
VOCATIONAL EDUCATION
AND TRAINING IN EUROPE

NORWAY

SYSTEM DESCRIPTION



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CHAPTER 1.

Summary of main elements and distinctive features of VET

Summary of main elements (1)

The Ministry of Education and Research has overall responsibility for education and training at all levels. In upper secondary vocational education and training (VET), both curricula and the VET system structure are laid down in national regulations, and providers are required to comply with them. There is cooperation on upper secondary and tertiary VET, between education and training authorities and the social partners.

The regional county authorities are responsible for general education and VET provision, distributing VET financing provided by the State budget and ensuring apprenticeship placement and supervision.

All young people completing compulsory schooling have a statutory right to 3 years of upper secondary education. Half of them choose between 10 VET programmes.

Upper secondary VET is conducted both in schools and in public and private enterprises. The county authorities must approve training establishments. The main model includes 2 years in school, where students also participate in practical training in workshops and enterprises, followed by 2 years of formalised apprenticeship (training and productive work) in enterprises. The first year of training consists of an introduction to the vocational programme. During the second year, VET students choose specialisations and courses are more trade-specific but core general education subjects are also included. Some trades and crafts follow other models, with 3 years in school or 1 year in school followed by 3 years of formalised apprenticeship.

In the main model, upper secondary VET (2+2 years) is completed with a practical-theoretical trade or journeyman examination (*Fagprøve* or *svenneprøve*) leading to an EQF level 4 qualification: a trade certificate (*Fagbrev*) for industrial and service trades or a journeyman certificate (*Svennebrev*) for traditional crafts. The 10 programme areas offer 197 different certificates. Some crafts are for 3 years of school-based learning, completed by a final exam and EQF level 4 qualification.

There are many possible routes to higher academic education via upper secondary VET. With a trade or journeyman certificate, the options to higher academic education are:

- via a 1-year bridging course in core subjects (*påbyggingsår*);
- direct admission to certain specially designed bachelor programmes (*Y-veien*).

Options without a trade or journeyman certificate are:

- 5 years' experience gained in work and/or education and passing courses in core subjects (for those aged 23 or older);
- recognition of relevant formal, informal, and non-formal learning for people aged 25 or older, who do not meet general entrance requirements;
- completing the bridge course in core subjects after completing the first 2 years of a VET programme;
- successfully completed 2-year full-time higher vocational education, 120 credits (EQF5).

Legal rights shape VET and contribute to making vocational skills visible. Those over 25 are entitled to upper secondary education or training, adapted to their needs and life situation. Adults also have a right to have prior learning assessed towards national curricula, which may result in exemption from parts of training. The experience-based trade certification scheme enables adults to sit a trade or journeyman examination on proof of sufficient relevant practice. The candidate must demonstrate comprehensive experience in the trade or craft,

normally over a minimum of 5 years.

VET colleges offer a wide range of vocational programmes at EQF level 5 for students with a trade or journeyman certificate. Some programmes at this level are also accessible for students with upper secondary general education.

Master craftsperson programmes are for holders of a relevant trade or journeyman certificate with several years' work experience. The programmes are provided by vocational colleges (*Fagskoler*), both private and public, and combine general business management, marketing, and vocational theory.

Distinctive features (2)

Norway has a long-standing tradition of close national and regional cooperation between education authorities and the social partners. National cooperation is organised in the National Council for VET (*Samarbeidsrådet for yrkesopplæring*, SRY), 10 vocational training councils (*Faglige råd*), one for each programme area, and national appeal boards (*Klagenemnder*). Regional cooperation involves county vocational training boards (*Yrkesopplæringsnemnder*) and examination boards (*Prøvenemnder*).

Tripartite cooperation aims to ensure that training provided to Norwegian VET learners meets labour market and skill needs. It informs changes in the VET structure, curriculum development, regional structure and volume of VET provision, the framework of examinations leading to trade or journeyman certificates, and quality control at all levels. At EQF level 5, the social partners participate in the National Council for higher VET (*Nasjonalt fagskoleråd*). In higher education, institutions are requested to set up a consultative council for cooperation with social partners.

Norway has a unified education and training system including both VET and general education as equal. Most education at upper-secondary level is provided by public schools. Young people have a right to attend upper secondary education, and most choose to do so. They also have the right to enrol in one of their top three choices.

More than half of trade and journeyman certificates are awarded to people over 25.

[1] Based on Cedefop (2021). *Spotlight on VET – 2020 compilation: vocational education and training systems in Europe*. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>

[2] Based on Cedefop (2021). *Spotlight on VET – 2020 compilation: vocational education and training systems in Europe*. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>

CHAPTER 2.

Main challenges and policy responses

Skilled workers with VET qualifications will play an important role in the reorganisation of the Norwegian economy. Figures from the Confederation of Norwegian Enterprise (NHO) show that many enterprises lack such employees and consequently lose business. Statistics Norway (SSB) estimates a shortage of almost 100 000 skilled workers in 2035.

The VET system is becoming more digital, labour market relevant and attractive. Initiatives aimed at increasing the number of students who complete their education, as well as teacher competences including digital, are in process. About 50 measures from the white paper *Skilled workers for the future (Fagfolk for fremtiden)* have been implemented, increasing VET attractiveness and labour market relevance. A new programme structure in upper secondary VET, including new curricula, was implemented from 2020/21.

Important changes took place in 2020/21:

- several suggestions on changes for a better upper-secondary education, both general and VET(3) ;
- a proposal for a new Education Act for primary and upper secondary education was presented(4) ;
- the Government has suggested several measures to ensure education and work during COVID-19;
- it is a priority to increase the digital teaching competence and establish more study places in higher vocational education;
- a regulation for higher vocational education (EQF 5) was adopted(5) ;
- a new strategy for higher vocational education (EQF 5);
- measures for increased completion rates in upper secondary were approved by the Government(6) .

[3] NOU 2019:25

[4] NOU 2019:23

[5] Based on Cedefop (2021). *Spotlight on VET – 2020 compilation: vocational education and training systems in Europe*. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>

CHAPTER 3.

External factors influencing VET

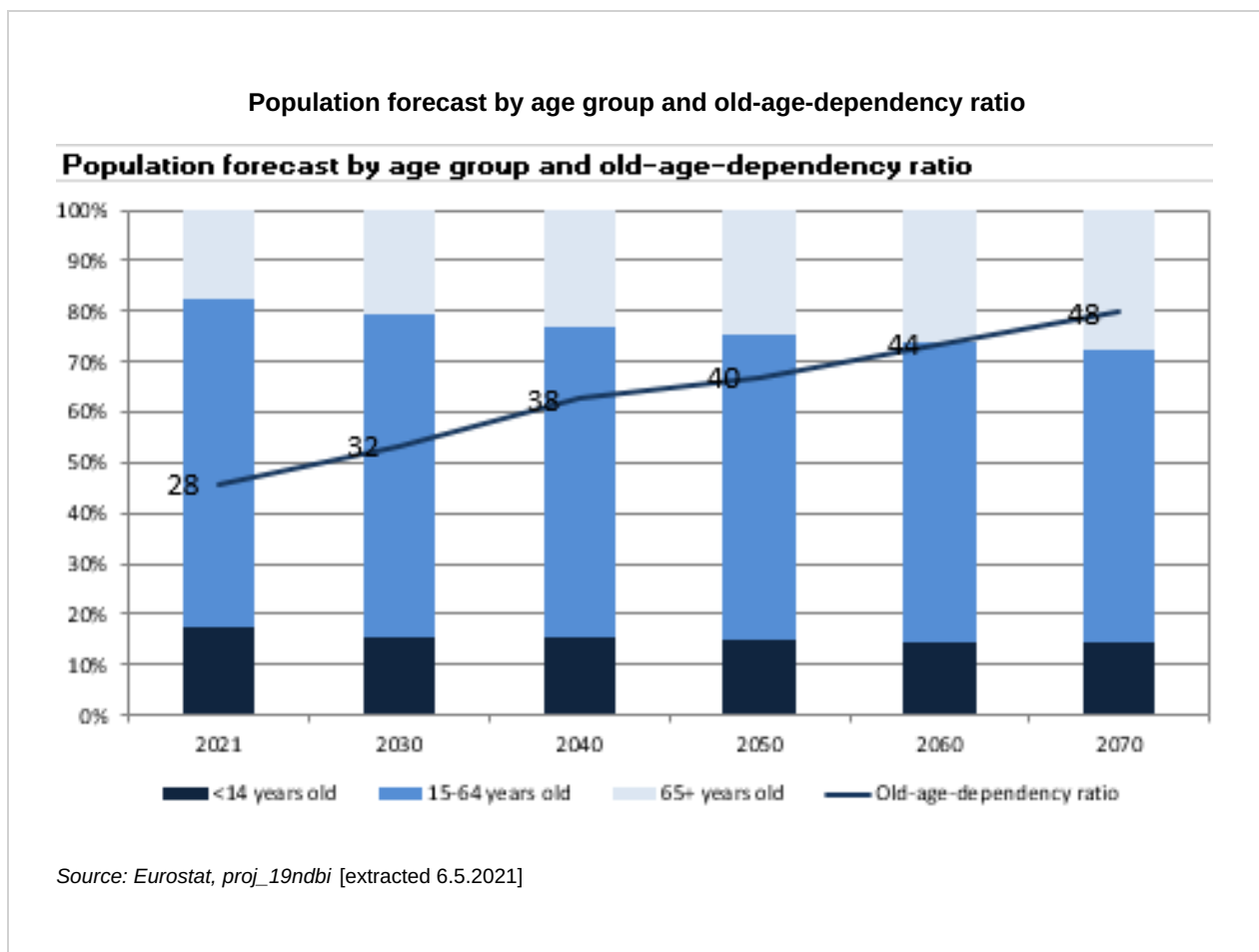
3.1 Demographics

Population in 2021: 5 398 804 (1st Quarter) (7) .

