Strategic Marine Alliance for Research and Training Summary
The Strategic Marine Alliance for Research and Training (SMART) is a marine cluster of Higher Education Institutions (HEIs) and the Marine Institute, which is supported by the Higher Education Authority (HEA) and led by Galway-Mayo Institute of Technology (GMIT). The SMART consortium was initiated in 2011 and has since established itself as a leading provider of practical, accredited, offshore training programmes for up to 300 students of marine science, technology and engineering annually. Training courses focus on the practical key skills and competences required to carry out research and operate at sea. All courses are multidisciplinary and address key marine science disciplines including oceanography, geology, benthic ecology, hydrography, marine mammal ecology, fisheries biology and ecosystem services. This approach is essential in producing graduates with an understanding of the complexities the marine system and is designed to foster an ecosystem approach in order to sustainably manage our oceans and build research capacity.

National Courses
Nationally, a number of bespoke courses have been developed and incorporated into accredited modules for delivery to marine-related undergraduate and postgraduate students. These blended learning courses have been developed in association with partner institutes and include reusable online resources, lectures, workshops in addition to training at sea:

- Multidisciplinary Offshore Operations (GMIT, NUIG, UCC, UU, MI)
- Geosciences and seabed mapping (UCC, UU, MI)
- Offshore energy and communications (AIT, NUIG, MI)
- Advanced marine technology (DCU, NUIG, SmartBay, MI)
- Marine renewable energy (UCC, CIT, MI)
- Applied Marine Biological Sampling (GMIT, IWDG, MI)

International Courses
SMART is recognised as a unique programme internationally and has fostered strategic partnerships globally. The Atlantic Summer School is a collaboration with the Alfred Wegener Institute for Polar and Marine Research (AWI) in Germany that in 2014 trained 14 postgraduates from 8 countries onboard the RV Celtic Explorer in cold-water coral ecosystems off SW Ireland. The 2015 Atlantic Summer School will be held onboard the RV Polarstern for 30 graduates and will carry out oceanographic research on a trans-meridional Atlantic transect from Germany to South Africa.

Research-vessel-based training courses in multidisciplinary marine science and operational oceanography have also been developed for International graduates through the FP7 funded EUROFLEETS and delivered by SMART in Estonia (TUT & Bigelow Lab), Norway (DTU Aqua and OGS), Ireland (OGS and TUT) and Italy (CNR).

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