





ENERGY AND SUSTAINABLE BUILDING DESIGN MSc

OVERVIEW

Accredited by both the Chartered Institution of Building Services Engineers (CIBSE) and the Energy Institute, the Energy and Sustainable Building Design MSc will allow you to develop an understanding of building physics, and skills in building simulation with emphasis on sustainability.

This innovative course is designed for those who wish to understand the ways new and renewable energy can be harnessed in buildings, gain the ability to undertake the simulation and modelling tasks essential for credible building performance analysis, and work creatively within a multidisciplinary design team, including building services engineers.

Modules are taught by research and teaching staff in the Institute of Energy and Sustainable Development (IESD), providing you with a unique opportunity to learn from scientists actively involved in furthering knowledge in this area.

The IESD's research has developed over a 30-year period to create the underlying knowledge, techniques and technology necessary to achieve more energy-efficient and sustainable lifestyles.

You will develop a broad insight in to energy and sustainability issues with in-depth knowledge of computer modelling techniques for the design of modern sustainable buildings.

MODULES

- Sustainable Development
- Sustainable Buildings
- Sustainable Energy
- Building Physics
- Building Performance Modelling
- Energy Analysis Techniques
- Study Skills and Research Methods
- Dissertation

Optional modules

- Leading Change for Sustainability
- Low Impact Manufacturing
- Green Business

TEACHING AND ASSESSMENT

You will normally attend three to four hours of timetabled taught sessions each week for each module; you can also expect to undertake around six further hours of independent study per module per week.

You will be taught by a team of Professors, lecturers and researchers who are respected internationally for the quality of their work. Their disciplines range from mathematics and physics, through engineering, to economics, sociology and psychology which enables them to lead multi-disciplinary projects that address

environmental, economic and social research problems. Students who choose to study by Distance Learning are able to access the same expertise through a virtual learning environment, including discussion forums and through email and telephone conversations with the programme leader.

On campus you will have access to the new Energy Laboratory a high-tech hub for teaching, research and technology demonstration. Complimenting DMU's wider green energy projects, the Energy Laboratory is housed in the Queens Building, the award-winning passively cooled student and research space for Engineering and Media.

EMPLOYABILITY

We offer a great opportunity to boost your career prospects through an optional one-year placement in industry as part of your postgraduate studies.

Upon graduating you will have the knowledge and advanced modelling skills to enable you to work effectively as a building design professional or analyst. These skills are increasingly in demand in architectural and engineering consultancies, utilities and regulatory organisations, and local and national government.

Our graduates go on to work in a wide range of energy, buildings and sustainability roles and work for globally recognised companies such as:

- Mott MacDonald
- WSP Group
- Arup
- WYG

- David Chipperfield Architects
- Stephen George and Partners
- Pick Everard

Graduates have also progressed to continue their academic careers in research.

KEY INFORMATION

Duration: September start: One year full-time. A minimum of two years part-time and distance learning (please contact us for further information). Optional one year placement available.

Entry Requirements: You should have the equivalent of a British Honours degree (2:2 minimum) in a relevant numerate subject, for example engineering, physical sciences, mathematics. Architects with an interest in computer modelling are also encouraged to apply.

English Requirements: If English is not your first language an IELTS score of 6.0 or equivalent when you start the course is essential.

Tuition Fees: Please visit dmu.ac.uk/pgfees for information.

For a full range of core and optional modules please visit: dmu.ac.uk/sustainable-building-design



ENERGY AND SUSTAINABLE DEVELOPMENT MSc

OVERVIEW

Energy and Sustainable Development MSc reflects the range of knowledge and skills required by professionals to address the challenges of energy, climate change and sustainable development. Accredited by both the Chartered Institute of Building Services Engineers (CIBSE) and the Energy Institute, this course is suitable for individuals from a variety of disciplines with either a social science or physical science background. It will also be suitable for you if you are a mid-career professional with relevant experience.

You will learn from leading academics and specialists from the Institute of Energy and Sustainable Development (IESD), as well as a range of invited experts and guests. You will develop an understanding of how sustainable development can be achieved and how we can deal with global climate change through sustainable energy, more efficient design and manufacturing, better management of buildings and organisational behaviour change. You will graduate with the skills and knowledge to lead communities, organisations and governments in responding to this challenge.

MODULES

Core modules

- Sustainable Development
- Sustainable Energy

- Sustainable Buildings
- Resource-Efficient Design
- Energy Analysis Techniques
- Study Skills and Research Methods
- Dissertation

Optional modules

- Integrated Environmental Strategies
- Leading Change for Sustainability
- Low-Impact Manufacturing
- Green Business

TEACHING AND ASSESSMENT

Our teaching team are recognised researchers within their field and embed industry-relevant case studies into the course to ensure content is current to the issues we face around sustainability and renewable energy. Current research is driven by the UK's commitments to reduce greenhouse gas emissions, increase the use of new and renewable energy technology, and provide a high-quality, comfortable, safe and efficient built environment.

Students who choose Distance Learning will have access to their same expertise through a virtual learning environment, including discussion forums and through email and telephone conversations with the programme leader.

Full-time students attend for two days each week and receive formal lectures from experienced research and teaching staff. You can also expect to undertake around six further hours of independent study per module per week.

You will have access to the new Energy Laboratory a high-tech hub for teaching, research and technology demonstration. Complementing DMU's wider green energy projects, the Energy Laboratory is housed in the Queens Building, the award-winning passively cooled student and research space for Engineering and Media.

EMPLOYABILITY

Upon graduating you could go on to work in a wide range of energy, buildings and sustainability roles in energy and environmental consultancies, non-governmental environmental organisations, central and local government (including the European Commission), and multi-national organisations.

Recent graduate destinations include: The Carbon Trust, BMW, Turley Associates and European Commission. Graduates have also progressed to continue their academic training with PhD study.

KEY INFORMATION

Duration: September start: One year full-time and a minimum of two years part-time and distance learning. January start: 18 months full-time. A minimum of two years part-time and distance learning (please contact us for further information). Optional one year placement available.

Entry Requirements: You should have the equivalent of a British Honours degree (2:2 minimum) in a relevant subject or five years' work experience in an appropriate field.