It increased since 2013 by 6.8% (8) due to positive growth and migration.

In 2021, the age group 67+ is 15.8%, an increase of 1.0 percentage points (pp) from 2017, and is expected to increase to 23.2% by 2040, 26.2% by 2060, and 27.7% by 2060 (9) .

The old-age-dependency ratio in Norway is expected to increase:



The demographic has an impact on VET. More people move into the cities, where it is more common to choose general education. In rural areas VET is often preferred (10) .

In Oslo 30.5% of the learners participate in VET. In Nordland 59% of the learners in upper secondary school participate in VET (11) .

At the beginning of 2020, the share of immigrants and those born in Norway to immigrant parents increased by 3.7% from 2019, representing 18.24% of the total population. 37.7% (376 656) of this segment of the population originates in other European countries (EU-27/EEA countries) (12) . The immigrant population is spread all over the country: 76.95% live in Oslo and the four surrounding counties (*Viken, Innlandet, Vestfold og Telemark og Agder*), constituting 21.6% of the population in the area(13) .

Information about external factor impact on VET is not available.

3.2 Economics

Small and medium-sized enterprises (SMEs), defined as enterprises with less than 250 employees, are more than 99% of all enterprises. 83.5% of SMEs have fewer than five employees, mainly because 66.8% of enterprises have no registered employees. Only 0.4% of the total number of enterprises has 100 or more employees (14) . These numbers indicate that apprenticeship training in Norwegian upper secondary VET often takes place in SMEs.

Most people in the production sector are employed in non-marketed services, business and transport and domestic trade.

Employment by production sector 2020

Sector	Per cent
Primary and utilities sector	4.4
Manufacturing	8.7
Construction	8.3
transport and domestic trade	17.6
Business and other service	27.1
Non-marketed services	33.9
Total	100,0

Source: [Statistics Norway](#). c [28.9.2021]

Exports are an important part of the economy thanks to a large oil and gas sector, fishing and fish farming, shipping, and power-intensive manufacturing sectors such as metals production, industrial chemicals and paper.

3.3 Labour market

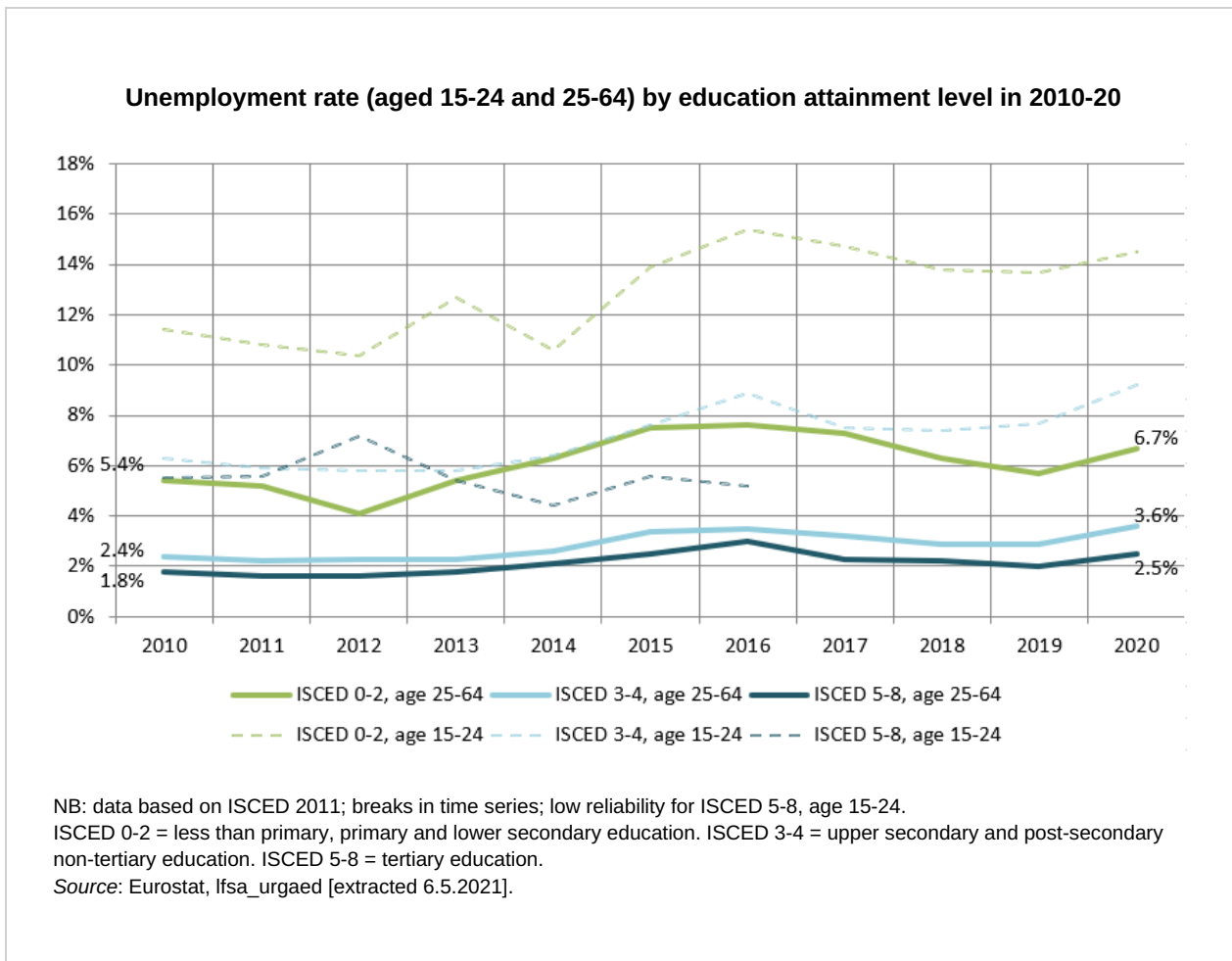
Some trades are regulated and certificates or recognition of qualifications are compulsory to get a job(15) .

There is an increasing number of job vacancies advertisements which require formal education, often a minimum of a bachelor degree. However, in trades where there is lack of employees and the trade is not

regulated, job seekers will find employment without formal education certification.

Total unemployment (16) (2020): 5% (7.9% in EU-27, May 2021); it increased by 2 percentage points (pp) since 2018 (17) .

Due to the COVID-19 pandemic employment has fallen.

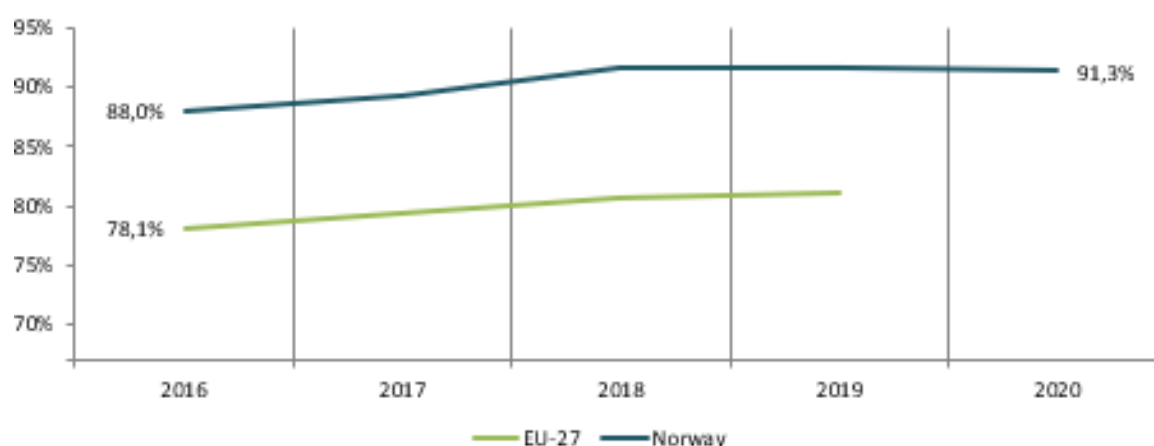


Unemployment rates of people aged 15-24 are generally higher than among people aged 25-64 for each education level, with low-qualified (ISCED levels 0-2) people scoring the highest unemployment rates. The total unemployment rate for the EU27 (percentage of active population, 25 to 74 years old) was 6.2% in 2020. This was down 1.9 pp since 2016 (18) .

In general, the crisis has hit more low-qualified than people with high-level (ISCED levels 5-8) and medium-level qualifications, including most VET graduates (ISCED levels 3 and 4).

The employment rate of 20 to 34-year-old VET graduates increased from 74.3% in 2016 to 76.2% in 2020 (+1.9 pp). (19) .

Employment rate of VET graduates (20 to 34 years old, ISCED levels 3 and 4)



NB: Data based on ISCED 2011; breaks in time series.
 ISCED 3-4 = upper secondary and post-secondary non-tertiary education.
 Source: Eurostat, edat_lfse_24 [extracted 6.5.2021].

