Mechanical Engineering course can select from any of the technical classes below.

- Pressurised Systems
- Machinery Diagnosis and Condition Monitoring
- Advanced Topics in Fluid Systems Engineering
- Spaceflight Systems
- Materials for High Temperature Applications
- Introduction to Engineering Optimisation
- Control Systems Design
- Nuclear Power Systems
- Energy Systems Analysis
- Engineering Plasticity

Aerospace (compulsory for AME with Aerospace, optional for other streams)
- Aerodynamic Performance
- Aerodynamic Propulsion Systems
- Spaceflight Mechanics

Energy (compulsory for AME with Energy Systems, optional for other streams)
- Energy Resources and Policy
- Electrical Power Systems
- Energy Modelling and Monitoring

Materials (compulsory for AME with Materials, optional for other streams)
- Engineering Composites
- Polymer and Polymer Composites
- Industrial Metallurgy

Power Plant Technologies (compulsory for AME with Power Plant Technologies, optional for other streams)
- Boiler Thermal Hydraulics
- Gas and Steam Turbines
- Electrical Power Systems

Generic Classes
- Design Management
- Project Management
- Risk Management
- Financial Engineering
- Environmental Impact Assessment
- Sustainability

Individual Project
Students undertake an individual research project the theme of which can be industry-related or aligned to engineering research at the University.

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in engineering or physical science.

Advanced Mechanical Engineering with Industrial Placement

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain in-depth technical understanding of advanced mechanical topics

Enhance your learning and build a professional network by undertaking a 2-3 month industrial placement

Select a specialist stream to increase your expertise in a chosen topic

Accreditation by the Institution of Mechanical Engineers

COURSE STRUCTURE

Students choose from the technical and generic classes listed opposite and in addition undertake an industrial placement for up to three months.

- Semester 1, September to December: taught classes
- Semester 2, January to May: taught classes
- June to September: industrial placement
- Semester 3, October to January: dissertation

Industrial Placement
Students will complete an 8-12 week industrial placement or from June to September. The Department provides support to apply for internships and allocates a supervisor to be your point of contact during your placement.

Individual Project
Students undertake an individual research project, the theme of which can be industry-related or aligned to engineering research at the University. The dissertation can be linked to the industrial placement and worked on with the industry partner.

COURSE DURATION

18 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in engineering or physical sciences.

Advanced Mechanical Engineering with Pilot Training

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Learn how to fly a plane during 45 hours of in-flight instruction

Explore the theoretical knowledge required for a EASA Flight Crew Licence (FCL) as part of your academic programme

Have the opportunity to work towards attaining an ICAO recognised Private Pilot's Licence (PPL)

Make yourself career ready by gaining an in-depth technical knowledge of advanced mechanical topics and developing industry relevant skills

COURSE STRUCTURE

Two academic semesters consisting of up to nine technical modules, plus at least three commercial skills modules. On completion of these modules, students will progress to their individual research project.

Compulsory Classes
- Pilot Studies A
- Pilot Studies B
- Pilot Studies Flight Time

Optional Classes
- Engineering Composites
- Pressurised Systems
- Aerodynamic Performance
- Aerodynamic Propulsion Systems
- Spaceflight Mechanics
- Advanced Topics in Fluid Systems Engineering
- Spaceflight Systems
- Polymer & Polymer Composites
- Fundamentals of Materials Science
- FEA in Mechanical Engineering Design
- Gas & Steam Turbines
- Energy Resources & Policy
- Electrical Power Systems
- Energy Modelling & Monitoring
- Industrial Metallurgy

Advanced Mechanical Engineering with Pilot Training MSc (continued)

Generic Modules
Select three from the following:
- Design Management
- Project Management
- Risk Management
- Financial Engineering
- Sustainability
- Environmental Impact Assessment

Individual Project
Students undertake an individual research project in their final year, the theme of which can be industry related or aligned to engineering research at the University.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in engineering or physical sciences, or equivalent professional qualification. A lower-class degree may be considered with relevant work experience.

OTHER INFORMATION

Students who wish to work towards an ICAO recognised Private Pilot's Licence will be required to successfully pass a Class 2 Aero-Medical Examination. This is not a requirement for entry of the programme.

For further information please visit https://www.strath.ac.uk/engineering/mechanicalaerospaceengineering/studywithus-postgraduate/

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Advanced Mechanical Engineering

MSc (part-time online learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Online resources, such as video, podcasts, webinars and presentations, allow students to study flexibly and remotely

Complete an individual project with an industry theme or aligned to engineering research at Strathclye

Extensive range of technical modules offers students choice and flexibility when learning advanced mechanical topics

COURSE STRUCTURE

Students select a combination of specialist and generic classes and undertake an industrial project.

- Aerodynamics in C
- Applied Metallurgy
- Boiler Thermal Hydraulics
- Degradation of Metals and Alloys
- Electrical Power Systems
- FEA In Mechanical Engineering Design
- Fundamentals of Materials Science
- Gas and Steam Turbines
- Hydraulics
- Introduction to Open Source Computational Dynamics
- Nuclear Power Systems
- Pressurised Systems
- Structural Integrity
- Financial Information
- People Organisation and Leadership
- Project Management
- Strategic Procurement Management
- Technology and Innovation Management

Individual Project
Students undertake an individual research project in their final year, the theme of which can be industry-related or aligned to engineering research at the University.

COURSE DURATION

MSc: 36 months part-time
PgDip: 24months part-time
PgCert: 12 months part-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in engineering or physical sciences; an equivalent professional qualification may also be considered.

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Advanced Mechanical Engineering by Modular study

MSc/PgDip/PgCert by stand-alone modules (part-time distance learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Flexible and modular framework offering a tailored study experience

Ideal for students seeking professional development opportunities

Study stand-alone modules or transfer credits towards a PgCert, PgDip or MSc degree

Wide variety of modules to choose from across mechanical and aerospace engineering discipline

COURSE STRUCTURE

Students can select any of the optional level 5 modules available within the department. There are approximately 35 modules available, some of which include:

- Pressurised Systems
- Spaceflight Mechanics
- Engineering Plasticity
- Control Systems Design
- Energy Resources and Policy
- Energy Systems Analysis
- Electrical Power Systems
- Energy Modelling and Monitoring
- Aerodynamic Performance
- Aerodynamic Propulsion Systems
- Spaceflight Mechanics
- Energy Resources and Policy
- Electrical Power Systems
- Energy Modelling and Monitoring
- Engineering Composites
- Polymer and Polymer Composites
- Industrial Metallurgy
- Boiler Thermal Hydraulics
- Gas and Steam Turbines
- Applied Metallurgy
- FEA In Mechanical Engineering Design
- Fundamentals of Materials Science

Individual Project
Students who progress to the MSc, will be required to undertake an individual research project in their final year, the theme of which can be industry related or aligned to engineering research at the University.

COURSE DURATION

MSc: Up to 60 months part-time distance learning
PgDip: Up to 48 months part-time distance learning
PgCert: Up to 24 months part-time distance learning
Individual modules: 4-8 months

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in engineering or physical sciences, or equivalent professional qualification. A lower-class degree may be considered with relevant work experience. Consideration will be given to those from differing backgrounds based on their experience on a module by module basis.

Satellite Applications (with or without Data Science)

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop technical skills in satellite data acquisition, processing, interpretation, and application

Gain multi-disciplinary skills across satellite engineering, entrepreneurship and data science fields

Learn how to solve global development challenges using the UN's Sustainable Development Goals (SDGs) as a learning tool

Acquire and apply entrepreneurial knowledge and skills by creating a business plan

COURSE STRUCTURE

Compulsory Classes

- Introduction to Space Technologies
- Introduction to Satellite Applications
- Data Science for Satellite Applications
- Payloads
- Satellite Applications for Sustainable Development Goals (SDGs)
- Big Data Fundamentals
- Entrepreneurship, Innovation and Commercialisation
- New Venture Planning
- Legal, Ethical and Professional Issues for the Information Society (specialist option)
- Machine Learning for Data Analytics (specialist option)

Individual Project
Students will create their own company or develop a viable business plan that addresses challenges in one or more United Nations Sustainable Development Goals (UN SDGs).

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in a relevant engineering, technology or science discipline. Other qualifications may also be considered provided there is evidence of capacity for postgraduate study.

"I am very pleased with the course. Lecturers allow us to explore our ideas in coursework which motivates me to learn about new technology and be innovative."

Karim Garad, MSc Satellite Applications (with Data Science)

Department of Naval Architecture, Ocean and Marine Engineering

RESEARCH DEGREES

MPhil, PhD

Contact for Research Degrees

t: +44 (0)141 548 4913
e: naome-research@strath.ac.uk

TAUGHT COURSES

Advanced Naval Architecture
Marine Engineering
Offshore Floating Systems
Ship and Offshore Structures
Ship and Offshore Technology (two-year programme offered jointly with Hamburg University of Technology)
Subsea and Pipeline Engineering
Technical Ship Management
Marine Engineering with Specialisation in Autonomous Marine Vehicles
Offshore Wind Energy
Sustainable Engineering: Offshore Renewable Energy (part of Sustainable Engineering Programme, (see page 30)
Sustainable Engineering: Marine Technology (part of Sustainable Engineering Programme, (see page 30)

Contact for Taught Courses

t: +44 (0)141 547 5484
e: eng-admissions@strath.ac.uk

The Department of Naval Architecture, Ocean and Marine Engineering (NAOME) has staff expertise covering all areas of Naval Architecture, Ship Design, Marine Engineering, Ocean Engineering, High-Speed and Small Craft Design.

The Department's laboratory and computing facilities include one of the largest university ship model experiment tanks in the UK, a small towing/wave-making tank and a diesel engine test facility. The Department also works with a variety of software packages which include AVL, AUTOCAD 2020, STAR CCM+, DMV SESAM, MATLAB, MAXSURF and MOSES. A full list of our software packages can be found on our website. The Department also has a racing yacht which students can use.

Research and teaching activities within the Department are complemented and enhanced by an excellent hydrodynamic test facility, fully turbulent flow channel, small ocean basin, ship full mission bridge simulator and a marine engine lab.

The Department also hosts one research institute and two research centres; i) the Offshore Engineering Institute ii) the Marine Safety Research Centre; an industry-University partnership involving NAOME, Royal Caribbean Cruise Lines and DNV GL Classification Society, and iii) the Peridynamics Research Centre. The Department is also contributing to three EPSRC-funded Centres for Doctoral Training: IDCORE, WAMESS and REMS.

Research

Our Department is one of the world's leading marine technology departments conducting research on ships and other offshore structures including marine renewable energy devices. We have Europe's largest team of postgraduate researchers and academic staff to sustain the production of useful and innovative research ideas. Our research is strategically grouped under three key areas: Fluid-Structure Interaction; Marine Design, Operations and Safety; and Ocean Engineering. We work closely with key UK and global industry and take part in many diverse research projects and networks funded by the UK government and the EU. We have the world's first dedicated Maritime Safety Research Centre and a dynamic CFD group having access to the regional super computer facility. We are also one of the key players of the EPSRC/ETI Industrial Doctoral Centre for Offshore Renewable Energy (IDCORE).

Research Areas

Fluid-Structure Interaction
Our internationally-renowned academic staff conduct research, development and demonstration activities in this key area, supported by the Kelvin Hydrodynamics Laboratory facilities which include a 75-metre towing/wave tank and fully turbulent circulating sea water channel. These experimental facilities are complemented by the High Performance Computing platform for the West of Scotland Centre (ARCHIE-WeST) to conduct time-intensive numerical fluid-structure interaction simulations. Our research in this area cross-cuts NAOME's other key areas, and supports the numerical and experimental hydrodynamics, structure and material research involving ships, offshore and other subsea structures as well as the marine renewables energy devices.

Marine Design, Operations and Safety
Our largest and most diverse key research area is supported by our internationally-leading academic staff and the world's first dedicated Maritime Safety Research Centre. Cross-cutting activities with the Fluid-Structure Interaction research and access to the regional super computer, ARCHIE-WeSt, strengthen our research, which is also supported by our experimental marine engineering facilities, including a fuel cell laboratory. The main activities in this key area focus on the Intact/Damage Stability and Survivability of Ships; Maritime Human Factors and Navigational Safety; Energy Efficient Ship Design and Operations; Marine Engineering, Alternative Fuels and Emissions; and Life Cycle Risk Management.

Ocean Engineering
Research in this area has a strong focus on offshore oil/gas and renewable energy, and is led by our internationally-renowned academic staff. Blended by the cross-cutting activities of our Fluid-Structure Interaction research, our research also benefits from the Kelvin Hydrodynamics Laboratory facilities and regional supercomputer, ARCHIE-WeSt. We also make a major contribution to the UK's first Industrial Doctoral Centre for Offshore Renewable Energy (IDCORE).

Scholarships and Funding

Applicants from Scotland and non-UK EU countries may be eligible for fees-only support from the Student Awards Agency for Scotland (www.saas.gov.uk). In addition, there are a limited number of scholarships from industry. Please contact the Department.

Advanced Naval Architecture

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain advanced practical knowledge in the field of Naval Architecture

Benefit from guest lectures by industry leaders

Develop skills and knowledge that are relevant for emerging challenges of naval architecture

COURSE STRUCTURE

The programme has three components:
- Instructional Modules
- Group Project
- Individual Project

Compulsory Classes
- Ship Operability and Control
- Ship Powering in Service
- Group Design Project
- Advanced Marine Design
- Maritime Safety and Risk
- Advanced Marine Structures
- Theory and Practice of Marine CFD
- Maritime Regulatory Framework

Optional Modules:
- Data Analysis for Engineering
- Inspection and Survey
- Maritime Transport and Economics

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in a relevant subject.

Marine Engineering

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Receive a degree which is recognised and accredited by Royal Institution of Naval Architects and the Institute of Marine Engineering, Science and Technology

Being led by key experts and academics, work in groups to solve real marine engineering problems of today and future

COURSE STRUCTURE

The programme has three components:
- Instructional Modules
- Group Project
- Individual Project

Compulsory Classes
- Advanced Marine Engineering
- Marine Engineering Simulation and Modelling
- Inspection and Survey
- Maritime Safety and Risk
- Onboard Energy Management and Marine Environment
- Systems Availability and Maintenance
- Marine Transport and Economics

Optional Classes
- Risk Analysis and Management
- Data Analysis for Engineering
- Autonomous Marine Vehicles and Digital Twin

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in a relevant subject.

Offshore Floating Systems

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain practical knowledge of offshore floating systems

Benefit from guest lectures by industry leaders

Accreditation by the Royal Institution of Naval Architects and the Institute of Marine Engineering, Science and Technology

COURSE STRUCTURE

The programme has three components:
- Instructional Modules
- Group Project
- Individual Project

Compulsory Classes
- Inspection and Survey
- Risers and Mooring Lines
- Dynamics of Floating Offshore Installations
- Finite Element Analysis of Floating Structures
- Maritime Safety and Risk
- Design and Construction of Floating, Production, Storage and Offloading Vessels
- Advanced Marine Structures
- Theory and Practice of Marine Computational Fluid Dynamics

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in a relevant subject.

Ship and Offshore Structures

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Accreditation by the Royal Institution of Naval Architects and the Institute of Marine Engineering, Science and Technology

Learn about the factors influencing the dynamic behaviour of offshore installations

COURSE STRUCTURE

The programme has three components:
- Instructional Modules
- Group Project
- Individual Project

Compulsory Classes
- Risers and Mooring Lines
- Dynamics of Floating Offshore Installations
- Finite Element Analysis of Floating Structures
- Advanced Marine Structures
- Reliability-based Structural Design and Plated Structures
- Computational Modelling of Problems in Structural Mechanics
- Materials Engineering

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in a relevant subject.

Ship and Offshore Technology

MSc (two-year programme with Hamburg University of Technology)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain an award in the name of two universities

Complete an intensive German language course

Accreditation by the Royal Institution of Naval Architects and the Institute of Marine Engineering, Science and Technology

COURSE STRUCTURE

The course is offered jointly between the University of Strathclyde and Hamburg University of Technology, Germany; the awards are made in the name of both universities.

Year 1 (University of Strathclyde)
- Risers and Mooring Lines
- Marine Pipelines
- Dynamics of Floating Offshore Installations
- Maritime Safety and Risk
- Design and Construction of Floating, Production, Storage and Offloading Vessels
- Theory and Practice of Marine CFD
- Inspection and Survey
- Finite Element Analysis of Floating Structures
- Group Project
- Research Project

Year 2 (Hamburg University of Technology)
- Structural Analysis of Ships and Offshore Structures
- Ship Design
- Seakeeping of Ships and Naval Architecture Laboratory
- Masters Thesis

Optional Classes
- Non-Linear Structural Analysis
- Ship Vibration
- Fatigue Strength of Ships and Offshore Structures
- Arctic Technology
- Innovative CFD Approaches
- Manoeuvrability and Shallow Water Ship Hydrodynamics

COURSE DURATION

24 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent), in a marine or marine-related engineering subject. Knowledge of structural mechanics,hydrostatics, fluid dynamics, ship resistance and propulsion and ship design is essential.

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Subsea and Pipeline Engineering

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Accreditation by the Royal Institution of Naval Architects and the Institute of Marine Engineering, Science and Technology

Gain advanced knowledge of subsea systems

Benefit from excellent teaching facilities

COURSE STRUCTURE

The programme has three components:
- Instructional Modules
- Group Project
- Individual Project

Compulsory Classes
- Maritime Safety and Risk
- Risers and Mooring Lines
- Marine Pipelines
- Underwater Vehicles
- Subsurface Technology
- Marine Pipeline Integrity
- Dynamics of Floating Offshore Installations
- Finite Element Analysis of Floating Structures

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in a relevant subject.

Technical Ship Management

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Accreditation by the Royal Institution of Naval Architects and the Institute of Marine Engineering, Science and Technology

Develop skills essential for efficient management of ships and fleets

COURSE STRUCTURE

Compulsory Classes
- Project Management
- Systems Availability and Maintenance
- Shipping Economics and Market Sector Analysis
- Maritime Regulatory Framework
- Onboard Energy Management and Marine Environment

Optional Classes
- International Law and Oceans Governance
- Inspection and Survey
- Maritime Safety and Risk
- Data Analysis for Engineering

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in a relevant subject.

Marine Engineering with Specialisation in Autonomous Marine Vehicles

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

This programme aims to address an identified market need for a postgraduate qualification that is relevant to the maritime industry and which develops skills and knowledge in autonomy and IT technologies used in the sector

COURSE STRUCTURE

The programme has three components:
- Instructional Modules
- Group Project
- Individual Project

Compulsory Classes
- Intelligent Sensing, Reasoning and Deep Learning
- Data Analysis for Engineering
- Autonomous Marine Vehicles and Digital Twin
- System Availability and Maintenance
- Marine Engineering Simulation and Modelling
- Underwater Vehicles

Optional Classes
- Inspection and Survey
- Maritime Transport and Economics
- Maritime Regulatory Framework
- Maritime Safety and Risk

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in a relevant subject.

Offshore Wind Energy

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

The offshore wind energy market is booming, and it urgently needs qualified people to further succeed in being the leading sustainable energy source

COURSE STRUCTURE

This programme is delivered in collaboration with the Department of Electronic & Electrical Engineering.

The programme has three components:
- Instructional Modules
- Group Project
- Individual Project

Compulsory Classes
- Wind Turbine Technology
- Offshore Wind Turbines Dynamics Modelling
- Offshore Structural Integrity
- Principles of Generator Modelling and Control
- Risk and Reliability Engineering
- Offshore Wind Farms Operation

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in a relevant engineering or technical subject.

The Faculty of Humanities & Social Sciences

We have significant expertise in developing the professional practice needed to equip modern societies at all levels.

We believe education has the capacity to change lives and providing an enriching student experience is a priority for us. Our graduates form the backbone of business and industry, and public services in Scotland and around the world.

In Humanities & Social Sciences we focus on the building blocks of society – human endeavour. Studying here, you will better understand how human beings think, act and interact with one another and the world around them. Employers value this knowledge.

Research informs our teaching and helps us make a difference to business, industry and society as a whole. We have a vibrant research culture and our research is noted for its impact.

Our Graduate School is home to over 300 research students from more than 30 countries and we support their development through a tailored training programme.

Our schools touch every aspect of human life: education and learning; government and public policy; humanities and culture; justice and the law; lifelong learning; psychological sciences and health; and social work and social policy.

We have strong links with governments, global organisations, in both the public and private sector, and academic networks. Our graduates are sought-after and intellectually engaged – focused on applying knowledge, they know how the world works, and how to make it a better place.

Contact
Humanities & Social Sciences
t: +44 (0)141 444 8600
e: hass-pg-enquiries@strath.ac.uk

School of Education

RESEARCH DEGREES

PhD Education or Applied Autism Research
MPhil Education
EdD Education

Contact for Research Degrees
e: hass-postgrad@strath.ac.uk

RESEARCH

MPhil/PhD in Applied Autism Research
The School of Education is home to the Scottish Centre for Applied Autism Research (SCAAR) and welcomes proposals from prospective students to study at doctorate level. At SCAAR our research is dedicated to addressing the social-emotional challenges associated with autism and making positive changes that facilitate the autistic community's full involvement in society.

Admission to the PhD programme is primarily based on the quality of a proposal and how it fits our philosophy to conduct autism research in applied (real-world) settings. At SCAAR we aim to understand autism through world-class research, translate theory into practical applications and to fully include autistic participation within research. This demands a multidiscipline approach to research and at SCAAR we welcome prospective students from across a range of disciplines.

Prospective students should develop proposals to match areas of research expertise held by members of staff and are encouraged to contact potential supervisors in advance of their application. We offer a research community with excellent connections to national and international autism research and practice communities.

MPhil/PhD in Education
The School of Education welcomes proposals from prospective students to study at doctorate level. Admission to the PhD programme is primarily based on the quality of a proposal and its match to areas of research expertise held by members of staff.

We offer a research community with excellent connections to national and international education research and practice communities. You will be invited to participate in a range of research and knowledge exchange activities where you can learn from and with us about the research, policy and practice innovation and evaluation.

Research Areas
Our academic staff have national and international recognition for their research and represent a range of expertise spanning diverse aspects of education. The following areas are some of the key aspects in which we can offer supervision:

- evidence-based practice
- learning-based pedagogies
- policy evaluation
- gender and sexuality
- equality and diversity
- curriculum development
- inclusive education and issues around children with additional support needs
- children and childhood
- a strong theme around social justice and civic responsibility

In addition, colleagues are at the forefront of innovative research approaches including quantitative methods, secondary data sets, mixed methods, visual methodology and participatory ways of working.

These areas are supported by specialist centres within the School, such as the Centre for Lifelong Learning, Scotland's National Centre for Languages (SCILT) and the Centre for Children and Young People Studies in which postgraduate research students are encouraged to play a full part.

The School of Education at Strathclyde is part of the Scottish Doctoral Training Centre through which ESRC Studentships in Education can be gained.

The School of Education is the leading provider of teacher education in Scotland and one of the largest in the UK. Our teacher education courses have a strong track record and are highly-valued by our students. Our graduates are sought by schools all over the country, and the majority of our students are in employment by graduation.

We are home to:
- Scotland's National Centre for Languages (SCILT)
- Confucius Institute

We have a vibrant research culture and our work is noted for its high impact as we try to better the lives of children and practitioners in Scotland and beyond.

ENTRY REQUIREMENTS FOR RESEARCH DEGREES

A Masters degree or evidence of Masters-level study, plus full-time practitioner experience (or equivalent) in a professional field with an educational dimension.

International students require a minimum IELTS score of 6.5 in writing and reading. Prospective research students should consult individual staff research profiles on our website and are encouraged to contact potential supervisors in advance of their application.

POSTGRADUATE TAUGHT COURSES

- PGDE Primary/Secondary
- TESOL and Intercultural Communication (offered jointly with the School of Humanities)
- Applied Educational and Social Research
- Autism Studies
- Education Studies
- Educational Leadership (part-time)
- Early Years Pedagogue (part-time)
- Part-time MEd programmes including MEd Education Studies with pathways
- Postgraduate Certificate in Education (International)

Contact for Postgraduate Taught Courses
e: hass-pg-enquiries@strath.ac.uk

Doctor of Education

EdD (full-time/part-time)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

One of only a few programmes in the UK that offer specialist pathways

Transfer Masters-level credits from other programmes

Choose full-time or part-time study modes – supported through the University's Virtual Learning Environment

This professional doctoral degree is aimed at those who have been working in the education sector for a number of years. It provides the opportunity to undertake research aligned to your role and practice as an educationalist.

The specialist areas below, or a generic route, are offered:

- Supporting Teacher Learning (part-time and full-time)
- Educational Leadership (part-time and full-time)
- Philosophy with Children (part-time and full-time)
- Bilingual Education (part-time and full-time)
- Autism Studies (MEd part-time and MSc full-time)
- Early Years Pedagogue (part-time only)
- Inclusive Education (part-time only)
- Digital Technologies (by Accreditation of Prior Learning only – please contact us)
- Philosophy and Culture (part-time and full-time; daytime taught modules)

FULL-TIME COURSE STRUCTURE

Full-time students will attend a range of taught modules through the week. Sessions will comprise elements of lecture, workshop and seminar.

Year 1 (taught stage)
Semester 1
- Methods of Enquiry, Literature and Scholarship
- Choice of optional or subject specific pathway class(es)

Semester 2
- Advanced Research Methods and Proposal
- Choice of optional or subject specific pathway class(es)

Years 2 & 3 (research stage)
- Thesis supervised by two supervisors

PART-TIME COURSE STRUCTURE

The part-time programme has been designed to provide a level of flexibility that facilitates part-time study for those who are continuing to work full-time while undertaking the EdD. The core classes are taught on-campus on Saturdays from 10am - 4pm. The timing of the **optional classes** varies but is focused around evening and weekends.

Year 1 (taught stage)
Semester 1
- Methods of Enquiry, Literature and Scholarship

Semester 2
- Choice of optional or subject specific pathway class(es)

Year 2 (taught stage)
Semester 1
- Choice of optional or subject specific pathway class(es)

Semester 2
- Advanced Research Methods and Proposal

Years 3 - 5 (research stage)
Thesis supervised by two supervisors

FAST-TRACK ROUTE

If you have completed a Masters in the last 5 years then it may be possible to apply for our fast track route within the part-time programme which reduces the length of the course by 1 year. By applying for accreditation of prior learning for up to 60 credits then you can complete the two core EdD modules within one year. Contact the department for further information.

ENTRY REQUIREMENTS

Masters degree or evidence of Masters-level study, plus full-time practitioner experience (or equivalent) in a professional field with an educational dimension.

Professional Graduate Diploma in Education

Primary and Secondary Pathways

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Learn from on-campus classes and 18 weeks of placements in schools

Become qualified to teach in locations world-wide

Opportunity to achieve Masters-level credits

COURSE STRUCTURE

The course provides the theoretical and practical starting point to your teaching career. You will acquire the skills, attitudes and competencies to communicate in the classroom.

Those following the Primary route will be qualified to teach from nursery (approximately age 3) to Primary 7 (age 12). The Secondary route qualifies you to teach specific subjects to pupils aged 11 to 18 years.

Masters-level Credits
As part of the course, you will have the opportunity to gain up to 120 Masters-level credits. On completion of these, there are opportunities in the subsequent year to work towards further Masters qualifications, either on a face-to-face or online basis.

Compulsory Classes
- Professional Skills; Professional Practice – taught both on campus and in schools, this module will enable you to become an effective teacher through learning pedagogical theory, observing experienced teachers and applying your knowledge and understanding in the practical context.
- Professional Skills; Curriculum and Pedagogy – examines what is taught; how it is taught and how teachers use assessment to promote learning.
- Education Studies; Professional Values – develops your understanding of educational issues in a broader intellectual context.
- Professional Learning through Enquiry - learn how to plan practitioner enquiry with the option of carrying out a small scale research project.

You are expected to keep a portfolio of progress throughout the course. This prepares you for the continuation of professional development during your teaching career.

COURSE DURATION

36 weeks full-time, including 18-week placement experience

SECONDARY SUBJECT AREAS AVAILABLE		
You will have the opportunity to qualify in one or two subjects, depending on the combination.		
Art and Design	Gaelic	Mandarin
Biology	Geography	Physical Education
Business Education	German	Physics
Chemistry	History	Psychology
Computing	Home Economics	Religious Education
English	Italian	Spanish
French	Mathematics	Technological Education

All of the above subjects can be taught in the medium of Gaelic.

ENTRY REQUIREMENTS

A university degree validated by a higher education institution in the UK, or a degree of an equivalent standard from an institution outside the UK (a degree should have at least 360 credit points). For the Secondary route, we require passes in at least two years' progressive study in the subject(s) you want to teach.

National Qualifications in English at SCQF Level 6 (for example, Higher Grade) or an accepted alternative; National Qualifications in Mathematics at SCQF Level 5 (e.g. National 5, or Intermediate 2) or an accepted alternative.

