

TERM 1

Introduction to Science, Engineering and Public Policy (60 credits)

- Core introductory module, taken by all MPA students. This module provides a specialist introduction to science, technology, engineering and public policy, and introduces key themes, concepts, skills and frameworks.
- Specific material for each MPA degree, including one dedicated day per week of specialist content, and a further additional week of in-depth focus, introducing key themes.
- External visits, guest lectures/seminars with experts.

Knowledge and Governance

- Tools and processes governments use to understand how the world works, i.e. 'How does government know?'
- Main challenges of generating and using STEM knowledge in policy making and public management
- Governance of processes and actors, within the context of the governance of national policy and socio-technical systems
- Interactive lectures, discussions, role-play and experiential approaches to learning

Evidence for Decision Making

- Evidence and analysis for decision-making
- Quantitative analysis of socio-technical systems
- Qualitative and mixed method analysis of socio-technical systems
- Modelling of socio-technical systems
- Integrating different types of knowledge to support (public) decision making

Public Administration

- Tools and processes that public administrations employ when managing and implementing policies
- Reflect on main challenges of responding to complex issues, coupled crises and uncertainties
- Administrative capacity of governments and policy networks to effectively, efficiently respond to challenges.
- Uses problem-based and reflective learning, including flipped classroom.

Policy Entrepreneurship

- Steps and tools for practical policy analysis
- Writing and presenting policy analysis
- Introduction to analytic methods and frameworks

Scenario week (real-world case project)

- Applying tools, methods and skills gained during the first term and applying them in an experiential simulated situation.
- Working, presenting and networking with experts

TERM 2

Analytical Methods for Policy (15 credits)

- Cover the diverse landscape of analytic methods used in policy practice, and develop literacy over a wide range of analytic methods
- Develop competency over a range of quantitative and qualitative methods
- Equip MPA students to be 'intelligent customers' when using external analytic products
- Provide pragmatic guidance, and social and computation skills that can be used to develop further analytic competencies

Route Specialist Module (15 credits)*

During Term 2, each MPA degree requires a route specific module that further explores the topical themes and challenges of the chosen speciality;

- Energy, Technology and Climate Policy
- Development, Technology and Innovation Policy
- Digital Technologies and Policy
- Urban Innovation and Policy

**MPA Science, Engineering and Public Policy students may select a UCL or STEaPP general elective.*

UCL STEaPP Elective (15 credits)

All MPA students select at least one elective module from those provided by STEaPP in any given year, these may also include other MPA route specialist modules (if not already required by your programme);

- Clean Energy and Development
- Communicating Science for Policy
- Negotiation and Diplomacy
- Risk Assessment and Governance
- Science, Technology and Engineering Advice in Practice
- Science, Research and Innovation in Policy
- Energy, Technology and Climate Policy
- Development, Technology and Innovation Policy
- Digital Technologies and Policy
- Urban Innovation and Policy

UCL/STEaPP Elective (15 credits)

Students may select a further module from UCL STEaPP or one provided by another UCL Department. This module may be selected for personal preference, special interest or deeper study of a related topic.

TERM 3

Ethics, Institutions and Power (15 credits)

- This module explores the topics and themes on the nature and behaviour of knowledge
- Major debates on the relationship between science, technology and engineering and the remit of politics and policy
- Inspire innovative and creative challenges to conventional ideas, push boundaries and pioneer original and bold approaches to create change, in both research and practice
- Delivered as an intensive set of research seminars and workshops

MPA Group Project (45 credits)

The MPA Group Project is a major experiential component of the programme, enabling students to work as a group on a real-world policy challenge, alongside an external partner organisation, with the additional support of UCL STEaPP faculty.

The MPA Groups will work with the partner to understand the challenge, to develop a work plan that includes problem definition and framing, explore and assess options relevant to the problem context and, ultimately, deliver a final set of products that meet the partner's needs and expectations.

This module begins in Term 2, when students are briefed by the client and develop a project plan. Workshops and training during Term 2 support the development of their projects.

There are a number of deliverables and feedback points (including peer assessment) that are required throughout Term 2 and Term 3, which culminate in a final presentation and report due at the end of the academic year (September). As such, students are expected to remain in London throughout the summer to work on their projects.

Skills applied:

- Scope, negotiate and develop agreed and deliverable terms of reference
- Team management and communication
- Managing client relations and stakeholder expectations
- Negotiation, diplomacy and communication
- Conducting research over a large area and focus
- Selecting appropriate and relevant analytic methods
- Applying methods, skills, knowledge and frameworks acquired throughout MPA study
- Applying adaptive policy design methods, including and evaluation of policy interventions
- Shaping solutions
- Presenting to clients, knowledgeable professionals and UCL STEaPP Faculty