For more information about the external drivers influencing VET developments in Norway please see the case study from Cedefop's changing nature and role of VET in Europe project (20) .

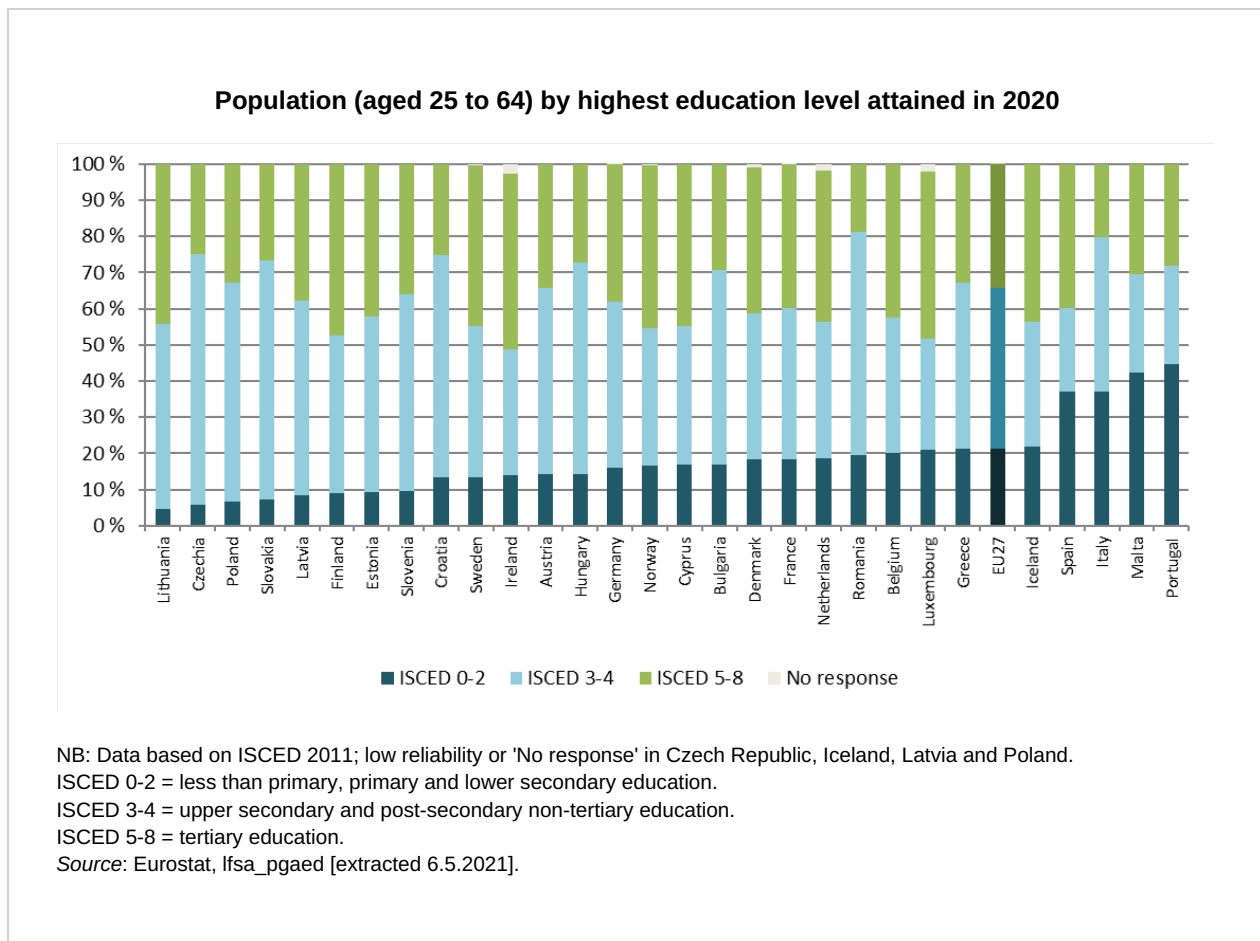
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- [6] White Paper 2020-21
 - [7] SSB. *Statistics Norway*. <https://www.ssb.no/befolkning/faktaside/befolkningen>
 - [8] NB: Data for population as of 1 January 2018. Eurostat table tps00001 [extracted 16.5.2019].
 - [9] SSB. *Statistics Norway*. <https://www.ssb.no/utdanning/statistikker/voppl>
 - [10] SSB. *Statistics Norway*. www.ssb.no and Norwegian Directorate for Education and Training. www.udir.no
 - [11] SSB. *Statistics Norway*. <https://www.ssb.no/utdanning/statistikker/vgu/aar>
 - [12] SSB. *Statistics Norway*. [Statistics Norway, h](#)
 - [13] SSB. *Statistics Norway*. [Statistics Norway, i](#)
 - [14] SSB. *Statistics Norway*. [Statistics Norway, b](#)
 - [15] Norway. National Agency for Quality Assurance in Education. www.nokut.no
 - [16] Percentage of active population, 25 to 64 years old.
 - [17] Eurostat table une_rt_a [extracted 20.5.2019].
 - [18] Eurostat, Unemployment by sex and age – annual data, Eurostat table: une_rt_a https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=une_rt_a&lang=en
 - [19] Eurostat table edat_lfse_24 [extracted 16.5.2019].

CHAPTER 4.

Education attainment

4.1 Share of high, medium and low level qualifications

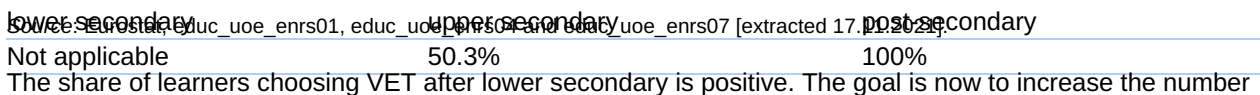
In 2020, the share of the population aged up to 64 with higher education (45.1%) was higher in Norway than the EU-27 average (34%). Also, the share of the population with only ISCED levels 0-2 achieved was lower (16.6%) than EU-27 average (21.3%).



For more information about VET in higher education in Norway please see the case study from Cedefop's changing nature and role of VET in Europe project (21) .

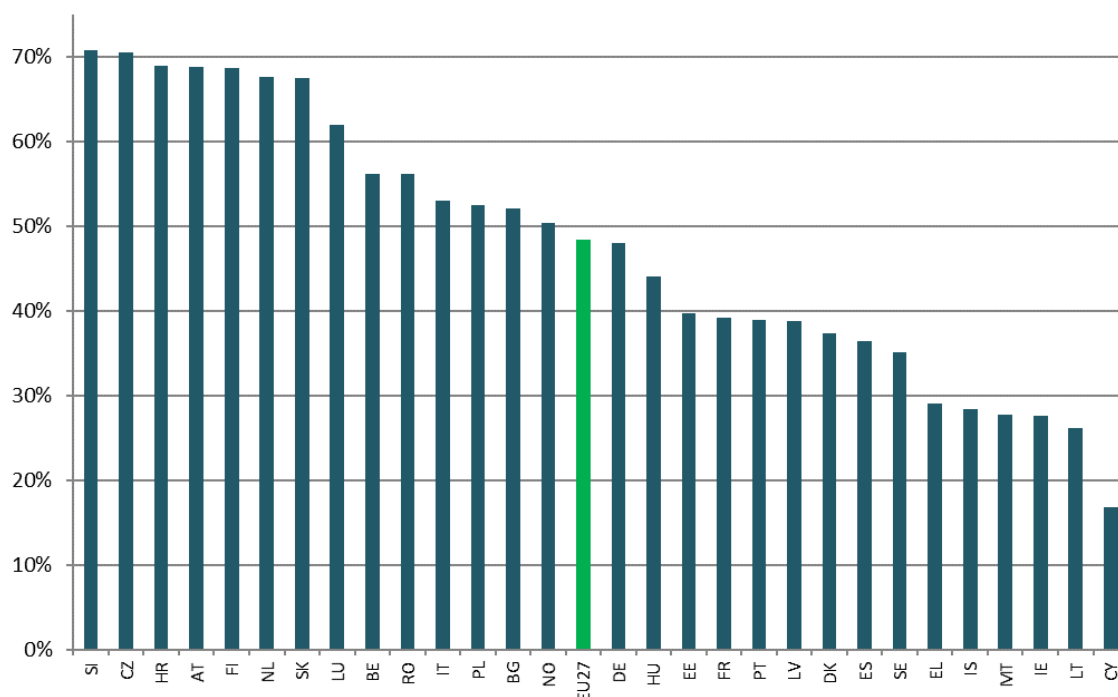
4.3 VET learners by level

Share of learners in VET by level in 2019



of students completing training, helping to prevent a projected lack of about 90 000 skilled workers in 2030.

Share of initial VET learners from total learners at upper-secondary level (ISCED level 3), 2019



NB: Data based on ISCED 2011.

Source: Eurostat, educ_uoe_enrs04 [extracted 6.5.2021].

4.4 Female share

In upper secondary VET, there are more males: 61.2% compared to 38.8% females(22) . In post-secondary VET the number of female learners is slightly higher (45%, autumn 2019) (23) .

Males prefer technical and industrial production (most popular option), followed by electrical trades and building and construction. Females choose healthcare, childhood and early youth development followed by design, arts and crafts and service trades.

