

Dette er en oversettelse av den fastsatte læreplanteksten. Læreplanen er fastsatt på Bokmål

Laid down as a regulation by the Norwegian Directorate for Education and Training on 14 December 2007 as delegated in a letter of 26 September 2005 from the Ministry of Education and Research pursuant to the Act of 17 July 1998 no. 61 relating to primary and secondary education (Education Act) Section 3-4 first paragraph.

Valid from 01.08.2008

Valid to 31.07.2023



Utdanningsdirektoratet

Purpose

Well drilling and rigging, sea-floor installations shall lay the foundation for practicing a vocation in installation and maintenance of production and injection equipment on the sea floor for national and international oil industries. The subject shall contribute to covering society's needs for safe and effective extraction of oil and gas from such fields. Work is done in critical and demanding climates, weather and working conditions, with high demands on a worker's health and functional physical abilities. The subject shall contribute to upholding high standards for environment, health and safety, and quality.

Learning in the subject shall contribute to developing practical skills and professional insight into sea-floor operations and maintenance of tool and equipment systems. Furthermore, learning in the subject shall promote the ability to develop professionally and use new technology. Learning in the subject shall also contribute to developing the individual's communication skills, and the ability work with precision and responsibility.

Learning in the subject shall arrange for varied training in the use of well and production equipment and tool systems. Furthermore, this subject shall help the apprentice learn to work independently and cooperate across professional groups in an international environment. Learning in the subject shall emphasise an understanding of safety and knowledge of Norwegian and international standards and guidelines.

Training completed and passed in the subject will lead to a Trade Certificate. The professional title is Sea-floor Installer.

Structure

Well drilling and rigging, sea-floor installations consists of three main subject areas. The main subject areas complement each other, and should be viewed in relation to one another.

Overview of the main subject areas:

Year level	Main subject areas		
Vg3 / In-service training at a training establishment	Installations	Maintenance	Safety barriers

Main subject areas

The main subject area covers installation and servicing of subsea equipment. Furthermore, the subject covers servicing tool systems and installations programs. Procedures and current legislation concerning work and servicing at sea are also included. Environment, health and safety are included in the main subject area.

The main subject area covers troubleshooting, maintenance and repairs to subsea tool systems and production and injection equipment. Procedures and maintenance programmes are also included. The main subject area also covers preparing equipment and tool systems.

The main subject area covers safety barriers (line-of-defence), shut-down systems and emergency shut-down functions. Furthermore, the subject covers the servicing of control systems.

Basic skills

Basic skills are integrated into the competence aims for this course in areas where they contribute to the development of and are a part of the basic subject competence. In Well drilling and rigging, sea-floor installations, basic skills are understood as follows:

Being able to express oneself orally in Well drilling and rigging, sea-floor installations involves communicating risk assessments and professional solutions in Norwegian and English.

Being able to express oneself in writing in Well drilling and rigging, sea-floor installations involves preparing reports and procedures in Norwegian and English.

Being able to read in Well drilling and rigging, sea-floor installations involves understanding and using works descriptions, procedures and regulations.

Numeracy in Well drilling and rigging, sea-floor installations involves calculating and converting units for dimensions, pressure and torque.

Digital literacy in Well drilling and rigging, sea-floor installations involves servicing digital control systems, gathering documentation and running network-based communications.

Competence aims

Installations

The aims of the training are to enable the apprentice to

- plan operations, carry out risk assessments, report deviations and non-conformances in line with routines and procedures
- service subsea tool systems for wellheads and give an account of how these work
- service subsea tool systems for wellhead completions and give an account of how these work
- service subsea tool systems for well workovers and give an account of how these work
- service subsea tool systems for replacing control modules, valves and pipe or steering cable pull-ins, and give an account of how these work
- discuss and elaborate on the advantages and disadvantages of subsea versus platform solutions
- perform installations according to installation programmes, procedures and current regulations
- give an account of official requirements for health for workers on the Norwegian continental shelf
- prepare final documentation for finished work and recommend corrective measures

Maintenance

The aims of the training are to enable the apprentice to

- plan and carry out maintenance in line with procedures, drawings and maintenance programmes
- prepare subsea equipment and tool systems for well installations
- prepare production and injection equipment for completion works
- prepare tool systems for production and injection equipment
- prepare tool systems for replacing components that are installed on the sea floor
- troubleshoot and repair wellhead tool systems

- troubleshoot and repair production and injection equipment
- troubleshoot and repair tool systems for completion work
- troubleshoot and repair tool systems for replacing subsea components
- perform systematic maintenance on subsea tool systems at sea and in the workshop
- register and report deviations and non-conformance in English and Norwegian in line with the company's routines for these

Safety barriers

The aims of the training are to enable the apprentice to

- service shut-down systems and emergency shut-down functions during wellhead installation and well workovers
- do service on control systems during wellhead installation and well workovers
- give an account of safety barriers related to well installations, wellhead installation and well workovers
- explain the placement of shut-down systems and emergency shut-down functions on offshore facilities used during well installation, wellhead installation and well workovers

Assessment

Vg3 Well drilling and rigging, sea-floor installations

Provisions for final assessment:

Main subject areas	Provision
Installations	
Maintenance	All apprentices shall sit for a Trade Examination, which is normally carried out over a period of three working days.
Safety barriers	

The provisions for assessment are stipulated in the regulations of the Norwegian Education Act.