

Hydrography Education in Geodesy Courses – Case Study in Maritime University of Szczecin

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SUMMARY

Hydrography and geodesy are both involved in earth surveying, although in various environments. It is however not obvious whether the hydrographers should be taught similar to land surveyors? Is a hydrographer some kind of special case of land surveyor? Or maybe teaching process should be more related to navigation and even marine environmental science? In this paper we address all these issues presenting the use case in Maritime University of Szczecin (MUS). Hydrographers have been taught there in Faculty of Navigation for more than 20 years already in various courses. The paper presents first the analysis of semantical and practical meaning and relationships between hydrography, geodesy, offshore surveying, remote sensing, cartography and geophysics. Then the analysis of IHO (International Hydrographic Organization) and IMO (International Maritime Organization) requirements for hydrography education are provided followed by polish implementation of them. The review of hydrographer's courses in Europe is given as well. Various approaches to this task on different levels are presented, based on courses programs. Finally the use case itself is described, showing briefly the history of hydrography education in MUS and describing current implementation with relationship to IHO standards and other requirements. The equipment base including ships, measurement equipment and software are presented, together with staff experience. Finally the discussion is included commenting the results of former analysis and showing strengths and challenges of the approach in use case. Generalized conclusions are given to sum up the paper. They show that there are various possibilities of implementing requirements into course. They also show that there are overlapping competencies and knowledge between land and underwater surveying and that combining hydrography and geodesy in one course is reasonable and results in modern and high competence profile of graduates.

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