Strathclyde aims to be carbon neutral by 2030. Its ambitious ‘Sustainable Strathclyde’ strategy won a 2014 Green Gown Award for Continuous Improvement: Institutional Change.

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Future Cities at the University of Strathclyde

Cities are very much at the heart of our increasingly complex world. Future cities research at the University of Strathclyde focusses on improving the quality of the city experience, through developing a better approach to the use of city assets.

The MSc Global Sustainable Cities is designed to help create the leaders of future cities, who are able to meet the challenges faced by cities as they continue to shape and define the lives of an increasing number of the world’s population. We understand that having the right knowledge, expertise and experience is vital to help improve the quality of life in cities – and to ensure that they are ambitious in their vision, key centres of innovation and, crucially, people-oriented.

“The MSc Global Sustainable Cities will help graduates to understand cities from multiple perspectives and to create solutions that tackle the big urban sustainability challenges, from the need for low carbon energy and transport, to urban regeneration.”

Richard Bellingham
Course Director

A Place of Useful Learning

The University of Strathclyde is committed to growing and developing, and is now the third largest university in Scotland, comprising four faculties – Business, Engineering, Science, and Humanities & Social Sciences.

The University is one of the top 20 research-intensive universities in the UK. Research is of central importance, as it informs our teaching and allows us to turn findings into strategies, making a difference to business, industry and society as a whole.

Strathclyde won Times Higher Education awards in three consecutive years – Entrepreneurial University of the Year in 2013, UK University of the Year in 2012 and Research Project of the Year in 2011.
MSc Global Sustainable Cities

The MSc Global Sustainable Cities course is designed to produce city leaders, designers and planners with the skills to shape the sustainable cities of the future.

Why the MSc Global Sustainable Cities?
Over half the world’s population now lives in cities, generating 80% of global carbon emissions. How cities are managed and the sustainability challenges facing urban centres have never been more relevant.

The MSc Global Sustainable Cities programme is aimed at graduates or sector professionals with the vision to recognise current challenges and the motivation to create opportunities to improve our future cities for the benefit of everyone.

Our students will develop a holistic understanding of how cities work and gain the practical, analytical and leadership skills to redesign city systems, raise finance, and build political and community support for strategies and projects that will transform the way our cities function.

Flexibility is key to the programme, with students able to undertake the course either full time over 12 months, or on a part time basis over 24 months.

The part time study option gives students the freedom to develop their knowledge and skills in accord with their career.

Learning Through Practice
For change to happen learning must be put into action. This is why the MSc Global Sustainable Cities offers students the chance to practise and extend their learning through two real-world work placements. Even before graduation our students will help deliver change in cities across the world while also enhancing their employability.

Tailored To Your Career
The MSc Global Sustainable Cities can take you where you want to go. Depending on your background or chosen career path, the course can be tailored to meet your needs. There is a range of elective classes available from across the University of Strathclyde.

Drawing Together Expertise
The multidisciplinary nature of the MSc Global Sustainable Cities is reflected in the course delivery, which benefits from staff expertise and collaboration from across the University of Strathclyde. Course modules are drawn from the Department of Civil and Environmental Engineering, the Strathclyde Business School and the Department of Architecture.

World-Class Learning
Strathclyde Business School is among very few in the world – less than 1% of the total – to be endorsed by all three international accrediting bodies, AMBA, AACSB and EQUIS, and is one of the largest Business Schools in Europe.

Strathclyde Business School and the Department of Civil and Environmental Engineering are first in Scotland and in the UK top 10 for Research Excellence.

Architecture, with its strong focus on urban design, is working to improve the quality of life for urban citizens by reducing social and environmental impacts and promoting energy and resource efficiencies. Much Architecture research at Strathclyde is rated as world class.
At a glance
- Enhanced employment prospects for graduates through two work-based placements, in place of a traditional dissertation
- Key focus on developing professional strategic-thinking, communication and leadership skills essential for success
- Option to study part-time allows students in employment to develop their career prospects in tandem with their working life
- Core classes delivered by a dynamic and passionate team of staff drawn from multiple disciplines
- Latest knowledge and insights from leading business, government and academic experts through guest speakers and case studies
- Opportunities to develop international experience through overseas project placements
- Flexible learning options, allowing students to pursue individual interests and diversify their skills
- Excellent opportunities for engagement and networking with a range of city-focused and innovative organisations

“ScottishPower Energy Networks is delighted to be part of the development of this new course. The University is known internationally as an Engineering Centre of Excellence, and we are pleased to be expanding our long-standing relationship with them to develop sustainable city leaders of the future.”

George Kirk
Cities Director
ScottishPower Energy Networks
Course overview

The MSc Global Sustainable Cities programme is designed to provide the essential key knowledge and skills required to contribute to urban futures, but is also adaptable to reflect the different career paths which our graduates can follow.
Course Structure
The course is designed around three fundamental elements:
- Core Modules
  Holistic understanding and core skill building
- Elective Modules
  Personal career path enhancement
- Transformative Projects
  Work experience placements

Transformative Projects
(60 credits)
At the heart of the programme, and in place of a traditional dissertation, is the unique opportunity for all students to engage in collaborative working with partners to help transform cities. These projects offer opportunities to work with other students, with city governments and commercial partners to gain experience of working towards sustainable cities.