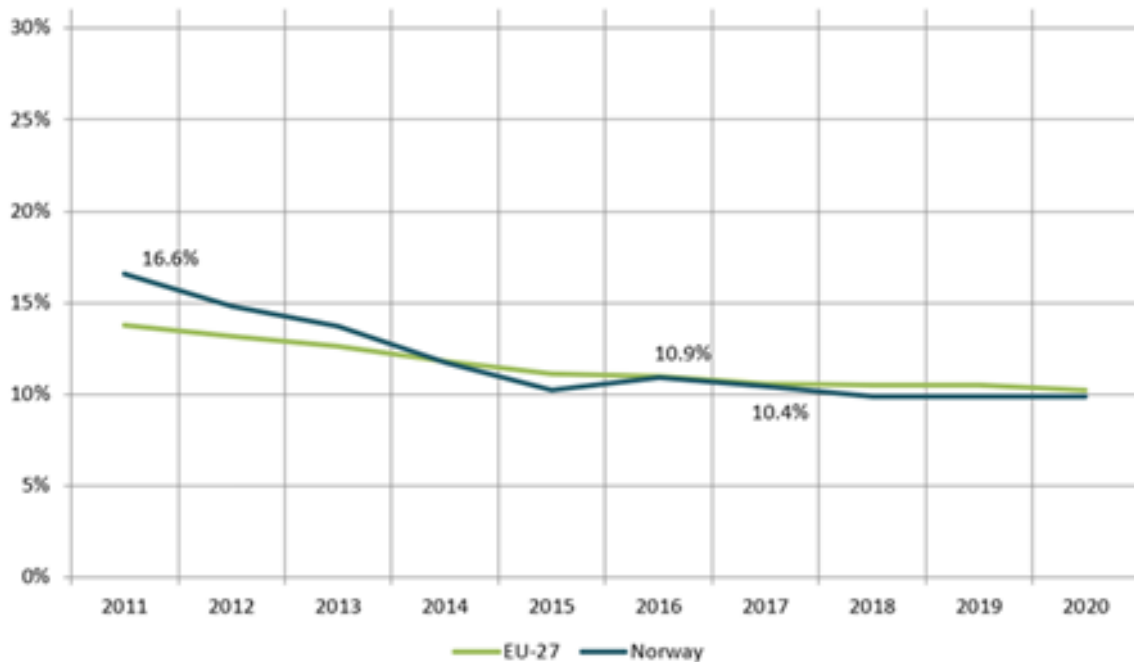
It is a national target to increase the number of underrepresented sexes in all vocational education tracks/programmes.

4.5 Early leavers from education and training

The share of early leavers from education and training has decreased from 16.6% in 2011 to 9.9% in 2020. It is below the EU-27 average of 10.1%.

The target is to reduce the number of school leavers so that 9 out of 10 complete upper secondary education by 2030 (24) . Several measures have been implemented and several more will follow as the Norwegian government aims to maintain the effort (25) .

Early leavers from education and training in 2011-20



NB: Share of the population aged 18 to 24 with at most lower secondary education and not in further education or training.
Source: Eurostat, edat_lfse_14 [extracted 06.05.2021] and [European Commission](#). [accessed 3.8.2021].

Drop-out is defined in Norway as non-completion of upper secondary level within a 5-year period after starting upper secondary level 1. More than half of those who do not complete upper secondary education complete by the age of 40.

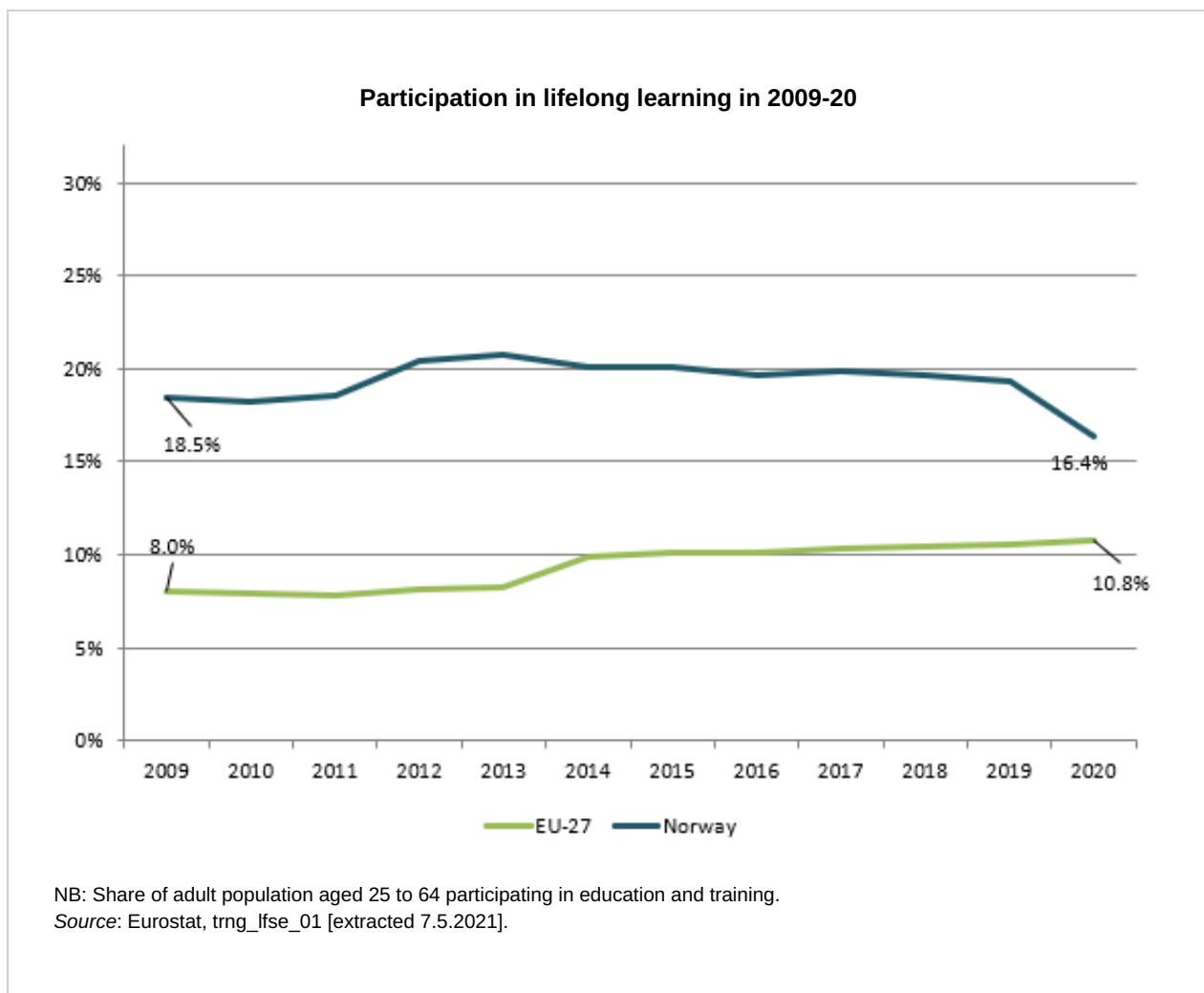
Drop-out has been widely discussed in recent years, and measures to tackle it are being developed and implemented. Factors have been identified that influence study progression, success rates, and drop-out rates. Two such factors are social background and learning achievements in primary and lower secondary education. Another factor is the lack of apprenticeship placements for VET learners in the transition from school-based training to apprenticeship training. In 2019, 28 600 learners applied for an apprenticeship contract, and 78 per cent received an apprenticeship placement by the end of the year. Most of those who receive apprenticeship placements complete their VET training with a trade or journeyman's certificate; 85.8% pass the exam after 5 years of apprenticeship.

Statistics show significant variations in drop-out rates between education programmes. In restaurant and food processing, around 40% dropped out before completing the programme, compared to only 3.6% in sport and physical education programmes (one of the general study programmes) the same year (26) . The differences in learners' grades at lower secondary level are seen as a key factor; learners admitted to general study programmes generally have higher marks than learners admitted to vocational programmes.

Measures to reduce drop-out rates include early interventions encouraging young people to learn, guidance and counselling, financial incentives, promoting VET and practice-based learning, and common core subjects in VET.

For more information, please read the VET in Europe report Norway 2018(27) .

4.6 Participation in lifelong learning



Participation in lifelong learning has been stable in recent years at 16.4% in 2020 (both formal and non-formal further education), significantly above the EU-27 average of 9.2%.

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- [22] Norwegian Directorate for education and training. www.udir.no
 - [23] Norwegian Directorate for higher education and competence. www.hkdir.no
 - [24] White Paper 2020-21
 - [25] Norwegian government web page. www.regjeringen.no
 - [26] The Norwegian Directorate for Education and Training. <https://www.udir.no/om-udir/>
 - [28] Statistics Norway. <https://www.ssb.no/>

CHAPTER 5.

VET within education and training system

The education and training system comprises:

- first education level, divided into two levels:
 - primary education (from 6 years to 13 years);
 - lower secondary education (EQF 2, ISCED 2);
- upper secondary education (EQF 3 and 4 and ISCED 3. VET is available from upper secondary level;
- post- secondary, non- tertiary VET education (EQF 5, ISCED 453 and 554);
- higher education (EQF 6, 7 and 8, ISCED 6, 7 and 8).