We also require the following information, which is considered when selecting candidates for interview (please note interviews can be held by Skype):

- evidence that you have experience of working with children in a school setting or related context
- an up to date understanding of education
- an ability to relate to people

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

TESOL & Intercultural Communication

MSc/PgDip/PgCert (full-time/part-time)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain the theoretical and practical skills to teach English to learners with a wide range of social, cultural and communicative goals

Benefit from the expertise of educationalists, linguists, and literature/culture scholars

COURSE STRUCTURE

Compulsory Classes
- Language Learning in a Multilingual World
- Introduction to Intercultural Communication
- Contemporary Issues in Language Teaching
- Research Methodologies and Reasoning

Optional Classes
(choose two from the following)
- Digital Technologies in Language Teaching
- Curriculum Development in TESOL
- Contemporary Scottish Cultural Studies
- Narrative Processing across Languages, Cultures and Media
- Independent Study

Dissertation (MSc students only)
Students write a dissertation of 12,000 - 15,000 words on a topic relating to the course.

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Degree or relevant professional qualification, or a combination of qualifications and experience demonstrating capacity for postgraduate study.

Applied Educational and Social Research

MSc/PgDip (full-time & part-time distance learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Learn to evaluate, design, conduct, analyse and justify applied research

Benefit from teaching by internationally-recognised experts

Tailor the choice of classes to your personal interests

COURSE STRUCTURE

Compulsory Classes
- Educational Research and Enquiry
- Design Strategies in Educational and Social Research
- Data Collection in Educational and Social Research
- Data Analysis in Educational and Social Research

Optional Classes (one to be chosen)
Further Quantitative Research Design and Data Analysis
Further Qualitative Research Design and Data Analysis

Dissertation (MSc students only)
Students write a dissertation of 12,000 - 15,000 words on a topic relating to the course.

COURSE DURATION

12 months full-time (attendance and blended learning);
24 part-time (distance learning)

ENTRY REQUIREMENTS

An undergraduate degree or equivalent.

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Autism Studies

MSc (full-time)

MEd/PgDip/PgCert
(part-time, distance learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Understand a range of complex theories essential to supporting the autism profile

Translate theory into practice with an Educational Practice Placement

Receive input from internationally-respected autism experts

COURSE STRUCTURE

Compulsory Classes
- Conceptual Frameworks
- The Spectrum of Autism
- Responding to the Impact of Autism: Approaches and Interventions
- Educational Practice Placement
- Research Methods and Reasoning
- Dissertation

Our full-time students will complete a compulsory educational practice placement within our partner schools in North Lanarkshire or East Dunbartonshire and complete a reflective practice journal as part of the core placement module. There is no requirement of a practice placement for our part-time students. A practice/professional/experiential/work based portfolio will be required for them for this core module.

Optional Classes (one to be chosen)
- Autism and Related Conditions
- Becoming an Autism Trainer
- Independent study module

COURSE DURATION

12 months full-time
12 months PgCert part-time/distance learning
24 months PgDip part-time/distance learning
4 years MEd part-time/distance learning

ENTRY REQUIREMENTS

Undergraduate Honours degree in a related discipline, or equivalent qualification, and direct experience of living or working with individuals on the autism spectrum. Experience is essential as students must demonstrate theory to practice links.

Education Studies

MSc (full-time)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop a solid foundation for understanding transformative processes in all cultural contexts

Enhance practice and career opportunities in the broader field of formal and informal education

Gain a grounding in research methods and reasoning

COURSE STRUCTURE

Compulsory Classes
- Thinking About Education
- Research Methods and Reasoning
- Frameworks for Understanding Learning
- Dissertation
- Globalisation, Society and Education Policy

Optional Classes
One pair of modules from a choice of:
- Philosophy of Technology and Education
- Education and Self-Formation in Cultural Contexts

Or
- Putting Theory into Practice
- Professionalism and Professional Learning

Or
- Conceptions of Leadership
- Leadership for Learning

COURSE DURATION

12 months

ENTRY REQUIREMENTS

Degree or relevant professional qualification, or a combination of qualifications and experience demonstrating capacity for postgraduate study.

Early Years Pedagogue

MEd (part-time)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Recognised by the Scottish Government

Blended approach of professional training and networking with practice-based assessments

Informed by contemporary research and international perspectives

COURSE STRUCTURE

Compulsory Classes

- Taking Action: child, family and community efficacy
- Creating stimulating learning environments: indoors and outside
- Listening to children and hearing their voices
- The connected child: early child development
- Leading in a time of change
- Child-centred and child-focused approaches to practitioner research
- Dissertation

COURSE DURATION

36 months

ENTRY REQUIREMENTS

The Early Years Pedagogue is a specialist postgraduate route for General Teaching Council for Scotland registered teachers and SSSC registered educators with a Bachelor of Arts in Childhood Practice. Equivalent qualifications, professional registration and experience will be considered for applicants outside of Scotland.

Applicants should hold a post with an appropriate age group (3-8), or have sufficient guaranteed access to such a position in order to fulfil the assessment requirements of each module.

Educational Leadership

MEd (part-time)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Enhance your professional practice in leadership

Develop your understanding of leadership and the purposes which educational leadership serves

Gain insights into your own professional development and an understanding of yourself as a leader

COURSE STRUCTURE

Year 1 Compulsory Classes

- Conceptions of Leadership
- Leadership for Learning
- Leadership for Equity, Inclusion and Social Justice

Year 2 Classes

- Research Methods and Reasoning*
- Leadership for School Improvement
- Contexts for Leadership

*You may replace Research Methods and Reasoning with the Year 3 class Strategic Leadership to complete a Postgraduate Diploma. However, you would not then be able to progress to Year 3.

Year 3
You can choose to take the class Strategic Leadership, plus a work-based project within your workplace to evaluate the impact of a proposed strategic change on student learning.

Alternatively you can choose to undertake dissertation under the guidance of a supervisor, in a subject area of your choice.

COURSE DURATION

36 months

ENTRY REQUIREMENTS

Good undergraduate degree, or relevant professional qualification, a teaching qualification (or its equivalent) or relevant experience within an educational setting.

During my period of study there were people on the course from primary schools, secondary schools, colleges, NDPBs and Community Learning and Development organisations. I also had the opportunity to engage and network with professionals at various levels including teachers, lecturers, principal teachers, faculty heads, depute heads and members of senior management. This diverse student base made it easy to achieve my aim and result in a rich and beneficial experience."

Derek Timpany
MEd Educational Leadership

Postgraduate Certificate in Education (International)

PG Cert (part-time online)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Learn and apply innovative teaching practices in your own classroom

Develop a deeper understanding of reflective practice in teaching

Benefit from flexibility and choice that suit your own interests

Opportunity to undertake a small-scale practitioner enquiry project

COURSE STRUCTURE

Compulsory Classes

- International Education: Issues, Debates and Challenges
- Learning, Teaching and Professionalism in International Contexts
- Practitioner Enquiry for Professional Learning

The programme also offers a route into a full Master's degree and a research orientated career.

COURSE DURATION

12 months part-time (delivered online)
Entry dates: September and January

ENTRY REQUIREMENTS

Undergraduate degree with at least a 2:1 or degree lower than this with professional experience working in an education related setting.

Applicants will already be working in an educational setting as teaching assistants, teachers, Head of Department, Senior Managers or other professional roles.

Education Studies

MEd (part-time)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Apply your learning as you study to improve your practice

Gain recognition for continuing professional development

Undertake individual classes and use credits as prior learning towards a Masters qualification

COURSE STRUCTURE

This programme allows you to tailor your studies through a choice of classes guided by your Advisor of Studies. Under the Education Studies framework, pathways include:

- Educational Leadership
- Philosophy with Children (only such course in the UK)
- Supporting Teacher Learning (GTCS Recognition)
- Inclusive Education
- Health and Wellbeing
- Digital Education

Year 1: three classes, normally one per semester. Classes taught on campus involve attending either in the evening or on Saturday mornings. Distance learning classes involve participation in weekly online seminars. These are scheduled in the evening to accommodate working professionals. Students who decide to complete their studies after one year will graduate with a Postgraduate Certificate.

Year 2: Two **optional classes** and a compulsory class, which are taken over a period broadly similar to the three school terms. The compulsory class, Research Methods and Reasoning, is delivered entirely online. Students who decide to complete their studies at the end of year two will graduate with a Postgraduate Diploma.

Dissertation
Following the Postgraduate Diploma you can undertake a research dissertation in a subject area of your choice. We will match you to an appropriate supervisor to provide one-to-one support. Your dissertation can be completed via distance learning to provide flexibility.

School of Government and Public Policy

RESEARCH DEGREES

PhD/MPhil in European Public Policy or Politics

Contact for Research Degrees

e: hass-postgrad@strath.ac.uk
Prospective research students should consult individual staff research profiles on our website and are encouraged to contact potential supervisors in advance of their application.

The School of Government and Public Policy has a long history of international research excellence. The quality of our research is recognised internationally – for example, the German Centre for Higher Education Development (CHE) lists the School as part of an 'Excellence Group' in political science.

We are one of the founding members of the European Consortium for Political Research, the largest organisation of its kind in European political science.

We have a strong research culture that focuses on individual and team-based research. We host three research centres:

- European Policies Research Centre
- Centre for Elections and Representation
- Centre for the Study of Public Policy

Our research is supported by grants from a range of funding bodies, including research councils, national governments and international bodies, such as the OECD and the EU.

Research Activities

The research activities of the School are grouped in four broad interlocking priority areas:

Elections and Representation
The School has a strong track record in the study of voting behaviour, political attitudes, social media, political behaviour and political parties, and is one of the leading centres of quantitative political science in the UK. Staff have recently been engaged in a number of major government and research council-funded projects including:

- Public attitudes on the EU referendum and on Scotland's independence referendum and broader British and Scottish social attitudes
- The impact of social media on attitudes towards Scottish independence
- A global examination of how corruption affects political participation, trust and popular support for government
- A comparative examination of the attitudes, backgrounds and experiences of parliamentary candidates
- The impact of cohesion policy on EU administrative capacity building in Europe
- Maximising synergies between European Structural and Investment Funds and other EU Instruments
- Energy saving innovations and economy-wide rebound effects
- Impacts of policy changes on climate change modelling
- The political economy of growth and institutional reform

Public Policy
In addition to the public policy expertise of the European Policies Research Centre, researchers in the School analyse the conditions that contribute to policy success, policy learning and policy transfer, EU policy-making, public policy in post-devolution Scotland and the territorial impact of public policy.

Governance and Institutions
The School has an established international profile in the study of parliaments in Scotland, the UK, and Europe. Staff also specialise in the study of Youth Parliaments, the European Commission and EU policy-making, multi-level governance and devolution, and the politics of nationalism, regionalism and localism.

International Politics
In addition to the extensive expertise in EU policies and politics and that in South-Eastern Europe politics, West European politics and German politics, there is a rapidly expanding expertise in international relations within the School. This includes international relations, war, terrorism and conflict, human rights, economy and security, international public policy, international institutions and global governance, international security, international law, Asian and US security, the international politics of Asia, the role of NGOs in international relations, the politics of the anti-globalisation movement, constructivist theories of security, feminist theory, and Chilean politics.

POSTGRADUATE TAUGHT COURSES

Applied Public Policy
Data Science for Politics and Policy-making
International Relations
International Relations, Law and Security (in collaboration with the Law School)
Political Research
Politics
Public Policy
Technology Policy and Management
Urban Policy and Analysis

Prospective students interested in international relations/security may also be interested in the MSc Diplomacy and International Security (see page 110 for course description).

Contact for Postgraduate Taught Courses

e: hass-pg-enquiries@strath.ac.uk

Applied Public Policy

MSc (Joint Masters with Koc University, Turkey)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Exciting opportunity to study in an international, multicultural academic environment

Gain expertise on policy design, implementation and evaluation

Learn innovative analytical tools and receive-class methods training

Benefit from a flexible curriculum, including possible engagement in internships and independent projects

COURSE STRUCTURE

Students will spend one semester in Istanbul at Koc University, and one semester in Glasgow at University of Strathclyde. The course comprises a range of compulsory classes, a few optional ones and a final project.

Koc University Classes (first semester)
- Policy Design and Implementation
- Policy Analysis and Evaluation
- Cases in Public Policy

University of Strathclyde Classes (second semester)
- Comparative Public Policy
- Quantitative Methods
- Qualitative Methods

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

First- or upper second-class Honours degree, or overseas equivalent, in a social science.

Data Science for Politics and Policy-making

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop the skills to use big data to solve complex political and social problems

Understand the mechanics behind capturing and organising large amounts of data

Undertake a research or client-based project

COURSE STRUCTURE

The course comprises compulsory and optional classes and a research or client-based project dissertation. It is delivered in collaboration with the Department of Computer and Information Sciences.

Compulsory Classes
- Principles of Research Design
- Qualitative Methods
- Big Data Technologies
- Legal Ethical and Professional Issues for the Information Society
- Machine Learning for Data Analytics
- Database Fundamentals

Optional Classes (one to be chosen)
- Welfare Concepts and Ideas
- Public Policy

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

First- or upper second-class Honours degree, or overseas equivalent, in social science.

International Relations

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain grounding in the analysis of international relations

Combine training in different theoretical and methodological approaches

Examine the theories and research designs for the study of conflict, peace, security and cooperation

Taught by international scholars

COURSE STRUCTURE

The course comprises compulsory and optional classes and a research project dissertation or a placement dissertation with industry, third sector, or government.

Compulsory Classes
- International Institutions and Regimes
- Debating International Relations Theory
- Principles of Research Design
- Contemporary International Relations

Optional Classes
Students also choose two optional classes. The range of classes will normally include:

- Feminism and International Relations
- European Governance
- Comparative Political Economy
- Contemporary Security Challenges and Responses
- Law of the World Trade Organisation
- International Environmental Law 1 and 2
- Global Health, Rights and Development
- Qualitative Methods
- Quantitative Methods 1
- Quantitative Methods 2

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

First- or upper second-class Honours degree, or overseas equivalent, in social science.

International Relations, Law and Security

MSc/LLM

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Learn alongside students from other disciplinary backgrounds

Focus on contemporary policies rather than traditional areas of concern

Benefit from a unique multidisciplinary experience

COURSE STRUCTURE

The course comprises compulsory and optional classes and a research project dissertation or a placement dissertation with industry, third sector, or government.

Compulsory Classes
- Contemporary Security Challenges and Responses
- Principles of Research Design (MSc) OR Legal Research Methods and Skills (LLM)

Optional Classes
Students also choose four optional classes. The range of classes will normally include:

- Contemporary International Relations
- Comparative Public Policy
- European Human Rights Law
- International Human Rights Law
- Terrorism and the Law
- International Migration Law
- Human Rights Protection in the UK
- Privacy, Crime and Security
- Quantitative Methods 1
- Quantitative Methods 2
- Qualitative Methods
- International Institution and Regimes

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

First- or upper second-class Honours degree, or overseas equivalent, in social sciences/law subjects or substantial professional experience.

Political Research

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop skills in empirical political science

Explore different methodological approaches and their application to real-life political problems

Gain transferable employability skills in research design

COURSE STRUCTURE

The course comprises compulsory and optional classes and a research project dissertation or a placement dissertation with industry, third sector, or government.

Compulsory Classes
- Principles of Research Design
- Qualitative Methods
- Quantitative Methods 1
- Quantitative Methods 2

Optional Classes
Students also choose two optional classes. The range of classes will normally include:

- European Governance
- Comparative Political Economy
- Policy Analysis
- Comparative Public Policy
- International Institutions and Regimes

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

First- or upper second-class Honours degree, or overseas equivalent, in social science.

Politics

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain advanced understanding of the study of politics

Learn to design and conduct research projects in political science

Benefit from the input of guest lecturers and visiting academics

COURSE STRUCTURE

The course comprises compulsory and optional classes and a research project dissertation or a placement dissertation with industry, third sector, or government.

Compulsory Classes
- Principles of Research Design
- Qualitative Methods OR Quantitative Methods 1

Optional Classes
Students also choose four optional classes. The range of classes will normally include:

- Feminism and International Relations
- European Governance
- Comparative Political Economy
- Contemporary International Relations
- Contemporary Security Challenges and Responses
- Debating International Relations Theory
- International Institutions and Regimes
- Public Policy
- Comparative Public Policy
- Quantitative Methods 1 (if not chosen from list above)
- Quantitative Methods 2
- Qualitative Methods (if not chosen from list above)

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

First- or upper second-class Honours degree, or overseas equivalent, in social science.

Public Policy

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Explore various conceptual and methodological tools and their connections to real-world problems

Gain a range of useful research and analysis skills

Freedom in dissertation topic to focus on any area of public policy

COURSE STRUCTURE

The course comprises compulsory and optional classes and a research project dissertation or a placement dissertation with industry, third sector, or government.

Compulsory Classes
- Policy Analysis
- Comparative Public Policy

In addition, two classes are chosen from the following:

- Principles of Research Design
- Qualitative Methods
- Quantitative Methods 1
- Quantitative Methods 2

Optional Classes
Students also choose two optional classes. The range of classes will normally include:

- European Governance
- Comparative Political Economy
- International Institutions and Regimes
- Principles of Research Design (if not chosen from list above)
- Quantitative Methods 1 (if not chosen from list above)
- Quantitative Methods 2 (if not chosen from list above)
- Qualitative Methods (if not chosen from list above)

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

First- or upper second-class Honours degree, or overseas equivalent, in social science.

Technology Policy & Management

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Benefit from the collective expertise of Strathclyde Business School, Faculty of Science and Faculty of Humanities & Social Sciences. This is a new, truly multidisciplinary Masters degree

Uniquely aligned with Glasgow City Innovation District (GCID) to maximise your opportunity to engage with business

The only taught programme in Scotland, and one of only a few globally, that places a focus on policy formulation, analysis and communication in relation to the management of innovation and technology

COURSE STRUCTURE

Compulsory Classes
- Systems thinking and Modelling
- Policy Analysis
- Regulation, Concepts and Practices
- Systems Architecture and Design
- Big Data Fundamentals
- Legal, Ethical and Professional Issues for the Information Society
- Management of Innovation
- Communicating Policy
- Business Analysis
- Exploring the International Business Environment
- Strategic Analysis and Evaluation
- Making Strategy
- Becoming an Effective Technology Analyst

Option 1: Dissertation (40 credits)
Option 2: Dissertation (20 credits) plus an elective class (20 credits) from one of two electives:
a) Hacking for Defence
or b) Hacking for Peace and Development

COURSE DURATION

MSc: 12 months full-time

ENTRY REQUIREMENTS

Upper second-class Honours degree, or overseas equivalent, in an Engineering or Science discipline including the physical or natural sciences and informatics. Previous working experience will also be considered but will not compensate for academic performance. Entry requirements may be widened to include other professional backgrounds and qualifications from social sciences or humanities given relevant mathematical or design-relevant course work.

Urban Policy and Analysis

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Focus on major urban opportunities and issues

Develop knowledge and skills to lead the design and delivery of sustainable city strategies

Undertake a research or client based project

Learn from staff with expertise across multiple disciplines

COURSE STRUCTURE

There are two tracks, you can choose to specialise in, 'Environmental' or 'Infrastructure':

Compulsory Classes:

- Understanding and Modelling Cities
- Comparative Public Policy
- Global and Future Cities
- Quantitative Methods

Environmental Track Compulsory Classes:

- Environmental Impact Assessment
- Circular Economy and Transformations Towards Sustainability

Infrastructure Track Compulsory Classes:

- City Systems and Infrastructure
- Analysis of Economic Data

Optional Classes

Choose from classes across the University to develop skills in specific areas.

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Upper second-class Honours degree, or overseas equivalent, in a relevant subject. Applications are also welcome from candidates with strong career experience in a relevant field.

"I chose to enter the Public Policy MSc at the University of Strathclyde because I was aware of the quality of teaching that was on offer in the course, and because of the variety of topics that were available to study as part of the course.

The course offers a tremendous opportunity to equip you with the theoretical knowledge of policy-making processes, but more crucially offers the chance to develop those knowledge and enquiry skills and the research based skills that are valuable when moving into a career."

Tom Hall,
MSc Public Policy

School of Humanities

RESEARCH DEGREES

MPhil/PhD in Creative Writing, English, Journalism, Gender Studies, History, French, Spanish, Italian or Translation Studies

MRes in Creative Writing, English, Journalism, History, French, Spanish or Italian

Contact for Research Degrees

e: hass-postgrad@strath.ac.uk

Prospective research students should consult individual staff research profiles on our website and are encouraged to contact potential supervisors in advance of their application.

The School of Humanities is a community of researchers, teachers, students and support staff working together on some of the most interesting and exciting issues in historical and contemporary culture. The quality of our research has a strong national and international reputation.
Our undergraduate and postgraduate courses cover a wide range of areas, from the teaching of high-level skills in languages, through advanced practical study in creative writing and journalism, to research-led courses at the cutting edge of their academic disciplines in the study of history, literature, language, and culture.

The School is home to the following centres:

Centre for the Social History of Health and Healthcare
A collaborative research group involving historians and students from the University of Strathclyde and Glasgow Caledonian University; activities focus on the way in which medicine, medical science and healthcare systems have developed over time and have come to shape our contemporary experience.

British Animal Studies Network
Animals are present in many and varied areas of human lives: as workers, objects for scientific inquiry, characters in stories, images, companions, food. To analyse the human relationship with and perception of animals therefore requires interdisciplinary work, which is enabled by the network. We also supervise PhD and Masters students in animal studies.

Scottish Centre for Victorian and Neo-Victorian Studies
The Centre promotes the study of Victorian literature, culture and history in Scotland. We are a joint organisation between the universities of Strathclyde, Glasgow and Stirling, as well as libraries and archives with an interest in the Victorian period. At Strathclyde, we also supervise PhD and Masters students in Victorian literature, culture and history.

Scottish Oral History Centre (SOHC)
The SOHC has an international reputation as a research and knowledge exchange hub. Since 1995 it has been involved in teaching, research, training and outreach activities around the theory and practice of oral history. SOHC staff are involved in a series of oral history based research projects, run an Advanced Oral History Masters class and supervise a wide range of dissertations and PhD students.

Research Areas

- Scotland and the world
- European and international history
- History of science and technology
- History of health and medicine
- Oral history
- Translation studies
- Literary linguistics
- Victorian literature and culture
- 20th century literature
- Creative writing
- Animal studies
- Gender and sexuality in media, literature and culture
- Political communications
- Media, health, wellbeing and trauma
- Social media

POSTGRADUATE TAUGHT COURSES

- Applied Gender Studies
- Applied Gender Studies (Research Methods)
- Business Translation and Interpreting
- Creative Writing
- Digital Journalism
- Diplomacy and International Security (in collaboration with the School of Government & Public Policy and the Law School)
- Interdisciplinary English Studies
- Media and Communication
- Health History
- Historical Studies
- TESOL and Intercultural Communication (taught jointly with the School of Education, see pg 92)

Contact for Postgraduate Taught Courses

e: hass-pg-enquiries@strath.ac.uk

MRes Programmes in Humanities

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Combine research and instructional classes

Gain key research skills, experience and training

Study opportunities across a wide spectrum of subjects

Opportunity to progress to a PhD programme

Benefit from the guidance of an academic supervisor

The MRes (Masters by Research) combines research in a dissertation and instructional classes, with an emphasis on providing basic research skills, experience and training. It is offered across a wide spectrum of subjects. The MRes (and MPhil) are independent postgraduate degrees and can serve as stepping-stones to the PhD programme. The MRes degree provides an alternative entry-point to academic research for those who are not yet sure what topic they wish to research, or who require training in new skills before they can embark on doctoral work.

COURSE DURATION

12 months full-time; 24 months part-time

MRES ENTRY REQUIREMENTS

Normally a first-class or upper second-class Honours degree (or overseas equivalent) in the relevant or appropriate related subject.

MRes Creative Writing

This course enables students to work on a substantial piece of imaginative writing with a successful, published author for one year (full-time) or two years (part-time), specialising in one genre, such as poetry, fiction or imaginative non-fiction. Working closely with one supervisor rather than with a group means the course can adapt to your personal interests.

The main element of the MRes is a dissertation of around 30,000 words, which includes a critical reflection on the creative process of around 5,000 words. The remainder of the course comprises a research methods class which teaches skills such as how to search for information, make presentations and apply for grants.

MRes English

The MRes provides research skills, experience and training in support of a lengthy piece of written research. Students wishing to undertake the MRes in English can study in a number of areas, related to the research specialisms of academic staff.

Our areas of research strength include Victorian, gender and sexuality, Scottish studies, 20th and 21st-century popular culture, animal studies, Renaissance, life writing, linguistic and cognitive literary studies.

Students prepare a 30,000 word dissertation and undertake the class Research Skills in Literature, Culture and Communication.

MRes History

Students work on their chosen topic under close supervision by a member of staff. The main element of the MRes is a dissertation of not more than 30,000 words. In addition, students take a number of taught classes, including Research skills, sources and methods for historians, depending on their field of research. **Optional classes** include Palaeography, Quantitative Methods, Qualitative Methods, Oral History.

The taught skills classes provide the training needed to complete a substantial piece of research and lay the foundation for further study.

MRes Journalism

Students wishing to undertake an MRes in Journalism should consult the wide-ranging interests of academic staff, which are organised under four major research clusters: Gender and Media, Political Communications, Social Media, and Media, Health, Wellbeing and Trauma. Within this we have particular interests in gender-based violence, cyberbullying, media ethics, digital storytelling, media reporting of bereavement, gender and politics, body image and mental health, social media, social network analysis, media and national identity.

Students prepare a 30,000 word dissertation and undertake a research training class to equip them for advanced academic research.

Applied Gender Studies

MSc/PgDip

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop analytical and practical skills to engage critically with contemporary gender issues

Undertake research placements with organisations from the feminist third sector and organisations committed to gender equality in education, arts, culture and sport

COURSE STRUCTURE

Compulsory Classes
- Understanding Gender
- Feminist Knowledge, Feminist Research
- Feminisms – Continuity and Change

Optional Classes (three to be chosen)
- Gender Studies Research Placement
- Advanced Topics in Gender Studies
- Gender, Health and Modern Medicine
- Global Queers: Travel Writing and Sexual Politics
- Feminism and International Relations
- Advanced Oral History
- Medicine, Health and the Moving Image
- Fleshy Histories: Meat Eating and Meat Avoidance, 1500 to the Present

Masters Students Only
- Dissertation

COURSE DURATION

MSc: 12 months full-time; 24 months part-time
PgDip: 9 months full-time; 21 months part-time

ENTRY REQUIREMENTS

First- or second-class Honours degree, or overseas equivalent, in a relevant discipline, usually in the Humanities and Social Sciences. Applicants with relevant experience (paid or voluntary) in feminist, queer or equalities work will also be considered.

Applied Gender Studies (Research Methods)

MSc/PgDip

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Benefit from the opportunity to engage with the unique archival collections at Glasgow Women's Library

Gain skills to design and conduct advanced research projects in Social Sciences

Develop an understanding of key feminist debates

COURSE STRUCTURE

Compulsory Classes
- Feminist Knowledge, Feminist Research
- Advanced Topics in Gender Studies
- Perspectives on Social Research
- Quantitative Methods
- Qualitative Methods

Optional Classes (one to be chosen)
- Gender Studies Research Placement
- Gender, Health and Modern Medicine
- Feminism and International Relations
- Feminisms – Continuity and Change
- Medicine, Health and the Moving Image
- Fleshy Histories: Meat Eating and Meat Avoidance, 1500 to the Present

Masters Students Only
- Dissertation

COURSE DURATION

MSc: 12 months full-time; 24 months part-time
PgDip: 9 months full-time; 21 months part-time

ENTRY REQUIREMENTS

First- or second-class Honours degree, or overseas equivalent, in a relevant discipline, usually in the Humanities and Social Sciences. Applicants with relevant experience (paid or voluntary) in feminist, queer or equalities work will also be considered.

Business Translation and Interpreting

MSc/PgDip

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain practical experience through industry-based activities on an engaging, industry-focused and skill-building course

Boost employability by participating in the SDL Trados Certification Program

Option to pursue a research pathway toward PhD study

COURSE STRUCTURE

Compulsory Classes
- Text Typology and Specialised Translation
- Translation and Interpreting Studies
- Professional Interpreting Practice
- Translation and Language Technology
- Interpreting for Business and Commerce
- Business Translation

Optional Classes (one per semester)
- Introduction to Intercultural Communication
- Narrative Processing across Languages and Cultures
- Contemporary Scottish Cultural Studies
- Research Skills in Literature, Culture and Communication

Masters Students Only
- Dissertation or Translation/Interpreting Project

COURSE DURATION

MSc: 12 months full-time
PgDip: 9 months full-time

ENTRY REQUIREMENTS

First- or upper second-class Honours degree, or overseas equivalent. An academic background in English or translating is not required. Applicants with a lower degree classification may be considered on an individual basis.

Suitable applicants are required to pass an aptitude test prior to admission, comprising of a written translation test. This may be followed by an oral interview to further demonstrate your language proficiency. The oral interview can be conducted face-to-face or online, according to circumstances.