The projects will allow students to develop the skills and understanding learned through the taught component of the programme and put this into practice.
Students will gain experience of:
- Leadership
- Project management and delivery
- Strategy
- Problem-solving
- Team working

By undertaking two projects in contrasting settings (including industry, academia, government organisations, policy institutes, or other relevant organisations worldwide), students will consolidate their learning and have the satisfaction of seeing their professional skills develop in a real-world setting.

Of course, Transformative Projects also grant students excellent opportunities for networking, building contacts and enhancing employability.

Core Modules
(80 credits)
For those shaping future agendas in cities, knowledge of how cities operate as systems, the management of cities and the ways to bring about change is crucial. The seven core classes reflect these learning needs.
- City Systems and Infrastructure: 10 credits
- Global Cities: Society and Sustainability: 10 credits
- Public Policy, Governance and Strategic Change in Cities: 10 credits
- Understanding and Modelling Cities: 10 credits
- Urban Theory: 10 credits
- Business Models, Financing and Urban Business Case Analysis: 10 credits
- Leadership Skills for Urban Change: 20 credits

Elective Modules
(40 credits)
Recognising that you will bring your own skills, experience and ambitions, the course actively supports the enhancement of individual career paths by offering a wide range of elective modules.
Electives can be selected from departments across the University, including:
- Engineering
- Architecture
- Business
- Economics
- Management Science
- Government & Public Policy
- Law
- Computer & Information Sciences

Entry to some classes may require relevant previous experience.

Admissions Procedure
Application to our postgraduate taught courses is made online. Full information about the admissions procedure can be found here: www.strath.ac.uk/admissions/postgraduatetaught/

Fees and Funding
The course website includes information on current fees and Strathclyde Business School scholarship opportunities: www.strath.ac.uk/courses/postgraduatetaught/globalsustainablecities/

You are advised to research how you are going to finance your studies as early as possible, including potential bank loans and other scholarships.
Details of all available university scholarships are available at www.strath.ac.uk/search/scholarships/

Over 5,000 cities in Europe alone have signed up to ambitious carbon reduction strategies, and the Technology Strategy Board estimate the market in joined up urban solutions will be worth £200 billion a year by 2030.
Career paths

The flexible structure of the MSc Global Sustainable Cities encourages students to explore their interests, building on background experience or developing new specialisations. A diverse range of potential employment opportunities are open to our graduates.

Cities and Government
- **Sustainability Policy Strategist**
  Advising city agencies and local authorities on the development of sustainability policy impacting residents, businesses, transportation, energy provision and infrastructure.
- **Resilience Officer**
  Designing resilience strategies across sectors to allow cities to withstand chronic stresses and unforeseen shocks.
- **Urban Planning Consultant**
  Managing the social, economic, environmental and spatial aspects of the design and delivery of sustainable urban developments.
- **Community Engagement Officer**
  Developing engagement strategies to increase local community involvement and representation in urban development projects.

Engineering
- **Urban Engineering Consultant**
  Creating solutions for global clients' urban development projects in transport, urban renewal, energy and waste management or integrated urban masterplanning.
- **Sustainability Architect**
  Designing and implementing green technology and techniques for sustainable architecture projects, including conservation and regeneration, housing developments and energy efficiency and water management systems.
- **Infrastructure Sustainability Consultant**
  Employed within consultancy and project management agencies, NGOs, utility companies and the third sector to advise on areas including infrastructure renewal, cost, waste and energy use reduction, lifespan extension of existing infrastructure and the selection of sustainable materials.
- **Sustainable Energy Manager**
  Planning and monitoring energy use to develop and improve sustainable energy systems.

Finance and Management
- **Sustainable Strategy Consultant**
  Collaborating with mayors, urban planners, foundations, non-profits, utility companies and businesses to create cross-sector sustainable strategies to reduce urban environmental footprints.
- **Global Sustainability Analyst**
  Assessing operational processes and sustainability measures, improving opportunities and managing stakeholders to allow clients in the corporate, commercial and public sectors to meet political and social sustainability pressures.
- **Corporate Responsibility Consultant**
  Leading on socially responsible policy for commercial organisations on supply chains, community investment, impact measurement and environmental services, carrying out research and analysis to create new sustainable business opportunities.
Meeting contemporary urban challenges

Subject to more and faster rates of change, cities are increasingly aware of the need to be resilient and to adapt to and withstand short-term crises and longer-term systemic change. Designing, managing and governing city systems which can endure and even thrive in such unstable conditions are key to a city’s future success. This requirement has been acknowledged by The Rockefeller Foundation through its 100 Resilient Cities network. Launched in 2013, the network offers financial and strategic support and is funding new resilience positions within 100 world cities.

21st century cities are also more complex ‘organisms’ where the need to work towards more integrated urban systems lies at the heart of future cities. No longer can functions be delivered and managed separately—the modern city needs holistic approaches where there is an understanding of the interconnections and dependencies across all areas of urban living.