Education is compulsory for 6- to 16-year-olds. It comprises primary education (years 1-7), where learners get no grades, and lower secondary education (years 8-10) where learners are given grades that are also counted for entering upper secondary level. It is under municipality responsibility and free of charge.

Upper secondary education is offered as general education and VET. The regional county authorities are responsible for general education and VET provision. All young people completing compulsory education have a statutory right to 3 years of upper secondary education and most of them use it. Public upper secondary schools are free of charge.

Post-secondary non-tertiary education builds on upper secondary education: an upper secondary certificate or an equivalent qualification is a requirement to enrol. The education can often be combined with work. There are public and private providers.

Norway has 10 universities, six university colleges and five specialised, State-owned university institutions. There are also private institutions for higher education.

Students must pay a small fee each semester, paid to the student welfare organisation at the education institution. The purpose of the fee is to cover expenses relating to the students' welfare needs at their place of learning. The amount varies, but it rarely exceeds EUR 61.

It is possible to attend formal, non-formal, initial and continuing VET. Depending on the programme, learners may attend school-based or work-based learning or a combination of both. It is also possible to take an exam as an external candidate.

To complete a VET programme at upper secondary level, learners need to pass a final craft- or journeyman exam, which is both theoretical and practical. There is one exception; a 3-year option leads to a qualification at EQF level 4.

Initial and continuing VET are part of the formal education system. Initial VET has to be completed to progress to CVET. Initial VET starts at upper secondary school and most pathways leads to an EQF level 4 qualification. CVET is at EQF level 5.

Apprenticeship is at upper secondary level and leads to EQF level 4 qualification.

CHAPTER 6.

Apprenticeship

At upper secondary level, VET is conducted both in school and in public and private enterprises. The main two-plus-two model normally includes 2 years in school, where students also participate in practical training in workshops and enterprises, followed by 2 years of formalised apprenticeship (training and productive work) in enterprises. The first year of training consists of an introduction to the vocational area. During the second year, VET students choose specialisations and courses that are more trade-specific but core subjects are also included. Some crafts follow varying models with 3 years in school or 1 year in school followed by 3 years of formalised apprenticeship.

Upper secondary VET is completed with a practical-theoretical trade or journeyman's examination (*Fag- eller svenneprøve*) leading to an EQF level 4 qualification: a trade certificate (*Fagbrev*) for industrial and service trades or a journeyman's certificate (*Svennebrev*) for traditional crafts. The ten programme areas offer 197 different certificates.

There are many possible routes to higher education via upper secondary VET.

From Spotlight on VET – 2020 (28) .

Learn more about apprenticeships in the national context from the European database on apprenticeship schemes by Cedefop (29) .

[29] Cedefop. *European database on apprenticeship schemes*.
<http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/apprenticeship-schemes/scheme-fiches>

CHAPTER 7.

VET governance

Central to the Norwegian education and training system is the Education Act of 17 July 1998 No 61 (*Opplæringsloven*), most recently amended on 1.7.2021. It covers primary, lower and upper secondary general education and VET, including apprenticeship training, for young people and adults, delivered by both public and private institutions. It states that the Ministry of Education and Research (*Kunnskapsdepartementet*) has overall responsibility for national policy development and administration of all levels of education and training. The counties (*fylkeskommuner*) and municipalities (*kommuner*) are responsible for developing comprehensive plans and for organising and financing within their jurisdiction.

The Education Act gives the social partners representation (most often majority) in all important advisory bodies for upper secondary VET at national and county levels:

- the National Council for Vocational Education and Training (*Samarbeidsrådet for yrkesopplæring* (SRY)) gives advice on an overarching level;
- ten vocational training councils (*Faglige råd*) give advice on training in specific groups of trades, one for each VET programme;
- the county vocational training board (*Yrkesopplæringsnemnda*) for each county gives advice on quality, career guidance, regional development and the provision in the county to meet local labour market needs;
- the trade-specific examination boards (*Prøvenemnder*) are situated in each county;
- national appeals boards (*Klagenemnder*) cater for candidates who fail the trade or journeyman's final test at county level.

For post-secondary vocational education (nationally referred as tertiary; *høyere yrkesfaglig utdanning*), the social partners are consulted through the National Council for Tertiary Vocational Education (*Nasjonalt fagskoleråd*) established by the Ministry of Education and Research in 2010. This council has less of a formal function than the vocational training councils have at upper secondary level, as the education and training providers at this level design their own programmes. The Directorate for Higher Education and Skills hosts the secretariat. In addition, advisory bodies with social partner representatives consult on tertiary vocational education. There are six advisory bodies established and two are planning.

Tertiary vocational colleges (*fagskoler*) represent a significant alternative to higher education. The colleges are important for developing competence and specialisation in VET. The objective of the National Council for Vocational Education and Training is to improve cooperation between the colleges, the rest of the education structure, working life, and society in general. The council acts as a coordinating body for the sector and is the advisory body to the Ministry of Education and Research. It comprises representatives from the education sector, employee and employer organisations and learners.

CHAPTER 8.

VET financing mechanisms

The regional county authorities are responsible for general education and VET provision, distributing VET financing provided by the State budget and ensuring apprenticeship placement and supervision (30) . Enterprises with training contracts, according to the Education Act, receive a grant (*Basistilskudd I*), approximately EUR 69 per month for 2 years (24 months) per apprentice. There are some grant variations depending on type of apprenticeship contract (main model (2+2) or 2, 3 or 4 years of training in enterprise). In addition, the enterprise receives yearly funding of approximately EUR 6 000 per contract.

The grant given to training enterprises accepting adult apprentices (*basistilskudd II*) is about EUR 6 000 per year per apprentice.

Extra funding is also provided for enterprises signing contracts with apprentices in rare and protected crafts.

A EUR 2 million grant to encourage new enterprises to take on apprentices was introduced in 2014. From 2015, the county municipality could define regional criteria for the grant and from 2016 the grant may also be used to reduce unemployment amongst NEETs or ensure high-quality school-based training as an alternative for those without an apprenticeships contract.

[30] Cedefop (2019). *Spotlight on VET – 2018 compilation: vocational education and training systems in Europe*. Luxembourg: Publications Office. <http://www.cedefop.europa.eu/en/publications-and-resources/publications/4168>

CHAPTER 9.

Teachers and trainers

9.1 VET teacher types

There are three main groups of VET training staff at upper secondary level:

- VET teachers who provide formal school-based education and training;
- training supervisors (*faglige ledere*);
- trainers (*instruktører*) who provide training in enterprises.

VET teachers

The formal qualification requirements for VET teachers in schools are specified in national regulations. In principle, there is no difference between VET teachers and other teachers. Both groups must have two sets of formal qualifications: qualifications in the relevant subject and in education (pedagogics and didactics). VET teacher education programmes follow the general degree system, with a 3-year bachelor degree and a 2-year master degree. To become a qualified VET teacher, candidates must complete either vocational practical-pedagogical education or vocational teacher education.

Vocational practical-pedagogical education (consecutive model) is a 1-year programme (or 2 years part-time) for learners who already hold a vocational/professional degree or other qualification (see below). The main fields of study are pedagogical theory, vocational didactics and supervised teaching and training practice. The admission requirements are:

- a professionally oriented bachelor or master degree+;
- a minimum of 2 years of professional experience,

or:

- qualification as a skilled craftsperson/worker;
- general university and college admission certification;
- 4 years of relevant occupational experience;
- 2 years of further studies (technical, professional, managerial).

Vocational teacher education is a comprehensive 3-year bachelor programme covering both vocational training and pedagogy. It is also available as a part-time course of study and through work-based provision. The admission requirements are:

- general university and college admission certification;
- mark requirements in mathematics and Norwegian;
- trade or journeyman's certificate;
- minimum 2 years of relevant work experience.

All teacher education programmes for the lower and upper secondary levels (grades 8–13), including those for VET teachers, were revised in the Norwegian national qualifications framework of December 2011, following up both the European qualifications framework for higher education in the Bologna Process (QF-EHEA) and the European qualifications framework for lifelong learning (EQF). The new regulation on the relevant framework curricula came into force in March 2013 and was last amended in August 2016.

Teachers already employed may apply for grants to do a 1-year undergraduate teacher training programme for vocations (60 ECTS) or a vocational teacher education (180 ECTS). The size of the grant size is from EUR 11 000 to 22 000.

Another option for teachers is to do continuing education in common core subjects. While studying, the teacher may be released with up to 37.5% of the employment.

Several continuing education courses are available from the school year 2020/21, all 15 ECTS. The target group is vocational teachers who teach programme subjects. Training supervisors and trainers in enterprises can also gain admission to continuing education courses for vocational teachers, if places are available.

Secondment as a visiting trainee for VET teachers, trainers and qualified training supervisors has been introduced to facilitate better cooperation between schools and enterprises. The teacher will become familiar with the enterprises and the trainers and qualified training supervisors will get an insight in how training in schools is organised for future apprentices.

Training supervisor and trainers

A training enterprise with an apprentice must appoint a qualified training supervisor and one or more trainers. How training is conducted varies between enterprises, but other employees in the enterprise are often involved in the training. The training enterprise must be able to document how the training is planned, organised and assessed in order to ensure that apprentices can develop the necessary skills and competences. These skills are not assessed by testing and grading, but rather through continuous evaluation by the enterprise and at two meetings a year between the trainer (*instruktør*) and the apprentice.

