MSc INFRASTRUCTURE AND SUSTAINABLE DEVELOPMENT
MSc / PGDip / PGCert

The planning of infrastructure to support inclusive and sustainable development in rapidly growing cities of middle and low income countries

The image above is courtesy of Jorge Láscar. Title: Metrocable - Reaching the least developed suburban areas of Medellin, via Stockphoto.
Infrastructure and Sustainable Development

MSc / PGDip / PGCert

This MSc is designed to meet the international demand for professionals who can lead on the planning of sustainable and resilient infrastructure to help alleviate poverty in the rapidly growing cities of middle and low-income countries.

The MSc is seeking full accreditation with the Royal Town Planning Institute (RTPI)

The programme offers a new approach to studying infrastructure planning and delivery designed to make the step change needed to meet the sustainability challenges of the 21st century.

Course objectives
This programme introduces new and innovative thinking on infrastructure, responding to the imperatives of growing cities to achieve poverty alleviation, ecological sustainability and local economic growth within increasingly complex and uncertain environments.

The core teaching on governance, human development, sustainability, finance and programme/project planning offers a unique combination of theoretical perspectives and practical skills delivered by an interdisciplinary team of academics and practitioners. This prepares students to engage with more holistic approaches to decision making and problem solving to deliver infrastructure that provides for both inclusive and sustainable development.

Course structure
As well as the MSc, our Infrastructure and Sustainable Development programme offers exit awards of a postgraduate certificate (PGCert) and a postgraduate diploma (PGDip).

Our innovative programme structure provides a flexible pattern of study that allows students to study the programme full-time over an academic year or part-time in open-learning mode (online) over two years. Students can start either in September or January, easily switch between open-learning and full-time modes of study and if needed, extend their study to up to five years.

Intensive study periods
There are four optional intensive study periods during the programme when both full-time and open-learning students come together on campus to attend lectures, seminars and workshops.

Each period is normally around three days long. The aim of these study periods is to develop skills through formal lectures, workshops, site visits and one-to-one tutorials.

For the open-learner, these study periods provide an opportunity to become part of an academic community, and to make valuable links with other open-learners.

Full-time students also get the chance to network with students already working within built environment industries.

International field trip
The programme offers the option to attend an international field trip each year which allows students to apply their theoretical learning to real life problems and contexts.

On this trip students evaluate the governance processes on an actual infrastructure development project engaging with a wide range of stakeholders and learning about the challenges of working in different social, cultural and regulatory contexts.
Course modules and structure

The course is structured around the following four core modules together with Applied Research Methods and a Dissertation. Each module is delivered via six learning packages.

Sustainable Development
Sustainable Development explores the relationships between urban infrastructure delivery, pro-poor development, environmental change and local economic growth. A key element to this is the teaching of new ways of thinking about infrastructure delivery that draw on emerging global thinking based on systems theory; circular models, decentralised approaches; collaboration and accountability.

Urban Governance and Political Economy
This module will provide you with a firm understanding of governance and decision-making processes involved in the planning and delivery of different types of infrastructure. This includes different approaches to participation of stakeholders to enable more informed and inclusive decision-making for infrastructure delivery that is to the benefit of the local and wider urban communities.

Infrastructure Finance
Infrastructure Finance examines how infrastructure is financed as well as alternative funding models, cost recovery options, and sources of finance. The module also examines the roles of key actors and reviews the approaches, methods and tools used for decision making in a variety of different contexts and under conditions of uncertainty.

Development in Practice
The aims of this module are to provide you with an understanding of the role of infrastructure in development, and to equip you with a working knowledge of the key frameworks and approaches used to design and implement local development programmes and projects. The module allows you to experiment with bringing together your broad knowledge base and skills and applying it to an actual project.

Applied Research Methods
Through developing your research skills, this module complements the overall master’s programme by providing the opportunity to draw on all the other modules to inform and direct your choice of dissertation subject matter.