We currently admit students who can master another language in addition to English, from the following: Chinese, Spanish, Italian, French.

Creative Writing

MLitt/PgDip/PgCert

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Benefit from workshops with peers and professional, published writers while developing your ideas

Opportunity to work on an extended creative project developed on a one-to-one basis with your supervisor

Prepare for the practical side of literary development

COURSE STRUCTURE

Compulsory Classes
- The Shape of Stories 1 and 2
- The Writing Life
- The Made Project

Optional Classes (indicative)
- Narrative Processing across Languages, Cultures, and Media
- Fleshy Histories: Meat Eating and Meat Avoidance, 1500 to the Present
- Contemporary Scottish Cultural Studies

Masters Students Only
- The Major Project (dissertation, 60 credits)

COURSE DURATION

MSc: 12 months full-time; 24 months part-time
PgDip: 9 months full-time; 21 months part-time

ENTRY REQUIREMENTS

Upper second-class Honours degree, or overseas equivalent, in any subject, plus a portfolio of creative writing.

This should include the following: 2,000 words of prose (fiction or creative non-fiction) up to 10 poems (no more than 40 lines in length) the page equivalent of a short, fifteen-minute play an outline of creative work you might develop in the course of the degree, possibly in the context of the dissertation (no more than two A4 pages).

Digital Journalism

MLitt/PgDip

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain the skills to produce multimedia news and features

Learn how to devise, launch, produce and market an online publication

Work in the University's simulated news environment and report externally using mobile media

COURSE STRUCTURE

Compulsory Classes
- Multimedia Journalism
- Producing Media
- Scots Law for Journalists
- Media Ethics

Optional Classes (indicative)
- Communication and Media Theory in an International Context
- From Broadcast to Participation: A History of Mediation
- Strategic Communication
- Entrepreneurial Journalism (subject to availability)

Placement
- Four-week journalism placement (optional)

Masters Students Only
- Academic Dissertation or Production Dissertation

COURSE DURATION

MLitt: 12 months full-time; 24 months part-time
PgDip: 9 months full-time; 21 months part-time

ENTRY REQUIREMENTS

Honours degree, or overseas equivalent, or professional experience demonstrating ability to study at Masters level. Experience of student journalism, a media work placement, freelance work or professional journalism is desirable.

My whole journey at Strathclyde was instrumental for my career. It was here that I learned how to write essays to a higher standard, how not to write essays, how to express myself creatively, how to work as part of a team, how to publish and edit a book, how to wander the library and lose track of time reading about something new."

Dr Craig Lamont,
MRes Creative Writing

Diplomacy and International Security

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Deepen your understanding of contemporary and historical issues relating to diplomacy and security

Gain skills to design advanced research projects

Benefit from a unique multidisciplinary experience including history, politics and law

COURSE STRUCTURE

Compulsory Classes
- Research Skills, Sources and Methods for Historians OR
  Principles of Research Design
- Diplomacy: Evolution, Theory and Practice
- Embassies in Crisis

Optional Classes (indicative)
- Diplomacy and Conflict Resolution in the Arab-Israeli Dispute
- The Global Cold War and Africa
- Contemporary Security Challenges and Responses
- Britain, France and the United States 1945-1955 Diplomacy, Strategy and Alliance
- Contemporary International Relations
- Terrorism and the Law
- International Human Rights Law
- International Institutions and Regimes

Masters Students Only
- Dissertation

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

First- or upper second-class Honours degree, or overseas equivalent, in humanities, social sciences/law subjects or substantial professional experience.

Interdisciplinary English Studies

MLitt/PgDip/PgCert

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Opportunity to take your studies to a more specialised level or in a new direction

Find connections between literary studies and other academic disciplines

Benefit from the guidance of an expert supervisor

COURSE STRUCTURE

Compulsory Classes
- Research Skills

Optional Classes (five to be chosen)
- Global Queers: Travel Writing and Sexual Politics
- Introduction to Intercultural Communication
- Making and Unmaking British Literature 1880-1950
- Narrative Processing across Languages, Cultures, and Media
- Fleshy Histories: Meat Eating and Meat Avoidance, 1500 to the Present
- Contemporary Scottish Cultural Studies
- Advanced Topics in Interdisciplinary English Studies
- English Studies Research Placement

Masters Students Only
- Dissertation

COURSE DURATION

MLitt: 12 months full-time; 24 months part-time
PgDip: 9 months full-time; 21 months part-time
PgCert: 4 months full-time; 9 months part-time

ENTRY REQUIREMENTS

First- or upper second-class Honours degree, or overseas equivalent, in English literature or a related subject.

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Media and Communication

MLitt

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop expertise in strategic communications to support a career in corporate communications, public relations, or academic research into these areas

Learn to apply media and communication theories across international contexts and media platforms

COURSE STRUCTURE

Compulsory Classes
- Research Skills in Media and Communication
- Communication and Media Theory in an International Context
- From Broadcast to Participation: a History of Mediation
- Strategic Communication
- Media and Communication Option

COURSE DURATION

MLitt: 12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

First- or upper second-class Honours degree, or overseas equivalent, in Media and Cultural Studies, English Studies, or a related discipline. Other qualifications may be considered.

Health History

MSc/PgDip/PgCert

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Explore the origins and impacts of our modern health experiences and expectations

Examine historically the intersection of gender, media and health

Suitable for those from humanities, social science and health science backgrounds

COURSE STRUCTURE

Compulsory Classes
- Research Skills, Sources and Methods for Historians

Optional Classes (five to be chosen)
- Health and Healthcare in the Long Nineteenth Century
- Pharmaceuticals, Ethics and Health, 1800 – 1980
- Food and Health in the West during the Twentieth Century
- Media and Health
- Advanced Oral History
- Medicine and Warfare, 1800-2000
- Gender, Health and Modern Medicine
- Medicine, Health and the Moving Image
- Governing Highs and Health: History and the Control of Drugs, c.1800-c.1945
- Fleshy Histories: Meat Eating and Meat Avoidance, 1500 to the Present
- Medicine and Madness: Psychiatry in the Nineteenth and Twentieth Centuries
- History, Health and Heritage
- Work Placement in History

Note: Students may also take one of the modules in the MSc Historical Studies options.

Masters Students Only
- Dissertation of 15,000 words

COURSE DURATION

MSc: 12 months full-time; 24 months part-time
PgDip: 9 months full-time; 21months part-time
PgCert: 4 months full-time; 9 months part-time

ENTRY REQUIREMENTS

First- or second-class Honours degree or overseas equivalent, in history or a related discipline.

Historical Studies

MSc/PgDip

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Deepen your historical knowledge, understanding and awareness

Assess historical themes and historiographical interpretations across a broad chronological range

Develop transferable skills necessary for employment

COURSE STRUCTURE

Compulsory Class

- Research Skills, Sources and Methods for Historians

Optional Classes

- Britain, France and the United States, 1945-1958: Diplomacy, Strategy and Alliance
- Nationalism and Nation-states in the Arab Middle East, 1900-1945
- Advanced Oral History
- Palaeography, c1500-c1800
- Race, War and Colonialism: France 1914-44
- War, Sacrifice and the Nation in Europe, 1789-1918
- Transnational Radicalism and the Irish World: 1845 - 1923
- Plantations by Land and Sea: British imperial projects in the Atlantic and Indian Oceans, c. 1590-1720
- Segregation, Migration and War: African-Americans 1910-1930
- Scotland and Ulster in the Early Modern North Atlantic World
- Work Placement in History

Note: Not all classes will be on offer in any one year. Others may also be chosen from Level 5 classes on offer across the Faculty of Humanities & Social Sciences.

Masters Students Only

- Dissertation of 15,000 words

COURSE DURATION

MSc: 12 months full-time; 24 months part-time
PgDip: 9 months full-time; 21 months part-time

ENTRY REQUIREMENTS

First- or upper second-class Honours degree in history, or overseas equivalent.

One of the most exciting opportunities I had studying at Strathclyde was the guidance and support network offered by the Scottish Oral History Centre (SOHC). Here I was able to discuss theoretical debates with leading oral history scholars while being supported through practical hands-on projects which acted as a gateway to larger scale fieldwork. ”

Emma Brunton,
MSc Historical Studies

Law School

Research Degrees

MPhil/PhD Law

Contact for Research Degrees
e: hass-postgrad@strath.ac.uk

Prospective research students should consult individual staff research profiles on our website and are encouraged to contact potential supervisors in advance of their application.

Strathclyde Law School has established a reputation of more than 50 years for quality teaching and research. We offer flexible learning including options for part-time study, accelerated study and distance learning.

The Law School is one of the UK's leading law schools and demonstrates the highest quality in teaching and research. We host Scotland's biggest Law Clinic, which is run by an Executive Committee of students and chaired by a Clinic Director. The Clinic provides a 'real life' learning experience for students, enhancing their professional skills. It is an invaluable service to members of the public who do not qualify for legal aid but cannot afford to pay legal fees. The Law School also hosts the Mediation Clinic, providing postgraduate students with a unique opportunity to mediate alongside experienced practitioners. The Clinic receives cases from several local courts including Glasgow Sheriff Court, Scotland's largest, and has just launched a new Housing Mediation Project.

The Law School hosts several centres of excellence including the Strathclyde Centre for Environmental Law and Governance, the Strathclyde Centre for Internet Law and Policy and the Strathclyde Centre for Antitrust Law and Empirical Study.

Research Areas
Research in Law covers a broad spectrum, with particular strength in socio-legal research and environmental law. We can offer supervision in the following areas:

- Access to Justice and the Provision of Legal Services – our researchers have expertise in many areas including intervention of the legal process in the employment relationship; legal profession; defence lawyers; the use of forensic science and expert evidence in legal proceedings; the role of the jury; and the role of law clinics in teaching ethical awareness.
- Constitutional and Administrative Law – covers most areas of domestic public law and comparative public law.
- Dispute Resolution – empirical research into mediation policy and practice.
- Environmental Law and Governance – research in the Strathclyde Centre for Environmental Law and Governance aims to identify and shape emerging areas of legal research in environmental governance with a strong development focus.
- Human Rights – human rights intersect with many areas of law and staff are able to supervise a wide range of cross-cutting topics. Core human rights research includes gender and rights, constitutional dimensions of human rights protection, migrants' rights, child care and protection in the context of the right to respect for private and family life, the prohibition of torture, freedom of expression, and human rights dimensions of environmental governance.
- Law, Crime and Justice - Criminal Law; Criminal Justice Decision-Making; Children & Young People; Courts; Defence Work; Homicide; Juries; Miscarriages; Prosecution; Security, Policing & Counter-terrorism; Sentencing & Punishment.
- Technology Law and Regulation – research explores issues of regulation and governance within the context of existing and emerging technologies and includes studies of Intellectual Property Law, Data Protection, Human Rights, Competition, Sector-Specific Regulation, and the governance of the Internet, AI, Autonomous Systems 3D printing and Fintech.
- Scottish Private Law – our academics review areas such as family law, bio-ethics and personhood, child law and child protection, sexual orientation and same-sex families, and history of Scots private law.
- International and EU Migration Law and Governance.
- Competition Law.
- EU and UK Labour Law.
- Public International Law.
- EU External Relations.
- Law and Society.
- Finance Law.
- Medical Law and Ethics.

PRE-QUALIFICATION LAW COURSES

Diploma/LLM in Professional Legal Practice
LLB Law (Graduate Entry)
LLB Law (Graduate Entry Scots & English Law)

POSTGRADUATE TAUGHT COURSES

- Construction Law
- Criminal Justice and Penal Change
- Global Environmental Law and Governance
- Human Rights Law
- International Commercial Law
- Internet Law and Policy/IT and Telecommunications Law
- Law
- Mediation and Conflict Resolution
- Diplomacy and International Security (in collaboration with School of Humanities and School of Government and Public Policy, (see page 110 for course description)
- International Relations, Law and Security (in collaboration with the School of Government and Public Policy, see page 99 for course description)

Contact for PostgraduateTaught Courses
hass-pg-enquiries@strath.ac.uk

Construction Law

LLM/PgDip/PgCert

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Construction professionals develop knowledge of the law required for practical application

Lawyers gain legal expertise relating to management of construction projects

Full-time and part-time study options

COURSE STRUCTURE

Some classes are taught by way of online lectures, others are taught in a traditional face-to-face format. All core construction law classes and the compulsory class in Legal Research are taught in the evenings (normally 6pm - 8pm) or by online lectures. Many optional classes are also taught in the evening, with some available during the day.

Compulsory Classes

- Context of Construction (for Law graduates)
- Legal Process and the Law of Contract and Other Obligations (for non-Law graduates)
- Law of the Construction Industry
- Law and Practice of Construction Management
- Construction Dispute Resolution
- Legal Research (LLM and PgDip)

Students also select one optional class from other Law School Masters programmes.

Masters Students Only

- Dissertation of 15,000 words

COURSE DURATION

LLM: 12 months full-time*; 24 months part-time*
PgDip: 9 months full-time; 18 months part-time
PgCert: 8 months part-time

ENTRY REQUIREMENTS

First- or upper second-class Honours degree, or overseas equivalent, in a related discipline. Where an applicant has a lower second-class Honours degree in a relevant discipline, admission may be possible with suitable professional qualifications and/or considerable appropriate experience.

*Please note that we are exploring the possibility of offering this course through online, distance learning. This would be in addition to our current campus based provision. Please visit our website for up to date information.

Criminal Justice and Penal Change

LLM/MSc/PgDip/PgCert

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Draw on a range of disciplinary approaches, to develop a rational and just response to crime

Full-time, part-time and evening study options

Learn from world experts in the fields of policy and practice

COURSE STRUCTURE

As well as seminars, you'll learn through role play, presentations, simulations etc. Plus an active programme of events on contemporary problems and visits to criminal justice agencies help to stimulate your learning.

Compulsory Classes

- Criminal Justice and Penal Decision-Making
- Punishment and Processes of Penal Change
- Legal Research (LLM/MSc/PgDip)

Optional Classes

- Childhood and Crime
- Surveillance, Technology and Crime Control
- Offender Supervision and Management
- Restorative Justice
- Homicide

Participants may also choose classes from other Law School Masters programmes, such as Human Rights Law, Internet Law and Policy, Mediation and Conflict Resolution.

Masters Students Only

- Dissertation

COURSE DURATION

LLM/**MSc:** 12 months full-time; 24 months part-time
PgDip: 9 months full-time; 21 months part-time
PgCert: 8 months part-time

ENTRY REQUIREMENTS

First- or upper second-class Honours degree, or overseas equivalent, in law, one of the social sciences, business or humanities. Entry may be possible with other qualifications and/or experience.

"The unique skill I've gained is the ability to grasp and critically analyse information that I have never come across before. Such skill will reflect positively on my career as a future construction solicitor."

Mohamad El Daouk
LLM Construction Law

Global Environmental Law and Governance

LLM/PgDip/PgCert

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Learn to critically appraise and creatively contribute to environmental regulation and governance

Develop the skills and expertise to pursue a career in areas of transnational environmental law

Specialise in thematic areas in environmental law

COURSE STRUCTURE

Compulsory Classes
- International Environmental Law 1 and 2
- Global Environmental Law: Issues of Sustainability and Equity
- Legal Research (LLM only)

Optional Classes
- EU Environmental Law
- International Investment Law and Sustainable Development
- International Climate Change Law
- Ocean Governance and the Law of the Sea

Masters Students Only
- Dissertation

COURSE DURATION

LLM: 12 months full-time; 24 months part-time
PgDip: 9 months full-time; 21 months part-time
PgCert: 8 months part-time

ENTRY REQUIREMENTS

First- or second-class Honours degree, or overseas equivalent, in law or an environmental-related discipline (some law content recommended). Entry may be possible with other qualifications and substantial professional experience in the area of environmental law, policy and/or management.

“If, like me, you are interested in getting to know the underlying tendencies and flows of the law rather than just being taught what the rules are, this course is for you. It challenges you to engage with the law in a completely different way than what you are taught in ‘a traditional law school’ and makes you understand the law on a deeper level.”

Hannah Dusauchoit, Belgium
LLM Global Environmental Law and Governance

Human Rights Law

LLM/PgDip/PgCert

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Focus on how human rights law shapes, and is shaped by, real-life contexts

Learn from a team of approachable academic experts

Engage with policy and legal practitioners at the forefront of human rights leadership in Scotland and abroad

Study with students from a range of professional backgrounds and academic disciplines

Opportunity to be awarded credits for a field dissertation based on research within a non-governmental organisation, in the UK or overseas

COURSE STRUCTURE

Compulsory Classes

- European Human Rights Law
- International Human Rights Law
- Human Rights Protection in the UK
- International Migration Law
- Legal Research (LLM/PgDip)

Optional Classes
Can change from year-to-year but may include:

- Business and Human Rights
- International Climate Change Law
- Surveillance, Tech and Crime Control
- Punishment and Processes of Penal Change
- Childhood and Crime
- Mediation, the Law and Policy
- Terrorism and the Law

Masters Students Only

- Dissertation or field dissertation

COURSE DURATION

LLM: 12 months full-time; 24 months part-time
LLM with field dissertation: 15 months full-time; 30 months part-time
PgDip: 9 months full time; 18 months part time
PgCert: 8 months part-time

ENTRY REQUIREMENTS

First- or upper second-class Honours degree, or overseas equivalent, in any discipline (some law content is recommended). Entry may be possible with other qualifications, especially where the applicant has relevant work experience.

“Being a member of Strathclyde’s Law Clinic has been a fantastic experience, getting to work alongside some fantastic law students, helping people who otherwise may not have been able to access justice. I feel I always learn better when I can see how the theory relates to and operates in practice so this has provided me with a great opportunity to what will be expected of me once I qualify.”

Sarah Fairley
LLB Law (Graduate Entry)

International Commercial Law

LLM/PgDip/PgCert

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Explore how international commercial law deals with real-world challenges

Opportunity to undertake a research placement with an international focus. Available on a competitive basis

Opportunity to specialise in Financial Regulation and gain insights into this rapidly changing area of regulation

COURSE STRUCTURE

Compulsory Classes
- The Law of the World Trade Organisation
- Law of International Business
- Legal Research (LLM/PgDip)

Optional Classes
Students also choose classes from other Law Masters programmes from a list which may include:

- Arbitration Law
- Business and Human Rights
- Financial Crime and Sanctions
- Intellectual Property Law
- E-Commerce
- International Banking Law
- International Investment Law
- International Migration Law
- Financial Regulation and Compliance
- Cybercrime
- Competition Law of the UK and EU

Masters Students Only
- Dissertation or field dissertation

Specialisation in Financial Regulation
A unique aspect of this course is the ability for students to specialise in Financial Regulation. Depending upon which electives you select, you can choose to graduate with an LLM in International Commercial Law with a specialisation in Financial Regulation. Electives are chosen when you arrive on campus.

COURSE DURATION

LLM: 12 months full-time; 24 months part-time
LLM with Field Dissertation: 15 months full-time; 30 months part-time
PgDip: 9 months full-time; 21 months part-time
PgCert: 8 months part-time

ENTRY REQUIREMENTS

First - or second-class Honours degree, or overseas equivalent, in a related discipline. Other qualifications may be accepted where the applicant has relevant work experience. Please note a law degree is not required for entry to this programme.

Internet Law and Policy/IT and Telecommunications Law

LLM/PgDip/PgCert (part-time online)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain a dual-named qualification which is recognised internationally

Experience areas of legal specialisation with international reach and strong employment prospects

Benefit from part-time online study mode

COURSE STRUCTURE

The programme is delivered fully online through Strathclyde's virtual learning environment. Classes will be taught through weekly discussion forums and podcasts (Legal Research only).The course structure and class choices are almost identical for both pathways; for the IT and Telecommunications Law pathway, it is necessary to take the class Telecommunications Law and also to write a dissertation in a telecoms-related subject.

Compulsory Class
- Legal Research (LLM and PgDip only)

Optional Classes
- E-Commerce Law
- Intellectual Property Law
- Cybercrime
- Privacy, Crime and Security
- Telecommunications Law (compulsory for IT and Telecommunications pathway)

Masters Students Only
- Dissertation of 15,000 words

COURSE DURATION

LLM: 24 months part-time online study mode
PgDip: 21 months part-time online study mode
PgCert: 8 months part-time online study mode

ENTRY REQUIREMENTS

A good Honours degree, or overseas equivalent, in Law or a degree with a substantial legal content. We also recognise other qualifications, especially where the applicant's work experience is in a field relevant to the subject of the course.

Law

LLM/PgDip/PgCert

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Benefit from flexibility and choice to construct your own programme of law studies

Opportunity to participate in masterclasses and teaching by guest speakers

Develop your interest in a particular specialist area

COURSE STRUCTURE

Compulsory Classes
- Legal Research (LLM/PgDip)
- Dissertation

Optional Classes
Students also choose classes from other Law Masters programmes from a list which may include:

- International Environmental Law 1 and 2
- E-Commerce
- Cybercrime and Society (online class)
- Employment Mediation
- Competition Law and Policy in the EU
- Intellectual Property Law
- Financial Crime and Sanctions
- Terrorism and the Law
- Telecommunications Law (online class)
- World Trading System: Law and Policy
- European Human Rights Law
- International Human Rights Law
- International Migration Law
- Human Rights Protection in the UK

COURSE DURATION

LLM: 12 months full-time; 24 months part-time
PgDip: 9 months full-time; 21 months part-time
PgCert: 8 months part-time

ENTRY REQUIREMENTS

First- or upper second-class Honours degree, or overseas equivalent. Entry may be possible with other qualifications, especially where the applicant has relevant work experience.

Mediation and Conflict Resolution

LLM/MSc/PgDip/PgCert

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Practical skills and a thorough academic foundation – the only course of its kind in the UK

Accreditation by Scottish Mediation

Real-world experience through our innovative Mediation Clinic

A rich blend of students from a range of professional backgrounds including law, psychology, social work, education and management

Full-time and part-time study options

COURSE STRUCTURE

Students may graduate with LLM or MSc depending on the topic of their final dissertation.

Compulsory Classes
- Theory and Principles of Conflict Resolution
- Mediation in Practice
- Legal Research (LLM/MSc/PgDip)

Optional Classes (three to be chosen)
- Mediation, the Law and Policy
- Negotiation
- Employment Mediation
- Conflict Resolution and the State
- Legal Process and the Law of Contract and Other Obligations

Students may also choose a class from other Law School Masters programmes.

Masters Students Only
- Dissertation

COURSE DURATION

LLM/**MSc:** 12 months full-time; 24 months part-time
PgDip: 9 months full-time; 21 months part-time
PgCert: 8 months part-time

ENTRY REQUIREMENTS

A degree, or overseas equivalent, and/or relevant practical experience.

Professional Legal Practice

Diploma (full-time/part-time)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Required for entry to the legal profession in Scotland

Experience a unique method of learning the practical application of legal principles

Work collaboratively in firms and apply professional skills to legal simulations

COURSE STRUCTURE

The course starts with an intensive week-long Foundation Course for full-time and part-time students which serves as an introduction to practical legal skills and collaborative learning.

The first semester involves the core subjects as required by the Law Society, as follows:

- Professional Practice and Ethics
- Business and Financial Awareness
- Conveyancing
- Private Client
- Civil Litigation
- Criminal Litigation
- Personal Injury Claims Handling

In the second semester, students choose five from the following **optional classes**:

- Advanced Criminal Advocacy
- Advanced Private Client
- Tomorrow's Legal Industry
- Commercial Contracts and IP
- Commercial Conveyancing
- Company Law
- Employment Law in Practice
- Family Business
- Family Law
- Mediation and Mediation Advocacy
- Practical Public Administration
- Work-based Learning Module in Legal Practice

COURSE DURATION

9 months full-time; 24 months part-time

ENTRY REQUIREMENTS

LLB degree (or equivalent) which meets the requirements and outcomes of the Law Society of Scotland's foundation programme.

The course] is led by a faculty who are open-minded and approachable to the inclusive value that mediation preaches. You are tested to challenge your existing philosophy of mediation, invited to relearn by choice and encouraged to reflect on your practice."

Jonathan Rodrigues, India
LLM Mediation and Conflict Resolution

Professional Legal Practice

LLM (online learning only)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Build on previous study and focus on a particular area of professional legal practice

Gain a deeper knowledge and understanding of a particular area of professional legal practice

Flexible study through online learning

COURSE STRUCTURE

This course is available on a distance learning basis. Students will normally receive credit for approved prior learning (from their Diploma in Legal Practice or equivalent) which will count towards the LLM award. Students therefore typically complete a compulsory Research Methods class (fully online) and a 15,000-word dissertation on their chosen area of interest.

Compulsory Class

- Legal Research Skills and Methods

COURSE DURATION

Generally 12 months by online learning

ENTRY REQUIREMENTS

First- or upper second-class LLB Honours degree and a qualifying Postgraduate Diploma in Legal Practice/ Professional Legal Practice from a Scottish university.

Where demand for places exceeds availability, performance of applicants during their studies (i.e. generally the relative performance of applicants in specified LLB classes and over the duration of their Diploma studies) will be taken into consideration.

Law (Graduate Entry)

LLB (full-time/part-time)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Accreditation from the Law Society of Scotland

Accelerated two-year programme for graduates from other disciplines

Develop your legal skills as a member of Scotland's largest student-run Law Clinic

Upon successful completion, opportunity to combine your qualification with one of our eight specialised or general LLM degrees

COURSE STRUCTURE

The following is a typical course of study incorporating compulsory classes which meet the requirements of the Law Society of Scotland's foundation programme for progression to the Diploma in Professional Legal Practice. For more information on the structure of the part-time course, please contact the Law School.

Compulsory Classes

- (Scots) Domestic Relations
- (Scots) Criminal Law
- Public Law 1 and 2 (Scots)
- Legal Methods
- Law and Society
- Legal Process
- Voluntary Obligations: Contract and Promise
- (Scots) Property, Trusts and Succession
- (Scots) Involuntary Obligations: Delict and Unjust Enrichment
- Commercial Law
- EU Law
- (Scots) Evidence
- Elective Class

CLINICAL LLB

Scots Law students who apply and gain entry to the Law Clinic are eligible to transfer to the Clinical LLB in which they use their clinical training and cases to develop the skills and ethical values required for legal practice. The Clinical LLB includes all of the core LLB classes, and five compulsory clinical classes. In addition, students gain credit for the work they undertake in the Clinic, assisting clients who do not qualify for Legal Aid and would otherwise not be able to access legal advice.

COURSE DURATION

Full-time: two years (Pass degree); three years (Honours)
Part-time: four years option to accelerate to three years

ENTRY REQUIREMENTS

Second-class Honours or Pass/Ordinary degree. Applicants who do not meet these requirements may also be considered.

Law (Graduate Entry Scots & English Law)

LLB

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Undertake a Graduate Entry LLB degree recognised in Scotland by the Law Society of Scotland

Designed to develop knowledge and skills to support your entry into the legal profession whether as solicitor, advocate or other routes

Benefit from flexibility in your future career

Visit our website for up-to-date information on accreditation

COURSE STRUCTURE

Students on this degree follow broadly the same curriculum as students on the Graduate Entry Scots Law degree, with the addition of English law classes, some of which are taken on a concentrated basis in the summer between Years 1 and 2. The Clinical LLB stream is not available to Graduate Entry Scots and English Law students.

Summer School Classes

- English Law of Tort
- English Law of Contract and Restitution
- English Law of Property and Land

Year 2 Compulsory Classes
Students take the same list of classes as for Graduate Entry Law, replacing the elective class with:

- English Criminal Law and Evidence
- English Law of Equity and Trusts

Subject to satisfactory performance, students can continue to a third year to complete an Honours degree.

COURSE DURATION

Pass degree: two years; Honours degree: three years.

ENTRY REQUIREMENTS

Second-class Honours degree in any discipline. Lower, or alternative qualifications will be considered on a case-by-case basis. A 2:2 Honours degree in Law is required for entry to the English Bar.

School of Psychological Sciences and Health

RESEARCH DEGREES

MPhil/PhD Applied Linguistics, Counselling, Physical Activity for Health, Psychology, Speech & Language Therapy
DEdPsy Educational Psychology
MRes Physical Activity for Health

Contact for Research Degrees

e: hass-postgrad@strath.ac.uk

PhD Speech and Language Therapy/Applied Linguistics
The Speech and Language Therapy Team in the School of Psychological Sciences and Health host a well-established Doctoral Training Centre (DTC) in Communication Disorders. This multidisciplinary DTC focuses on a wide range of aspects related to the study of communication problems, including characterisation, diagnosis and treatment. In addition, we offer supervision in more linguistically aligned areas of study, such as language acquisition, socio-linguistics and phonetics. Our aim is to research the speech, language and voice characteristics of typical as well as impaired populations across their lifespan in order to further our understanding of these issues and impact positively on people's lives.

We offer supervision in a wide range of communication related areas, including issues such as speech sound disorders, voice, dementia, autism, stroke, dysphagia, dysarthria, telehealth and other uses of technology in client treatment. In addition, we have expertise in investigating speech patterns in healthy populations, including first and second language learners.

