



MSc Hydromorphology and River Management
MRes River Science

There is an international interest and demand for trained specialists in river science who can bridge the gap between river engineering and the environment. This arises due to increasing demands for sustainable solutions to flood and erosion risk management which must also balance the demands for improving and restoring the ecological health of the World's Rivers. Central to this is the need to understand how physical river processes create and sustain channel morphologies and physical habitats, and how through the development of models and tools, it is possible to apply this understanding to manage rivers within a changing environment.

The MSc and Masters by Research (MRes) programmes at Southampton offer an exciting, interdisciplinary approach to this important global issue. The MSc award links study of river processes and management with an academic focus on skills in modelling and geographical information systems (GIS), key tools for assessing the response of river systems to environmental change and for supporting river management decisions. The MRes combines core study of theoretical and policy issues concerned with rivers management with methodological training directed towards the production of a research-based dissertation. Both programmes address real world concerns relevant to the enhancement of global river environments and draw on the research and expertise of one of the world's leading groups of fluvial geomorphologists as well as other world-leading groups from across the University.

Programme structure:

As shown below, the programme comprises a mixture of compulsory core modules covering key topics and skills, supplemented by a series of optional modules.

Module Title	MSc	MRes
Hydromorphology: The Scientific Basis	Core	Core
Research Skills	Core	Core
Research Project Design	Core	Core
Hydromorphology and River Management	Core	
2 optional modules from:		
GIS for Environmental Management	Option	Not Applicable
Topographic Data Analysis		
Core Skills in Remote Sensing		
Freshwater Ecosystems		
River and Fisheries Restoration		
Dissertation	Core	Core

Admissions

Applicants will have backgrounds in geography environmental science, ecology, environmental engineering or similar areas.

Entry requirements are a good undergraduate degree, at least lower second class or equivalent. Other qualifications will be considered in lieu of a relevant undergraduate degree. A part-time programme of study is available and fees will be advised annually. Scholarships are available for international studentships and are awarded on a competitive basis.

Careers

Graduates from the programmes will be well placed to enter research and planning posts in environmental consultants and specifically river management agencies. Others will go on to national or international consultancy work on river related management or to careers in scientific research. The programmes also provide an ideal stepping stone to further doctoral level study. The courses will be highly relevant to professionals seeking to enhance their training in hydromorphology, and opportunities to take individual modules are available. A short 2-day course in applied hydromorphology and river management is available for professionals.

Course Tutors

The course will be taught by internationally renowned experts in hydromorphology and river management including:

Prof Paul Carling, over 30 years experience in fluvial geomorphology and sedimentology

Prof David Sear, over 20 years experience in applied hydromorphology and river management/restoration

Prof Steve Darby, over 18 years experience in river and catchment modelling and fluvial geomorphology

Dr Keith Richardson, Over 10 years experience in modelling fluvial processes.

About the University of Southampton & City
The University of Southampton is already one of the top 10 research universities in the UK and has achieved consistently high scores for its teaching and learning activities.

Teaching takes place across a broad range of disciplines and our students are led by academics who push research boundaries. Students benefit from the latest knowledge and expertise and this, together with the University's strong entrepreneurial culture, makes the Southampton learning experience especially valuable. The University has more than 20 Academic Schools which are organised into three Faculties.

The University is also part of The Worldwide Universities Network or WUN, a group of sixteen leading research institutions of

international standing from around the world which have come together with the aim of promoting a global research culture through collaborative academic activity.

Founded in 2000, activity to date includes joint research, joint distributed learning courses and staff and student exchanges. More information can be found at the WUN website.

The city of Southampton is one of the most lively and dynamic cities in the south of England. It offers a vibrant and varied nightlife, numerous leisure facilities, superb heritage attractions, bustling marinas, beautiful parks and great places to eat and drink. There really is something for everyone.

Southampton is one of the UK's greenest cities with several large parks situated throughout the centre. Four of our campuses are next to Southampton Common – 326 acres of managed woodland – perfect for walking, jogging or a spontaneous game of football.

The beautiful New Forest National Park is right on our doorstep, and the coastal resorts of Bournemouth, Poole and Brighton are nearby. The historic cathedral cities of Salisbury and Winchester are even closer. London is also just over an hour away by train. With its own international airport, the city is within easy reach of Europe, with good connections to cross-channel ferries and the Eurostar rail service.



For more information, including entry requirements, application forms, and fees, please contact us: <http://www.soton.ac.uk/postgraduate/pgstudy/index.html>

For international students, scholarships are available to contribute towards tuition fees and are awarded on the basis of academic ability.

For those wishing to refresh their knowledge and skills whilst working, some modules within these programmes may be taken on a one-off basis, independently of our postgraduate degree programmes.

www.southampton.ac.uk/geography

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