Training supervisors (*faglige ledere*) in enterprises or other workplaces with apprentices must ensure that the training meets the requirements stipulated in the Education Act. They must have one of the following qualifications:

- a trade or journeyman's certificate in the relevant trade or craft;
- master craftsman's certificate in the relevant craft;
- relevant higher education in the trade or craft;
- adequate educational background in the parts of the trade which, according to the curriculum, will be taught in the enterprise;
- 6 years of experience in the trade or craft.

Trainers (*instruktører*) in training enterprises are vocationally skilled, often with a formal vocational qualification. They are not required to hold a teaching certificate. Some trainers do not hold formal qualifications in their vocational skills, but have instead developed them through work experience. Formal regulations simply state that the management of the training enterprise must ensure that trainers have 'the necessary qualifications' (31) .

Initiatives for VET competence development

Norway will need more vocational education teachers in the years to come to help provide skilled tradespeople for the national workforce. The Government gives priority to increased recruitment and qualification of VET teachers in the national competence development initiative from 2015. The Norwegian Directorate for Education and training is responsible for several VET competence development initiatives. Since 2015 there has been a mapping of skills development among VET teachers, for the best possible adapted schemes to this target group. Course material for trainers (*instruktør*), qualified training supervisor (*faglig leder*) and examination board member is made easily accessible online, together with tips and guidance to apprentices preparing for the qualifying exam.

9.2 Continuing professional development of teachers/trainers

It is not compulsory for teachers and trainers to undertake CPD.

There are, however, many possibilities for those who are interested and funding is available. The funding covers temporary employment and scholarships and is meant as an incentive for continuing education.

The courses are selected by the individuals and approved by the school leader. The courses take place during the school year.

CHAPTER 10.

Shaping VET qualifications

10.1 Anticipating skill needs

Demands for new skills and changes in the labour market call for continuous adjustment and revision of upper secondary VET programmes, their content and their modes of delivery. The Ministry, parents, learners, employers, trade unions and others may initiate a need for adjustments or changes.

At upper secondary VET level

All eight upper secondary VET programmes are closely monitored. Changes are made continuously, based on input and applications from social partners, counties or the vocational training councils (*Faglige råd*) that give advice on training in specific groups of trades (32) .

The Directorate for Education and Training (Directorate) hosts the secretariats of both the National Council for Vocational Education (*Samarbeidsrådet for yrkesopplæring* (SRY)) that gives advice on an overarching level, and the vocational training councils. These councils must report on the situation to the national authorities once in the 4-year nomination period. The report also covers the potential need for changes in their respective VET programmes. The Directorate, in cooperation with vocational training councils, vocational committees (*faglig utvalg*), county municipalities and social partners, reviewed VET programmes available in 2016. The result is a new structure for vocational subjects in upper secondary schools from 2020, which will be the biggest change in vocational education since 2006. The new structure will strengthen the quality and relevance of education.

One element that may limit the social partners' impact on upper secondary VET provision is the emphasis placed on the individual choices of learners. According to legislation (33) , learners are entitled to admission to one out of three preferred upper secondary programmes. In the school year 2021/22, 86% of first-year learners were admitted to their first choice of upper secondary education (34) . County authorities must provide programmes and subjects that correspond to these preferences. In order to balance VET provision with labour market needs, social partners give advice concerning a wide range of topics related to upper secondary VET: training programme structure, curriculum development, regional structure, volume of VET provision, examinations framework for trade and journeyman certificates, and quality control at national, county and local level.

At post-secondary VET level

In post-secondary vocational education, and in higher education, study programmes are designed by the provider. Each post-secondary vocational education programme must be recognised by Norwegian Agency for Quality Assurance in Education (NOKUT) and is placed at EQF level 5. The vocational colleges offering post-secondary vocational education are not free to establish programmes at above EQF level 5. In other higher education, all accredited institutions can establish programmes at bachelor level (EQF 6), within the scope of their accreditation. Universities are free to establish programmes at all levels, including master and PhD programmes. All tertiary education institutions have external board members, and consultation with relevant labour market players on the design of programmes is common. In some fields there are national framework curricula to ensure some degree of similarity in training for all graduates (including teacher education, nursing, engineering, auditing). For other fields of training, the respective industries have national boards which offer advice to higher education providers. All higher education institutions are required to have a strategy and a consultative council for cooperation with working life (*Råd for samarbeid med arbeidslivet*).

10.2 Designing qualifications

In April 2016, the Government adopted a new white paper(35) that will lead to renewal of the curriculum

reform (*Kunnskapsløftet*) from 2006. The renewal of the school subjects in primary, lower and upper secondary education, including VET, will give learners more in-depth training and a better subject understanding, and more relevant content and links between subjects; the learning process progression will be made clearer. The new curriculum was ready in the autumn of 2020.

The national curriculum

The National curriculum for knowledge promotion (*Kunnskapsløftet 2006*) covers compulsory primary and lower secondary education and upper secondary education and training as a whole.

The curriculum consists of:

- the core curriculum: values and principles in education;
- subject curriculum;
- a framework regulating the distribution of teaching hours per subject.

The core curriculum deepens appreciation of basic values such as moral outlook, creative abilities, preparation for working life and society, general education, cooperation, and ecological understanding. This part of the curriculum underlies all education in Norway, from primary to adult, and provides the binding foundation and values for primary and upper secondary education and training.

The quality framework consists of the principles that clarify the school owners' (municipalities and county authorities) responsibilities. Key competences are integrated into the quality framework, such as learning strategies, social competences, cultural competences, motivation to learn, and learner participation.

The subject curricula consist of outcome-based learning targets, the main subject areas and basic skills. The main subject areas describe what the learner and apprentice should be able to do. The basic skills are: the ability to express oneself orally and in writing, the ability to read, fluency in numeracy, and the ability to use digital tools. The subject curricula also describe which final assessment will be given on completion.

The distribution of teaching hours per subject is set at national level. This is an overview of how the total teaching hours should be distributed per subject per year for the 10-year compulsory education as well as for the upper secondary level, VET included.

The national curriculum encompasses 10-year compulsory education and upper secondary education and training as a whole. The competence objectives state what the learner/apprentice should be able to master at each level after grades 2, 4, 7 and 10, as well as after every stage of upper secondary education and training. Basic skills are decisive for acquiring subject-related knowledge and for communicating and cooperating with others in a wide range of situations. Their aims are integrated with, and adapted to, each subject according to level. The subject curricula also describe the principles for assessment. However, decisions regarding teaching methods are left to the education and training institutions. Curricular activities at local levels are essential in order to implement the national curriculum, particularly the outcome-based competence aims in the subject curricula. School owners must have a system in place for following up the quality of local curricular activities. The Norwegian Directorate for Education and Training develops web-based guidelines to support local curricular activities as well as other measures to raise competence among school owners and school managements.

Developing VET curricula (EQF level 4)

The Directorate has responsibility for continuous curriculum development. It makes extensive use of expert groups from both schools and enterprises providing upper secondary education. When the need for a new qualification is identified, a tripartite group is set up to design vocational profiles; these form the basis for developing the subject curricula. The Directorate appoints teams for curricula development consisting of professionals (most often proposed by the employer and employee organisations) and VET teachers.

Within 3 months, the team submits a draft version of the curriculum to the Directorate. The draft is distributed to the sector for a 3-month consultation process and relevant feedback is incorporated. With support from external representatives from the sector, curriculum quality is assured by the Directorate. Depending on the subject, curricula are finally set by the Ministry or the Directorate.

The identified labour market needs will have no direct influence on teachers' training or assessment, but the training of teachers and the assessment of learners and apprentices will be dependent on the subject curricula.

The Directorate also has a follow-up system for curricula (*System for oppfølging av læreplan* (SOL)). The purpose of the system is to obtain a more holistic and systematic overview of the situation for the curricula. SOL entails reviewing, compiling and analysing different sources that inform the situation for the curricula and how they function. These sources include studies, enquiries, evaluation reports and statistics. The intention is that SOL should contribute to making administration of the curricula more systematic, knowledge-based and predictable. The knowledge gained gives the Directorate a basis for initiating necessary and adequate measures for strengthening implementation of the curricula. These measures can support and inform VET providers when adjusting the curricula.

Norway is in the process of renewing all subjects at all levels of education. The renewed subjects and a new core curriculum were implemented in 2020.

[32] One for each VET programme.

[33] Section 3-1 of the Education Act.

[34] <https://www.udir.no/tall-og-forskning/statistikk/statistikk-videregaende-skole/analyser/forsteinntak-til-videregaende-opplaring-2021/>

[35] Meld.St. 28 (2015-16) Fag – Fordypning – Forståelse — En fornyelse av Kunnskapsløftet [Report No 28 to the Storting, 2015-16, on in-depth learning and better understanding; a renewal of the Knowledge promotion reform]
<https://www.regjeringen.no/contentassets/e8e1f41732ca4a64b003fca213ae663b/no/pdfs/stm201520160028000dddpdfs.pdf>

CHAPTER 11.

Quality assurance

Tripartite cooperation is a crucial quality assurance mechanism for upper secondary VET. The Education Act requires the county authority (*fylkeskommunen*) to consult the county vocational training board (*Yrkesopplæringsnemda*) on quality issues related to school-based and work-based VET. A main task for the board is thus to give advice, especially related to accreditation of apprenticeship training enterprises. The board should also present proposals for quality development, including improving partnerships between schools and enterprises, and skills and competence development for teachers and trainers.