To meet these challenges and make cities forward-looking, economically robust and exciting and desirable places to live, there is a need for new, smarter forms of governance, where citizens and professionals collaborate towards setting our shared goals and redefining the rights and responsibilities each have in shaping a future city.

An understanding of city systems, sustainability, urban planning and energy systems, coupled with strong leadership skills, are all highly desirable in the new field of resilience, attributes that the MSc Global Sustainable Cities is designed to deliver.
The Institute for Future Cities (IFC) is an ambitious new centre for world-changing research, focussing on improving the quality of the city experience and quality of life in cities globally. MSc Global Sustainable Cities students will benefit directly from our innovative projects, working in collaboration with industrial and commercial partners and global agencies of change. More information can be found at the IFC website: www.strath.ac.uk/research/futurecities

City Observatory
Designed to demonstrate, develop and exploit innovative approaches for future sustainable cities, the IFC’s City Observatory uses data capture and analysis to enable cities to develop a new understanding of how the city works. Excitingly, Glasgow and its partner cities will act as living labs where new approaches can be tested and understood in the real world, allowing researchers, developers and policy makers to see how the city responds to new systems, identify optimal solutions and uncover future possibilities.

The City Observatory will provide a unique teaching facility for the MSc Global Sustainable Cities.

Coordinated by the Institute for Future Cities, STEP UP worked together with local government, research and commercial partners in the European cities of Glasgow, Gothenburg, Ghent and Riga, focussing on energy and sustainable city planning. A partnership of twelve organisations from city government, academia and business, the consortium combined expertise in energy planning, economics, finance, technology, project management and delivery and had representatives from each city council, ensuring the active participation and political commitment of the cities themselves.

The new MSc Global Sustainable Cities has been developed as part of the STEP UP project, incorporating STEP UP knowledge and learning in its teaching. More information about STEP UP can be found on the project website: www.stepupsmartcities.eu
Sustainability in Glasgow

Glasgow is an exciting place to study sustainability. Through ambitious and collaborative initiatives and projects the city is working hard to ensure its sustainable future.

Sustainable Glasgow aims to make the city one of the greenest in Europe. This Glasgow City Council-led initiative was formed in 2010 to make Glasgow a world-leading centre for sustainable policy, innovation and action and brings together partners from education, including the University of Strathclyde, housing, communities, business and enterprise. Sustainable Glasgow is implementing diverse partnership projects including the installation of LED street lights and electric car charging points and the creation of renewable energy schemes and Green Jobs, with the aim of improving quality of life in the city, boosting the economy and protecting the environment.

Glasgow beat 60 competitor cities to be awarded £24 million by the Technology Strategy Board to fund Future City Glasgow. The innovative programme will demonstrate how technology can make life in the city smarter, safer and more sustainable. Glasgow citizens will be at the forefront of technology integration and application and analysis of the gathered data will assist policymakers and inform future investment in Glasgow.

The Commonwealth Games 2014 Athletes’ Village is a visionary regeneration project aimed at improving the lives of local residents by providing sustainable housing and affordable heat to one of the poorest parts of Glasgow. The scheme comprises 700 new homes, heated via a local district heating system, housed in a purpose built new Energy Centre, situated in a former industrial area extending along the River Clyde. It is the first large scale carbon neutral project in Scotland.

A key focus by the Scottish Government on waste reduction, re-use, enhanced recycling and renewable energy recovery has seen Glasgow plan for change. Currently sending 74% of its waste to landfill, the new Waste to Energy facility in the Polmadie area of Glasgow will reduce this figure by 90% and produce enough energy to power the equivalent of 22,000 homes and heat the equivalent of 8,000 homes. The plant, which will be one of the most advanced waste management facilities in Europe, will deliver a potential saving to Glasgow of 90,000 tonnes of CO2 every year.

In 2014 Glasgow was named as one of the first 33 members of the Rockefeller Foundation’s 100 Resilient Cities Network. 100 Resilient Cities is the Rockefeller Foundation’s $100m+ commitment to build urban resilience in 100 cities around the world. Supported by the University of Strathclyde, Glasgow is creating a city-wide resilience strategy to help prepare for, withstand and bounce back from catastrophic events and chronic stresses and challenges, such as storms and flooding caused by climate change, securing sustainable and affordable energy supplies, and tackling poverty.
The MSc Global Sustainable Cities programme has been developed through STEP UP (Strategies Towards Energy Performance and Urban Planning), which has received funding from the European Union’s Seventh Framework Programme for research, technological development and demonstration under grant agreement no 314679.

The European Union is not liable for any use that may be made of the information it contains.

If you would like to know more about the MSc Global Sustainable Cities please contact us at:
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More information on the course, including details about fees, scholarships and funding can also be found on the course website:
www.strath.ac.uk/courses/postgraduatetaught/globalsustainablecities/

More information on the Institute for Future Cities can be found on the IFC website:
www.strath.ac.uk/research/futurecities

Or contact the IFC directly on:
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