The supervisory pool spans all four University faculties, which provides you with access to the highest level of academic expertise as well as a significant pool of technical resources, including labs for speech and movement analyses, signal processing, systems for eye tracking, or EEG.

About The School

The School of Psychological Sciences and Health focuses its research on being useful to society by employing research insights and understandings to address the problems that face society today.

We offer courses accredited/approved by the British Psychological Society, the Royal College of Speech and Language Therapists, the Health and Care Professions Council, and the British Association for Counselling and Psychotherapy.

The School provides a vibrant, friendly environment for outstanding research and teaching that brings together internationally-recognised academic staff with a diverse range of interests.

Our staff engage in research and undertake undergraduate and postgraduate teaching across four subject disciplines:

- Psychology
- Speech and Language Therapy
- Physical Activity for Health
- Counselling

Research Areas

The four subject groups within the School have two overall research themes:

- Children and Young People (including social and cognitive development, educational psychology, child and family wellbeing, developmental disorders and disabilities)
- Health (clinical and public health interventions of many kinds across the lifespan, including research on the aetiology of disease, and on the development of improved clinical, research and policy interventions)

Recognising that these topics often generate complex, multidisciplinary, and global research problems, staff collaborate across the four disciplines within the School and with a wide range of colleagues internationally.

To see the full breadth of research activity within the School, prospective students should consult individual staff research profiles on our website and are encouraged to contact potential supervisors in advance of their application.

POSTGRADUATE TAUGHT COURSES

Clinical Health Psychology
Counselling and Psychotherapy
Psychology with a Specialisation in Business
Research Methods in Psychology

Contact for Postgraduate Taught Courses

e: hass-pg-enquiries@strath.ac.uk

Educational Psychology

DEdPsy

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

The DEdPsy is a flexible research degree designed to meet the needs of practising Educational Psychologists (EPs) with at least one year's experience in the field. The course combines applied psychology with high quality real world research in a variety of vital and complex educational issues. It provides a framework in developing rich evidence based practice and self-reflection.

- Develop research skills in design, data collection and analysis leading to the submission of an original thesis that makes an identifiable contribution to knowledge in an area of developmental/educational psychology
- Cultivate a critical academic understanding of current advances in theory and research within a specialist area of professional expertise
- Develop effective, critical and reflective independent professional practice using a range of assessment and intervention approaches that are underpinned by psychological paradigms and are evidence-based
- A wide range of career long professional development opportunities (CLPL) are available to enrich and expand students psychological toolkit
- All supervisors are Health and Care Professions Council (HCPC) registered Educational Psychologists

We have expertise in all aspects of educational and developmental psychology.

COURSE DURATION

The minimum period of study for Scottish Educational Psychologists with an MSc in Educational Psychology is 24 months.

ENTRY REQUIREMENTS

Normally, a Masters degree in Educational Psychology. Candidates without an MSc may have to complete an additional 9 month portfolio of 3 small-scale project work carried out in practice.

Clinical Health Psychology

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Prepare yourself for an application to an applied psychology training programme (e.g. Doctorate in Clinical or Counselling Psychology, PhD in an applied area, Clinical Associate in Applied Psychology training, Cognitive Behavioural Therapist training)

Unique combination of clinical, health and neuropsychology classes

Dedicated training to support professional and ethical practice

Practitioner led workshops covering key psychological interventions

Advanced research methods training

Links with external partners who provide voluntary placement opportunities

COURSE STRUCTURE

- Clinical Psychology
- Health Psychology
- Neuropsychology
- Professional Practice
- Quantitative Research Methods
- Qualitative Research Methods
- Research Dissertation

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

First or Upper Second class Honours degree in Psychology, or overseas equivalent
Applicants whose first language is not English, require IELTS 7.0

Eligibility for voluntary placement
Students who opt to undertake a voluntary placement may require membership of the Protecting Vulnerable Groups Scheme (PVGS) or update of an existing membership. This will require applicants to provide a verified criminal records check from their home country.

Counselling and Psychotherapy

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Focus on person-centred therapy throughout the course

Learn to apply one of the leading therapeutic approaches to mental health and wellbeing

Opportunity to undertake work placements with clients in a range of health and wellbeing settings

COURSE STRUCTURE

Compulsory Classes
- The Therapeutic Relationship
- Personality Theory
- The Therapeutic Process
- Counselling Care Formulation
- Personal and Professional Development
- Counselling Practicum
- Counselling Research Dissertation

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

First- or upper second-class Honours degree, or an equivalent qualification; COSCA Certificate in Counselling Skills or an equivalent qualification.

Psychology with a Specialisation in Business

MSc (online distance learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Route to Graduate Basis for Chartered Membership with the British Psychological Society

Gain knowledge of the core domains of psychology

Develop an understanding of the applications of psychology to real life, particularly business contexts

COURSE STRUCTURE

The programme is delivered entirely online.

Psychology Classes
- Social and Developmental Psychology
- Conceptual and Historical Issues in Psychology and Individual Differences
- Psychobiology and Cognitive Psychology
- Research Design and Analyses in Psychology

Business Classes
- Organisational Psychology
- Leadership in Organisations
- Foundations of Risk
- Psychometrics in Organisations

Students will also conduct an empirical project (dissertation) under the supervision of a member of staff.

COURSE DURATION

- Delivered full-time over 12 months
- Option available to study flexibly part-time for up to 60 months
- Both full-time and part-time study takes place via online learning

ENTRY REQUIREMENTS

First- or upper second-class Honours degree, or overseas equivalent, in law, social sciences or related disciplines, or a Masters degree; in some cases a qualification deemed to be equivalent may be considered.

Psychology Honours graduate (without Graduate Basis for Chartered Membership of the BPS) with lower second-class degree (or international equivalent).

Research Methods in Psychology

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Learn the skills and theory for conducting research

Undertake a substantial research project, with one-to-one supervision

Enhance your academic profile for doctoral funding applications or for research assistant posts

COURSE STRUCTURE

Compulsory Classes
- Quantitative Research Methods
- Qualitative Research Methods
- Perspectives on Social Research
- Research Design

Students also undertake an individual research project under the supervision of a member of staff. Supervision by active researchers with international track records is available across a wide range of topics.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

First- or upper second-class degree in Psychology, or overseas equivalent.

School of Social Work and Social Policy

RESEARCH DEGREES

MPhil/PhD in Criminology, Public Health and Health Policy, Social Policy, Social Work

Contact for Research Degrees

e: hass-postgrad@strath.ac.uk

We encourage prospective research students to consult the individual staff research profiles on our website and to contact potential supervisors before applying.

RESEARCH

The School of Social Work and Social Policy offers postgraduate research degrees in Social Work and Social Policy, Criminology and Public Health and Health Policy.

In Social Policy, we offer supervision across each of the School's main research areas (see below). We cover both historical and contemporary issues, and welcome enquiries from students with interests in Scotland and the UK, and globally. We are currently supervising students on a wide range of topics from volunteering and associational life in contemporary Scotland to the development of social work services in Tanzania.

Our Social Work staff also offer supervision across all of our research areas. Current work includes studies of the provision of support for disabled children and their families, various aspects of criminal justice social work, and the experiences of looked-after children and care-leavers. Many of our current students benefit from the opportunity to work with colleagues in the Centre for Excellence for Children's Care and Protection (CELCIS) and the Centre for Youth and Criminal Justice (CYCJ).

Our PhD programme in Criminology draws on the expertise of colleagues in both Social Work and Social Policy and the School of Law. We offer supervision across a range of topics, including youth and criminal justice, criminalisation, punishment and sentencing, the promotion of desistance, prison health services, and prisoners' relationships with their families and the wider community. We also have close links with the Centre for Youth and Criminal Justice and the Scottish Centre for Crime and Justice Research.

The School also manages a dedicated PhD programme in Public Health and Health Policy. This programme also draws on the expertise of colleagues in the Centre for Health Policy and other parts of the Faculty and University. We are currently supervising students who are working on a variety of different topics, ranging from the impact of mental health problems on women experiencing poverty to the relationship between mental health, homelessness and recovery.

Research Areas

We encourage colleagues to work across disciplinary boundaries and this is reflected in the construction of our four Research Clusters:

Children, Young People and Families
Research topics include improvement in services for children and young people; marginalised youth and social inequalities; children and young people's rights; migrant children; evidence-based practice and sustainable change in policy and practice. We work with a range of funders and partners, including the Scottish Government, local authorities and related voluntary sector organisations and international partners. Many of our team are based within the Centre for Youth and Criminal Justice (CYCJ) and the Centre for Excellence for Children's Care and Protection (CELCIS).

Health and Wellbeing
Research ranges from historical studies of health and morbidity and the conceptualisation of health and wellbeing to the role played by information technology in the provision of health services and the interface between health and social care. Our work also encompasses research in the fields of older age, the medicalisation of everyday life, and mental health and disability. We have close links with CELCIS, CYCJ and the Centre for the Social History of Health and Healthcare. We also play a key role in the University-wide Centre for Health Policy and collaborate with a number of external partners, including Scotland's Commissioner for Children and Young People, the World Health Organisation and New York and Yale Universities.

Criminal and Social Justice
Our researchers undertake applied research on issues of criminal and social justice, penal and social policy and practice. We have strong links with the Scottish Government, Scottish Prison Service, Criminal and Youth Justice Social Work Services, and related voluntary sector and penal reform organisations. We are affiliated to the Scottish Centre for Crime and Justice Research (SCCJR), which is a consortium of the Universities of Edinburgh, Glasgow, Stirling and Strathclyde. Research topics include crime and desistance; risk, regulation and reintegration; prisons, imprisonment and re-entry; punishment and penal practices; co-production in community justice; and children, young people and crime and justice.

Citizenship and Communities
Research in this area covers a range of historical and contemporary topics associated with the study of citizenship and communities in Scotland and the UK, and across the world. Our interests include the history of mutual aid and philanthropy, social investment and inclusive growth, the enhancement of citizenship rights and social cohesion, the development of welfare-to-work programmes, the impact of devolution on UK social policy, the relationship between migration and resettlement and culture and identity, 'smart cities', and the future of city centres.

POSTGRADUATE TAUGHT COURSES

Contact for Postgraduate Taught Courses

e: hass-pg-enquiries@strath.ac.uk

We offer a range of both academic and professional courses for postgraduate students. Our academic courses MSc programmes in International Social Welfare, Social Policy and Social Policy (Research Methods). All of these courses can be taken on a full-time or part-time basis.

We also offer a range of vocational or professional courses, including the Postgraduate Certificate in Mental Health Social Work, the MSc in Advanced Residential Child Care, the MSc in Child and Youth Care Studies, and the Master in Social Work (MSW). The Postgraduate Certificate in Mental Health Social Work and the MSc in Advanced Residential Child Care are both part-time programmes. The MSc in Child and Youth Care Studies is a part-time programme delivered through distance learning. The Master in Social Work (MSW) is a full-time course spread over two years.

Social Work
MSW Social Work
Advanced Residential Childcare
Child and Youth Care Studies
Mental Health Social Work

Social Policy
Social Policy/Social PolicyResearch Methods
International Social Welfare

Social Work

MSW/PgDip

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

An initial qualifying programme in social work validated by the Scottish Social Services Council

Placements of 90 days in each year of the course in a range of social work service settings

Gain a qualification recognised outside the UK

COURSE STRUCTURE

Year 1 Classes
- Social Policy, Law and Social Work Organisations
- Theory, Practice and Professional Development
- Research Methods 1
- Practice 1

Year 2 Classes
- Risk and Protection in Organisational Contexts
- Theory and Practice 2
- Research Methods 2
- Practice 2

Placements
Placements of 90 days from January to May are provided across the statutory and voluntary sectors, e.g. in childcare, community care and criminal justice services, hospitals, health centres and day centres, residential care, prisons and special projects for offenders.

COURSE DURATION

Two years

ENTRY REQUIREMENTS

Upper second-class Honours degree, preferably in a social science discipline but graduates in other disciplines with an understanding of social sciences are welcome. Applicants who do not have a first degree may be considered if they have extensive professional experience and can demonstrate academic ability at postgraduate level.

A minimum of six months of directly-relevant experience in social work, social care, community work or a closely-related activity is essential.

HOW TO APPLY

Applications must be made through UCAS.

Advanced Residential Child Care

MSc/PgDip/PgCert (part-time)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Only course in the UK devoted entirely to residential child care

Develop knowledge and abilities for optimal practice

The MSc/PgDip meet the management requirement for registration with the Scottish Social Services Council

COURSE STRUCTURE

The course is modular and requires attendance at the University for six days per module; there are four modules in Year 1 and two modules in Year 2. A further six months is allocated for completion of a practice-based dissertation.

Compulsory Modules

- Critical Perspectives on Residential Child Care
- Understanding and Assessing in Children's Life-spaces
- Ethical Leadership and Management in Residential Child Care
- Skilled and Reflective Use of Self in Residential Child Care
- Intervening Effectively in Residential Child Care
- Methods: Effective and Ethical Research in Residential Child Care
- Professional Enquiry in Residential Child Care: Dissertation

COURSE DURATION

24 months part-time

ENTRY REQUIREMENTS

Degree (minimum 360 SCQF credit points) or equivalent qualifications and experience.

Students with professional or academic qualifications other than social work will be considered.

No charges apply to students employed in residential child care settings in Scotland. Fees for this programme are paid through a Scottish Government grant (subject to continued funding) to CELCIS.

Child and Youth Care Studies

MSc/PgDip/PgCert (online distance learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

The only Child and Youth Care Masters-level programme delivered entirely online with no attendance required

The programme is accredited by the Child and Youth Care Educational Accreditation Board of Canada as a provider of quality post-secondary education in the field of Child and Youth

Develop theoretically informed, practice-based understanding of issues related to the social, political and cultural contexts of children and youth

COURSE STRUCTURE

Classes involve a range of individual and group tasks in addition to live online sessions when the student group participates in online seminars.

Compulsory Classes

- Globalised Childhood: Theoretical and Policy Contexts
- Child Development in the Lifespace
- Critical Reflection and Relational Practice
- Management and Leadership
- Interventions
- Research Methods
- Masters Research Project (incorporating dissertation)

COURSE DURATION

24/36 months part-time distance learning

ENTRY REQUIREMENTS

A first degree or relevant professional qualification, or a combination of qualifications and experience demonstrating capacity for postgraduate study.

Participants will also require sufficient access to child care settings through which they can evidence practice requirements. However, these requirements are broad enough to allow those in external management, supervisory and education and/or training positions to do so.

You will need to have access to a device/computer with sufficient processing capability and an excellent broadband connection.

Mental Health Social Work

PgCert (part-time)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain a qualification to contribute positively to the care and treatment of those experiencing mental disorder

Undertake practice experience with your employing local authority

Benefit from the specialist input from guest lecturers

COURSE STRUCTURE

The course is offered in partnership with 13 local authorities in the west of Scotland, represented by the Scottish Social Services Council Learning Network West.

Compulsory Classes

- Mental Health Officer Theory and Practice 1
- Mental Health Officer Theory and Practice 2

Work Placement

Two blocks of practice experience – September to December and February to May are undertaken in your employing local authority, supervised by a suitably-qualified member of staff, and supported by the course team.

COURSE DURATION

30 days of teaching/contact time during term time. You will need to commit to a minimum of 600 hours of study, practice learning and assessment over the course of the academic year.

ENTRY REQUIREMENTS

Applicants must be nominated and supported by their employing local authority, and be provided with appropriate learning opportunities. A minimum of two years post-qualifying experience is normally expected and you should be able to demonstrate that you have improved and extended your level of competence since qualification.

A professional social work qualification recognised by the Scottish Social Services Council (SSSC) is required. Suitable qualifications include BA (Honours) Social Work, Diploma in Social Work, Certificate of Qualification in Social Work (CQSW) and its predecessor qualifications, Certificate in Social Service. If you trained abroad, a letter of comparability with the CQSW or a letter of verification issued by SSSC (or another registering Council in the UK) will be required.

Social Policy/Social Policy (Research Methods)

MSc/PgDip/PgCert

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Expand your knowledge of contemporary issues facing social welfare and wellbeing and how social policy responds to them

Develop knowledge and research skills highly valued by public, third and private sector employers

Acquire research training vital for further study at PhD level

This course has two pathways. The Social Policy pathway is for students who wish to update their existing knowledge and skills and improve their understanding of social policy.

The Social Policy (Research Methods) pathway draws on many of the same classes while offering students more opportunities to develop their research skills. Both pathways enable students to undertake an independent research project.

The Research Methods pathway is recognised by the ESRC (Economic and Social Research Council) and is particularly appropriate for those seeking to undertake postgraduate research.

The programmes are suitable for those who have studied social policy at undergraduate level, as well as graduates of other disciplines.

COURSE STRUCTURE

Each pathway includes compulsory and **optional classes**. In addition, MSc students complete a 15,000-word dissertation.

Compulsory Classes

- Perspectives on Social Research
- Quantitative Methods*
- Qualitative Methods*
- Welfare Concepts and Ideas
- Approaches to Welfare: Past, Present and Future
- Dissertation (MSc only)

*students on the Social Policy pathway must take one of these classes. Students on the Research Methods pathway take both.

Social Policy/Social Policy (Research Methods)

Optional Classes
Social Policy is an interdisciplinary field of study which draws inspiration from many areas.
We currently offer the opportunity to choose options from a number of disciplines across the Faculty.

Examples of classes available include:
- Advanced Project Module (students produce a 50,000 word independent project within the research interests of a member of Social Policy teaching staff)
- Comparative Public Policy
- International Regimes and Institutions
  Policy Analysis

RESEARCH METHODS PATHWAY

Studying Social Policy at Strathclyde means students will work closely with and learn from the School's growing number of internationally-recognised researchers and their work. This includes such issues as:

- migration
- history of social policy
- gender-based violence
- health policy and health inequalities
- social investment and inclusive growth
- criminology and penology
- evidence and policymaking

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

First- or second-class Honours degree, or overseas equivalent, in Social Policy or a related discipline.

International Social Welfare

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop a critical understanding of global social issues

Prepare students to work in a variety of different social work and social development settings

Explore the complexities, challenges and dilemmas experienced by professionals in the fields of social work and social policy

COURSE STRUCTURE

Compulsory Classes
- Welfare Concepts and Ideas
- Approaches to Welfare: Past, Present and Future
- International Social Work: Themes and Perspectives

Choose one or both of the below. If you choose one Methods class, select two **Optional Classes**, if you choose two, select one of the **Optional Classes**.

- Quantitative Methods
- Qualitative Methods

Optional Classes
- Contemporary International Relations
- Evaluation and Policy Research
- The Context of Social Work Research
- The Use of Evidence in Social Work Research
- Social Welfare Project
- The Contexts of Criminal Justice Research
- Contemporary Issues in Criminology
- Global Health, Rights and Developments
- Topics in Public Economics
- Principles of Economic Appraisal

Masters Students Only
Research project with 15,000-word dissertation

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

First-class or second-class Honours degree, or overseas equivalent, in any discipline. Entry may be possible with other qualifications, where the applicant has relevant work experience.

"Strathclyde's Social Policy department is excellent. The University of Strathclyde was voted 1st in 'The Complete University Guide League Tables 2019.' I also had the opportunity to work with Professor Sir Harry Burns, an individual I highly admire and believed could help me help others with my research."

Penelope Laycock
PhD Social Policy

Centre for Lifelong Learning

POSTGRADUATE TAUGHT COURSES

Genealogical, Palaeographic and Heraldic Studies
Safety and Risk Management

Contact for Postgraduate Taught Courses
e: hass-pg-enquiries@strath.ac.uk

For more than 40 years, the Centre for Lifelong Learning has contributed to the University's founding principle to be a 'place of useful learning open to all'.

Through providing a range of learning opportunities for adults of all ages, the Centre encourages participation in learning throughout life, whether for personal or professional development. Its online postgraduate programmes are renowned for being practitioner-focused, ensuring students emerge with skills of direct relevance to their lives, work and career ambitions.

The Centre for Lifelong Learning also offers a broad range of classes for the public, as well as CPD courses including IOSH Managing Safely and COSCA Counselling courses. To find out more, please visit our website.

"I developed a better view on the entire spectrum of health and safety, stepped out of my comfort zone and gained skills and knowledge to become a better health and safety professional."

Rens Duisters,
MSc Safety & Risk Management

Genealogical, Palaeographic and Heraldic Studies

MSc/PgDip/PgCert
(full-time/part-time distance learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain a grounding in the theory and practice of genealogical research, records, archives and heraldry

Focus on the sources available to genealogists and family historians

Study online by distance learning

COURSE STRUCTURE

Compulsory Classes
- Professional Practice and Methodologies
- Repositories, Geography and Administration
- Civil and Church Records
- Family History Studies and Overseas Records
- Property, Law and Inheritance
- Heraldry and Latin
- Methods of Professional Enquiry and Research Project
- Genealogy, Heraldry and Social History 2
- Documents, Palaeography and Research Studies

Masters Students Only
- Professional Enquiry and Development and dissertation

ENTRY REQUIREMENTS

PgCert: Normally a degree or similar evidence of study skills is required however non-standard educational or professional qualifications will be considered, particularly the Open Studies Certificate in Genealogical Studies offered by the University. Some experience in genealogical (or other relevant) research is also required.
PgDip: Entry is normally by successful completion of the Postgraduate Certificate.
MSc: Entry to the part-time MSc by dissertation is by successful completion of the Postgraduate Diploma and invitation.

Entry to the full-time MSc requires an undergraduate degree and some experience in genealogical (or other relevant) research.

The course is delivered online, so you will require computer access at home. You should be familiar with the use of computers in genealogy and the course is standardised on Microsoft Windows. You will also need to subscribe to or pay for certain online databases and services.

Safety and Risk Management

MSc/PgDip/PgCert
part-time online distance learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Study from anywhere by distance learning

Accredited by the Institution of Occupational Safety and Health for Graduate Membership

Open to those without a first degree

Gain practical knowledge of direct use in the workplace via practitioner-led support

CPD courses available including IOSH Managing Safely and Radiation Protection

COURSE STRUCTURE

Compulsory Classes
- Benchmarking Safety and Risk Management
- Assessing Hazards, Risks and Dangers
- Optimising Safety and Risk Management
- Psychology of Workplace Activities
- Ergonomic Factors in Work Activities
- Corporate Risk Management
- Methods of Professional Enquiry

Masters Students Only
- Research project with 12,000-word dissertation

ENTRY REQUIREMENTS

PgCert: Foundation-level certificate in occupational health and safety and a university degree (or equivalent preparation for postgraduate study). Relevant work experience will also be taken into account.
PgDip: Successful completion of the University of Strathclyde Certificate in Safety and Risk Management. Applicants who have gained other qualifications and experience equivalent to GradIOSH may be accepted on to the Diploma, subject to certain conditions.
MSc: Direct entry to the MSc is available to students who hold a Postgraduate Diploma in a Safety-related discipline.

The Faculty of Science

We offer our students high-quality teaching, informed by innovative research, within one of the UK's leading schools of science.

We provide a dynamic, supportive and friendly place to study. The Faculty offers a wide range of postgraduate taught courses and research opportunities designed to offer you advanced skills relevant in today's global workplace.

With the largest number of research students in the University, we investigate the challenges and possibilities of the natural and technological world – from drug discovery and public health to environmental concerns, tackling cybercrime and understanding space. Multimillion-pound funding from research councils, the EU, the National Health Services, charities and industry ensures our research is relevant and of national and international importance. Based on the REF2014 Grade Point Average scores, Times Higher Education ranked Strathclyde as number one in the UK for physics research.

Delivered by world-class researchers, our Masters programmes provide the opportunity to gain an invaluable postgraduate qualification which will enhance your career prospects.

There are opportunities for cross-disciplinary research and study, both within the Faculty, or across other University faculties and centres.

In choosing to study science at Strathclyde you will become part of an international community of staff and students from more than 40 countries.

Our facilities are excellent, with well-equipped, modern laboratories and teaching rooms, plus 24-hour access to an advanced computer information network and a sophisticated virtual e-learning environment.

Contact
Faculty of Science
e: science-masters@strath.ac.uk

Department of Computer & Information Sciences

RESEARCH DEGREES

MPhil, PhD, DInfSci

Contact for Research Degrees

t: +44 (0)141 548 3189
e: enquiries@cis.strath.ac.uk

TAUGHT COURSES

Advanced Computer Science
Advanced Computer Science with Big Data
Advanced Software Engineering
Digital Health Systems
Information and Library Studies
Information Management
Software Development
Quantitative Finance (offered in collaboration with the Departments of Mathematics & Statistics and Accounting & Finance, see pg 121 for course entry)
Artificial Intelligence and Applications

Contact for Taught Courses

t: +44 (0)141 548 3623/+44 (0)141 574 5147
e: science-masters@strath.ac.uk

The Department of Computer and Information Sciences is an interdisciplinary school providing an innovative teaching and research environment. Research interests span the whole spectrum of computer and information sciences theory and application, from fundamental algorithms to information behaviour. Research is funded by the Research Councils (EPSRC, ESRC and AHRC), the EU, and various government agencies and industry bodies. We have a strong record of industrial and professional engagement and collaboration including partnerships with Microsoft, Rolls-Royce Marine and the European Space Agency.

The Department is the largest and oldest provider of postgraduate instructional and research training in Library and Information Studies in Scotland, and is a member of the iSchools group, a coalition of the world's leading information schools.

Research Areas

Research activities are structured around six groups:

Strathclyde iSchool Research Group

The group investigates arising socio-techno phenomena and evolving information systems and behaviours. In pursuit of a literate and informed society, much of our work is societal in nature. We investigate human information need and use, and we are informing future interactive information system design. Our work is theoretically underpinned by internationally-recognised expertise in:

interactive information retrieval
information behaviour
information law and ethics
information engagement

We bridge theory and practice, working collaboratively with a number of partners including the National Health Service in Scotland, Glasgow City Libraries and Barnardo's Scotland.

We have a large and internationally-diverse PhD group and are members of the AHRC Information Science Doctoral Scheme Consortium and the Scottish Informatics and Computer Science Alliance.

Digital Health and Wellbeing

Research interests and work of the group include looking at the full development lifecycle of truly person-centered digital health and wellness services and products. We have extensive experience of designing with, and for, patients, consumers, citizens, and health and social care professionals. We are working on several projects with charities, the NHS, industry and public sector bodies to develop usable and effective digital health and wellness products and services to reduce inequalities, improve people's lives and transform the way health and care is delivered and accessed globally.

Mathematically Structured Programming

The group is researching programming languages to provide solutions to problems in important areas such as concurrency and distribution, program verification, multi-core architectures, domain specific languages, security, web programming and mobile apps. Researchers use ideas from category theory, type theory and functional programming to achieve their goals.

Strathclyde Security Research Group

The Strathclyde Security Group spans the Department of Computer & Information Sciences, the Department of Electronic & Electrical Engineering and the Law School. Our vision for excellence in security research is to ensure cybersecurity delivers on its potential to be one of the key technologies that will drive our economic, social and scientific development in the decades ahead. The Strathclyde Security Group is internationally known for our systems focus that bridges systems security, behavioural and legal aspects of cybersecurity research.

Data Analytics, Software Systems and Interaction Research Group (DASSI)

Understanding large volumes of heterogeneous data is key to much business, science and societal support. However, that data must be used in ways that are understandable and must be handled securely by complex stable software systems. The DASSI group at Strathclyde investigates these three connected research themes in the area of data science or big data. Together they cover our research into intelligently handling complex data and software systems. This can both lead to better accurate understandings and predictions, and can also be used to inform decisions or to improve user interaction.

The group has research and knowledge exchange competencies in many aspects of data analytics, software systems, cyber security, usability, interactive systems design and evaluation of software and its usability.

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Advanced Computer Science

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Pursue a tailored programme through a flexible structure of optional classes

Opportunity to follow a specialist pathway leading to a specific named award

Skilled computer science professionals are in demand

COURSE STRUCTURE

Compulsory Classes

- Legal, Ethical and Professional Issues for the Information Society
- Research Methods

Optional Classes

Students have the flexibility to build their own specialist pathway by selecting five classes from the following list:

- Software Architecture and Design
- Advanced Topics in Software Engineering
- Designing Usable Systems
- Distributed Information Systems
- Mobile Software and Applications
- Evolutionary Computing for Finance
- Business Analysis
- Information Retrieval
- Big Data Technologies
- Machine Learning for Data Analytics
- Project Management

Dissertation

Students also undertake an individual research project.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent, in computer science or a closely-related mathematical or engineering discipline.

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Advanced Computer Science with Big Data

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain skills to meet the challenges posed by the advent of the big data revolution

Understand how classical statistical techniques are applied in modern data analysis

Work on a research project with our industrial partners

Partial Accreditation by the British Computer Society

COURSE STRUCTURE

Compulsory Classes
- Legal, Ethical and Professional Issues for the Information Society
- Distributed Information Systems
- Big Data Technologies
- Machine Learning for Data Analytics
- Research Methods

Optional Classes (two to be chosen)
- Advanced Topics in Software Engineering
- Mobile Software Applications
- Evolutionary Computing for Finance

Dissertation
Students also undertake an individual research project.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent, in computer science or a closely-related mathematical or engineering discipline.