As quality assurance is embedded in the legal framework, the State is responsible for inspecting all activities stipulated in the Education Act. The State also has the authority to issue legally binding orders to rectify unsatisfactory conditions. The Ministry of Education and Research (*Kunnskapsdepartementet*) has delegated this responsibility as the inspectorate at national level to the Norwegian Directorate for Education and Training (*Utdanningsdirektoratet*). The Directorate is responsible for developing and supporting inspections, to facilitate a unified inspection throughout the country, and to provide guidance on legislation. The county governors (*Statsforvalter* (36)) serve as the operational inspection authority for basic training, and have responsibility for activities at county level. They also serve as the appeal body for individual decisions regarding learners in primary and lower secondary school. However, the Ministry still has the authority to exercise supervision, and can instruct the Directorate for Education and Training and the county governors on how inspections should be performed.

Quality standards for VET providers are set out in the Education Act and relevant regulations. The legislation sets standards for examinations, trade and journeyman's certification, approval of apprenticeship training enterprises, and teacher competence. The Education Act also regulates the county governors' responsibility to provide guidance to school owners. This applies to guidance not only on academic matters but also on other matters related to the Education Act. It includes guidance on administrative rules, and is intended to provide the best possible cooperation between the State and school owners.

In addition to the county governors' more general inspections, joint national inspections may also be implemented. These inspections are incident-based, and derive from regional risk assessments made in cooperation with the county governors. Situations may arise that invoke immediate attention by the authorities, and give county governors the authority to perform inspections at their own initiative.

The Norwegian Agency for Quality Assurance in Education (*Nasjonalt organ for kvalitet i utdanningen* (NOKUT)) is responsible for recognition, accreditation and quality assurance in post-secondary vocational education and higher education. The frameworks for these activities are laid down in the respective laws and regulations on quality assurance in higher education and post-secondary vocational education, as well as in supplementary regulations, rules and procedures laid down by NOKUT.

[36] New gender neutral name from 1.1.2021

CHAPTER 12.

Validation of prior learning

Validation of non-formal and informal learning is possible at all levels of education and training in Norway and can be used to acquire modules and/or full qualifications. There are laws and regulations in place relating to each level of education and training, providing a general framework for validation of prior learning. The Norwegian system of validation is based on shared principles across all sectors. One of these principles is that the validation process should be voluntary and of benefit to the individual.

Differences in funding and governance mechanisms found in primary, upper secondary, post-secondary vocational and higher education affect the preconditions for setting up validation procedures. The sectors of education have developed schemes for validation of non-formal and informal learning according to their specific needs and preconditions. Higher education institutions exercise the greatest freedom in the design and delivery of validation, because responsibilities are devolved to each institution. This also concerns post-secondary VET. The national government and its underlying administrations provide guidelines for all educational sectors.

During the autumn 2013, the Norwegian Directorate for Education and Training, in cooperation with stakeholders from the sectors, developed national guidelines (last amended on 16 March 2021) relating to adults who claim the right to have their formal, non-formal and informal learning validated compared to lower or upper secondary level. The guidelines focus mainly on how to interpret the regulations relating to validation and how to implement the different points described in the regulations. The purpose of the national guidelines for validation is to ensure that sound validation procedures are carried out, leading to similar practices in all Norwegian counties and municipalities. By providing a national basis for local practice, the guidelines could spur confidence and legitimacy of the validation practices.

- It is possible to acquire a full qualification on the basis of validation in the Programme for general studies in upper secondary education (university-preparatory).
- In upper secondary VET, it is necessary to take the relevant final (trade) examination to achieve a trade or journeyman's certificate as a skilled worker.
- In higher education, individuals can gain exemptions for parts of study programmes. On the diploma as well as on the diploma supplement, the relevant courses and credits will be identified as having been obtained through validation. In post-secondary VET, the possibility to give exemption from courses and modules on the basis of validation was introduced through regulations of 1 August 2013.

In terms of awarding credits or partial qualifications after validation in primary and upper secondary education and training, the Education Act permits candidates to achieve a partial certificate qualification, called 'certificate of competence' (*kompetansebevis*) at any level through validation. Candidates then have the right to access further education and training, in order to achieve a full trade or journeyman certificate. The certificate of competence is awarded to recognise that an individual has achieved certain objectives (learning outcomes) within an upper secondary curriculum. The certificates can serve as stand-alone evidence of competences and can be used, for example, to support a job application or participation in further education courses.

These partial certificates of competence are recognised in the labour market, as a documentation of parts of the demands in the trade. It is also possible to access education through validation: the individual must be able to show (through documentation or other means) the required skills and competences to enter a certain level of education and training.

For more information about arrangements for the validation of non-formal and informal learning please visit Cedefop's European database (37) .

[37] Cedefop. European database on validation of non-formal and informal learning.

<http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/european-database-on-validation-of-non-formal-and-informal-learning>

CHAPTER 13.

Incentives for learners

Salary during apprenticeship training

The apprenticeship scheme is a critical component of the upper secondary VET 2+2 model. The regulated salary during the apprenticeship training period is a financial incentive to promote learner participation in VET. The salary for apprentices is a given percentage of the initial salary of a worker with a craft certificate in the relevant vocation. The salary increases throughout the apprenticeship.

For apprentices following the main model (2+2), the salary is calculated as follows, for the 2 years of apprenticeship:

- first half of the years in an approved training company: 30 per cent of the initial salary;
- second half: 40 per cent of the initial salary;
- third half: 50 per cent of the initial salary;
- fourth half: 80 per cent of the initial salary.

Grants and loans for learners

The main purposes of the Act relating to learner grants (*Lov om utdanningsstøtte*) of 1985, most recently amended in 2020, are to:

- improve equity in access to education and training regardless of geography, gender, age and social background;
- improve learning environments and enable learners to study more effectively;
- ensure a qualified workforce for society at large.

Learner loans carry no interest charges during the period of study and up to 40% may be converted to grant after completing education. All registered learners participating in formally recognised study programmes, at both public and private institutions of higher education, may receive grants and subsidised loans from the Norwegian State education loan fund (*Statens lånekasse for utdanning*) for subsistence expenses. Support is also provided to Norwegian learners abroad, who may receive additional support for travel, admission and tuition fees.

Learners in upper secondary school-based VET (learners and apprentices alike) may qualify for grants and subsidised loans from the Norwegian State education loan fund subject to a needs-based assessment. They may receive relocation grants if they have to move away from home to attend school or enterprise-based training, and are also entitled to support from the fund.

The following grants are also available to adult learners:

- additional subsistence grant to cover expenses if they live away from home;
- grants for purchasing compulsory equipment, according to study programme.

Support to learners at upper secondary level is mainly provided in the form of grants.

CHAPTER 14.

Incentives for enterprises to boost their participation in VET provision

The apprenticeship scheme is a critical component of the upper secondary VET 2+2 model. After 2 years of school-based education, most VET programmes involve a 2-year apprenticeship in a training enterprise. This period is equivalent to 1 year of practice-based training and 1 year of productive work for the training enterprise. During the first year as an apprentice with practice-based training the enterprise focus on teaching; there is no expectation of profit-making. The second year with productive work is expected to be profit-making for the company. After 2 years in school, the apprentice signs a legally binding apprenticeship contract with the training enterprise and a representative from the county authorities. By law, apprentices are employees of the enterprise, with the rights and obligations that follow. They are entitled to a salary that increases with the apprentice's productivity during the 2-year apprenticeship period. Salary increases normally start at 30% and increase to 80% of a skilled worker's salary. For the school year 2019/20, 72 111 vocational learners are registered in upper secondary education in Norway and there are 45 000 apprentices with running apprenticeship contracts.

All training enterprises received a State grant of approximately EUR 16 000 per apprentice for a 12-month training period. The grant covers the training period only, not the productive component. The grant is distributed evenly throughout the apprenticeship period in the company. The grant is supposed to cover costs related to training the apprentice. Additional grants are given to enterprises either for offering apprenticeships in rare and protected crafts (*små og verneverdige fag*) or for accepting apprentices or training candidates with special needs.

CHAPTER 15.

Guidance and counselling

Legislation (38) guarantees the right of every learner to receive guidance on educational and vocational matters as well as for social or personal character.

Guidance and guidance services are provided by different institutions according to level of education and relationship to the labour market. The main guidance services are organised within the school system. Learners in primary and secondary education have the right to 'necessary guidance on education, vocational opportunities, vocational choices and social matters'. The provision is organised by the individual schools. All learners are entitled to guidance according to their needs.

A whole-school approach to guidance has been adopted, meaning that individual teachers, and all other personnel in schools, have a responsibility to provide guidance to learners. One subject in the curriculum for lower secondary schools, the study elective programme subject (*Utdanningsvalg*), is specifically aimed at providing learners with the competences they need to make informed educational and vocational choices. A similar subject is offered in VET programmes in upper secondary schools. With a different responsibility for guidance, guidance counsellors in lower and upper secondary education provide guidance to learners in school. Guidance counsellors in the Follow-up Service (*Oppfølgingstjenesten*) provide guidance to those aged between 16 and 24 who are neither in education nor in employment.

All counties have allocated funding from the State budget to establish partnerships for career guidance; most have established such partnerships or other forms of regional cooperation. Local and regional school authorities, the Norwegian Labour and Welfare Administration (NAV), the business sector, and social partners are often partners in these initiatives. Several counties have established career centres to provide guidance for everyone, primarily adults aged 19 and above. The career centres also play a role in helping improve the competence of guidance counsellors in schools, in local NAV offices and other institutions offering career guidance. The National Unit for Lifelong guidance in Competence Norway is in charge of managing and monitoring partnerships in career guidance.

