

HBB500 - Hydrographic Practice

Présentation

Objectifs pédagogiques

Module Outline:

Fieldwork - see Training Record Book

Fieldwork is carried out in hydrographic or hydrographic related companies and governmental organisations under supervision of a supervisor of the company/organisation.

Different tasks as outlined in de Training Record Book (see annex 6) must be carried out during this period, after completion the supervisor will sign the book.

Total fieldwork period is 18 working weeks, divided in 3 parts.

1 day - Basic Safety, Antwerp Maritime Academy Chr. Sensen

This day the students will learn to board a liferaft, wearing emergency suits and lowering/hoisting/entering/leaving a lifeboat.

In addition an extra 120 hours (3 weeks) of integrated fieldwork organised and supervised by IVH - see Training Record Book and programme:

5 days - building up a survey vessel and do a survey Axel Annaert

During this period the students will use different surveying tools as Multi/singlebeam and sidescan sonar. Also water analysis, seabed sampling and other research are carried out. They will have the occasion to build a database with information that they can use for later workshops.

1 day - Dredging simulator, Jan De Nul A. Annaert

In this workshop the students will visit the surveying department of one of the bigger dredging companies and can do exercises on different dredging simulators as there are: Cutter dredger, hopper dredger and backhoe dredger. They can see the influence of the type of dredger on the dredging results and possibilities.

1 day - Polaris and Dynamic Positioning simulator, Antwerp Maritime Academy A. Annaert

On this simulator the students can do different manoeuvres with different kinds of vessels. Entering port, manoeuvring with twin screw vessels, bow trusters, ...

1 day - Survey techniques A. Annaert

Setting up a polygonal network with a total station. Practicing various geographical survey techniques.

3 days - QINSy A. Annaert

The students will use QINSy software to work out the data obtained during the 5 day survey period in order to obtain nautical charts.

1 day - Products and Operations A. Annaert / DEME (L. Lievens)

1 day - Surveys in support of port management and coastal engineering Offshore industrial surveys A. Annaert / G-tec (G. Moerkerke)

1-2 days - Visits to research centra and conferences A. Annaert

Valide le 02-07-2022



Code : HBB500

Unité d'enseignement de type mixte

24 crédits

Responsabilité nationale :

EPN08 - Institut national des sciences et techniques de la mer (INTECHMER) / 1

Compétences

Learning Outcomes:

Identification of types of surveys, their specifications and processing.

At the end the student must be able to assist in the installation and calibration of a survey boat.

He must be able to use the most common survey instruments.

Knowledge and application of hydrographic surveys

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Programme

Contenu

Practical 1 Practical training module 1 (7 weeks @ 5 days)

During the first semester

Practical 2 Practical training module 2 (5 weeks @ 5 days)

During the second semester

Practical 3 Practical training module 3 (6 weeks @ 5 days)

During the second semester

Practical 4 Integrated fieldwork (4 weeks @ 5 days)

Defence Defence of the reports and Record book (Assignment 2 hours)

Modalités de validation

- Contrôle continu
- Projet(s)
- Mémoire
- Examen final

Description des modalités de validation

Evaluation

The practical training period must be at least 90 working days (18 weeks) divided over the complete programme.

The programme is finalized by the integrated fieldwork period where the students must do a survey in group.

The evaluation is done at the end after all examinations based on a student's report and the training record book after an interview based on the students reports.