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## MSc/PGDip

# Infrastructure Planning, Appraisal and Development

UCL's Infrastructure Planning, Appraisal and Development MSc programme is unique in preparing students for the major infrastructural challenges ahead both globally and in the UK. The programme covers the critical areas of governance, politics, socio-economic and environmental development, funding, finance and strategic planning, and how sustainable development goals can and should be incorporated in investment decisions. It takes in frameworks and methodologies that bring risk and uncertainty into the milieu of complex decision-making. The programme offers a holistic approach to decision making and problem solving that lead to more robust investment outcomes across a range of infrastructure types, scales, systems and networks, including major and nationally significant infrastructures.

## Overview

The programme is inter-disciplinary and international, aimed at developing a critical understanding of the theory and practice of infrastructure planning, implementation and the development associated with it. The MSc investigates questions regarding how 'successful' infrastructure developments can be defined from a range of perspectives given the significant and often fast-changing expectations placed upon such investments. It recognises that judgments about project 'success' need to be examined against different contexts. With this in mind, the programme aims to arm students with insights, knowledge and skills that will assist them to better plan, appraise and deliver future infrastructure in a manner that is sensitive to the risks, uncertainties and complexities of different contexts be they temporal, cultural or physical.

Originally based on the work of the OMEGA Centre, the programme still draws on the numerous studies undertaken in this field by the Centre and other leading research institutions.

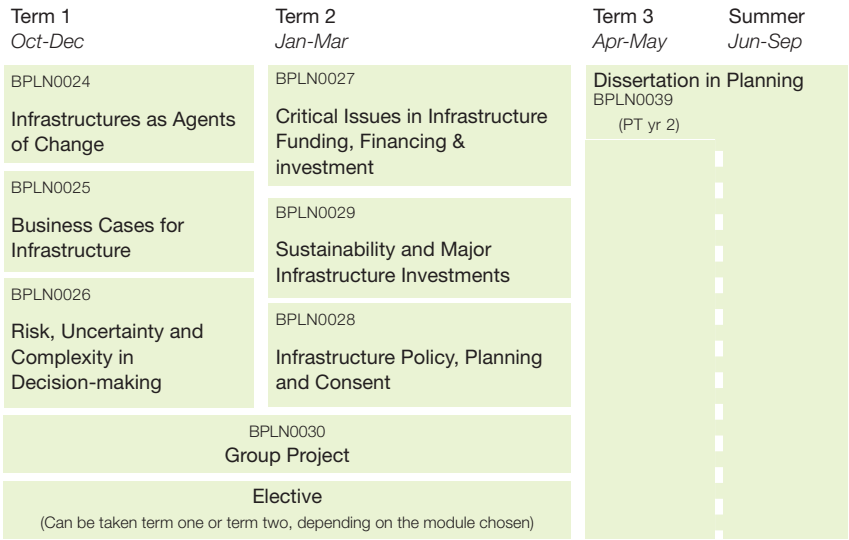
The core learning outcomes of the course include:

- Acquisition of understanding of the fundamental characteristics and key issues of contemporary infrastructure;
- Appreciation of theories and practice of infrastructure planning, appraisal and delivery;
- Understanding of the contribution that such initiatives make to environmental, social, economic and institutional objectives at local, national and global scales;
- Appreciation of the policies, legislative frameworks and market contexts that surround infrastructure development;
- Appreciation of the diversity of stakeholders' agendas and of interrelationships and tensions between local and national interests;
- Enhanced understanding of the critical issues concerning sustainable infrastructure investment at all scales;
- Attainment of generic skills of strategic planning and risk analysis and management distilled from other disciplines where risk, uncertainty and complexity are at the heart of their planning;
- Grounding in traditional infrastructure planning and appraisal methods and techniques including: Business Case Development, Financial, Economic and Social Cost Benefit Analysis (CBA), Environmental Impact Assessment (EIA), and Social Impact Assessment (SIA);
- Introduction to innovative methods and techniques for infrastructure planning, appraisal and monitoring, including: Stakeholder and Issue Analysis and Policy-led Multi Criteria Analysis (PLMCA) that facilitate the transparent trade-off between different project stakeholder priorities, aims and interests in a holistic manner.

## Structure/Content

The programme comprises the following modules:

- BPLN0024 Infrastructures as Agents of Change (15 credits)
- BPLN0025 Business Cases for Infrastructure (15 credits)
- BPLN0026 Risk, Uncertainty and Complexity in Decision-making (15 credits)
- BPLN0027 Critical Issues in Infrastructure Funding, Financing & Investment (15 credits)
- BPLN0028 Infrastructure Policy, Planning and Consent (15 credits)
- BPLN0029 Sustainability and Major Infrastructure Investments (15 credits)
- BPLN0030 Major Infrastructure Planning Practice (15 credits)
- Elective Module (free choice but subject to approval by the Course Director and Module Tutor) (15 credits)
- BPLN0039 Dissertation in Planning (60 credits)




## Field Trip

Students will have the opportunity to visit a selection of important European mega-infastructure projects during a one week trip. In this way students will be able to appreciate directly the way different contexts, including cultural, political and institutional, frame infrastructure decision-making in their planning, appraisal and delivery. In recent years students have visited and received specially arranged presentations from a wide range of senior professionals, civil servants and academics regarding:

- France's High Speed TGV network
- The Amsterdam North South Metro
- The Port of Rotterdam
- The Rotterdam Central Station
- Maeslant Storm Surge Barrier in the Netherlands
- The Brussels Midi Station re-development

## Entry Qualifications

Applicants must have obtained a minimum of a good second-class Bachelor's degree or other qualification of equivalent standard (preferably 2.1 or higher, but 2.2 with appropriate experience or equivalent will also be considered). Entrants from all disciplines will be considered, with preference given to those with work experience in some aspects of infrastructure planning, appraisal and delivery.

A high level of competence in both spoken and written English is also required. Overseas students whose first language is not English will be asked to provide evidence of competency in English. A minimum overall IELTS score of 6.5 with a minimum of 6.0 in each of the sub-tests is required.

## Careers

The programme has been conceived to provide enhanced capacity-building opportunities for those currently working in the field of infrastructure development and offer an invaluable grounded qualification for new entrants into the field.

With strong links to industry, government and academia on a global scale, many students have gone on to find placements within the first year after graduation. They have taken up positions in community development, academia, consulting and the construction industry. A number of graduates have been accepted to undertake PhD studies at UCL and other prestigious institutions.