Advanced Software Engineering

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop the skills to design and deploy sophisticated modern software systems

Enhance your existing practical software engineering skills

Learn new theories of software development

COURSE STRUCTURE

Compulsory Classes
- Legal, Ethical and Professional Issues for the Information Society
- Research Methods

Optional Classes (five to be chosen)
- Advanced Topics in Software Engineering
- Software Architecture and Design
- Designing Usable Systems
- Distributed Information Systems
- Mobile Software and Applications
- Project Management

Dissertation
Students also undertake an individual research project.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent, in computer science or a closely-related mathematical or engineering discipline.

Digital Health Systems

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Become a leader in the field of health IT

Learn how to manage and analyse data collected from personal devices and large-scale health systems

Develop software development and management skills to support planning and delivery of better care systems

Partial Accreditation by the British Computer Society

Newly accredited by the Chartered Institute of Library and Professionals

COURSE STRUCTURE

Compulsory Classes
- Project Management
- Database Fundamentals
- Research Methods
- Health Information Governance
- Decision Support and Health Analytics
- Digital Health Implementation
- Design of Usable Health Systems
- Health Ageing

Dissertation
Students also undertake an individual research project.

COURSE DURATION

12 months full-time; students also have the opportunity to study the course part-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent, in computer science, business, health or statistics. Applicants with other qualifications in relevant disciplines may also be considered.

Artificial Intelligence and Applications

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

A course in modern Artificial Intelligence, with a focus on intelligent agents and machine learning

Artificial Intelligence and machine learning skills in wide demand

No previous experience of computer science necessary

COURSE STRUCTURE

Compulsory Classes
- AI for Autonomous Agents
- Deep Learning and Neural Networks
- Big Data Technologies
- Machine Learning for Data Analytics
- AI for Finance
- Quantitative Methods for AI
- Legal, Ethical and Professional Issues for the Information Society
- Research Methods

Dissertation
Students also undertake an individual research project.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Second class honours degree, or overseas equivalent.

Information and Library Studies

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Accredited by the Chartered Institute of Library and Information Professionals, incorporating international reciprocal agreements with professional bodies in the US, Canada, Australia and New Zealand

Benefit from practical experience of a placement

COURSE STRUCTURE

Compulsory Classes
- Information Retrieval and Access
- Information Law
- Research Methods
- Library Technology and Systems
- Information Analysis
- Organisation of Knowledge
- Libraries, Information and Society
- Human Information Behaviour

Dissertation
Students also undertake an individual research project.

Placement
Students will have a placement one day per week in semester 1 or 2, and providers include Glasgow Life, the National Library of Scotland, the BBC, Scottish Enterprise, NHS Scotland, as well as university and special libraries.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent. Consideration may also be given to those holding other qualifications in relevant disciplines.

Information Management

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Accredited by the Chartered Institute of Library and Information Professionals and recognised by the Chartered Management Institute

Opportunity to gain practical business analysis experience via an industrial engagement project

Partial Accreditation by the British Computer Society

COURSE STRUCTURE

Compulsory Classes
- Project Management
- Database and Web Systems Development
- Information Law
- Research Methods
- Business Analysis
- Information Retrieval
- Big Data Technologies
- Machine Learning for Data Analytics

Dissertation
Students also undertake an individual research project.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent. Consideration may also be given to those holding other qualifications in relevant disciplines.

Thinking about my future career and deciding to move from psychology into digital health, Strathclyde offered the most suitable course for me, compared to other universities”

Athina Tatsi, MSc
Digital Health Systems graduate

Software Development

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Provides a pathway into one of the most in-demand professional job sectors for graduates without a computing science background

Focus on programming skills for software engineering, mobile and web applications, and computer security

Initial Partial Accreditation by the British Computer Society

COURSE STRUCTURE

Compulsory Classes

- Introduction to Programming Principles
- Object Oriented Programming
- Mobile Application Development
- Software Engineering
- Computer Security Fundamentals
- Database Fundamentals
- Database Development
- Legal, ethical and professional issues for the information society

Dissertation
Students also undertake an individual research project.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent, in any discipline other than Computer Science.

Department of Mathematics & Statistics

RESEARCH DEGREES

MPhil, PhD

Contact for Research Degrees

t: +44 (0)141 548 3382
e: ma-contact@strath.ac.uk

TAUGHT COURSES

Actuarial Science
Applied Statistics
Applied Statistics in Health Sciences
Quantitative Finance

Contact for Taught Courses

t: +44 (0)141 548 3623/+44 (0)141 574 5147
e: science-masters@strath.ac.uk

The Department of Mathematics and Statistics is one of the largest of its kind in Scotland, with an international reputation in the use of mathematical analysis for real-world problems. The Department has collaborative links with researchers in other universities, from other disciplines and from the industry charity, business and government sectors, in the UK, Europe, the USA and China.

Funding comes from a range of sources including the Engineering and Physical Sciences Research Council, the Carnegie Trust, the Leverhulme Trust, Cancer Research UK, University Scholarship Awards, UK industry and the EU.

Research Areas

We have major research themes in the areas of industrially-relevant mathematics, numerical algorithm development, statistics for the health sciences, modelling of marine systems, and the development of novel techniques for stochastic and network analysis.

Research activities are focused in five interdependent groups:

Applied Analysis

Research focuses on the development of rigorous analytic and constructive methods for solving differential and integral equations arising from the applied sciences and in enumerative, bijective and algebraic combinatorics, with connections to theoretical computer science, statistical physics, probability theory and graph theory. The group has collaborations with other groups in the department and with researchers from a range of other disciplines – from physicists, chemists and engineers to social scientists. There is a particular focus on research in:

- Combinatorics, including grid classes of permutations; random permutations; permutation tableaux; sorting processes; graph representations; combinatorics of words; the abelian sandpile model; combinatorial counting sequences; asymmetric exclusion processes; uniform resource distribution.
- Differential equations of material science
- Nonlinear evolutionary processes,
- Operator theory for the study of differential and integral equations
- Analysis of networks.

Continuum Mechanics and Industrial Mathematics

Research in the group focuses on the development and analysis of mathematical models for a wide range of real-world problems ranging from the flow of complex fluids and microfluidics to geophysical applications and using ultrasonic waves to detect cracks in engineering structures. Group members have expertise in continuum mechanics, material science, fluid dynamics, and soft matter modelling. The work is naturally multidisciplinary, and group members use a variety of analytical and numerical techniques to undertake collaborative research with physicists, engineers, chemists and industrial companies on a diverse range of exciting applications. In particular, the group has an international reputation for its cutting-edge work on the mathematical analysis of liquid crystals.

Numerical Analysis and Scientific Computing

This group is one of the largest in the UK. It has an international reputation for research excellence in the construction and analysis of methods for numerical solution of linear and non-linear partial differential equations, the computational solution of problems of practical interest and several aspects of numerical linear algebra (fast solvers of large linear systems, preconditioning). Research activities are focused on:

- Numerical analysis of partial differential equations (construction and analysis of schemes preserving physical properties)
- Numerical linear algebra (Preconditioning large unstructured sparse matrices, Iterative solution of large sparse linear systems arising from finite element discretisations)
- Computational physics and engineering (numerical simulations of complex and realistic mathematical models arising).

Population Modelling and Epidemiology

Research focuses on the epidemiology of infectious diseases, ecological complexity, marine and fisheries modelling, and mathematical cell biology. The group encompasses a wide range of expertise from statistics, informatics and image processing to dynamical systems and time series analysis.

The overarching theme of the group is the use of modelling techniques to extract information from complex data sets with an emphasis on practical problems.

Research activities are focused on:

- marine population modelling
- mathematical biology
- epidemiology and statistical informatics

Current projects are modelling the epidemiology of measles, mumps and rubella to assess the spatial risk of the disease and potential effects of low MMR-vaccination uptake and implementing spatial models for air pollution in central Scotland to investigate the link between atmospheric sulphur dioxide and health problems.

Stochastic Analysis

Research is ongoing across a broad range of stochastic mathematics including discrete-state space Markov processes, stochastic differential equations, stochastic geometry, point processes and time series. Application areas include modelling in population biology, agricultural epidemiology, biochemistry, quantum optics, telecommunication systems, finance and financial econometrics.

Group members have formed a widely distributed network of national and international collaborators, in academia and the business world. Research interests cover:

- Stochastic Differential Equations
- Stochastic Computation
- Time Series
- Probability Theory
- Image Analysis

Actuarial Science

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain an understanding of actuarial theory and analysis

Prepare for a career in the financial services industry with a quantitative and data facing role

Learn about the nature and functioning of financial markets and institutions

COURSE STRUCTURE

This cross-faculty programme is delivered in collaboration with Strathclyde Business School.

Compulsory Classes
- Foundations of Probability and Statistics
- Principles of Finance
- Inference and Regression Modelling
- Fundamentals of Macroeconomics
- Fundamentals of Microeconomics

Optional Classes (six to be chosen)
- Behavioural Finance
- Security Analysis
- Portfolio Theory and Management
- Risk Management for Banks
- Financial Econometrics
- Financial Stochastic Processes
- Quantitative Risk Analysis
- Quantitative Business Analysis
- Risk Analysis and Managment

Research Project
Students also undertake an individual research project which may involve working with one of our industrial collaborators. An industry-based project can be based in the UK or abroad and may take the form of a paid internship.

COURSE DURATION

MSc: 12 months full-time

ENTRY REQUIREMENTS

Second-class Honours degree, or international equivalent in engineering, physics, chemistry, computing science, business studies, accounting, economics. Applications are also welcome from those with appropriate professional qualifications or those who can demonstrate relevant practical experience.

Applied Statistics

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Conversion course for those with a background in a broad range of disciplines

Gain skills in problem-solving, big data and use of statistical software packages

Learn to interpret and report the result from data analyses

COURSE STRUCTURE

Train as an applied statistician without previously having studied statistics. This course is taught by academics who also work for the Government and the National Health Service.

Compulsory Classes
- Foundations of Probability and Statistics
- Data Analytics in R
- Applied Statistical Modelling

Optional Classes
- Quantitative Risk Analysis
- Survey Design and Analysis
- Bayesian Spatial Statistics
- Effective Statistical Consultancy
- Financial Econometrics
- Financial Stochastic Processes
- Business Analytics
- Risk Analysis and Management
- Optimisation for Analytics

Research Project
You undertake a research project in which you will work on a real-life data set, putting the theoretical skills you have learned into practice.

COURSE DURATION

12 months full-time; part-time study available – contact us to discuss options

ENTRY REQUIREMENTS

Second-class Honours degree, or international equivalent; mathematical training to A Level or equivalent standard.

Applied Statistics in Health Sciences

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Conversion course for those with a background in a broad range of disciplines

Gain skills in problem-solving, big data and use of statistical software packages

Learn to interpret and report the results of data analyses, specifically related to problems in health sciences

COURSE STRUCTURE

The course is run in collaboration with the Animal and Plant Health Agency (APHA), an Executive Agency of the Department for Environment, Food and Rural Affairs. It is taught by academics who also work for the Government and the National Health Service.

Compulsory Classes
- Foundations of Probability and Statistics
- Data Analytics in R
- Applied Statistical Modelling
- Medical Statistics
- Bayesian Spatial Statistics
- Effective Statistical Consultancy
- Quantitative Risk Analysis
- Survey Design and Analysis

Research Project
You undertake a research project in which you will work on a real-life data set, putting the theoretical skills you have learned into practice. It is possible to work with APHA and the National Health Service on one of their policy-driven problems.

COURSE DURATION

12 months full-time (on campus); part-time study is also available on campus, contact us to discuss options.
36 months part-time (online)

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent. mathematical training to A Level, or equivalent standard.

Applications from prospective students with relevant experience or appropriate professional qualifications are also welcome.

Quantitative Finance

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain an understanding of financial theory and analysis, financial markets, numerical methods in finance and programming for financial applications

Designed with input from the finance industry

Opportunity to undertake industry-based project

COURSE STRUCTURE

This cross-faculty programme draws on expert input from three departments – Accounting & Finance, Mathematics & Statistics, and Computer & Information Sciences.

Compulsory Classes
- Foundations of Mathematical and Statistical Finance
- Principles of Finance
- International Financial Markets and Banking
- Big Data Technologies

Optional Classes (one to be chosen from each list)
List A
- Behavioural Finance
- Security Analysis
- Portfolio Theory and Management
- Derivatives and Treasury Management

List B
- Database and Web Systems Development
- Machine Learning for Data Analytics
- Evolutionary Computation for Finance

List C
- Financial Stochastic Processes
- Financial Econometrics
- Networks in Finance

Research Project
Students also undertake an individual research project which may involve working with one of our industrial collaborators.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent, in engineering, physics, chemistry, computing science, business studies, accounting, economics; mathematical training to A Level or equivalent standard. Applications are also welcome from those with appropriate professional qualifications, or those who can demonstrate relevant practical experience.

“Being able to apply statistics to real-life scenarios particularly caught my attention as I really enjoyed applying my knowledge and skills to real-world problems, based on past experiences but in a biological context. The modules also appeared to be well balanced in regards to theoretical and practical elements of the learning process and this was highlighted by my current employer (a leading global Clinical Research Organisation).”

Glenn McCreadie, MSc
Applied Statistics graduate

Department of Physics

RESEARCH DEGREES

MRes, MPhil, PhD
Centre for Doctoral Training in Diamond Science and Technology

Contact for Research Degrees

t: +44 (0)141 548 4134
e: pgstudies@phys.strath.ac.uk

TAUGHT COURSES

Advanced Physics
Applied Physics
Nanoscience
Optical Technologies

Contact for Taught Courses

t: +44 (0)141 548 3623/+44 (0)141 574 5147
e: science-masters@strath.ac.uk

The Department is engaged with exciting projects at the forefront of Physics research, from teasing out the fundamental properties of the Universe to spearheading market-driven device-oriented interdisciplinary projects. Based on the REF 2014 GPA scores, the Times Higher Education ranked Strathclyde as number one in the UK for Physics research.

We are developing disruptive technologies from basic physics that have the potential to revolutionise healthcare in the future, or solve the energy crisis. Many of our researchers have received national and international recognition of their contributions to science.

Recent major developments include the establishment of, and leading role for the Department in an international Max Planck Partnership in Measurement at the Quantum Limit, and the first UK Fraunhofer Research Centre, the Centre for Applied Photonics.

The Department is a member of SUPA (the Scottish Universities Physics Alliance), a research collaborative initiative across Scottish Physics departments and a pan-Scotland Graduate School in Physics. It is also involved in the SULSA, SINAPSE and MASTS research pooling initiatives and is a partner in the Cockcroft Institute of Accelerator Science and Technology.

The Department is also a major player in the recent UK initiative to exploit quantum technologies. It is the only Department in the UK to be involved in all four of the Quantum Hubs that were established in 2015 and renewed in 2019. In addition, the Department is playing a key role in the management of the scientific direction of the National Physical Laboratory (NPL), a world-renowned body for physical standards.

Research Divisions

Nanoscience

The Nanoscience division reflects the broad range of scientific areas in which nanotechnology is destined to make an impact on our lives. The division comprises:

- Biomolecular and Chemical Physics Group – researchers are interested in the building blocks of life such as molecules, proteins, nanoparticles or microorganisms, which have relevance from the molecular basis of health to life in the sea as well as super-resolution and nonlinear microscopy
- Semiconductor Spectroscopy and Devices Group – combines studies of optical processes in advanced semiconductor materials and the realisation of practical optoelectronic devices

Optics

The Optics division concentrates on quantum optics, both experimental and theoretical, and the expertise that has been attracted to the division is being used to form both international and UK-wide research links through the Max Planck Partnerships, the Quantum Hubs and the University's management of NPL. Central to this is our work in the understanding and exploitation of the foundations of quantum optics. The division includes a theoretical research group – Computational Nonlinear and Quantum Optics, and an experimental group – Experimental Quantum Optics and Photonics:

- Computational Nonlinear and Quantum Optics – investigates problems associated with the fundamentals of light-matter interactions, many-body physics, simulations of nonlinear optical devices, non-equilibrium dynamics of quantum gases
- Experimental Quantum Optics and Photonics – researchers explore the entire research field from the fundamental interactions of single atoms and photons, through to applied research in spectroscopy and application of our techniques to new quantum technologies

Plasmas

The Plasmas division is the largest centre for plasma physics research in Scotland. It is the location for the Scottish Centre for the Application of Plasma-based Accelerators and was a partner in the EPSRC Centre for Doctoral Training in Next Generation Accelerators.
The Plasmas division comprises:

- Atoms, Beams and Plasmas Group – research is broadly based on free electron physics, accelerator science, plasma physics and atomic and molecular spectroscopy; current topics include free electron physics, particle accelerator technology, plasma physics, atomic and molecular spectroscopy
- Strathclyde Intense Laser Interaction Studies Group – investigates radiation-beam-plasma interactions at large field intensities for the production of high-energy particle beams (electrons, protons, ions) and high brightness radiation pulses (X-rays, gamma-rays, THz)

Institute of Photonics

The Institute's key objective is to bridge the gap between academic research and industrial application and development through excellence in commercially-relevant research and its exploitation. It is closely linked to the recently-established UK Fraunhofer Research Centre for Applied Photonics. We seek to establish ongoing relationships with companies, providing research capabilities which both complement and supplement their internal research activities. Current research themes are:

- laser and LED sources
- solid-state lasers
- diamond Raman lasers
- VECSELs
- microLED and nanoLED arrays
- hybrid organic-inorganic photonics
- optogenetics and biophotonics

We are a research-intensive unit and postgraduate student training is one of our core activities. As a result of the multidisciplinary nature of photonics, many of our students are jointly supervised with academic colleagues from other departments, such as Pure and Applied Chemistry or Biomedical Engineering. The Institute provides a friendly and supportive environment for a large number of postgraduate students.

Advanced Physics

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Focus on topics such as theoretical physics, quantum information, plasma physics and solid state physics

Choose taught elements relevant to your career interests

Gain transferable, problem-solving and numeracy skills

Opportunity to choose classes relevant to your interests

COURSE STRUCTURE

Compulsory Class

- Research Skills

Optional Classes

- Introductory Nanoscience
- Advanced Nanoscience 1 & 2: Imaging and Microscopy/Solid State Nanoscience
- Topics in Photonics: Laser and Nonlinear Optics
- Advanced Topics in Quantum Optics
- Experimental Quantum and Atom Optics
- Advanced Topics in Photonics: Ultrafast Physics and Plasmas
- Photonics Materials and Devices
- Advanced Photonics Devices
- Theoretical Quantum Information
- Quantum Optics, Nonlinearity and Open Quantum Systems
- Advanced Topics In Theoretical Physics
- Advanced Topics In Electromagnetism and Plasma Physics

Research Project
Students also undertake an individual research project.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent, in physics or a related subject.

Other qualifications, including industrial experience, may be considered.

Applied Physics

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Acquire knowledge of the techniques, practices and theoretical background within applied physics and its interdisciplinary applications

Specialise in subjects such as microwave technology, laser-based acceleration and applied solid-state physics

COURSE STRUCTURE

Compulsory Class
Research Skills

Optional Classes

- Introductory Nanoscience
- Advanced Nanoscience 1 & 2: Imaging and Microscopy/Solid State Nanoscience
- Topics in Photonics: Laser and Nonlinear Optics
- Optical Design
- Experimental Quantum and Atom Optics
- Advanced Topics in Photonics: Ultrafast Physics and Plasmas
- Photonics Materials and Devices
- Advanced Photonics Devices
- Quantum Optics, Nonlinearity and Open Quantum Systems
- Advanced Topics In Electromagnetism and Plasma Physics

Research Project
Students with interest in an industrial placement and appropriate qualification will be supported to find a internship at one of our industrial partners to work on their project in an industrial R&D environment.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent, in physics or a related subject.

Other qualifications, including industrial experience, may be considered.

“I’ve had the support of my supervisor from the day I decided to change career and start doing research in physics. The research community starts with your supervisor and colleagues and grows to include other groups in the department.

We also collaborate with some of the best research groups in the field of quantum optics, and enjoy events with people from all over the world.”

Araceli Venegas-Gomez, from Spain
Physics PhD Student

Nanoscience

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Master state-of-the-art research and methods in nanoscience in a course which combines elements of physics and chemistry

Become equipped for a research-based career in industry or to progress to a PhD

COURSE STRUCTURE

Compulsory Classes
- Research Skills
- Conversion Course
- Introductory Nanoscience
- Advanced Nanoscience 1; Imaging and Microscopy
- Advanced Nanoscience 2: Solid State Nanoscience
- Advanced Nanoscience 3: Chemical and Biomedical Nanoscience

Research Project
Students undertake a research-intensive project in a relevant nanoscience topic. Projects take place primarily in research labs associated with nanoscience located in the University's physical science departments; there may also be opportunities for relevant industrial placements.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent, in physics, chemistry or a related subject.

Other qualifications, including industrial experience, may be considered.

Optical Technologies

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain hands-on experimental research experience using modern instrumentation

Suitable for those with a science or engineering background wanting to gain a vocational degree

Establish a foundation for an optics-related PhD

COURSE STRUCTURE

Compulsory Class
- Research Skills

Optional Classes
- Introductory Nanoscience
- Topics in Photonics: Laser and Nonlinear Optics
- Optical Design
- Experimental Quantum and Atom Optics
- Advanced Topics in Photonics: Ultrafast Physics and Plasmas
- Advanced Topics in Quantum Optics
- Photonics Materials and Devices
- Advanced Photonics Devices
- Theoretical Quantum Information
- Quantum Optics, Nonlinearity and Open Quantum Systems
- Optical Communication (Photonic Systems)

Research Project
Students with interest in an industrial placement and appropriate qualification will be supported to find a internship at one of our industrial partners to work on their project in an industrial R&D environment.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent, in physics or a related subject.

Other qualifications, including industrial experience, may be considered.

Department of Pure and Applied Chemistry

RESEARCH DEGREES

MPhil, PhD

Contact for Research Degrees
t: +44 (0)141 548 2672
e: pg-application.chemistry@strath.ac.uk

TAUGHT COURSES

Forensic Science

Contact for Taught Courses
t: +44 (0)141 548 3623/+44 (0)141 574 5147
e: science-masters@strath.ac.uk

Our Research
The Department of Pure and Applied Chemistry is one of the largest chemistry research schools in the UK. Our research spans a very wide range of topics from analytical chemistry to materials science and from biological chemistry to theoretical chemistry. Research is well supported by industry, government, research councils, the EU and charitable foundations. We are part of WestCHEM, the joint research school of the University of Strathclyde and the University of Glasgow, with whom we work on many areas of chemistry research.

Research Areas
You can study for a PhD or MPhil in any of our key research areas:

Bionanotechnology and Analytical Chemistry
Research in Bionanotechnology and Analytical Chemistry is broad-ranging. Our bionanotechnology research is focused on the application of nanoscience to solve biological problems most notably with applications in healthcare. There is significant critical mass in the study and the application of surface enhanced Raman scattering and functionalisation of nanoparticles to create new clinical diagnostics. We have expertise in imaging, plasmonic sensors, the use of infrared spectroscopy for clinical diagnostics, the development of peptides as biological mimics and the application of new chemiluminescence approaches to biological measurements. Our analytical research is focussed on process analytical chemistry, environmental chemistry, and conservation science. Atomic and molecular spectrometry, chemometrics, chromatography, materials analysis and optical spectroscopies are used extensively in the development of these areas. Our specific skills lie in accurate analytical measurement of molecules, developing new instrumentation and techniques, development of bioanalytical assays and chemical reagents for use in rapid and highly sensitive detection approaches.

Catalysis and Synthesis
Our projects include the design of new reactions and mechanistic studies, the synthesis of complex natural products, metal-free reagents and metal-based transformations, and the emerging area of synergistic bimetallic chemistry. We have strong international links and partnerships with more than 25 companies, including GlaxoSmithKline (GSK), Merck and Huntsman.

Chemical Biology and Medicinal Chemistry
Research in chemical biology and medicinal chemistry encompasses a broad spectrum of interests from the delivery of chemical tools to underpin and advance basic biology to the application of knowledge in drug discovery. Our links with Strathclyde Institute of Pharmacy and Biomedical Sciences have developed our outstanding track record in innovation and delivery at all stages of the drug discovery pipeline. Molecular and biological sciences are fully integrated with the medical and veterinary science across several institutions in Glasgow including The University of Strathclyde, the University of Glasgow and the Beatson Institute for Cancer Research.

Materials and Computational Chemistry

The Materials and Computational Research group covers a diverse range of interests with an emphasis on applied, multidisciplinary projects. The group has a strong track record of working with industry in areas such as energy, lighting, displays, polymer science, bionanotechnology, biophysical chemistry, sensors and the food industry. The activities of the section encompass inorganic and organic synthetic chemistry for the development of functional materials and devices. The work is complemented by substantial characterisation facilities and pioneering research into structure-property relationships.

Centre for Forensic Science

The Centre for Forensic Science (CFS) is internationally recognised as a centre of excellence in forensic science education, research, policy and practice. In addition to undergraduate and postgraduate education, the Centre has provided training in forensic science to the police and scientists worldwide.

The Centre is a recognised leader in research in forensic science and works in close collaboration with partners in operational forensic science laboratories. CFS members have published extensively in peer-reviewed journals in the forensic science domain.

Research within the Centre has an emphasis on the development of techniques for solving current and future forensic science-related problems with an end-user operational focus. The biology-based research includes aspects of DNA analysis including recovery and analysis of degraded DNA, and the use of RNA and DNA to explore aspects of body fluid identification and ageing.

Further research strengths include the application of novel electrochemical methods to samples of forensic science relevance, and the development of policy relating to the effective use of forensic science and the interface of science and law. This encompasses the social and legal aspects of forensic science and the effective use of forensic science in major and volume crime.

Forensic Science

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Longest running MSc Forensic Science course in the UK

Accredited by the Chartered Society of Forensic Sciences

Strathclyde ranked no 1 for Forensic Science in the UK in the Complete University Guide 2021

Participate in a major practical crime scene and courtroom exercise

Input by forensic practitioners and professional scientists

COURSE STRUCTURE

Semester 1
The first semester covers core aspects of forensic science including:

- crime scene investigation
- legal procedures and the law
- interpretation and statistical evaluation of evidence
- forensic analysis of a range of biological and chemical evidence types

Semester 2
You can choose to specialise in either forensic biology or forensic chemistry, studying a range of topics including:

Forensic Biology
- investigation of assaults and sexual offences
- biological trace evidence
- DNA profiling

Forensic Chemistry
- analysis of fires and explosives
- drugs of abuse
- alcohol and toxicology

MSc Project
The three-month project may be undertaken in the university research laboratories. There are also opportunities for some students to be based externally at a forensic science laboratory, in a company or at another university, in the UK or overseas.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent, in a relevant science subject such as chemistry, biology, biochemistry, pharmacy, zoology or botany. Candidates with operational experience are also welcome to apply.

**“the best thing about life at the University of Strathclyde is the facilities and techniques that I have been exposed to. I also particularly love the teacher-student relationship as the instructors are always eager to listen and guide.
The friends that I have made, have been awesome as well.”**

Akinpelu Oyewumi,
MSc Forensic Science

Strathclyde Institute of Pharmacy & Biomedical Sciences

RESEARCH DEGREES

PhD, MPhil, MRes, DPharm

Contact for Research Degrees

t: +44 (0)141 548 2135
e: sipbs-postgrad@strath.ac.uk

TAUGHT COURSES

Advanced Biochemistry/Immunology/Pharmacology
Advanced Clinical Pharmacy Practice
Advanced Drug Delivery
Advanced Pharmaceutical Manufacturing
Biomedical Sciences
Cancer Therapies
Clinical Pharmacy
Industrial Biotechnology
Molecular Microbiology
Neuroscience & Mental Health
Pharmaceutical Analysis

Contact for Taught Courses

t: +44 (0)141 548 3623/+44 (0)141 574 5147
e: science-masters@strath.ac.uk

The Strathclyde Institute of Pharmacy and Biomedical Sciences (SIPBS) is a major research centre with a focus on three principal areas - Biomedical Sciences, Pharmaceutical Sciences and Pharmacy. Our research uses modern biological, chemical and informatics technologies to inform on fundamental biological process relevant to health and disease. We integrate biological sciences, medicinal chemistry, pharmaceutical sciences and pharmacy practice to develop new and better medicines which enhance human health and wellbeing. This basic science approach underpins translational research related to clinical practice and industry engagement.

