

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 01.08.2018

Valid to 31.07.2021



Utgått

Purpose

The program area *Woodworking* shall give general competence in wood as a building material and about the different wooden products available in the building industry such as doors, windows and stairs. The programme subjects shall give insight into the meaning of wood as a renewable resource and the use of wood and wood-based materials in wooden articles for building industries, wood laminates and in the timber industry.

Learning in the subjects shall develop practical skills in management of materials and production, the use of modern technology and different types of production equipment for woodworking. Learning in the subjects shall help the individual develop the ability to plan, carry out and document own work. The program area shall contribute to promoting creativity and the ability to see the whole picture and interrelationships between the processes from idea to finished product. Through work with wood and wood-based materials, learning in the subjects shall stimulate mastery of challenging tasks. Furthermore, learning in the subjects shall contribute to developing the pupil's ability to cooperate and work independently.

To illustrate the context of the production chain, learning in the subjects shall place emphasis on practical work and interdisciplinary cooperation. 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 the subject area stretches from traditional artisanship to production based on the use of modern technology.

Structure

The programme area *Woodworking* 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 deals with adjusting, use and simple maintenance of the most common machines for working with wood. Introduction in programming and the use of computer-controlled machines for production of simple components or products is included in the programme subject. Planning, documentation and evaluation of own work is central to the subject. The programme subject also deals with surface treatment, composition and working with materials for finished products. The basic principles of material and production control are also included. Use of environmental standards and norms for quality for the products in question are included in the subject. Environment, health and safety (EHS) and quality assurance (QA) are central themes in the subject.

The programme subject deals with selecting and using materials. It deals with the forest as a resource and as a source of raw materials, properties of wood, and discusses which materials are best suited to different products. The programme subject deals with the interrelationship between idea and finished product, design and construction. Drawings, understanding drawings and the use of computer-assisted drawing programs are also included in the subject. The subject also deals with trade history and relationship between employer and employee.

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 *Woodworking*, basic skills are understood as follows:

Being able to express oneself orally and in writing in Woodworking involves communicating with various collaborators. It also involves documenting work processes up to product completion. In addition to this are included discussing and evaluating work processes and professional solutions.

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

Numeracy in Woodworking involves doing calculations related to work processes and calculating strength, weight, volume, amounts, sizes and angles. It also involves calculating times and costs.

Digital literacy in Woodworking involves planning, execution, documentation and quality control of production processes and products with the help of digital tools. 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

- give an account of historical development in the trade, and discuss its social significance
- discuss what the forest means as a resource and source of raw materials
- give an account of the properties of and areas of use for wooden and other relevant materials
- measure and calculate moisture in wood and give an account of how drying processes influence material properties
- give an account of the properties of, areas of use for and application methods for various glues
- discuss and elaborate on the interrelationship between idea, design and production technique
- use drawings in planning and production

- use computer-controlled drawing programs to create schematics, simple working drawings and work descriptions and transfer these to a computer-controlled machine
- give an account of central environmental standards and norms for quality in the area of woodworking
- give examples of how a system of agreements regulates a relationship between employee and employer

The aims of the studies are to enable pupils to

- perform work according to current applicable regulations and pre-accepted solutions
- plan, perform, document and evaluate own work
- make different wood products for use in the building industry based on drawings and descriptions
- adjustments and use relevant tools, woodworking equipment and assembly equipment for producing different wooden products
- maintain tools, equipment and machines
- treat the surfaces of wooden products and give an account of different methods for protecting wood
- program and use computer-controlled machines to create parts for simple wooden products
- use correct working techniques and working postures
- use protective gear and safety equipment
- plan and do work in accordance with requirements for EHS
- do quality controls on own work
- handle materials and waste in accordance with requirements for safety, environment and resource use
- discuss and elaborate on the central principles for material and production management, and organize cutting lists and materials lists for the products in question
- assemble parts for products based on drawings and descriptions, and give an account of methods and principles of assembly

Assessment

Vg2 Woodworking

Provisions for final assessment:

Overall achievement marks

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

Examination for pupils

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

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