

**Exclusive offer
to members**



VOUW: an advanced training programme in dredging engineering

The key to expanding your expertise in dredging engineering

Would you like to take the dredging engineering know-how and operational knowledge to a higher level? The VOUW training programme has been developed by hydraulic engineers for hydraulic engineers specifically for this purpose. This unique training programme, exclusive to members of the Dutch Association of Dredging Contractors, integrates all essential elements of hydraulic engineering know-how and practical experience into seven in-depth modules, all accessible via a digital learning environment.

The modules each comprise essential information about topics such as: Soil Mechanics, Pumping Technology, Main dredge equipment, Process Measurement, Automation and Surveying, Work- Methods, Project Preparation and Coastal Structures and Bank Protection Works. Each aspect has been carefully designed to highlight practical applications and technologies, providing course participants with skills and tools they can apply immediately in their work. Thanks to the fully English content, the training programme is available to a broad audience.

For whom?

The training programme is ideal for anyone involved in project execution, such as:

- contractors/project managers working on hydraulic engineering projects.
- future contractors; trainees and other related professions such as surveyors and captains.
- project planners; general engineers/ work planners, designers, Cost engineers, environmental experts, production engineers.
- staff involved in tendering.
- technical services personnel.



Discover the Modules



1. Soil Mechanics

This module explains the properties of different soil and rock types and their impact on the hydraulic transport and the dredging process. Participants will learn about the most common classification systems used in the field to enable them to determine the most suitable equipment for the job.



2. Pumping Technology (including fluid mechanics)

An in-depth introduction to pump technology, that provides participants with the opportunity to build up a detailed knowledge of the pump process. Participants will be able to understand the effect on the pump process of different drives and continuously changing resistance line parameters. After all, it is the drive and the pump technology together that form the heart of the tool doing the work. In addition, participants will learn about hydraulic transport and structural aspects, such as the external impact of waves, tides and erosion and sedimentation.



3. Main Equipment

Participants will look at all types of dredging equipment, including their applications and limitations. This module will provide participants with a good insight in the type of work and soil that each type of dredging vessel is suitable for. Participants will also be given an understanding of the limitations of specific equipment. For example, what is its production capacity? To do this, production-based calculations will be made. Finally, dredging history is illustrated through several older types of dredger.



4. Process Measurement, Automation and Surveying

Participants will be given a thorough basis in ship-positioning systems and surveying, focusing on the various techniques available and their specific features. In addition, they will gain greater insights into the positioning and working of the vessel through fleet automation, providing more accurate and more effective working methods.



5. Work Methodes

Participants will familiarise themselves with different compaction techniques, differentiating between deep compaction and surface compaction. The module also makes an in-depth examination of filling techniques and explains the different systems for the dumping of spoil and the installation of pipelines. Environmental aspects will also be discussed, since environmental guidelines are becoming increasingly relevant for the dredging process.



6. Project Preparation

This module offers insights into the selection of appropriate equipment. Key aspects include equipment characteristics, the size of the project and the soil types in situ. Participants will also learn about (local) conditions that may affect the project, such as weather and legal regulations. In addition, they will be instructed in how to draw up a project plan, by evaluating different time schedules, cost estimations and common forms of contract. This enables participants to optimize their project plan.



7. Coastal Structures and Bank Protection Works

This module deals with key design aspects and provides an insight into the constituent parts of different types of marine constructions. It also examines the various materials used and their suitability and function in relation to these constituent parts. Participants will also learn about the technical aspects involved in the execution of coastal structures and bank protection works, as well as the sourcing of materials. In this way, they will gain a better understanding of the various execution techniques used in practice.

Way of working and fees

The course is designed for self-study and is conducted in English. Each module includes digital books (i.e. the basis) and an e-learning section (support material). The modules are independent of one another and can be completed at the participant's own pace.

Training programme costs per module

- digital books and e-learning: € 350 (excl. VAT)
- exam attempt: € 350 (excl. VAT)

Recognition

A certificate is issued to those who have successfully completed each module. On completion of the first six modules, course participants will receive a VOUB certificate (dredging). On completion of all seven modules, a VOuw certificate will be awarded.

Enrolment

Enrolment takes place exclusively via the (training department of the) employer.

More information

Check out www.waterbouwers.nl or contact the Dutch Association of Dredging Contractors directly on +31 (0)70 349 0700 or by email at: vouw@waterbouwers.nl.