SIPBS is supported by major grant funding from many sources. All our postgraduate programmes are fully embedded in the Institute giving our students excellent access to world-class research and teaching. The education and training in SIPBS provides students with a wide range of skills and knowledge for careers in academia, the pharmaceutical industry, Health Service research and biotechnology enterprises.
The Institute houses and interfaces with the following:

- The Industrial Biotechnology Innovation Centre (IBioIC)
- CMAC – EPSRC Centre for Innovative Manufacturing in Continuous Manufacturing and Crystallisation
- The Cancer Research UK Formulation Unit
- Scottish Government Cancer Medicines Outcomes Programme
- Health Data Research UK @ Strathclyde Programme
- Scottish Centre for the Application of Plasma-based Accelerators (SCAPA)

Research Areas

Research is focused around our Institute strap-line of 'New Medicines, Better Medicines and Better Use of Medicines' and is undertaken in our four research groups:

Cellular and Molecular Basis of Disease

We focus on understanding the fundamental processes involved in biological systems including normal health and how this changes in disease. Determining how the body functions under both physiological and pathophysiological conditions further enhances our understanding of disease conditions. This helps us to identify potential novel therapeutic targets that can be probed using available in vitro and in vivo techniques.

We look for new disease targets and, therefore, potential new therapies, using a combination of molecular and cell biology techniques. In collaboration, we use medicinal chemistry, chemical biology, radiobiology and regenerative therapeutic approaches to improve treatment of disease and to develop research tools to increase understanding of disease mechanisms.

Our research incorporates a broad range of activities in cancer, cardiovascular disease, inflammatory disease, neurodegenerative disease, neuroscience, parasitology and rare conditions that can be investigated through multiple target pathways in humans.

Microbiology and Industrial Biotechnology

The group focuses on several research areas in microbiology and Industrial Biotechnology.

Drug Discovery

- Exploring the boundaries of specialised metabolites for targeted drug discovery
- Exploring the boundaries of specialised discovery
- Understanding microbial interactions for informed bioprospecting
- Understanding replication of specialised metabolite-producing actinobacteria
- Minor groove binding antibiotics

Microbial Biochemistry

- Bacterial membrane transporter characterisation in Escherichia coli
- Drug resistance in Mycobacterium tuberculosis

Microbial Genetics

- Microbial genetics and signalling by bacterial enhancer binding proteins in actinobacteria
- DNA replication and end patching of bacterial linear chromosomes

Microbial Genomics

- Pseudomonas aeruginosa pathogenicity
- Pseudomonas bacteria for drug discovery
- Corynebacterium and Nocardia phylogeny and epidemiology

Industrial Biotechnology

Working with Industry partners from concept to adoption, enabling bio-based growth (www.ibioic.com).

Pharmaceutical Sciences

Through the discovery, development and manufacture of innovative drugs, millions of people's lives are saved and the quality of life for many others are improved. SIPBS Pharmaceutical Sciences research contributes to the development, manufacture and testing of the next generation of medicines that promote the effective delivery and targeting of drugs. Our research builds on expertise in physical and material science, pharmaceutical technology, and formulation and advanced processing to translate new and existing chemical entities into safe, effective and high quality medicines.

The mission of the Drug Discovery, Formulation and Delivery team is to push traditional boundaries in pharmaceutical sciences. We have a broad spectrum of expertise including, but not limited to advanced drug delivery technologies (e.g. nanomedicines), routes of administration (e.g. oral, ocular, lung, intravenous), therapeutic targets (tumour, immune system), chemistry (novel drugs, surface functionalisation) and natural products (lead compounds).

The Materials & Manufacture research team has expertise in crystallisation & particle formation, materials characterisation & formulation design, process monitoring & control, as well as digital manufacturing. We also research and develop novel materials and devices for medicines delivery. Our researchers have international academic/clinical/industry/patient collaborations.

Pharmacoepidemiology and Health Care Research

Within this theme, our aim is to maximise the use of Scotland's rich health informatics datasets, including the new individual-level prescribing dataset, to support stratified medicine approaches and investigate the impact of interventions on public health. The programme focuses on medicine adherence, clinical outcomes, and toxicities in real-world clinical practice.

We lead the Farr Institute pharmacoepidemiology programme. This focuses on cardiovascular and immunological therapies and we have complementary programmes in respiratory disease, cancer and infection.

Doctor of Pharmacy

DPharm

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Undertake the programme at your place of work

Gain the skills to undertake research within the NHS

Suitable for practising pharmacists in hospital clinical and community practice, and technical services

Link your research to your role as a pharmacist

COURSE STRUCTURE

You take taught classes in the first year of the programme. The remainder of the time is spent on a research project in your area of practice.

Compulsory Classes
- Clinical Skills
- Research Skills
- Literature Review

COURSE DURATION

36 months full-time; 48 months part-time

ENTRY REQUIREMENTS

First- or second-class Honours degree in Pharmacy, or overseas equivalent. For recent Pharmacy graduates, this will be the degree of MPharm with merit or distinction. Applications will also be considered from candidates holding other qualifications.

Candidates are normally required to be registered with the General Pharmaceutical Council as a pharmacist in the UK; or with the relevant professional body in the EU (including EEA countries); or may be registered as a pharmacist in a country outside the EU.

All candidates must have identified and secured an area of practice in which to conduct their research prior to applying.

For students with appropriate qualifications and experience, credit for prior learning may be awarded. Applicants who think that they may be suitable for this should contact the Institute.

Master by Research Programmes

MRes

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain laboratory-based training in research methods

Contribute to research-oriented activities in the biomedical industries, the health sector or academia

Develop skills in discipline-specific research, statistics, ethics and communication

COURSE STRUCTURE

The programme is mainly focused on research. You will spend approximately two-thirds of your time undertaking a laboratory-based research project, supervised by an academic member of staff, in one of the following areas:

- Biomedical Sciences
- Microbiology
- Immunology
- Pharmacology
- Biochemistry

Compulsory Classes
- Generic Biomedical and Pharmaceutical Research Skills

Optional Classes
- Advanced Techniques in Biomedical Research I (practical)
- Advanced Techniques in Biomedical Research II (practical)
- Advanced Techniques in “In vivo” Biology (practical)
- Postgraduate Studies in one of Microbiology/ Immunology/Pharmacology/Biochemistry/ Pathology

Research Project
Your research project (which takes approximately two-thirds of your time) is assessed through a written thesis

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent, in a biology/chemistry-related subject. Other qualifications may also be considered.

Advanced Biochemistry/ Immunology/ Pharmacology

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Specialise in one of three fundamental research areas

Develop a range of current and relevant laboratory skills

Benefit from teaching by active researchers and practising clinical professionals

Gain in-depth understanding of the life sciences

COURSE STRUCTURE

Compulsory Classes
- Generic Biomedical and Pharmaceutical Research Skills
- Entrepreneurship
- Postgraduate Studies in Advanced Biochemistry/ Advanced Immunology/Advanced Pharmacology
- Advanced Topics in Biomedical Research
- Advanced Techniques in Biomedical Research

Optional Classes
- *In Vivo* Biology
- Drug Discovery
- Postgraduate Studies in Haematology
- Postgraduate Studies in Clinical Biochemistry/ Clinical Immunology/ Clinical Pharmacology
- Postgraduate Studies in Applied Biochemistry/ Applied Immunology/Applied Pharmacology

Research Project
In addition, students undertake a 10-week research project which is assessed through a written thesis.

COURSE DURATION

12 months full-time, 24 months part-time

ENTRY REQUIREMENTS

Second-class Honours degree, or equivalent, in a biological or chemical discipline.

Advanced Clinical Pharmacy Practice

MSc/PgDip/PgCert

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Choose classes that address specific practice and personal development needs

The Independent Prescribing qualification is included as an optional element in the course

Study in a small peer-group learning environment

COURSE STRUCTURE

Classes are chosen from within the following themes:

Therapeutics Toolkit
- Advanced Clinical Assessment and Consultation Skills
- Advanced Therapeutics and Health Innovation

Health Service Quality Improvement Toolkit
- Pharmacist Independent Prescribing
- Clinical Service Development
- Quality Improvement Methodology

Research Toolkit
- Research Skills
- Research Project

The Independent Prescribing (IP) qualification is included in the course as an optional class; practitioners who have already completed the IP qualification will receive 30 credits for prior learning and the requirements for each award will be reduced correspondingly.

COURSE DURATION

A maximum of five years is allowed from the point of first registration to complete the award of an MSc.

ENTRY REQUIREMENTS

A degree in Pharmacy from a UK university or an equivalent qualification, and registration with the General Pharmaceutical Council.

Advanced Drug Delivery

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop understanding of the biology of specific targets for drug-based intervention

Learn about and apply the principles of design and formulation of drug dosage systems

Gain specialist research skills and practical experience

COURSE STRUCTURE

Compulsory Classes

- Generic Biomedical and Pharmaceutical Research Skills
- Pharmaceutical Formulation and Clinical Pharmaceutics
- Chemical Analysis: Principles Applications and Methods
- Pharmaceutical Project Management and Digital Design
- Novel Therapeutics and Biopharmaceuticals
- Advanced Topics in Drug Delivery

Research Project
In addition, students undertake a 10-week research project which is assessed through a written thesis.

COURSE DURATION

12 months full-time, 24 months part-time

ENTRY REQUIREMENTS

Second-class Honours degree, or equivalent, in a biological or chemical discipline.

Advanced Pharmaceutical Manufacturing

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

You will be equipped to take up jobs in the food, chemical and pharmaceutical industries

Undertake a 10-week research project

Learn about key aspects of manufacturing approaches for pharmaceuticals and high-value chemicals including pharmaceutical development and production, continuous manufacturing processes, crystallisation mechanisms, manufacturing processes as they relate to the modern pharmaceutical industry, transferable and professional skills

COURSE STRUCTURE

Compulsory Classes

- Process Analytical Technology and Quality by Design in Manufacturing
- Generic Skills for Biomedical and Pharmaceutical Students
- Principles of Pharmaceutics
- Drug Substance Manufacture: Industrial Crystallisation
- Drug Product Manufacture
- Pharmaceutical Project Management and Digital Design

Research Project
In addition, students undertake a 10-week research project, either at the University or at an external company or organisation, and which is assessed through a written thesis.

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent, in science or engineering.

Biomedical Sciences

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Opportunity to select a clinically-oriented or basic life science research pathway

Develop skills in statistics, communication, ethics, science writing and experimental data analysis

Gain experience in the research funding process

COURSE STRUCTURE

Compulsory Classes

- Generic Biomedical and Pharmaceutical Research Skills
- Entrepreneurship
- Advanced Techniques in Biomedical Research
- Advanced Topics in Biomedical Research

Optional Classes

- *In Vivo* Biology (practical class)
- Drug Discovery (practical class)
- Postgraduate Studies in Pathology
- Postgraduate Studies in Haematology
- Postgraduate Studies in Clinical Biochemistry/ Clinical Immunology/Clinical Microbiology

Research Project
In addition, students undertake a 10-week research project which is assessed through a written thesis.

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent, in a biological or chemical discipline.

Cancer Therapies

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Focus on anti-cancer treatment therapies, with a particular emphasis on personalised medicine

Gain the skills to contribute to the global drive to advance cancer treatment

Learn about cancer drug discovery development

COURSE STRUCTURE

Compulsory Classes

- Generic Biomedical and Pharmaceutical Research Skills
- Entrepreneurship
- Advanced Techniques in Biomedical Research
- Development and Design of Anti-Cancer Drugs
- Targeted Cancer Therapies for Personalised Medicine
- Radiobiology and Radiation Oncology: from beam to bedside
- Drug Discovery and Development in Cancer
- Scientific Writing

Research Project
In addition, students undertake a 10-week research project which is assessed through a written thesis.

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent in science or a health-related subject.

Clinical Pharmacy

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Teaching is mostly by GPhC-registered pharmacists

Students are exposed to a variety of clinical practice including community/primary care

Benefit from advanced training to become a safer and more effective practitioner of pharmaceutical care

COURSE STRUCTURE

Semester 1
Classes introduce key concepts and skills associated with the delivery of clinical pharmaceutical care, including pharmaceutical care planning, communication skills, the role of evidence-based practice and clinical research.

Semester 2
Classes focus on specific areas of clinical therapeutics with a focus on polypharmacy, medicine reconciliation and the application of clinical guidelines to clinically manage patients with multiple or complex morbidities.

Research Project
In addition, students undertake a 10-week individual research project investigating a specific clinical topic. Project output will be written in the format of a clinical research paper.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

MPharm or an overseas equivalent of a degree in Pharmacy at the same academic level. Minimum 12 months of clinical experience post-qualification as a practising pharmacist.

Industrial Biotechnology

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

The course is designed to respond to industry needs and is at the forefront of developments in biotechnology

Undertake a 10-week placement and research project

Benefit from the expertise of staff from academic institutions across Scotland and industry partners

COURSE STRUCTURE

Compulsory Classes
- Bioprocessing (Strathclyde)
- Applied Biocatalysis (Strathclyde)
- Synthetic Biology (Glasgow)
- Big Data Fundamentals (Strathclyde)
- Introduction to Bioinformatics for Life Scientists (Edinburgh)
- Downstream Processing (Heriot Watt)

Optional Classes
- Analysis and Shaping of the Bioeconomy (Innogen)
- Blue Biotechnology (SAMS)
- Renewable Energy Technologies (Abertay)
- Project Management (Strathclyde)
- Circular Economy and Transformations Towards Sustainability (Strathclyde)
- Understanding the Regulatory Environment of Bioprocessing Industries (GCU)
- Food Commodities and Sustainability (GCU)
- Food Microbiology and Biotechnology (GCU)

Research Project
In addition, students undertake a 10-week placement, typically hosted in one of our industry partners, working on an industrially-relevant project on which they write and present a formal report.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Upper second-class Honours degree, or overseas equivalent, in biology, biotechnology, chemistry, chemical engineering or a related subject.

Other qualifications and industrial experience may be considered.

Molecular Microbiology

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop knowledge and skills in areas such as genomics, molecular genetics and synthetic biology

Gain transferable skills in statistics, communication, ethics, science writing and critical analysis of data

Design experiments and analyse complex datasets

COURSE STRUCTURE

Compulsory Classes
- Generic Biomedical and Pharmaceutical Research Skills
- Entrepreneurship
- Postgraduate Studies in Microbiology
- Advanced Microbiology
- Advanced Topics in Biomedical Research
- Advanced Techniques in Biomedical Research

Optional Classes
- *In Vivo* Biology
- Drug Discovery
- Postgraduate Studies in Clinical Microbiology
- Postgraduate Studies in Applied Microbiology

Research Project
In addition, students undertake a 10-week research project which is assessed through a written thesis.

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Second-class Honours degree, or equivalent, in a biological or chemical discipline.

Pharmaceutical Analysis

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain skills in the analytical techniques used to detect, identify and quantify drugs and related substances

Examine strategies for analytical research and development

Gain experience in instrumentation and techniques

COURSE STRUCTURE

Compulsory Classes
- Chemical Analysis: Principles Applications and Methods
- Spectroscopy: Principles, Application and Methods
- Chromatography: Principles, Application and Method Development
- Bioanalysis, Biotechnology and Quality Management
- Chromatographic and Bioanalytical Methods
- Generic Biomedical and Pharmaceutical Research Skills

Research Project
In addition, students undertake a 10-week research project which is assessed through a written thesis.

COURSE DURATION

12 months full-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent, in an appropriate science.

Neuroscience & Mental Health

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain an in-depth understanding of how the nervous system works from molecules to cells to functional networks to high-order cognition

Appreciate the range of diseases and disorders that affect the nervous system, how we can research them and develop new treatments

Develop skills and awareness of in vitro and in vivo models, experimental design, bio-statistics, communication, ethics, science writing and data analysis

COURSE STRUCTURE

Compulsory Classes

- Core Neuroscience
- Functions of the Nervous System
- Disorders of the Nervous System
- Generic Biomedical and Pharmaceutical Research Skills
- Entrepreneurship
- Advanced Techniques in In Vivo Biology (practical class)
- Advanced Topics in Biomedical Research
- Advanced Techniques in Biomedical Research (practical class)

Research Project
In addition, students undertake a 10-week research project which is assessed through a written thesis.

COURSE DURATION

12 months **full**-time; 24 months part-time

ENTRY REQUIREMENTS

Second-class Honours degree, or overseas equivalent, in a biological or health-related discipline.

Strathclyde has the resources, facilities and most importantly, the environment where I can thrive and develop as a professional in the pharmaceutical industry."

Kylie Ang She Tou,
MSc Advanced Pharmaceutical Manufacturing

Strathclyde Business School

Founded in 1948, Strathclyde Business School is an enterprising and pioneering organisation within a leading international technological university.

AACSB ACCREDITED

EQUIS ACCREDITED

ASSOCIATION OF MBAS ACCREDITED

Strathclyde Business School has held triple accreditation from the three main business school accreditation bodies – AMBA, EQUIS and AACSB – since 2004. We were the first business school in Scotland to achieve triple accreditation.

We have a reputation for research excellence. We develop theory-led, policy-relevant research through collaboration with industry, government, business and the third sector. Our industry-facing research centres of excellence, which work with industry partners, include the Fraser of Allander Institute, the Scottish Centre for Employment Research, the Strathclyde Institute for Operations Management and the Centre for Financial Regulation and Innovation. Based on the REF (Research Excellence Framework) 2014 GPA scores, the Times Higher Education ranked us No 1 in Scotland and in the top 10 business schools in the UK for our research.

Our departments and programmes hold internationally-recognised industry accreditations. Our departments are accredited by expert professional bodies such as CIMA, ICAS and CIPD.

Strathclyde is also the first business school in Scotland to be awarded the Small Business Charter Award. This award recognises our world-leading support for scaling Scottish firms through innovation, internationalism and leadership.

Strathclyde Business School is a signatory of the UN's Principles for Responsible Management Education. This commits us to supporting the transformation of management education, research and thought leadership by developing learning communities and promoting awareness of the UN's Sustainable Development Goals.

Contact
SBS Student Recruitment and Marketing Unit
t: +44 (0)141 553 6116/6105/6117
e: sbs.admissions@strath.ac.uk

Research Degrees

RESEARCH DEGREES

MRes, MPhil, PhD, DBA

Research degrees (MRes, MPhil and PhD) are offered in all of our academic departments, so departmental sections outline key research themes.

PhD

A PhD is both a training ground for future researchers and a process intended to produce a coherent and well-reasoned contribution to knowledge in a particular discipline or field of inquiry. As such, you should expect it will take you to the limits of your current knowledge and beyond, into uncertain, and potentially challenging new territory.

Your PhD study includes some taught elements. At Strathclyde Business School we offer a Postgraduate Certificate in Research Methodology for Business and Management, which includes a minimum of 60 credits of research training.

Researcher development support

In addition, you are encouraged to access various other training and development opportunities such as those offered by the Strathclyde Researcher Development Programme. Each department in the School also offers its own programme of researcher development, including support for attendance at relevant conferences.

PhD candidates work independently, but with guidance from supervisors who have expertise in knowledge domains relevant to your programme of study. Two or more supervisors are appointed by the University and are responsible for establishing regular contact and keeping you informed about requirements for progress and completion of the PhD degree. At least one supervisor will be an academic member of staff in the Business School. Supervisors normally operate as a team, providing guidance about the nature of research and the standards expected.

PhDs are examined by a 'viva voce' a face-to-face examination where an external examiner, appointed by the University, alongside an internal examiner from Strathclyde will question you on the research undertaken.

The minimum period of study for full-time PhD candidates is normally 36 months (P/T 48 months), during which you are expected to be working on their research for at least 35 hours per week except for reasonable periods of holiday, which should be agreed in advance with supervisors.

Master of Philosophy (MPhil)

The Master of Philosophy (MPhil)* degree is a Masters degree by research. Like the PhD you would have two supervisors nominated by the University and would undertake some Research Methods training. The minimum study period for MPhil is 12 months.

Doctor of Business Administration (DBA)

The Doctor of Business Administration (DBA) is a research degree designed to develop business professionals skilled in solving business problems. Your focus will be on applying academic theories, methods and models to solve problems of practice. Research projects undertaken during the DBA programme aim to understand and explore how organisations work and how management is practised.

- learn how to analyse complex situations and problems
- acquire skills in conceptual and reflexive thinking
- develop knowledge of the design, implementation and monitoring of research interventions

Research Methodology in Business & Management (MRes)

The Research Methodology in Business & Management* provides research training that corresponds with research education guidelines set by the Economic and Social Research Council and the Engineering and Physical Sciences Research Council. It can be taken as a stand-alone qualification or as a foundation course for a PhD in business & management. All registered MPhil and PhD students within Strathclyde Business School must complete the PgCert element as their mandatory 60 credits of research methods training. The minimum study period for MRes is 12 months.

Contact for Research Degrees

e: sbs-pgrsupport@strath.ac.uk

*Scottish and EU students on eligible Research Masters courses are able to apply for the postgraduate tuition fee loan from the Scottish Government of up to £5,500 and the living cost loan support of up to £4,500.

Only free-standing Research Masters will be eligible. Strathclyde students studying an MRes or MPhil would be eligible, but not individuals who are studying these courses as a component of a PhD. Full-time courses must be no longer than two years in duration.

Research Methodology in Business & Management

MRes/PgDip/PgCert

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Suitable as a foundation course for a PhD in business and management

Study full-time or part-time

Choose from classes across the Business School

Research training following ESRC and EPSRC guidelines

COURSE STRUCTURE

Compulsory and Optional Classes

- Research Philosophy
- Research Methods
- Introduction to Quantitative Methods: Survey Design and Analysis
- Advanced Quantitative/Qualitative Methods
- Research Colloquium
- Writing and Presenting Research
- Choice of classes from across the Business School

Masters Dissertation

Masters students submit a dissertation of around 20,000 words.

PROGRAMME DURATION

MRes: 12 months full-time
PgDip: 9 months full-time
PgCert: 4 months full-time

The course is offered on a full-time or part-time basis. Classes run for two to five consecutive days once a month from October to May. Students studying part-time will be able to complete their programme over two academic years.

ENTRY REQUIREMENTS

Masters degree or a first- or upper second-class Honours degree, or overseas equivalent, in business and management.

Contact for Research Degrees

e: sbs-pgrsupport@strath.ac.uk

Department of Accounting & Finance

RESEARCH DEGREES
MRes, MPhil, PhD

Contact for Research Degrees
Accounting: Dr Julia Smith
t: +44 (0)141 548 4958
e: julia.smith@strath.ac.uk

Finance: Dr Chandra Thapa
t: +44 (0)141 548 3891
e: chandra.thapa@strath.ac.uk

TAUGHT COURSES

Finance
International Accounting & Finance
International Banking & Finance
Investment & Finance
Finance & Management
Financial Technology (FinTech)
Economics & Finance (in collaboration with the Department of Economics, see **pg 182**)
Quantitative Finance (in collaboration with the Departments of Mathematics & Statistics and Computer & Information Sciences)

Contact for Taught Courses
SBS Student Recruitment and Marketing Unit
t: +44 (0)141 553 6116/6105/6117
e: sbs.admissions@strath.ac.uk

MSc Finance and MSc Investment & Finance have been accepted into the Chartered Financial Analyst (CFA) Institute University Recognition Program. This status is granted to institutions whose degree programme(s) incorporate at least 70% of the CFA Program Candidate Body of Knowledge (CBOK), and which provide students with a solid grounding in the CBOK and positions them well to sit for the CFA exams.

Research Areas
We cover all areas of accounting and finance, with particular expertise in corporate finance, treasury management, derivative markets, bond markets, portfolio performance, volatility in financial markets, international banking, critical accounting, management accounting, social, environmental and public sector accounting, issues relating to privatisation and regulation of utilities, development finance and small business finance and accounting.

Our research activities are supported by subscription to an extensive set of comprehensive databases, internal workshops, seminar series and financial support for conference participation.

Accounting
Research topics include:

- economic, political and social impact of accounting on our everyday lives
- financial reporting standard for smaller entities
- assessment of environmental risk in the financial sector

Finance
Research topics include:

- investment strategies
- corporate finance
- risk management
- corporate governance
- financial econometrics

Facilities for Research Students
You have access to the Datastream (global economic, financial and accounting data) which includes IBES earnings forecasts, SDC Platinum, Thomson One, Compustat, Execucomp, CRSP (Centre for Research in Securities Pricing), London Business School Share Price Database data and Bloomberg.

ENTRY REQUIREMENTS FOR RESEARCH DEGREES

PhD in Accounting: Honours degree and Masters degree in accounting (or equivalent). Qualified and part-qualified accountants with first degree in social sciences or humanities are also encouraged to apply.
PhD in Finance: Masters degree or equivalent, particularly in finance, economics, accounting or mathematics.

Finance

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Accredited by the Chartered Institute of Management Accountants

Develop understanding of financial theory and analysis

Learn about financial markets and institutions

COURSE STRUCTURE

Compulsory Classes
- Principles of Finance
- Accounting and Financial Analysis
- Quantitative Methods for Finance
- International Financial Markets and Banking
- Advanced Corporate Finance and Applications
- Derivatives and Treasury Management

Optional Classes (two to be chosen)
- Portfolio Theory and Management
- Empirical Methods in Finance
- Behavioural Finance
- Management Accounting
- Financial Modelling for Excel
- Fixed Income Analysis
- Equity Analysis

Two research projects – supported by an academic supervisor, you will work on a series of research projects. Topics can be chosen from the broad range of issues covered on the programme. You will be assessed on your ability to select and apply relevant theory and research methods.

DURATION OF PROGRAMME

MSc: 12 months full-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent, in accounting, economics, business studies or a subject area with a strong quantitative component.

The programme requires no prior knowledge of finance.

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

International Accounting & Finance

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Accredited by the Chartered Institute of Management Accountants

Gain awareness of international accounting standards

Study financial management and securities markets

Learn to apply analytical techniques in practice

COURSE STRUCTURE

Compulsory Classes
- Principles of Finance
- Accounting and Financial Analysis
- Quantitative Methods for Finance
- International Financial Markets and Banking
- Advanced Corporate Finance and Applications
- Advanced Accounting
- Management Accounting

Optional Classes (one to be chosen)
- Portfolio Theory and Management
- Empirical Methods in Finance
- International Accounting
- Financial Modelling for Excel
- Fixed Income Analysis
- Equity Analysis

Two research projects – supported by an academic supervisor, you will work on a series of research projects. Topics can be chosen from the broad range of issues covered on the programme. You will be assessed on your ability to select and apply relevant theory and research methods.

DURATION OF PROGRAMME

MSc: 12 months full-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent, in accounting, economics, business studies, maths, statistics or computing.

International Banking & Finance

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Accredited by the Chartered Institute of Management Accountants

Understand financial theory and analysis

Learn about financial markets and institutions

Use accounting information in financial decision-making

COURSE STRUCTURE

Compulsory Classes
- Principles of Finance
- Accounting and Financial Analysis
- Quantitative Methods for Finance
- International Financial Markets and Banking
- Topics in Corporate Finance
- Financial Management for Banks
- Derivatives and Treasury Management
- Risk Management for Banks

Optional Classes (one to be chosen)
- Portfolio Theory and Management
- Empirical Methods in Finance
- Management Accounting
- Behavioural Finance
- Financial Modelling for Excel
- Fixed Income Analysis
- Equity Analysis

Two research projects – supported by an academic supervisor, you will work on a series of research projects. Topics can be chosen from the broad range of issues covered on the programme. You will be assessed on your ability to select and apply relevant theory and research methods.

DURATION OF PROGRAMME

MSc: 12 months full-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent, in accounting, economics, business studies or a subject area with a strong quantitative component.

The programme requires no prior knowledge of finance or banking.

Investment & Finance

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Accredited by the Chartered Institute of Management Accountants

Gain understanding of derivatives

Learn to develop investment strategies

Understand quantitative analysis used in finance

COURSE STRUCTURE

Compulsory Classes
- Principles of Finance
- Accounting and Financial Analysis
- Quantitative Methods for Finance
- International Financial Markets and Banking
- Topics in Corporate Finance
- Derivatives and Treasury Management
- Portfolio Theory and Management
- Fixed Income Analysis

Optional Classes (one to be chosen)
- Empirical Methods in Finance
- Behavioural Finance
- Financial Modelling for Excel
- Equity Analysis

Two research projects — supported by an academic supervisor, you will work on a series of research projects. Topics can be chosen from the broad range of issues covered on the programme. You will be assessed on your ability to select and apply relevant theory and research methods.

DURATION OF PROGRAMME

MSc: 12 months full-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent, in accounting, economics, business studies or a subject area with a strong quantitative component. Applications are also considered from those with appropriate professional qualifications and relevant practical experience.

Finance & Management

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain knowledge of financial and management principles

Understand how organisations work

Develop technical and analytical skills

Opportunity to study at Toulouse Business School

Undertake a project in each subject area

COURSE STRUCTURE

The programme is offered jointly by the Department of Accounting & Finance and the MBA Unit.

Compulsory Classes
- Principles of Finance
- Accounting and Financial Analysis
- International Financial Markets and Banking
- Professional Management Practice

Optional Classes (minimum of one to be chosen)
Finance
- Behavioural Finance
- Topics in Corporate Finance
- Derivatives
- Fixed Income Analysis
- Equity Analysis

Management (minimum of one to be chosen)
- Global Operations Strategy
- Project Management
- Managing in Europe (at Toulouse Business School, France)
- New Venture Creation
- Brand Management & Strategy
- Blockchain in Technology Services
- Strategic Financial Management
- Service Operations Simulation
- Marketing Management

Masters Project
Students will be required to undertake two research projects, one in Finance and one in Management.

