MSc in Soil Mechanics
(with specialisations)
MSc in Soil Mechanics

INTRODUCTION

The MSc course cluster in Soil Mechanics was established in 1950 and is internationally renowned. The current and Emeritus staff includes four Rankine Lecturers and the research and teaching facilities are first class. Graduates from the course hold senior positions around the world. The Geotechnics Section engages closely with the geotechnical engineering industry to ensure that the course content is up to date and relevant to current professional practice.

AIMS

The course is designed to provide students with a solid technical basis in the key areas of geotechnics through a coherent, coordinated and balanced degree programme, integrating core engineering science and recent research findings with practical application.

COURSE THEMES

The 5 Soil Mechanics MSc courses share approximately 80% of the curriculum (core modules see side column), while the remaining 20% allow specialisation in the areas of Advanced Soil Mechanics, Engineering Seismology, Environmental Geotechnics, Sustainable Development and Business Management.

Distinctive features of this programme include strong links with industry, emphasis on fieldwork, laboratory testing using state-of-the-art facilities and numerical analysis using in-house state-of-the-art software, integration of teaching with the sister course in Engineering Geology, and teaching by leading experts in the field of Soil Mechanics.
The course comprises two terms of lectures, tutorials, laboratory classes and individual coursework assignments and one term devoted to a research dissertation. The lab classes offer first-hand experience of experimental soil mechanics in our modern, purpose-built teaching laboratories.

The programme also includes 3 field trips: 2 weekends in the Autumn term to investigate the engineering geology and geotechnical issues in two distinct areas of the UK and a one-week study tour in the beginning of the Summer term visiting several geotechnical and geological projects in Southern Europe.

MSC INDUSTRIAL BURSARY SCHEME

Our courses are supported by a group of 11 Companies which make up our Industrial Bursary Scheme. The Scheme aims to provide industrially funded bursary awards for our students. Funding normally covers the full fees as well as a contribution towards subsistence costs and is available to UK based students. Other funding opportunities include 2 Statoil Scholarships and a number of Departmental fee scholarships.

Companies forming the bursary group organise recruitment events and regularly recruit our MSc graduates contributing to the excellent employability record of our graduates.

MSc CORE MODULES

- Consolidation and Seepage
- Strength and Deformation
- Laboratory and Field Techniques
- Analysis and Constitutive Modelling
- Ground Investigation
- Embankments & Earthworks
- Stability of Soil Slopes
- Foundations
- Earth Pressures
- Geotechnical Processes

MSc SPECIALISATION MODULES

INCLUDE

- Engineering Geomorphology
- Partially Saturated Soil Behaviour
- Advanced Constitutive Modelling
- Rock Engineering
- Landfill Engineering
- Hydrogeology of Contaminated Land
- Geotechnical Hazards
- Geotechnical Earthquake Engineering
- Dynamics

DISSERTATION

- 11 week research project
- Access to state-of-the art laboratory and computing facilities
- Collaboration with Industry

FULL- AND PART-TIME STUDY

The full-time programme is taken over 11 months, with a single entry point per year at the beginning of October. The part-time programme is available on a Term Release basis over 2 years.
HOW TO APPLY

Apply for the Course online via:
www3.imperial.ac.uk/pgprospectus/howtoapply

As a minimum applicants should have an Upper Second Class Honours degree in Civil Engineering or a related discipline from a UK university (or overseas equivalent), preferably with some industrial experience.

CONTACT

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