



1. TITLE OF THE CERTIFICATE (NL)

Diploma Beroepsonderwijs
Kwalificatie: Scheepswerktuigkundige waterbouw
Kwalificatiedossier: Maritiem waterbouwer

In the original language

2. TRANSLATED TITLE OF THE CERTIFICATE (EN)

Certificate Senior Secondary Vocational Education
Qualification: Engineer hydraulic engineering
Qualification file: Maritime hydraulic engineering officer

This translation has no legal status

3. PROFILE OF SKILLS AND COMPETENCES

The most important duties of an Engineer hydraulic engineering are:

Core task 1: OL technical A-III/1 (Carries out the technical tasks at operational level A-III/1 on dredgers/ships)

- 1.1 Marine engineering at the operational level A-III/1
- 1.2 Electrical, electronic and control engineering at the operational level A-III/1
- 1.3 Maintenance and repair at the operational level A-III/1
- 1.4 Controlling the operation of the ship and care for persons on board at the operational level A-III/1

Core task 2: ML technical A-III/2 (Carries out the technical tasks at management level A-III/2 on dredgers/ships)

- 2.1 Marine engineering at the management level A-III/2
- 2.2 Electrical, electronic and control engineering at the management level A-III/2
- 2.3 Maintenance and repair at the management level A-III/2
- 2.4 Controlling the operation of the ship and care for persons on board at the management level A-III/2

Core task 3: Carries out safety tasks on dredgers/ships

- 3.1 Prepares to act in case of calamities or accidents
- 3.2 Manages and is in charge of life-saving vessels
- 3.3 Provides limited first aid in case of accidents and medical care in case of disease on board
- 3.4 Organises fire-fighting operations on board
- 3.5 Recognises and identifies potential threats
- 3.6 Carries out the security of the dredger/ship

4. RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE CERTIFICATE

The Engineer hydraulic engineering works for a contractor's firm in the water construction. These companies focus on performing dredging works, both on inland waters and offshore and/or on performing works on shores and banks in ports or along rivers and canals.

*** Explanatory note**

This document is designed to provide additional information about the specified certificate and does not have any legal status in itself. The format of the description is based on the following texts: Council Resolution 93/C 49/01 of 3 December 1992 on the transparency of qualifications, Council Resolution 96/C 224/04 of 15 July 1996 on the transparency of vocational training certificates, and Recommendation 2001/613/EC of the European Parliament and of the Council of 10 July 2001 on mobility within the Community for students, persons undergoing training, volunteers, teachers and trainers.

More information is available at: <http://www.europass.cedefop.europa.eu/>

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5. OFFICIAL BASIS OF THE CERTIFICATE																					
<p>Name and status of the body awarding the certificate The certificate issued on completion of the programme is signed by the examination board at the school where the pupil attended the programme.</p>	<p>Name and status of the national/regional authority providing accreditation/recognition of the certificate Ministry of Education, Culture and Science</p>																				
<p>Level of the certificate (national or international) Qualification level 4 of the Dutch VET qualification structure Characteristics: non-job related skills such as tactical and strategic capacities. The professional bears his or her own responsibility, which is not only related to practical implementation in terms of monitoring and supervision, but also a more formal, organisational responsibility. The range of tasks also includes drafting new procedures. NLQF level 4 - EQF level 4 - ISCED 3A</p>	<p>Grading scale / Pass requirements</p> <table border="0"> <tr><td>10</td><td>excellent</td></tr> <tr><td>9</td><td>very good</td></tr> <tr><td>8</td><td>good</td></tr> <tr><td>7</td><td>very satisfactory</td></tr> <tr><td>6</td><td>pass</td></tr> <tr><td>5</td><td>fail</td></tr> <tr><td>4</td><td>unsatisfactory</td></tr> <tr><td>3</td><td>very unsatisfactory</td></tr> <tr><td>2</td><td>poor</td></tr> <tr><td>1</td><td>very poor</td></tr> </table>	10	excellent	9	very good	8	good	7	very satisfactory	6	pass	5	fail	4	unsatisfactory	3	very unsatisfactory	2	poor	1	very poor
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<p>Access to next level of education/professions The Engineer hydraulic engineering starts as an officer with guard authority and can after certain sailing time, proven competences and after completing compulsory courses (such as the training of ship management) reach the position of chief engineer officer. The Engineer hydraulic engineering can also transfer to other maritime Sectors such as fishing industry and see fishing industry. If he makes a move to shore, there are possibilities such as executor of a dredging company or in project management. On the basis of an obtained qualification the Engineer hydraulic engineering can by means of a vertical through flow follow adjoining hbo courses in the fishing industry.</p>	<p>International agreements The profession of Engineer hydraulic engineering is regulated in the Netherlands under the European directive 2005/36/EC, amended by directive 2013/55/EU.</p>																				
<p>Legal basis Act on Vocational Education and Training (WEB), registered number of qualification (crebo): 95734 The education and training for this qualification is offered as of August 1, 2012.</p>																					

6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE	
<p>Senior secondary vocational education features two learning pathways: the school-based pathway (bol) and the training on the job pathway (bbi).</p> <p>In the school-based pathway, the majority of the course consists of theory at school. The extent of the practical component (vocational practice) is between 20% and 60%. In the training on the job pathway, the extent of vocational practice is at least 60% of the course. The participant works four days a week in a training company, and attends school for theory subjects just one day a week.</p> <p>In principle it is possible to follow both learning pathways, but which pathway is offered will depend on the individual educational institution.</p>	
<p>Average duration of the education/ training leading to the certificate</p>	<p>4 years (6400 study hours) (depending on previous education)</p>
<p>Entry requirements The certificate preparatory vocational secondary education (vmbo) advanced vocational programme, combined programme, or theoretical programme, or a comparable level.</p>	

7. ADDITIONAL INFORMATION
<p>Dutch senior secondary VET is based on qualification files, that each contain one or more qualifications. The information in section 3 and 4 is drawn directly from the qualification file, that is composed by the Centre of Expertise. The complete qualification file is available at www.kwalificaties.s-bb.nl, only in Dutch.</p> <p>Additional information, including a description of the Dutch national qualifications system, is available at the</p>

7. ADDITIONAL INFORMATION

Netherlands National Reference Point (NRP) for VET: www.nlntp.nl

SBB has been appointed by the Ministry of Education, Culture and Science as NRP.