PROJECT PROPOSAL FORM

Making the Most of Masters aims to improve collaboration between employers and universities by providing opportunities for postgraduate students to undertake work based projects as an alternative to a traditional university dissertation. Projects should address a real need within the host organisation and be beneficial to both host and student.

The Marine Alliance for Science and Technology for Scotland (MASTS), pools the majority of Scotland's marine research capacity. MASTS members provide Masters courses in a range of marine related disciplines and many of their students are keen to undertake applied projects outside of academia.

Notes on Topic Selection

A relevant academic will work with your organisation to refine your proposed topic and ensure it meets both your needs and the academic requirements of the student. Projects should typically be achievable within a 12–16 week timeframe (including writing the final report).

Your proposed project could be:

- A specific project title or topic for the student to deliver;
- A general idea of a business need which requires further development;
- A core research theme to be developed by the student into a bespoke project;
- An intended outcome for the organisation.

The level of detail you provide will determine the extent to which further discussion may be required with the relevant programme director to ensure suitability.

desk-based/data studies that will easily facilitate remote working and remote supervision are welcome, as well as in person and/or experimental based projects where appropriate.

What's Next?

Please send your completed form to the MASTS Programme Coordinator & Deputy Dean of Grad School, Dr Emma Defew (masts@st-andrews.ac.uk) before the deadline.

Following submission of the form, it will be channeled to the leaders of the various Masters programmes that operate within the MASTS community and a representative from the most relevant programme or department will get in touch to discuss the project scope, delivery and the selection of an appropriate student. If more than one student expresses an interest in your project, you will need to ensure discussions take place to enable the most suitable student to be matched with your project. The projects themselves usually won't start until May or June.

MASTS - Making the Most of Masters – Project Proposal Form

Name and address of Organisation: Marine Directorate, Marine Lab, 375 Victoria Road, Aberdeen, AB11 9DB
Name of the key contact in Organisation: Helen Dobby
Contact e-mail and phone number: helen.dobby@gov.scot
Title of proposed project: Improving the evidence base for two commercially important mollusc species (tbc)
Project outline and intended outcomes: There are substantial Scottish fisheries for queen scallop (*Aequipecten opercularis*) and whelk (*Buccinum undatum*). In 2025, the landings for these species were worth over £3 million at first sale and the economic benefits of these fisheries play an important role in supporting coastal/rural communities in Scotland. Despite this, there is limited understanding of the spatial distribution and population dynamics of these species and stock assessments are not routinely carried out. The Marine Directorate (and predecessors) has been conducting dredge surveys of the main king scallop grounds around the coast of Scotland since the mid-1990s. These are primarily used as part of the evidence base for king scallop stock assessments, however, the surveys also routinely record other by-catch species including substantial quantities of both queen scallop and whelk. The project will utilise summary statistics and statistical modelling to explore these data – considering abundance, size and spatial distribution of the two species, and whether there have been significant changes over time. The work could potentially lead to the derivation of indices of abundance, contributing to an improved evidence base for fisheries management.

Any additional comments e.g. details of specific disciplines required, methods to be used, travel involved, where the work would take place (i.e. at the host site or at the University), whether you foresee any Intellectual Property or confidentiality issues (and if so, what form might these take?):

This is a desk based project that would suit a student with expertise in the R programming language – with respect to manipulating & visualising large data sets, and statistical modelling of survey data (e.g. spatial GAMs).
Work would be conducted at the university.
I do not foresee any IP or confidentiality issues – the survey data are not confidential.