Dissertation
This involves carrying out an extended piece of research on a topic of your choice.

www.brookes.ac.uk/isd
**Our applied approach to learning**
The MSc is a flexible programme which is purposely designed to deliver an authentic, contemporary learning experience that provides students with opportunities to engage with real-life challenges within a stimulating theoretically informed environment. This is achieved in the following ways:

- We adopt a collaborative approach to learning and teaching working closely with practitioners both in the private and public sectors, and other academics and professionals in the field. The contribution of our own multidisciplinary teaching team is interspersed with input from a variety of guest speakers in practice with direct personal experience of planning and delivering infrastructure programmes in development contexts.

- The programme makes use of Problem Based Learning (PBL) to support students in developing skills in problem solving and decision making in complex situations. This is achieved through guided working on a variety of real-life case studies drawn from around the world on which students are encouraged to share their own experiences.

- Students are taught a combination of both theoretical learning and practical skills including both traditional and innovative infrastructure planning and appraisal methods and approaches to programme design and evaluation. To develop these skills, the programme includes a core practice based module where students have the opportunity to experiment with, and test approaches through the design of their own project.

**Research embedded in teaching**
The programme is closely linked with the Oxford Institute for Sustainable Development (OISD). A recent HEFCE report suggests that OISD is one of the key players in sustainable development research in higher education in England.

The programme is taught by academics associated with OISD, who are actively involved in research in the field of sustainable development and are able to contribute up to date knowledge and timely research thinking.

**Employability**
Meeting industry’s requests for MSc courses to involve more practical and interdisciplinary skills, this programme is designed to provide graduates with the attributes employers seek. Students develop transferable skills, critical knowledge and understanding in infrastructure appraisal and planning, skills which are highly sought after by industry.

The long-standing reputation of the School of the Built Environment at Oxford Brookes in producing highly skilled, enthusiastic and very capable professional planners aids the employability of our graduates. We are the first port of call for many employers when they are seeking new graduate planners.

On completing this programme, graduates can expect to find employment in the following sectors:

- International and national development agencies such as UN Habitat, the World Bank, the European Union and DfID
- Local and national governments
- International engineering and planning consultancies
- non-governmental agencies worldwide, such as Practical Action, Care International and WaterAid

Our School’s graduate employment rate is exemplary, and our students go on to be employed throughout the globe including India, Pakistan, South Africa, Canada, Nigeria, Kenya, the Middle East and China.

**Admissions criteria**
You should normally have a good honours degree or relevant experience and demonstrable study abilities. If your first language is not English, an overall IELTS score of 6.5 with at least 6.0 in reading, writing, listening and speaking is required. Find out about other acceptable language qualifications, student visa requirements and our English courses at www.brookes.ac.uk/international
MSc INFRASTRUCTURE AND SUSTAINABLE DEVELOPMENT

Full-time September entry

**Autumn**
September - December
Semester 1

- Sustainable Development
  - P
  - Credits 30
- Finance
  - P
  - Credits 30
- Applied Research Methods
  - P
  - Credits 10

**Spring**
January - April
Semester 2

- Governance
  - Field trip during Easter break
  - P
  - Credits 30
- Development Practice
  - P
  - Credits 30

**Summer**
May - September

- Dissertation
  - Credits 50

Key modules

---

MSc INFRASTRUCTURE AND SUSTAINABLE DEVELOPMENT

Open Learning September entry

**Autumn**
September - December
Semester 1

- Sustainable Development
  - P
  - Credits 30
- Finance
  - P
  - Credits 30
- Applied Research Methods
  - P
  - Credits 10

**Spring**
January - April
Semester 2

- Governance
  - Field trip during Easter break
  - P
  - Credits 30
- Development Practice
  - P
  - Credits 30

**Summer**
May - September

- Dissertation
  - Credits 50

Key modules

---

www.brookes.ac.uk/isd
CONTACT INFORMATION

School of the Built Environment
Oxford Brookes University
Headington Campus
Gipsy Lane
OX3 0BP

Follow us on Facebook
www.facebook.com/builtenvironment

Follow us on Twitter
@obu_be

Email
be-enquiry@brookes.ac.uk

All information is correct at the time of going to print (February 2018).
Please refer to the University's website for the most up-to-date details.

www.brookes.ac.uk/be