Climate Change Adaptation for and with Sediments (ClimASed)

Masters (by Research) Scholarship

Sustainable Infrastructure Research & Innovation Group (SIRIG)
Faculty of Engineering
MTU Cork Campus, Ireland
April, 2026

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The MTU Sustainable Infrastructure Research & Innovation Group (SIRIG), is pleased to offer a Masters scholarship for research in the area of sediment and hydraulic modelling, and sediment management and behaviour with application to tidal estuary systems in Ireland with a focus on the River Shannon. The scholarship is set within the ClimASed Project which is a collaborative large-scale project (2025-2028) (https://sirig.mtu.ie/our-project/climased-project-2025-2028/)

The project is funded through the Interreg NWE Programme with a large multi-partner project team.

Project Background and Detail
The project aims to make North-West Europe (NWE) more resilient to climate change for river and estuary systems through the use of sediments as a natural resource. The project focuses on assessing sediment management strategies for climate resilience, developing strategic sediment management actions plans and applying monitoring and modelling techniques at a range of pilot sites across Ireland, France, Belgium and Germany. Project partners include water authorities and river managers, innovation companies and Universities.

Munster Technological University (MTU) is the Lead Partner of the ClimASed Project with overall responsibility for the project and its management and coordination. The current MTU team includes an overall Project Coordinator, a Project Manager and a PhD student. The successful candidate will join this MTU ClimASed team.

Masters (by Research) Scholarship Details
The successful candidate will receive a stipend of €23,000 per annum for the duration of the Masters study (maximum of 24 months) and an annual contribution of €6,000 towards tuition fees. Attendance at project meetings and conferences will be facilitated.

An outline of the work which the successful candidate will undertake as part of his/her/their Masters research includes:

1. Conduct research in the area of sediments in tidal river and estuary systems including behaviour and transport, sediment as a resource and sediment budgets and management.
2. Conduct research into the hydraulic aspects of river environments in Ireland (within the broader River Shannon catchment) and North West Europe in the context of climate change and sediments.
3. Apply hydraulic and sediment modelling as appropriate.
4. Study and follow the technical literature including academic papers, journals, and textbooks to keep abreast with the state-of-the-art on the topic.
5. Actively participate in field activities such as field surveys at pilot sites, stakeholder engagement, training activities and submit progress reports in the fulfilment of the project requirements.
6. Present the research outcomes at meetings, project workshops, and to external audiences to disseminate and publicise research findings in line with the ClimASed project.
7. Record, analyse and write up results of research work and contribute to the production of research reports and publications.
8. Carry out routine administrative duties as requested, e.g. arranging research programme group meetings, contributing to research programme website, contributing to the organisation of ClimASed workshops and events.
9. Plan own day-to-day activity within the framework of the agreed research and training programme, manage own time and meet agreed deadlines.
10. Make internal and external contacts to develop knowledge and understanding and form relationships for future collaboration.

This research position, which is currently available, offers candidates an opportunity to work within a large EU research consortium and as part of a multidisciplinary research environment within Munster Technological University. The Masters candidate will have the opportunity for national and international travel to conferences and for project collaboration. The candidate will also work closely with colleagues in Munster Technological University in the Sustainable Infrastructure Research & Innovation Group.

Applicants should hold (or about to obtain) a minimum of an Honours Bachelor degree (minimum final grade 2.1 or equivalent) in Civil Engineering, Water Resources Engineering, Environmental Engineering, Environmental Science or a similar cognate discipline. Fluency in English and excellent written and oral presentation skills are required. Additional desirable criteria for the candidate include:

1. Sufficient breadth or depth of specialist knowledge in hydraulics, hydrology, statistics and data analysis.
2. Ability to logically conceptualise and summarise research findings.
3. Ability to work proactively and independently, as well as in a team, under pressure, respect deadlines, and produce quality work.
4. Ability to communicate complex information clearly, and demonstrable intellectual ability.
5. Have or about to obtain an Honours Bachelors Degree in Civil Engineering, Water Resources Engineering, Environmental Engineering, Environmental Science or in a related field.
6. Relevant knowledge of quantitative analysis, experience in field work activities, and/or other research experience.
7. Strong analytical and problem-solving skills.
8. Excellent interpersonal skills and an enthusiasm for working in a research team.

Written applications, in English, should include a concise C.V., a one-page letter of motivation describing why you are interested in this position, an English language test certificate, if applicable and contact details for three references. Along with the application, please include a copy of relevant qualifications such as official university transcripts. Please email applications to Dr. Joe Harrington (joe.harrington@mtu.ie) by Thursday 21st May 2026. Shortlisted candidates will be called for an interview in late May / early June 2026.