



Nippon Foundation / GEBCO Postgraduate Certificate in Ocean Bathymetry

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Designed to train a new generation of scientists and hydrographers in ocean bathymetry

The Nippon Foundation / GEBCO Postgraduate Certificate in Ocean Bathymetry A global capacity-building initiative

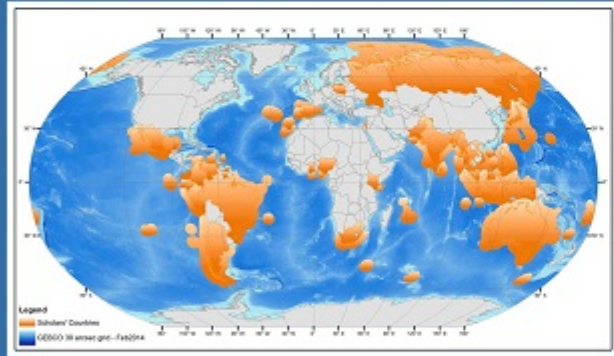
The ongoing success of GEBCO, and its global and regional-scale bathymetric products, depends on the participation and passion of this volunteer community.

GEBCO designed the unique Postgraduate Certificate in Ocean Bathymetry (PCOB) program to train and educate a new generation of scientists and hydrographers in ocean bathymetry (<http://www.gebco.net/training>). This training is funded by the Nippon Foundation of Japan (www.nippon-foundation.or.jp/en) and taught at the Center for Coastal and Ocean Mapping / Joint Hydrographic Center, University of New Hampshire, USA (<http://ccom.unh.edu>).

The aim of this annual Nippon Foundation / GEBCO Training Program, which was run for the first time in 2004, is to build a global network of young ocean mappers, who can utilise the skills, knowledge and personal networks they made during their training to build capacity within their own country and to keep the Nippon Foundation / GEBCO community growing. This will ensure that a new generation of ocean mappers will continue to build on our knowledge of the oceans.

THE Distribution of Nippon Foundation / GEBCO Alumni Distribution

72 students from 33 coastal states have been trained to date, representing 40 different organizations, including 23 officers from 15 Naval Hydrographic Offices, 19 alumni from Hydrographic Offices and the remaining 30 from Universities, Research Institutes and relevant Government offices. Each year the class combines a diverse mix of backgrounds and fields of expertise, promoting interaction and knowledge sharing between each other and their classmates at UNH.



Home country distribution of Nippon Foundation / GEBCO Scholars from Year 1 to 12 (2004-2016)

Selection Process

The prerequisites of GEBCO and the Nippon Foundation is that prospective students must have a passion for the ocean. An involvement in the ocean and a desire to build capacity in their home country on the completion of the training program is essential, with applicants aspirations supported by their home organization. Applicants also have to meet UNH graduate school requirements, with a four year degree in an applicable field and sufficient capability in English.

Qualifications that may be awarded

- GEBCO Postgraduate Certificate in Ocean Bathymetry
- UNH Graduate Certificate in Ocean Mapping
- FIG/IHO/ICA Category A hydrography (theory)

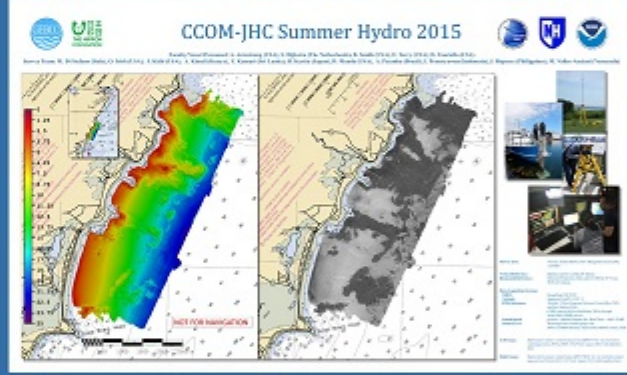
PCOB Course

The training program includes an academic component, which consists of core courses, elective courses and projects; a more practical component that includes significant time aboard a survey vessel and an additional opportunity to work with relevant experts in a field of interest to develop networks.

Fall Semester (August-December)	<ul style="list-style-type: none"> • Fundamentals of Ocean Mapping I • Applied Tools in Ocean Mapping • Geological Oceanography • Elective (Math for Mapping)
J-term	<ul style="list-style-type: none"> • Visit NCEI in Boulder, Co • Software training (e.g. Fledermaus & QnSy)
Spring Semester (January-May)	<ul style="list-style-type: none"> • Fundamentals of Ocean Mapping I • Bathymetric Spatial Analysis • Geodesy and Positioning for Ocean Mapping • Seamanship and Marine Weather • Electives (LOS, Nearshore Processes, Acoustics etc.)
Summer (June-August)	<ul style="list-style-type: none"> • Students take the Hydrographic Field Course
Lab Visit & Cruise	<ul style="list-style-type: none"> • Lab visit (s) and/or research cruise • NOAA Chart Adequacy Workshop

SUMMER HYDROGRAPHIC FIELD COURSE

This comprehensive, intensive and practical lecture, lab and field course puts to use the wide-ranging set of skills gained during the academic year of the PCOB Training Program. The field course allows students to gain experience in all aspects of hydrographic surveying: from planning and conducting hydrographic surveys, data acquisition and processing, to product generation and report writing.



Poster created for Summer Hydrographic Course of Summer 2015

LABORATORY VISITS / RESEARCH CRUISES

The lab visits and / or a research cruise over the summer are selected by student and their home organization in a relevant field of mutual interest, with working visits to over 30 different research organizations undertaken to date.

The visit aims to round out the students training, to help them build networks and to deepen some of their newly-acquired theoretical knowledge. This training includes familiarization with the programs the visited organization is engaged in, as well as some directed work under supervision.

Students also attend the NOAA Chart Adequacy Workshop in Silver Spring, Md. as an additional networking opportunity.



Acknowledgments

This PCOB training program is made possible by the generous support of The Nippon Foundation since the Training Program inception in 2004.