DURATION OF PROGRAMME

12 months full-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent, in economics, accounting, business studies, maths, statistics, computing, related subjects, or an equivalent professional qualification.

Financial Technology (FinTech)

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

- Combine the study of theory with intensive practice and industrial engagement.
- Understanding how the use of technology improves the efficiency of financial transactions
- Opportunity to undertake client-based project

COURSE STRUCTURE

The programme is offered jointly by the Departments of Accounting & Finance and Management Science.

Compulsory Classes
- Principles of Finance
- Programming for Financial Technology
- Quantitative Business Analysis
- Big Data Fundmentals
- Business Analytics
- Business Information Systems
- Risk Management for Banks
- Becoming an Effective Technology Analyst
- Fixed Income Analysis

Optional Classes (choose one from each subject area)
Accounting & Finance
- Portfolio Theory and Management
- Derivatives
- Financial Management for Banks

Management Science
- Stochastic Modelling for Analytics
- Business Simulation Modelling
- Risk Analysis and Management

Computer Science
- Big Data Tools and Techniques
- Fundamentals of Machine Learning for Data Analytics

Masters Project
Students complete a FinTech-focused research project.

DURATION OF PROGRAMME

MSc: 12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent, in accounting, economics, business studies, or a subject area with a strong quantitative component. No prior knowledge of finance required.

Quantitative Finance

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Prepare for a career in financial engineering and risk mangement, hedge fund manager or financial analyst

Understand numerical methods in finance

Study programming for financial applications

Undertake an industrial-based project

COURSE STRUCTURE

This one-year cross-faculty programme draws on expert input from three departments – Accounting & Finance, Mathematics & Statistics, and Computer & Information Sciences

Compulsory Classes
- Foundations of Mathematical and Statistical Finance
- Principles of Finance
- International Financial Markets and Banking
- Big Data Technologies

Optional Classes (one to be chosen from each list)
List A
- Behavioural Finance
- Portfolio Theory and Management
- Derivatives and Treasury Management
- Fixed Income Analysis
- Equity Analysis

List B
- Database and Web Systems Development
- Machine Learning for Data Analytics
- Evolutionary Computation for Finance

List B
- Financial Stochastic Processes
- Financial Econometrics
- Networks in Finance

DURATION OF PROGRAMME

12 months full-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent, in engineering, science subjects (physics, chemistry, computing science), business subjects (business studies, accounting, economics); mathematical training to A Level or equivalent standard.

Applications are also welcome from those with appropriate professional qualifications, or those who can demonstrate relevant practical experience.

Department of Economics

RESEARCH DEGREES

MRes, MPhil, PhD

Contact for Research Degrees
t: +44 (0)141 548 4326
e: pgecon@strath.ac.uk

TAUGHT COURSES

Applied Economics
Economics & Finance (in collaboration with the Department of Accounting & Finance)
Global Energy Management

Contact for Taught Courses
SBS Student Recruitment and Marketing Unit
t: +44 (0)141 553 6116/6105/6117
e: sbs.admissions@strath.ac.uk

The Department, home to the Fraser of Allander Institute (FAI) and Strathclyde's Applied Economics Centre for Doctoral Training (CDT), is one of the leading UK centres for internationally recognised policy and business-relevant economics research. We have a diverse mix of staff, with collaborators throughout the UK and overseas, involved in both fundamental academic research and commissioned projects for businesses and policymakers.

The Department is an active participant in the Scottish Graduate Programme in Economics and the Scottish Graduate School of Social Science. We are members of the Scottish Institute for Research in Economics, and are a founding partner in the Economic Statistics Centre of Excellence for the UK Office for National Statistics (ONS). Our research activity is supported by a diverse range of prestigious funders, including the ESRC, the EPSRC, the Scottish Government, the ONS, the UK Energy Research Centre, and the Scottish Funding Council.

The FAI, for more than 40 years, has been Scotland's authority on economic policy and the Scottish economy. Our students have a variety of opportunities to engage with the FAI, including MSc summer projects with businesses, work placements in the Institute and a vibrant practitioner seminar series.

Through our Applied Economics CDT, we seek appropriately qualified PhD applicants whose proposed research is closely aligned with our focus on applied policy-relevant economics. Our research students are supported to not only achieve excellence in rigorous research but also to reach beyond the confines of academia through collaboration and engagement with stakeholders.

Research Areas

Applied Microeconomics
Our research analyses the market behaviours of consumers and businesses. Research areas include a range of applications in industrial organisation, international trade theory and policy, public economics, health economics, labour economics, and strategic behaviour in markets.

Applied Econometrics
We apply statistical and mathematical theories to economics to test ideas and forecast regional, national and global trends. Research includes big data methods in macroeconomics, multiple imputation methods for cross-country panel data, and a range of applications of time series and spatial econometrics.

Applied Macroeconomics
We examine how economies perform and evolve at national level, with a particular focus on real-world challenges facing policymakers and business. We are engaged in macroeconomic modelling of the UK and Scottish economies, nowcasting the economy, developing new ways of measuring of the modern economy, labour market analysis and macroeconomic policy evaluation.

Energy and Environment
We explore the relationships between economic activity and the environment, recognising their interrelationships. We are engaged in work on economic-environmental accounting and modelling, the economic contribution of energy activities and policies, and the consequences of environmental change.

ENTRY REQUIREMENTS FOR RESEARCH DEGREES

PhD and MPhil – a strong first degree in economics, or a degree in which economics was a major part, and a Masters degree in economics that includes core classes in Microeconomics, Macroeconomics, Econometrics, a range of other relevant classes and a dissertation.

DBA – MBA degree from an AMBA-accredited institution or a Masters degree containing a significant amount of Economics. You will also have a significant amount of work experience as a manager or consultant and we expect you to continue in a senior practice role throughout the programme. Ongoing support from your employer is also required.

Applied Economics

MSc/PgDip/PgCert/Modular
(full-time, part-time)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain skills in data analysis and economic modelling

Learn to apply economic techniques to real-world problems in business and policy

Develop ability to interpret and understand key economic and financial statistics and information

COURSE STRUCTURE

Compulsory Classes
- Fundamentals of Microeconomics
- Fundamentals of Macroeconomics
- Professional Development for Economists
- Analysis of Economic Data
- Economic Appraisal and Eocnomic Modelling
- Topics in Public Economics
- International Macroeconomics

Optional Classes (four to be chosen – two may be substituted with classes offered elsewhere in the Business School and the School of Government and Public Policy) Optional classes offered in Economics normally include:
- International Development
- Games of Strategy
- Environmental Economics
- Energy Economics
- International Trade
- Economics of Inequality and Inclusive Growth
- Regional Policy Development
- Health Economy Policy

Your summer project topic can be chosen from any of the areas/issues covered on the programme. This is your opportunity to develop a substantive piece of applied work on a topic that is of particular interest to you, with supervision provided by an appropriate member of staff. It's also a key opportunity to put into practice what you have learned during your MSc studies.

Each year, we offer a number of opportunities for you to undertake your summer project in partnership with leading companies and public sector institutions.

DURATION OF PROGRAMME

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent in any subject.

Economics & Finance

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Enhance your knowledge and skills in a range of economic, finance, analysis and quantitative methods

Learn to analyse, understand and explain complex economic and financial issues

Develop specialised skills through choice of options

COURSE STRUCTURE

The programme is jointly offered by the Department of Economics and the Department of Accounting & Finance.

Compulsory Classes
- Fundamentals of Macroeconomics
- Fundamentals of Microeconomics
- Analysis of Economic Data
- International Macroeconomics
- Professional Development for Economists
- Principles of Finance
- Accounting and Financial Analysis

Plus either
- Advanced Corporate Finance and Applications OR Derivatives and Treasury Management
  OR
- Topics in Corporate Finance, and Derivatives

Optional Classes
Students will be able to choose one class offered across the Departments of Economics and Accounting & Finance.

Summer Project
The MSc is completed by producing a piece of research in the summer term. You will have the choice to undertake a substantive piece of applied work on a topic that is of particular interest to you, with supervision provided by an appropriate member of staff in Economics, or to undertake shorter empirical projects in Finance during the summer months. These choices let you apply the skills and learning you have developed during the course of your taught classes.

DURATION OF PROGRAMME

12 months full-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent, in economics, finance, business studies and management science. Applications are also welcome from candidates with strong career experience in a relevant field.

Global Energy Management

MSc (full-time, part-time)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Acquire in-depth knowledge of global energy systems

Benefit from practical training in the management of energy-related issues

Gain practical insights from leading energy experts

Accredited by the Energy Institute

COURSE STRUCTURE

Compulsory Classes
- Global Energy Issues, Industries and Markets
- Global Energy Technologies, Impacts and Implementation
- Global Energy Policy and Politics
- Global Energy Forum
- Energy Economics

At least one of the following:
- Fundamentals of Microeconomics
- Fundamentals of Macroeconomics
- Topics in Public Economics
- International Macroeconomics

Optional Classes
Choose from classes available in the Business School, Faculty of Engineering and the Faculty of Humanities & Social Sciences.

Summer Project
The summer project can take two forms – the research route and the industrial route. Both routes help you gain more problem-focused experience of relevance to the energy sector. In addition, both routes will enable and require you to apply knowledge gained on the course.

DURATION OF PROGRAMME

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent in any subject. Applications are also welcome from candidates with significant high-calibre industry or government experience.

Hunter Centre for Entrepreneurship

RESEARCH DEGREES

MRes, MPhil, PhD

Contact for Research Degrees
Director of Doctoral Research
Dr Samuel Mwaura
t: +44 (0)141 548 4848
e: samuel.mwaura@strath.ac.uk

TAUGHT COURSES

Entrepreneurship, Innovation & Technology
Entrepreneurship Studies
Project Management & Innovation

Contact for Taught Courses
SBS Student Recruitment and Marketing Unit
t: +44 (0)141 553 6116/6105/6117
e: sbs.admissions@strath.ac.uk

The Hunter Centre for Entrepreneurship is a research-oriented academic department with a focus on developing a better understanding of how entrepreneurs and their organisations can more successfully create new value for business and society. Research is conducted by nationally and internationally-recognised experts in high-growth, international, corporate, technology, family, rural, social and female entrepreneurship.

We are at the heart of the Global Entrepreneurship Monitor (GEM) research programme, an annual assessment of levels of entrepreneurial activity in dozens of economies. The Centre has played a significant role in the international organisation of GEM since 2000 and is responsible for the Country Report for Scotland and, jointly with Aston Business School, the UK Report.

Researchers participate in a range of projects which are funded by the EU (business start-up, technology commercialisation, and growth rates), as well as funding councils in Norway (enterprise diversity, farm-based innovation, and family business succession) and in New Zealand (social entrepreneurship).

The Centre's international research impact is also evidenced through invited reviews for and editorial contributions to internationally-ranked entrepreneurship research journals, including the *Journal of Business Venturing*, *Entrepreneurship Theory and Practice*, *Small Business Economics*, and the *International Small Business Journal*.

Academic staff and PhD students regularly present their work at international conferences such as the Babson Kauffman Entrepreneurship Research Conference, the ECSB Research in Entrepreneurship and Small Business conference, the European Academy of Management conference and the US Academy of Management conference.

The international character of the Centre is also reflected in the heritage of many of our academic staff (Germany, Greece, Italy, Kenya, France, Turkey, Kazakhstan and India) and of our PhD students (Oman, Egypt, Nigeria, Singapore, Canada, China Switzerland, Pakistan, US, Turkey, Greece, Poland, India, Croatia, Columbia, South Africa, Germany, Russia and Thailand)

Our academic staff and PhD students regularly engage in university research exchanges in the US, Germany, France and New Zealand and also enjoy visiting posts (Norway, France, Finland, New Zealand).

Research Themes

- Enterprise policy, education and economic development
- Growing innovative enterprises
- Global and international entrepreneurship
- Entrepreneurial management and leadership
- Enterprise and diversity
- Social enterprise, CSR and philanthropy
- Strategy and innovation practice
- Family business and enterprising households
- Entrepreneurial networking, social capital and society
- Entrepreneurial finance
- Entrepreneurship and the collaborative economy

Entrepreneurship, Innovation & Technology

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Combine theoretical knowledge with practical skills

Study a practical, career-focused programme

Undertake a virtual incubation project to develop an innovative business opportunity

COURSE STRUCTURE

Compulsory Classes

- Creativity & Innovation Development
- Data Lab
- Introduction to Entrepreneurial Finance
- Issues & Trends in Entrepreneurship, Innovation & Technology
- Strategic Innovation Management
- Advanced Entrepreneurial Finance
- Entrepreneurial Management and Leadership
- Internationalisation & Growth Lab
- New Venture Creation
- Sales Lab
- Mindset Lab
- Social Entrepreneurship

Virtual Incubator Project
You work on a real-world innovation challenge. Using an innovative virtual platform, participants will collaborate with the UK ecosystem and go through a stage-gate model of developing and pitching their solution to potential investors.

DURATION OF PROGRAMME

12 months full-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent, in any subject.

Entrepreneurship Studies

MRes

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Designed for those who want a stronger research-based qualification, with the option to continue onto a PhD in Entrepreneurship.

A research methods class will help you prepare to undertake a comprehensive piece of field-based research.

Learn about cutting edge research problems and research methods in this dynamic discipline.

By the end of the programme, you'll possess both the area-specific knowledge and research training needed to succeed in academic research, consultancy and policy in entrepreneurial settings.

COURSE STRUCTURE

Compulsory Classes

- Creativity and Opportunity Recognition
- Issues and Trends in Entrepreneurship
- Entrepreneurial Management and Leadership
- Mindset Lab
- Data Lab
- Advanced Entrepreneurial Finance
- Social Entrepreneurship
- Research Methods in Entrepreneurship

Dissertation
The dissertation allows you to pursue an area of specific interest, providing scope of original thought, research and presentation. Successful completion presents the opportunity to apply to the competitive PhD programme in the Hunter Centre for Entrepreneurship.

DURATION OF PROGRAMME

MRes 12 months full-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent, in any subject.

Project Management & Innovation

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop the skills to manage complex technology and innovation projects

Be prepared for a career in industries ranging from manufacturing and services to the public sector

Opportunity to work on a live issue for a business client

COURSE STRUCTURE

Compulsory Classes
- Professional Management Practice
- Commercial Management in Projects
- Technology and Organisational Change
- Leadership for Change and Innovation
- Managerial Accounting
- Programme and Project Management
- Managing Innovation
- Business Operations
- Project Portfolio Management
- Project Methodology
- Business Strategy
- Consultancy in Practice

Optional Classes (two to be chosen)
- Global Operations Strategy
- Project Management
- Managing in Europe (at Toulouse Business School, France)
- New Venture Creation
- Brand Management & Strategy
- Blockchain in Technology Services
- Strategic Financial Management
- Service Operations Simulation
- International Trade Theory and Policy
- Managing Talent and Succession Planning
- Family Enterprise

Project
The project provides the opportunity to apply your learning to a practical situation with an organisation.

DURATION OF PROGRAMME

MSc: 12 months full-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent, in any subject.

Department of Management Science

RESEARCH DEGREES

MRes, MPhil, PhD, DBA

Contact for Research Degrees
Dr Ashwin Arulselvan
t: +44 (0) 141 548 4923
e: mansci-admin@strath.ac.uk

TAUGHT COURSES

Business Analysis & Consulting
Business Analysis & Consulting (online)
Data Analytics
Data Analytics (online)
Global Master in Industrial Management 4.0
International Master in Project Management
Operational Research (online)
Supply Chain & Logistics Management/Procurement Management/Sustainability Management (offered jointly with the Department of Design, Manufacture & Engineering Management) (see page 53)

Contact for Taught Courses
SBS Student Recruitment and Marketing Unit
t: +44 (0)141 553 6116/6105/6117
e: sbs.admissions@strath.ac.uk

The Department of Management Science is one of the leading Operational Research (OR) departments in the UK. Research interests of staff span the spectrum of management science activity. Many are internationally-known – through their academic output and applied work with government and business organisations. Through applied research and consultancy, staff collaborate with major organisations on new ways of dealing with complex decisions.

We engage in a range of methodological approaches to research including both qualitative and quantitative methods. Our interests are in providing holistic decision support and developing approaches to problem structuring, model development, data analysis, model inference and decision support.

We develop our methods to meet the needs of users with a variety of applications. In the UK, we work with 15 universities and collaborate internationally with academics from 45 universities. Currently, we are working on funded research projects with academics from each of the other departments within Strathclyde Business School, as well as the Engineering and Science faculties.

Research Areas

Health Systems
The health systems research cluster is interested in the applications of management science in healthcare organisation and delivery. Our work has close links with health economics, optimisation, operations management and demography. On-going projects include health technology assessment and programme evaluation, healthcare performance targets and variations in practice, process improvement for hospital services, pharmacy automation, process improvement for hospital services, and radiation treatment planning.

Optimisation
The optimisation group is developing theory and solution methods for challenging optimisation problems stemming from various applications. Current projects cover network optimisation: telecommunication networks and evacuation modelling, production planning in manufacturing, optimisation for transportation and energy markets, offshore windfarm installation logistics optimisation, and optimisation in radiation treatment planning.

Risk and Uncertainty
Our interest in risk relates to decision-making under uncertainty. We are engaged in all aspects of the decision support process from problem structuring through data analysis and model building to recommendations. We work closely with industry, applying methods primarily from statistics, probability and decision analysis, to real-world problems.

Knowledge
Our research group covers a wide range of knowledge modelling. We explore the fundamentals of knowledge, problems, creativity, intuition, levels of expertise, risk, perception of risk, and subjective probabilities. We do most of our work in applied contexts, structuring problems and modelling expert knowledge in order to support decision-makers and decision-takers in their organisations. Our research also served as basis for developing a number of software packages used for knowledge modelling.

Operations Management and Supply Chain Management
Our interest in operations and supply chain management covers a wide range of topics, including operations strategy, service operations management, innovation in operation, project management, performance measurement, enterprise resource planning, logistics optimisation and supply chain risk modelling.

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Business Analysis & Consulting

MSc/PgDip (full-time, part-time)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain practical, evaluative and analytical skills

Learn how to use business models to develop strategy for organisations

Opportunity to undertake a three-week work placement

Work on a project for a leading organisation

COURSE STRUCTURE

Compulsory Classes
- Foundations of Operational Research and Business Analysis
- Quantitative Business Analysis
- Managing Business Operations
- Spreadsheet Modelling and Demand Forecasting
- Strategy Modelling and Management
- Becoming an Effective Business Analyst

Optional Classes (three to be chosen)
- Business Simulation Methods
- Risk Analysis and Management
- Business Information Systems
- Performance Measurement and Management
- Business Analytics

Work Placement
The apprenticeship scheme offers the opportunity to compete for a three-week placement in a private or public sector organisation.

Dissertation
MSc students undertake a three-month project, typically for an external organisation.

DURATION OF PROGRAMME

MSc: 12 months full-time; 24 months part-time
PgDip: 9 months full-time; 21 months part-time

ENTRY REQUIREMENTS

MSc: Minimum second-class honours degree or overseas equivalent, in business, economics, engineering or the social sciences. Applications from those with other degrees are welcome.
PgDip: Minimum of a Pass degree, or equivalent, in an appropriate subject. Subject to performance students may transfer from the Diploma course to the MSc course.

Business Analysis & Consulting (online)

MSc/PgDip/PgCert (part-time distance learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain practical, evaluative and analytical skills

Learn how to use business models to develop strategy for organisations

Benefit from a flexible distance learning study model to suit your work schedule

COURSE STRUCTURE

The programme contains three stages. Successful progression will lead towards completion of the MSc. To proceed to the Postgraduate Diploma you need to be in appropriate employment.

- PgCert (stage 1)
- PgDip (stage 2)
- MSc – project (stage 3)

Compulsory Classes
PgCert
- Foundations of Operational Research and Business Analysis
- Quantitative Business Analysis
- Managing Business Operations
- Spreadsheet Modelling and Demand Forecasting
- Strategy Modelling and Management

PgDip
- Becoming an Effective Business Analyst

Optional Classes (one for PgCert; two for PgDip)
- Business Simulation Methods
- Risk Analysis and Management
- Business Information Systems
- Performance Measurement and Management

Project
To complete the course, you'll be expected to undertake a project. The project will be integrated with your employment. You'll have individual personal mentoring to guide you in reflection and learning.

DURATION OF PROGRAMME

PgCert (stage 1): minimum 12 months part-time
PgDip (stage 2): minimum 12 months part-time
MSc (stage 3): maximum 6 months part-time

ENTRY REQUIREMENTS

PgCert: Minimum Pass degree or non-UK equivalent, in business, economics, engineering or social sciences. We also encourage applications from other degrees. Admittance is to the PgCert (stage 1) only.

"The in-class experience with the lecturer and course content here is amazing. While looking for jobs right now I can say that the skills I have developed while studying the Data Analytics course are what is in demand currently in the market."

Abdul Rehman,
MSc Data Analytics

Data Analytics

MSc (full-time, part-time)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain a comprehensive skill set and expertise through input from three contributing departments

Use data analytics techniques within business contexts to become rounded problem-solvers

COURSE STRUCTURE

Compulsory Classes
- Big Data Fundamentals
- Big Data Tools and Techniques
- Data Analytics in R
- Business and Decision Modelling
- Optimisation for Analytics
- Data Analytics in Practice

Optional Classes (choose from at least two departments)
Computer Science
- Database Fundamentals
- Evolutionary Computation for Finance 1 & 2
- Fundamentals of Machine Learning for Data Analytics

Mathematics & Statistics
- Financial Econometrics
- Bayesian Spatial Statistics
- Mathematical Introduction to Networks

Management Science
- Stochastic Modelling for Analytics
- Business Simulation Modelling
- Risk Analysis and Management
- Business Information Systems

Dissertation
MSc students undertake a three-month project, either as a research project or for an external organisation.

DURATION OF PROGRAMME

MSc: 12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

MSc: Minimum second-class honours degree or overseas equivalent, the natural sciences, engineering, or economics/finance. Degrees in other areas are welcome.

Data Analytics (online)

PgCert (part-time distance learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain a comprehensive skill set and expertise through input from three contributing departments

Use data analytics techniques within business contexts to become rounded problem-solvers

Benefit from a flexible distance learning study model

COURSE STRUCTURE

Compulsory Classes
- Big Data Fundamentals
- Big Data Tools and Techniques
- Data Analytics in R
- Business and Decision Modelling
- Optimisation for Analytics

DURATION OF PROGRAMME

PgCert: 12 months part-time

ENTRY REQUIREMENTS

PgCert: Minimum Pass degree, or non-UK equivalent, in mathematics, the natural sciences, engineering, or economics/finance. Applications from those with other degrees are also encouraged if you have demonstrated a good grasp of numerical/quantitative subjects.

Global Master in Industrial Management 4.0

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Benefit from international academic experience at three institutions

Gain an understanding of essential business and management skills for industrial management

Bridge the gap between university and industry through tackling industrial problems

COURSE STRUCTURE

The programme is delivered in English in collaboration with the MiP Politecnico di Milano, Milan, Italy.

Semester 1 (September – January: University of Strathclyde)
- Accounting for Engineers
- Marketing Management
- Managing People in Organisations
- Business Strategy
- Risk Analysis and Management
- Business Simulation Methods

Semester 2 (February – July: MiP Politecnico di Milano)
- Operations Management and Improvement in the Digital 4.0 Era
- Industry 4.0 Integrated Operations and Supply Chain Planning
- Quality and Maintenance Management
- Service Management 4.0
- Global Supply Chain Management
- Industrial management consulting

Elective classes delivered online are chosen from Quantitative Business Analysis, Spreadsheet Modelling and Demand Forecasting, Innovation and Commercialisation, and Big Data Fundamentals.

Semester 3 (September – January: International Study)
Students spend semester 1 of their second year at an approved partner institution completing international study

Project (January – March)
Final project work or research project can be based in the UK, Italy or overseas, depending on available opportunities.

DURATION OF PROGRAMME

MSc: 18 months full-time

ENTRY REQUIREMENTS

Bachelor degree (or an equivalent academic degree) of at least three years full-time study (180 ECTS) ideally in a technical or science discipline.

International Master in Project Managment

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain understanding of project management as a process to deliver change

Examine recent approaches in project management with a cross-sectoral and intercultural perspective

Benefit from the academic expertise of two institutions

COURSE STRUCTURE

The programme is delivered in English in collaboration with the MiP Politecnico di Milano, Milan, Italy.

Semester 1
(September to January – MiP Politecnico di Milano)
- Strategy and Organisation Management
- Project Management Fundamentals
- Innovation Management
- Project Accounting
- Project Finance
- Project Risk Management

Semester 2
(February to June – Strathclyde Business School)
- Project Portfolio Management
- Leadership for Change and Innovation
- Issues and Trends in Entrepreneurship, Innovation and Technology
- Commercial Management
- Strategic Procurement Management
- Consulting in Practice
- Elective choice (20 credits) from the Postgraduate Spring School and the MBA Summer School

During the semester at Strathclyde, you also have the opportunity to attend one elective (non-mandatory) offered on campus or in one of the School's International centres.

Project (July to March)
Final project work or research project can be based in the UK, Italy or overseas, depending on available opportunities.

DURATION OF PROGRAMME

MSc: 18 months full-time

ENTRY REQUIREMENTS

Bachelor degree (or an equivalent academic degree) of at least three years duration and 180 ECTS credits in any discipline. Candidates should have a minimum of second-class Honours degree or equivalent CGPA.

Operational Research (online)

MSc/PgDip/PgCert (part-time distance learning)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop a rigorous understanding of advanced analytical methods

Learn how to play an effective role in providing model-based support to managers for better decisions

Benefit from a flexible distance learning study model to suit your work schedule

COURSE STRUCTURE

The programme contains three stages. Successful progression will lead towards completion of the MSc. To proceed to the Postgraduate Diploma you need to be in appropriate employment.

- PgCert (stage 1)
- PgDip (stage 2)
- MSc – project (stage 3)

Compulsory Classes
PgCert
- Foundations of Operational Research and Business Analysis
- Quantitative Business Analysis
- Managing Business Operations
- Spreadsheet Modelling and Demand Forecasting
- Operational Research Methods

PgDip
- Becoming an Effective OR Modeller

Optional Classes (one for PgCert; two for PgDip)
- Business Simulation Methods
- Risk Analysis and Management
- Business Information Systems
- Advanced OR Modelling with Specialised Software Tools

Project
To complete the course, you'll be expected to undertake a project. The project will be integrated with your employment

DURATION OF PROGRAMME

PgCert (stage 1): minimum 12 months part-time
PgDip (stage 2): minimum 12 months part-time
MSc (stage 3): maximum 6 months part-time

ENTRY REQUIREMENTS

PgCert: Minimum Pass degree or non-UK equivalent, in business, economics, engineering or social sciences. We also encourage applications from other degrees. Admittance is to the PgCert (stage 1) only.

Supply Chain & Logistics Management/Procurement Management/ Sustainability Management

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain an in-depth understanding of the strategic and operational issues relating to supply chain management

Contribute towards making organisations competitive

Accredited by the Chartered Institute for Procurement & Supply

COURSE STRUCTURE

The programme is delivered in collaboration with the Department of Design, Manufacturing & Engineering Management.

Compulsory Classes
- Strategic Supply Chain Management
- Supply Chain Operations
- Enterprise Resource Planning
- Advanced Project Management
- Case Studies in Supply Chain Management
- People, Organisation and Technology
- Performance Measurement and Management
- Individual Project

Specialist Classes by Theme
- Logistics Management – Management of Total Quality and Continuous Improvement, Lean and Green Logistics, Spreadsheet Modelling and Demand Forecasting
- Procurement Management – Strategic Procurement Management, Spreadsheet Modelling and Demand Forecasting, Organisation Buying Behaviour and Structures
- Sustainability Management – Sustainable Product Design and Manufacturing, Lean and Green Logistics, Remanufacturing

COURSE DURATION

12 months full-time; 24 months part-time

ENTRY REQUIREMENTS

Normally a first-class or second-class honours degree (or international equivalent) in engineering, technology or business-related subject.

Department of Marketing

RESEARCH DEGREES

MRes, MPhil, PhD, DBA

Contact for Research Courses
Christina MacLean
t: +44 (0)141 548 4919
e: christina.maclean@strath.ac.uk

TAUGHT COURSES

Digital Marketing Management
Marketing
Innovation & Marketing Management
International Marketing
Tourism Marketing Management

Contact for Taught Courses
SBS Student Recruitment and Marketing Unit
t: +44 (0)141 553 6116/6105/6117
e: sbs.admissions@strath.ac.uk

The Department of Marketing at Strathclyde is one of the oldest Marketing departments in Europe. It has an international reputation for the quality of its teaching and research. Staff act as advisers and consultants to private and public organisations and also hold senior posts in the Chartered Institute of Marketing, the Market Research Society and other professional associations, as well as national and International companies.

