

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 9 January 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 01.08.2007

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Utgått

Purpose

A well-functioning society depends on safe infrastructures for roads, rails, airports, wharfs, buildings and appurtenant technical installations. Climatic, geographic and geologic conditions in Norway create great challenges and place demands on construction projects in areas of environment, technical solutions and economics. Subjects related to technical construction are therefore of great significance for developing and maintaining national infrastructures. These programme subjects shall contribute to developing competence in future employees in subjects related to this type of construction.

The programme subjects shall give the individual a professional basis for carrying out relevant and practical work tasks in social and professional communities. Learning in the subjects shall promote good and safe work habits and multicultural understanding, and enhance the ability to cooperate with colleagues and other vocational practitioners at building and construction sites.

Practical work and holistic, interdisciplinary tasks shall be emphasized in learning the subjects. Using different arenas for learning and cooperation with local businesses can help facilitate the development of working processes. Learning in the subjects shall also illustrate how subject areas stretch from simple trade skills to modern technology.

Structure

The programme area *Construction* consists of two programme subjects. Programme subjects complement each other and should be viewed in relation to one another.

Overview of the programme subjects:

Year level	Programme subjects	
Vg2	Production	Trade studies

Description of the programme subjects

The programme subject *Production* deals with production and service in the field of construction. The use of stones, earth materials, explosive goods and other chemical products and materials is also included in the subject. The subject also considers laws, regulations and pre-accepted solutions. It also includes use and maintenance of different tools, construction equipment and machines that require certification for use. The use of measuring tools and technical drawings are included in the subject. Environment, health, safety and quality assurance (EHS&QA) are also central themes in this subject.

The programme subject *Trade studies* deals with the use of measuring tools, descriptions and drawings as a basis for production and documentation. The programme subject covers regulations and the use of earth-moving machines and blasting, and trade requirements for construction sites like operation and control of ditch works and digging for piping systems. The programme subject also deals with the history of such construction techniques and their place in society. The subject also deals with environment, health, safety and quality assurance (EHS&QA), and the relationship between employee and employer. The use of digital tools is included in the programme subject

Teaching hours

Teaching hours are given in 60-minute units.

Vg2

Production 337 teaching hours per year

Trade studies 140 teaching hours per year

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 the program area *Construction*, basic skills are understood as follows:

Being able to express oneself orally and in writing in Construction involves communicating with customers, colleagues, suppliers and other collaborators, and discuss professional solutions and working processes. This also involves documenting working processes, products and services.

Being able to read in Construction involves finding relevant information in technical literature and current laws and regulations. It also involves understanding content and use of specifications, drawings, product descriptions and work descriptions.

Numeracy in Construction involves calculating time, price, weight, volume, amounts, sizes and mass. It also involves taking measurements, and calculating angles and declinations, and working to scale.

Digital literacy in Construction involves using digital media for planning, production, documentation, quality control and communication. It also involves using digital tools for measuring, calculating, drawing and image processing.

Competence aims

The aims of the studies are to enable pupils to

- do work according to laws, regulations and pre-accepted solutions
- plan, perform, document and evaluate own work
- use digging machines and at least one other construction machine to dig and moving loose masses
- perform daily controls and periodic maintenance on machines and equipment based on servicing the machines and using manuals
- select and use correct tools, equipment and machines
- calculate slopes and angles, and do necessary calculation of quantities
- raise basic roads and rail surfaces according to drawings and descriptions
- do basic work in digging ditches and digging for piping systems according to drawings and descriptions
- prepare blast and burst blasting plans
- do drilling work and blasting according to prepared plans in accordance with applicable regulations

- perform simple soil surveys and give an account of the properties of different soil types and rocks
- use protective gear and safety equipment
- follow requirement for environment, health and safety (EHS), and do quality controls on your own work
- handle waste and materials in accordance with requirements for safety, environment and use of resources

The aims of the studies are to enable pupils to

- give an account of the history of such construction techniques, and discuss their significance in a social perspective
- document having carried out safety course on use of earth-moving machines and related equipment
- read and use drawings and descriptions
- use relevant testing equipment for surveying and setting out heights and angles
- give an account of current requirements related to the construction sites, operations and controls for ditch and digging work for piping systems
- follow current requirements for handling and using explosive goods for blasting work under and above ground
- create roadwork warnings for work on and alongside public roads
- use digital tools in communication, planning and documentation of construction work
- give an account of a system of agreements that regulates the relationship between employee and employer

Assessment

Vg2 Construction

Provisions for final assessment:

Overall achievement marks

Programme subject	Provisions
Production	The pupils shall have an overall achievement mark in each programme subject.
Trade studies	

Examination for pupils

Programme subject	Provisions
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Production	Pupils shall also sit for an interdisciplinary practical examination that covers the common programme subjects.
Trade studies	The examination is prepared and marked locally.

Examination for external candidates

Programme subject	Provisions
Production	The external candidates shall sit for a written examination in each programme subject.
Trade studies	External candidates shall also sit for an interdisciplinary practical examination that covers the common programme subjects. The examination is prepared and marked locally.

Training carried out in the use of earth moving machines and work equipment from shall not be included in the basis for a final assessment mark, but must be documented with its own course completion certificate.

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