



## PROJECT PROPOSAL FORM

Making the Most of Masters aims to improve collaboration between employers and universities by providing opportunities for masters 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.

**Covid implications** – the ongoing situation around Covid may suit desk-based/data studies that will easily facilitate remote working and remote supervision. If restrictions allow, in person projects are always welcomed.

### 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](mailto:masts@st-andrews.ac.uk)) before **16:00 on Friday 29<sup>th</sup> October 2021**.

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, discussions will take place to ensure the most suitable student is matched with your project. The projects themselves usually won't start until May or June.



**Making the Most of Masters**

## **MASTS - Making the Most of Masters – Project Proposal Form**

<b>Name and address of Organisation:</b> Ocean Science Consulting Limited (OSC) Spott Road, Dunbar, EH42 1RR
<b>Name of the key contact in Organisation:</b> Dr Laura Williamson
<b>Contact e-mail and phone number:</b> <a href="mailto:lw@osc.co.uk">lw@osc.co.uk</a> +44 (0)1368 865 722
<b>Title of proposed project:</b> Analysis of Remotely Operated Vehicle (ROV) imagery from offshore structures <u>And/or</u> Cetacean echolocation detections during baseline surveys within an offshore windfarm
<b>Project outline and intended outcomes:</b> OSC has extensive datasets falling into two general categories: benthic fauna and marine mammals. Benthic fauna data are from video footage collected by industrial Remotely Operated Vehicles (ROVs) and marine mammal data are from echolocation-click detectors (C-PODs). OSC has extensive ROV datasets of offshore structures which can be analysed to investigate species assemblages and ecological interactions, as well as development of advanced analysis techniques such as machine learning for automated imagery assessment. C-POD data can be analysed in conjunction with oceanographic data to perform statistical analysis (GLM, GAM, etc.) to investigate environmental drivers of marine mammal presence. For both types of project, we would expect results to be published in a peer-reviewed journal.  For examples of types of research performed by OSC scientists, see: <a href="http://www.osc.co.uk/publications-and-press-covers">www.osc.co.uk/publications-and-press-covers</a>
<b>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?):</b> For ROV imagery analysis, experience or interest in taxonomy is required. For both projects, experience of statistical analysis and Geographic Information Systems (GIS) is beneficial generally, as these skills increase a student's ability to analyse data. The student can be based at OSC's headquarters in Dunbar, Scotland or remotely; however, being based in the office allows closer collaboration with OSC scientists, integration into our team, and exposure to commercial consultancy. All projects are likely to be desk-based. All students and academic supervisors are required to sign a Non-Disclosure Agreement (NDA) prior to receiving data due to the commercial sensitivity of data.