Research Areas
Our academic staff are actively involved in research and have built a strong portfolio of publications in leading journals. Research expertise in the Department includes:

Export marketing and international business
E-business and e-marketing
Customer relationship management
Consumer behaviour
Digital marketing
Sports marketing
International channel management
Innovation and new product/service development
Business-to-business networking and marketing
International sourcing and strategic procurement management
Marketing research
Services marketing
Hospitality and tourism management and marketing

Marketing Management
Marketing Management research has attracted funding from several organisations, and the group's areas of interest include strategic marketing, franchising, strategic alliances, sustainable supply chains, corporate social resonsibility and green consumers, digital marketing, branding, marketing management within the b2b services and tourism contexts and sales management.

Consumer and Social Marketing Research
Our research looks at furthering work on consumer culture theory through exploring consumer tribes/ communities and celebrity culture, and cultural approaches towards the understanding of brand culture. Research themes include the impact of poverty on consumption and the implications of consumer disadvantage and consumer poverty for wellbeing and social exclusion, the importance of religion as an influence on consumption, culinary consumption and food cultures, tourism consumption, sustainable consumption and historical approaches to analysing consumption culture within the globalisation discourse.

Researching Business Networking
This programme of research is developing knowledge and management practice regarding business networking and relationship management across a range of industry sectors.

Digital Marketing
A number of staff and doctoral students are working on a series of projects relating to the use of Web 2.0, social networks and new media in the area of marketing. This touches on a number of the other specialist areas of research within the Department such as services marketing, marketing communications and consumer behaviour.

Services Marketing
This research stream focuses on the linkages between corporate culture, performance measurement and service delivery personnel, corporate reputation, service branding, service differentiation and customer satisfaction. Also issues around the service profit chain concept, including customer (value) management, research on satisfaction and loyalty, complaining behaviour, retail marketing and relationship marketing.

Hospitality and Tourism Management
Key areas covered include managerial relevance, human resource issues, tourism marketing and consumer behaviour and critical perspectives. Some projects have contributed to developing Scottish hospitality and tourism, for example, work to foster social inclusion through hospitality to counter marginalisation; and to tourism and transport policy-making through studies of leisure travel behaviour. The team has also been active in developing new methodologies and conceptualisations, for example, development of sociological impressionism.

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Digital Marketing Management

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain an understanding of digital technologies and their application for business purposes

Learn about digital marketing in practice with hands-on experience of established and emerging digital media

Benefit from the involvement of industry partners

COURSE STRUCTURE

Compulsory Classes
- Cross-Cultural Buyer Behaviour
- Strategic Digital Marketing
- Marketing Research in a Digital Age
- eMarketing in Practice
- Supply Chain Digitalisation
- Contemporary Consumers
- Integrated Marketing Communications
- Leadership for Change and Innovation
- Business Information Systems
  or another class deemed appropriate by the Department

Digital Transformative Project
You'll work with a business to develop bespoke solutions to their business challenges and create a digital transformative plan which will form the basis of your final project.

DURATION OF PROGRAMME

MSc: 12 months full-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent, in marketing or business. Business-related degrees should include a significant marketing component.

Marketing

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Suitable for non-business graduates who want to pursue a career in this area

Develop an understanding of marketing in relation to individuals and organisations

Undertake an industry marketing project

COURSE STRUCTURE

Compulsory Classes
- Consumer Behaviour
- Strategic Marketing Management
- International Marketing Research
- Brand Management and Strategy
- Dissertation Skills

Optional Classes (four to be chosen)
- Contemporary Consumers
- Customer Management 2: Digital Marketing
- Destination Marketing Management
- Export Marketing
- Integrated Marketing Communications
- International Culture and Heritage Marketing
- International Services Marketing
- Managing Tourism Resources
- Retail Marketing Management
- Sports Marketing in a Global Context

Marketing Works: Applied Marketing Group Project
You work in small groups with a local or national company to tackle a real-life marketing issue.

Dissertation: Individual Research Project
The research project allows you to pursue an area of specific interest, providing scope for original thought, research and presentation.

DURATION OF PROGRAMME

MSc: 12 months full-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent, in a non-marketing discipline. A business degree may be considered, if it does not contain significant marketing components.

"I chose Strathclyde for its reputation, its triple-accredited Business School, for being the UK University of the Year and also for the location near the centre of Glasgow, an exciting city which I really love. Moreover, during the application process, everyone was friendly and quick in replying, which confirmed my first impression."

Camilla Logiudice,
MSc Digital Marketing Management

Innovation & Marketing Management

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Only course in Europe that integrates marketing and engineering in a single course

Understand how technology and innovation open the way to new business opportunities

Opportunity to work on a group project within industry

COURSE STRUCTURE

The programme is offered jointly with the Department of Design, Manufacture & Engineering Management.

Compulsory Classes
- Brand Management and Strategy
- Strategic Marketing Management
- Strategic Technology Management
- Design Management
- Product Costing and Financial Management
- Strategic Procurement Management
- International Marketing Research
- Supply Chain Operations
- Marketing Works Group Project
- Management of Innovation
- Marketing Research

Optional Classes (two from each department to be chosen)
Marketing
- Export Marketing
- International Services Marketing
- B2B and Key Account Management

Design, Manufacture & Engineering Management
- Management of Total Quality and Continuous Improvement
- Design Methods
- Project Management

Marketing Works: Group Project
You work in small groups to tackle a real-life problem for a local or national company.

Dissertation: Individual Research Project
The research project allows you to pursue an area of specific interest, providing scope for original thought, research and presentation.

DURATION OF PROGRAMME

MSc: 12 months full-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent, in business, economics, engineering or science.

International Marketing

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Specialist course reflecting current diversity in global marketing practice

Acquire new skills and enhance your existing experience

Benefit from industry collaboration

Study within a student cohort from across the globe

COURSE STRUCTURE

Compulsory Classes
- Cross-cultural Buyer Behaviour
- Strategic Global Marketing
- International Marketing Research
- Brand Management and Strategy
- Dissertation Skills

Optional Classes (four to be chosen)
- Contemporary Consumers
- Customer Management 2: Digital Marketing
- Destination Marketing Management
- Export Marketing
- Integrated Marketing Communications
- International Culture and Heritage Marketing
- International Services Marketing
- Managing Tourism Resources
- Retail Marketing Management
- Sports Marketing in a Global Context

Marketing Works: Applied Marketing Group Project
You work in small groups with a local or national company to tackle a real-life marketing issue.

Dissertation: Individual Research Project
The research project allows you to pursue an area of specific interest, providing scope for original thought, research and presentation.

DURATION OF PROGRAMME

MSc: 12 months full-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent, in marketing or a business-related degree including a significant marketing element.

Tourism Marketing Management

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain insight into the technologically-innovative nature of contemporary marketing in the context of tourism

Benefit from skills-based teaching

Enhance your leadership, teamwork and cross-cultural skills

COURSE STRUCTURE

Compulsory Classes
- Consumer Behaviour
- Strategic Marketing Management
- International Marketing Research
- Brand Management and Strategy
- Destination Marketing Management
- Managing Tourism Resources
- International Services Marketing
- Dissertation Skills

Optional Classes (one to be chosen)
- Contemporary Consumers
- Customer Management 2: Digital Marketing
- Export Marketing
- Integrated Marketing Communications
- International Culture and Heritage Marketing
- Retail Marketing Management
- Sports Marketing in a Global Context

Marketing Works: Applied Marketing Group Project
You work in small groups with a local or national company to tackle a real-life tourism marketing issue.

Dissertation: Individual Research Project
The research project allows you to pursue an area of specific interest, providing scope for original thought, research and presentation.

DURATION OF PROGRAMME

MSc: 12 months full-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent in any subject.

MBA and General Management

TAUGHT COURSES

Master of Business Administration (MBA)
Business & Management (MBM)
International Management (MIM)

With over 50 years' experience in developing a ground-breaking MBA programme, Strathclyde Business School is a major innovator in the field of business and management.

The Strathclyde MBA is a generalist degree, intended to develop experienced business people and professionals into business leaders. To be an effective leader, you need a solid overview of business, and that is something that SBS has been offering since it introduced the MBA in 1966.

The Strathclyde MBA is highly experiential and based on collaborative learning. Students share their varied work experiences, knowledge, understanding and skills.

The Strathclyde MBA is a very flexible programme. We offer a variety of study routes, allowing you to choose a programme which suits both your work and/or personal circumstances:

- full-time (12 months intensive study in Glasgow)
- part-time (intensive seminars in Glasgow over two to three years)
- flexible learning (combination of off-campus, self-paced study, interspersed with workshops and seminars: three to five years)
- Strathclyde Executive MBA – International (study your MBA locally in Singapore, Malaysia, Switzerland, Greece, Bahrain, UAE, Oman)

Our selection process is designed to identify talented professionals from a wide range of academic, business and cultural backgrounds who might gain from, and contribute to, our learning community.

As a result, while there are formal requirements for entry, our concern is with the potential of individual candidates, their interpersonal and team working qualities, and the range and nature of their managerial experience.

The general management Masters programmes on offer, namely MBM and MIM, develop the keys skills required for a successful career in management. Learning from leading academic experts, you will gain a multicultural and international perspective, and build experience of business by working with industry contacts.

Contact for Taught Courses

SBS Student Recruitment and Marketing Unit
t: +44 (0) 141 553 6116/6105/6117
e: sbs.admissions@strath.ac.uk

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Master of Business Administration

MBA

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Gain an internationally-recognised qualification

Learn in a cross-cultural environment

Study strategy with internationally-acclaimed academics

Develop confidence as a manager and leader

Improve your career prospects or change career direction

Study Themes and Classes

The Reflective Practitioner
- The Learning Manager
- Comparative Corporate Governance
- Entrepreneurial Management and Leadership

Making the Business Work
- Finance and Financial Management
- Financial and Management Accounting
- Operations Management
- Marketing Management
- Analytical Support for Decision-making
- Managing People in Organisations

Strategic Management for Sustainable Success
- Exploring the International Business Environment
- Strategy, Analysis and Evaluation
- Making Strategy
- Information Technology Management

Personal Development
- Strategic Consulting in Practice – you work as part of a team for a client on an organisational issue; the client will have significant input into the evaluation of the class and your team's performance

Elective classes – choose from over 25, including
- The CEO - Challenges & Choices in Delivering Value
- Brand Management & Strategy
- Games of Strategy
- New Venture Creation
- Service Operations & Simulation
- Big Data Fundamentals
- Scenario Planning for Global Challenges
- Digital Transformation & Technological Innovation
- Strategic Financial Management
- Project Management
- Digital

MBA Project

The MBA project provides an opportunity to examine in depth a managerial, organisational or environmental issue of your choice over an extended period of time. It can be done on an individual basis or as part of a group. The project enables you to put into practice the knowledge and skills you have developed throughout the programme. We have close links with industry and can offer a number of company-sponsored projects many of which can lead to internships.

Professional Development Journey

Career and professional development support is a key part of the MBA, focusing on the skills needed to achieve long-term strategic career enhancement. As well as core job search activities such as CV and LinkedIn profile building and how to excel in interviews, we provide workshops and seminars on a range of personal and management skills, on-campus and online. Every student has access to one-to-one sessions with our Careers and Employability Consultants, as well as our online Career Management site, which offers a wealth of resources available 24/7.

Flexible Study Options

- full-time (12 months intensive study in Glasgow)
- part-time/executive (intensive seminars in Glasgow over two to three years or at the Business School's seven international centres)
- flexible learning (combination of off-campus study combined with intranet tutor support and attendance at intensive seminars in Glasgow, three to six years)

ENTRY REQUIREMENTS

A good first degree is expected and applicants must be at least 24 years old, have a minimum of three years' postgraduate managerial/professional experience and be able to demonstrate career progression.

Applicants who hold non-degree/professional qualifications, are expected to have at least five years' varied management/professional experience with demonstrable career progression.

Candidates with no formal qualifications require extensive and varied managerial/professional experience of 10 years or more, with sustained career progression.

Strong verbal reasoning and numerical abilities are critical for the MBA and we may ask for a GMAT result (min 600).

Candidates will be interviewed.

Contact

t: +44 (0)141 553 6119
e: sbs.admissions@strath.ac.uk

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

Business & Management

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

The programme is accredited by the Association of MBAs as a Pre-Experience Masters in Management

Experience a broad, yet specific exploration of general management

Develop skills in management theories and practices

COURSE STRUCTURE

Compulsory Classes
- Professional Management Practice
- Analytical Support for Decision-making
- Managing People in Organisations
- Leadership for Change and Innovation
- Managerial Accounting
- Marketing Management
- Business Operations
- Finance and Financial Management
- Business Strategy
- Managing Innovation
- Consultancy in Practice
- Project Methodology

Optional Classes (two to be chosen)
- Global Operations Strategy
- Project Management
- Managing in Europe (at Toulouse Business School, France)
- New Venture Creation
- Brand Management & Strategy
- Blockchain in Technology Services
- Strategic Financial Management
- Service Operations Simulation
- International Trade Theory and Policy
- Managing Talent and Succession Planning
- Family Enterprise

Project
The project provides the opportunity to apply your learning to a practical situation with an organisation.

DURATION OF PROGRAMME

MSc: 12 months full-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent, in a non-business or management-related subject.

January 2021 start date available.
Visit **www.strath.ac.uk** for full details.

International Management

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop the knowledge and skills required by international managers and leaders to operate in a global environment

Benefit from a practical focus on managing and leading in various organisational settings

COURSE STRUCTURE

Compulsory Classes
- Professional Management Practice
- Managing Across Cultures
- Managing People in Organisations
- Marketing Management
- Global Business Environment
- Finance and Financial Management
- Project Methodology
- Business Strategy
- International Entrepreneurship
- Consultancy in Practice

Optional Classes (two to be chosen)
- Global Operations Strategy
- Project Management
- Managing in Europe (at Toulouse Business School, France)
- New Venture Creation
- Brand Management & Strategy
- Blockchain in Technology Services
- Strategic Financial Management
- Service Operations Simulation
- International Trade Theory and Policy
- Managing Talent and Succession Planning
- Family Enterprise

Project
The project provides the opportunity to apply your learning to a practical situation with an organisation.

DURATION OF PROGRAMME

MSc: 12 months full-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent, in business or management, or a non-business degree, plus work experience in international trade or business.

“The MSc in Business & Management has exceeded my expectations so far – the broad scope of the course keeps it dynamic whilst the variety of teaching methods keep things interesting. The group work assessments have been particularly valuable. Working together with fellow students from different cultures, backgrounds and experiences has really enhanced my understanding of the true workplace environment, teamwork and communication.”

Rebecca O’Toole,
MSc Business & Management

Department of Work, Employment & Organisation

RESEARCH DEGREES

MRes, MPhil, PhD, DBA

Contact for Research Degrees
e:weo-pgr@strath.ac.uk

TAUGHT COURSES

Human Resource Management (full-time/part-time)
International Human Resource Management

Contact for Taught Courses
SBS Student Recruitment and Marketing Unit
t: +44 (0)141 553 6116/6105/6117
e: sbs.admissions@strath.ac.uk

The Department of Work, Employment & Organisation has a broad focus on human resources, organisational behaviour and industrial relations. We undertake research in a range of international and UK public, private and voluntary sector organisations. The Scottish Centre for Employment Research, one of the UK's leading contributors on workplace innovation, sits within the Department, as does the editorship of three leading international journals – *New Technology, Work and Employment*, *Employee Relations*, and the *Human Resource Management Journal*. The Department is a Chartered Institute of Personnel and Development (CIPD) Approved Centre and provides programmes leading to professional membership of CIPD.

Research Areas

Skills, labour power and workplace innovation
Research focuses on how work is organised and the kind of skills required by employers. Current themes include:

- skill ecosystems and occupational change
- skill utilisation, conversion and mismatch
- HR development and training, recruitment and selection
- employability, under-employment
- education, work, career transitions

Regulation and restructuring of employment relations
Changing managerial regimes is a focus of our research, with a particular emphasis on issues such as employee participation and voice, union bargaining strategies and the management of performance and its effects on employee wellbeing. Current projects include:

- global value and commodity chains
- patterns of labour migration
- performance management
- lean working
- new managerial regimes in social care
- work reorganisation control and wellbeing
- union strategies and organising, industrial relations disputes

Labour market disadvantage
Changes in employment and industry restructuring is a new focal point for our research. Project themes include:

- young people and work
- gender, careers and occupational segregation; monitoring of equal opportunities
- precariousness and insecurity
- migrant divisions of labour

New and contested technologies at work
Themes include:

- social media, uses and abuses
- technology, sustainability and green jobs
- technological and organisational change, impacts on occupational boundaries

Work, health and wellbeing
Research includes studies on employee experiences of, and attitudes towards, changing forms of work and management; employee involvement and participation; occupational health and safety; work-life boundaries; and experiences of unemployment and return to work. Current project themes include:

- sickness absence, presenteeism and employer practice
- work intensification, job strain and stress
- shiftwork, occupational safety behaviour and climate
- psychology of risk and trust in high-hazard/safety critical organisations
- ageing workforce, extending working life, health and capability

Human Resource Management

MSc (full-time)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Combine theory and practice in the study of organisations and the management of work

Suitable for those preparing for a career in HR

Gain professional membership of the Chartered Institute of Personnel and Development

Opportunity to undertake a project placement

COURSE STRUCTURE

Compulsory Classes
- HRM in a Business Context
- Contemporary Employee Relations
- Leading, Managing and Developing People
- People Resourcing
- Critical Issues in HRM
- Employee Reward
- Business Skills

Optional Classes (one to be chosen)
- Labour and Diversity in a Global Context
- Managing HR in Multinationals
- SBS Spring School

Integrated Dissertation and Research Report
The Integrated Dissertation and Research Report provides an opportunity to analyse a live human resources issue in an organisation. This enables you to put into practice the knowledge and skills you have developed throughout the programme. The Department has a network of HR professionals and assistance can be given by the Department to gain access to an organisation. If access to an organisation is unavailable, you will use a case study approach.

DURATION OF PROGRAMME

12 months full-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent, in social science or a business-related subject.

Human Resource Management

MSc/PgDip (part-time)

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Develop an advanced level of knowledge related to HR

Suitable for HR professionals or line managers with people management within their role

Gain professional membership of the Chartered Institute of Personnel and Development

COURSE STRUCTURE

Compulsory Classes (Year 1)
- HRM in a Business Context
- Leading, Managing and Developing People
- People Resourcing

Compulsory Classes (Year 2)
- Critical Issues in HRM
- Employee Reward
- Contemporary Employee Relations

In addition, one optional class is chosen (see left for list).

Management Research Report
PgDip: you complete a 7,000-word Management Research Report, on an HR issue within their place of work.

Integrated Dissertation and Research Report
MSc: you complete an Integrated Dissertation and Research Report, also based on a live human resources issue and usually based within their place of work.

MSc (post-diploma)
Following the Postgraduate Diploma, you may continue to the MSc, participating in a series of research methods workshops and completion of a 15,000-word dissertation.

DURATION OF PROGRAMME

PgDip: 24 months part-time; MSc: 24 months part-time
MSc (post-diploma): additional 12 months part-time

ENTRY REQUIREMENTS

MSc/PgDip: First degree or equivalent, plus HR or management experience; other qualifications may be considered
MSc (post-diploma): PgDip in HRM from Strathclyde or equivalent CIPD-approved qualification from another UK university. Candidates with a CIPD-awarded advanced qualification may also be considered.

International Human Resource Management

MSc

WHY STUDY THIS PROGRAMME AT STRATHCLYDE?

Understand how multinational organisations can best mobilise a culturally-diverse workforce

Prepare for an HR career in global organisations

Gain professional membership of the Chartered Institute of Personnel and Development

Opportunity to undertake a project placement

COURSE STRUCTURE

Compulsory Classes

- HRM in a Business Context
- Global Staffing
- Leading, Managing and Developing People
- Comparative Employment Relations
- Labour and Diversity in a Global Context
- Research Methods for HR Professionals
- Critical Issues in HRM
- Managing HR in Multinationals

Optional Classes (two to be chosen)

- Employee Reward
- People Resourcing
- Employment Issues and the Law
- SBS Spring School

Integrated Dissertation and Research Report
The Integrated Dissertation and Research Report provides an opportunity to analyse a live human resources issue in an organisation. This enables you to put into practice the knowledge and skills you have developed throughout the programme. The Department has a network of HR professionals and assistance can be given by the Department to gain access to an organisation. If access to an organisation is unavailable, you will use a case study approach.

DURATION OF PROGRAMME

12 months full-time

ENTRY REQUIREMENTS

Minimum second-class honours degree or overseas equivalent, in any subject.

Studying Global Energy Management allowed me to analyse various energy markets from a different perspective. The course gave me a well-rounded understanding of the energy industry and my thoughts on future trends – this stood me well I think, particularly in preparing for job interviews."

Penny Leake,
MSc Global Energy Management

Applicant Information

If you are interested in postgraduate study at Strathclyde, our recruitment team can provide the help and advice you need to make your decision.

Our Recruitment & International Office (RIO) can give you information about applying and courses, and information specifically relevant to you – whatever your circumstances, wherever you live. If you live outside the UK, the University has agents and representatives in many countries around the world.

To find a list, search for 'international students' at **www.strath.ac.uk.**

Entry Requirements
The University admits students with a range of both academic and professional qualifications. In addition to an appropriate academic qualification (generally a strong undergraduate degree, or equivalent qualification), some courses require relevant professional or work experience.

If you are unsure whether your qualification is acceptable to the University, please contact us:
e: pgenquiries@strath.ac.uk (within UK/EU)
e: international@strath.ac.uk (non-UK/EU)

Applications
There is no formal closing date for most postgraduate applications but we advise you to apply as soon as possible, preferably by the end of March for entry in September. Applications are considered and decisions given on a rolling basis by most departments; exceptions will be specified in the relevant course entry in this prospectus.

If you wish to be nominated by the University for any scholarship or funding, we recommend that you apply as early as possible

Taught Courses
Most taught courses take one year of study and normally start in September at the beginning of the academic year. Taught courses involve a combination of lecture and/or seminars, with an emphasis on group work and individual study. Many courses conclude with a project. These courses are intended to provide advanced knowledge or techniques in specialised aspects of subjects you studied more generally at undergraduate level.

Some taught courses also serve as conversion courses for those who wish to change disciplines, upgrade their knowledge within a discipline or prepare for further study. You will be assessed at various points throughout the academic year through examinations, assessed coursework, group work and seminars.

Research Degrees
Registration for research degrees normally takes place in September, but it is possible to start at other times. A research degree provides training in an area of study through original research and experiment, culminating in the preparation of a thesis setting out the conclusions of your research. You will be working on your own under the guidance of an academic supervisor and your progress will be monitored through meetings and submission of your research findings..

Study Modes
Many of our programmes can be undertaken full-time, part-time, or on a modular basis.

Distance or open-learning options are also available on some courses. Please note that non-EEA (European Economic Area) international students are not eligible for part-time study programmes based in the UK due to visa restrictions.

Careers and Work Experience
Your career development is an integral part of your postgraduate education. At Strathclyde you will benefit from one of the UK's best university careers services. Our Careers Service resources and advisers can help you to make the most of your qualification.

EU Students
As a result of Brexit, the Scottish Government has announced that EU students starting their studies from 2021/22 will not be eligible for tuition fee support.

We're currently awaiting further details from the Scottish Government and we will keep you informed of relevant developments. Please visit our website for the latest updates.

International Students
Each year, the University welcomes students from more than 100 countries. Students from countries outside the European Economic Area and Switzerland will normally require a Tier 4 Adult (General) Visa in order to study in the UK.

To apply for this visa students will require a Confirmation of Acceptance for Study (CAS) and also appropriate evidence of their funding. A CAS will be issued by the University when you accept our offer, meet any conditions mentioned in the offer, and pay a deposit. This deposit is offset against your tuition fees. If you have an official financial sponsor, for example your government or an international scholarship agency, you will not need to pay this deposit. Instead, you should send a copy of your sponsorship letter to the University's Finance Office for consideration.

UK Visas and Immigration have very specific requirements relating to the level and nature of funding for studies and the supporting evidence needed when applying for a visa. You must provide evidence that you have the required level of funds relating to fees and maintenance (living costs). For further details, search 'visas' at **www.strath.ac.uk.**

International Study Centre
In partnership with Study Group the University has established an International Study Centre which offers international students who do not meet direct entry requirements the option to complete a Foundation or Pre-Masters programme at the Centre with successful students transferring to the University's undergraduate and postgraduate degree courses.
Visit **http://isc.strath.ac.uk** for information about the study plan options and pathways.

English Language Requirements
If English is not your first language, you must provide evidence of your proficiency. The UK government's preferred English Language test is IELTS. Strathclyde's standard English language requirements are as follows:

IELTS: 6.5 with no individual component below 5.5
PTE: 62 overall (minimum component score 51)

Some courses may have different English language requirements. Please refer to individual course information for details.

Students with alternative English Language qualifications or who have lived and studied in a majority English-speaking country may not be required to take the IELTS test. Please contact **international@strath.ac.uk** for further guidance.

English Language Programmes
Students who do not meet the English Language requirements for the programme that they wish to study may enroll on a pre-sessional English course at Strathclyde prior to beginning their degree programme. All of our pre-sessional English programmes are accredited by BALEAP (British Association for Lecturers in English for Academic Purposes), and are designed to prepare students for the real tasks and situations that students will encounter in their studies. Up to 44 weeks of tuition are available, and students may enter the programme with IELTS scores of 4.0 overall (no subtest less than 4.0) or above.
(Note: students wishing to take a pre-sessional English programme must sit the IELTS for UKVI – Academic test).

One month of free pre-sessional English tuition is available to international students paying full overseas fees. Up to four hours of free in-sessional tuition is also available.

For further information, search 'English language teaching' at **www.strath.ac.uk**.

Other Sources of Funding
international (non-EU/EEA) students
You should explore funding opportunities in your home country at the same time as applying for funding in the UK, eg Ministry or Department of Education, British Council Office, British Embassy or High Commission.

International agencies such as UNESCO, the World Bank and the World Health Organisation operate funding schemes and some voluntary organisations and charities award modest scholarships.

Details on scholarships and funding sources are available at:

- **ukcisa.org.uk**
- **iefa.org/scholarships**
- **studentmoney.org**
- **acu.ac.uk**
- **internationalscholarships.com**
- **postgraduatestudentships.co.uk**
- **britishcouncil.org**
- **prospects.ac.uk**
- **marshallscholarship.org**

Funding Enquiries – UK students
The University's Student Financial Support Team offers financial support and advice to UK applicants and students. Assistance is available through the Discretionary and Childcare funds for students experiencing financial hardship.

Accommodation
Applications for University accommodation are accepted from January. Places will be confirmed after firm offers of academic admission have been accepted by the applicant.

Postgraduate Courses 2021 entry

Terms and conditions

All students will be required as a condition to abide by and to submit to the procedures and rules of the University's Statutes, Ordinances, and Regulations as found in the University Calendar, as amended from time to time.

The University will use all reasonable endeavours to deliver courses in accordance with the descriptions set out in this prospectus. Matters such as industrial action and the death or departure of staff may adversely affect the ability of the University to deliver courses in accordance with the descriptions. Also, the University has to manage its funds in a way which is efficient and cost-effective, in the context of the provision of a diverse range of courses to a large number of students.

The University therefore:

a) reserves the right to make variations to the contents or methods of delivery of courses, to discontinue courses and to merge or combine courses, if such action is reasonably considered by the University in the context of its wider purposes. If the University discontinues any course, it will use its reasonable endeavours to provide a suitable alternative course.

b) cannot accept responsibility, and expressly excludes liability, for damage to students' property, transfer of computer viruses to students' equipment, and changes to teaching arrangements and similar activities.

This prospectus, published in September 2020, is for use by those interested in entering the University in the academic year beginning in September 2021.

The contents of the prospectus are as far as possible up-to-date and accurate at the date of publication.

Changes are made from time to time and the University reserves the right to add, amend or withdraw courses and facilities, to restrict student numbers and to make any other alterations as it may deem necessary and desirable.

The descriptions of courses in this Prospectus are intended as a useful guide to applicants and do not constitute the official regulations which are available in the current edition of the University Calendar.

A guide to the admission requirements is given in each course entry, but please consult the University website (**www.strath.ac.uk**) for the most up-to-date information.

With thanks to individuals and departments throughout the University who have contributed to this prospectus.

The mesmeric visuals of Rob Lowe (aka Supermundane) have become an instantly recognisable feature of the contemporary design landscape.

His signature geometric drawings, known for their playful use of colour, line and optical effects, have been commissioned for almost every kind of setting. Whether he's designing a cover for Penguin Books, collaborating on a bespoke rug for Made.com, or building a site-specific installation for the community of Great Ormond Street Hospital.

Rob's work is always infused with his distinctive humour and imagination. Prolific in output, with a portfolio spanning almost 20 years, his work has been published and exhibited worldwide.

The University of Strathclyde would like to acknowledge the kind permission of Rob to use his artwork as a creative base on which to build this design.

YouTube TikTok

The place of useful learning

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