Career guidance is available as a master degree. Career guidance strengthens the individual's ability and competence to make informed education and vocational choices.

Although all learners in upper secondary education have the right to guidance under the Education Act, apprentices do not have this right. An official Norwegian report (39) recommends a right to guidance also for apprentices. An online guidance platform to increase the quality of guidance in both lower and upper secondary schools is available. Universities and some university colleges have established career centres to provide guidance to learners. Adults who need guidance may use the local offices of the NAV or visit regional career centres established by partnerships in career guidance. A small number of private agencies also provide career guidance on a commercial basis.

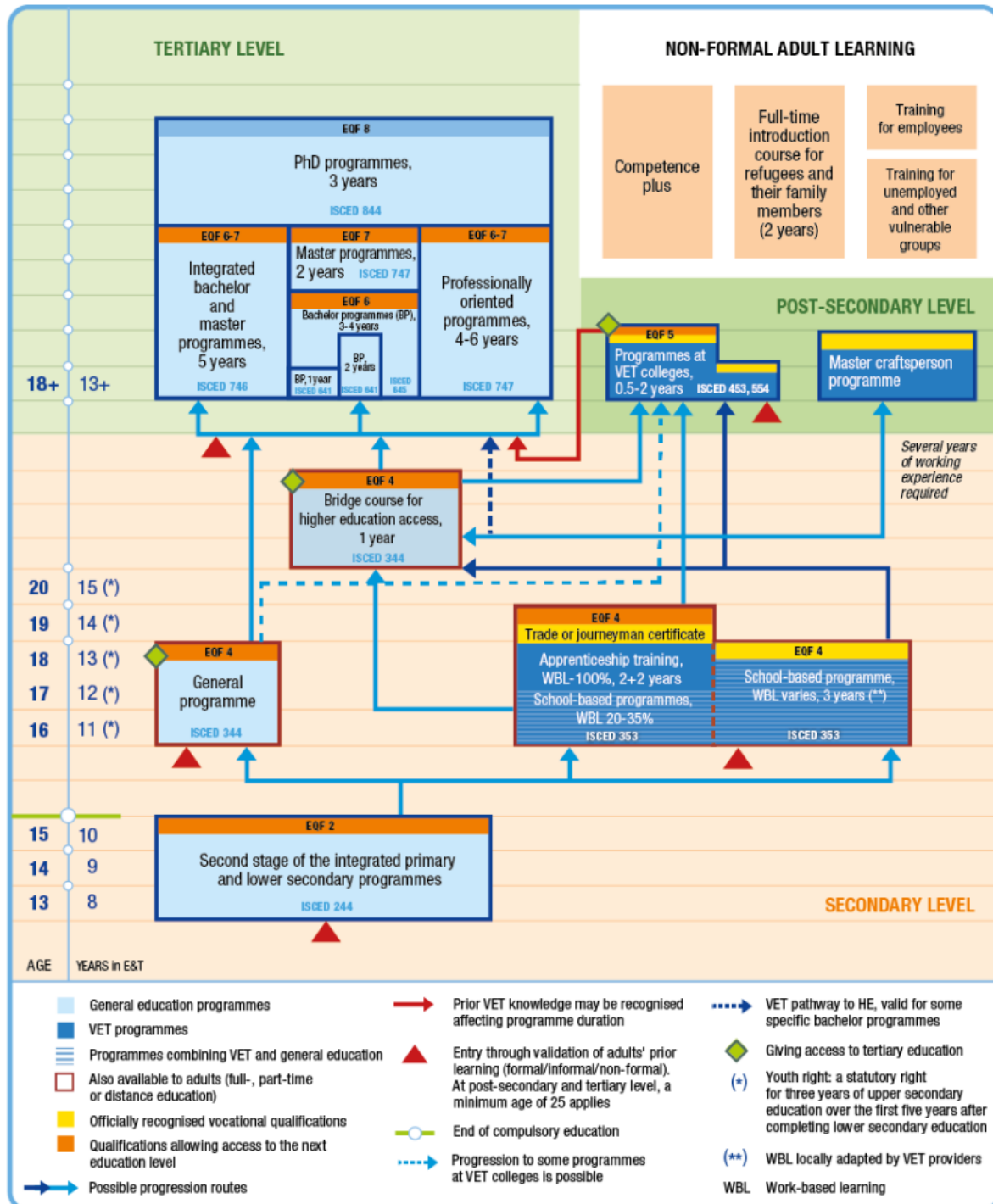
Please see also:

- guidance and outreach Norway national report (40) ;
- Cedefop's inventory of lifelong guidance systems and practices (41) .

[38] Under the Education Act (Opplæringsloven); came into force 1.1.2009.

[39] NOU 2016:7 Norge I omstilling – karriereveiledning for individ og samfunn [Career guidance for individuals and society]. <https://www.regjeringen.no/en/topics/education/voksnes-laring-og-kompetanse/artikler/sammendrag-av-nou-20167-karriereveiledning-for-individ-og-samfunn/id2485528/>

Vocational education and training system chart



NB: ISCED-P 2011.

Source: Cedefop and ReferNet Norway, 2022.

VET Programme Types

EQF 4
School-based programmes, no WBL, 3 years ISCED 353

The 3-year upper secondary school-based pathway leading to EQF level 4, ISCED 353 (Yrkeskompetanse)

EQF level	4	ISCED-P 2011 level	353
Usual entry grade	11	Usual completion grade	13
Usual entry age	16	Usual completion age	18
Length of a programme (years)	3		
Is it part of compulsory education and training?	✗	Is it part of formal education and training system?	✓
Is it initial VET?	✓	Is it continuing VET?	✗
Is it offered free of charge?	✓	Is it available for adults?	✓

ECVET or other credits Credits are not available at upper secondary level.

Learning forms (e.g. dual, part-time, distance) School-based learning consisting of 981 hours of teaching in the first year, of which 477 hours in the programme subject.
Second year: 982 hours of teaching, 477 hours in the programme subject.
Third year: 981 hours, 926 hours in the programme subject.

Main providers Upper secondary schools

Share of work-based learning provided by schools and companies Work-based learning varies and is locally adapted.

Work-based learning type (workshops at schools, in-company training / apprenticeships)

- practical training at school
- locally adapted in-company training

Main target groups	This scheme is available both for young people and for adults.
Entry requirements for learners (qualification/education level, age)	Completed lower secondary education is required. The level of the grades to enter may vary, depending on the demand (the number of applicants) and the grades of the applicants.
Assessment of learning outcomes	The learners need to pass a compulsory final exam, which is based on learning outcomes and usually includes a practical part. At upper secondary level, learners have the right to a new final exam if the first attempt fails. The school is obliged to offer the opportunity to take the exam next time this is scheduled at the school. If a learner fails to do so, the exam has to be completed as an external candidate for a public examination.
Diplomas/certificates provided	Professional competence qualification (EQF 4)
Examples of qualifications	Interior designer, piano repair, space technology, pharmacy technician, medical secretary and gardening.
Progression opportunities for learners after graduation	Those who complete VET may enter the labour market. The learners may do a craft or journeyman`s certificate exam after 5 years of working in the trade.
Destination of graduates	Information not available. In Norway, graduates are tracked 3 years after completing a vocational education. In total, 83.9% of all the 2016-17 graduates are employed, 9.7% are in education and 6.4% are neither in education nor job (42) .
Awards through validation of prior learning	Achieving qualifications through validation of prior learning is possible.
General education subjects	 The common core subjects (<i>fellesfag</i>) (Norwegian, English, mathematics, physical education, natural sciences and social sciences) are the same for all VET programmes.
Key competences	 Key competences are integrated in the competence aims for the subject.
Application of learning outcomes approach	 The programme is based on learning outcomes.
Share of learners in this programme type compared with the total number of VET learners	In 2021/22 there were 112 670 learners in general education and 94 161 (45.5%) in vocational education and training at upper secondary level. 5 565 learners attended the third year at upper secondary school and 48.4% of them attended this programme. The others progress to apprenticeship or to a bridge year to access higher education.

[42] Norwegian Directorate for Education and Training. <https://skoleporten.udir.no>

EQF 4
Apprenticeship training, WBL -100% 2+2 years School-based programmes, WBL 20-35% ISCED level 353

The main model 2+2 pathway (apprenticeship model) leading to EQF level 4, ISCED level 353 (2+2 modellen).

EQF level	4	ISCED-P 2011 level	353
Usual entry grade	11	Usual completion grade	14
Usual entry age	16	Usual completion age	19
Length of a programme (years)	4		
Is it part of compulsory education and training?	✗	Is it part of formal education and training system?	✓
Is it initial VET?	✓	Is it continuing VET?	✗
Is it offered free of charge?	✓	Is it available for adults?	✓
Upper secondary school is free of charge.			

ECVET or other credits Credits are not available at this level of education.

Learning forms (e.g. dual, part-time, distance) The model entails 2 years of education in school followed by 2 years of formal apprenticeship training in company.

Main providers

- VET schools in the first 2 years
- Training companies in the second 2 years

Share of work-based learning provided by schools and companies

=20-35% in the first 2 years

=100% in the second 2 years

Work-based learning type (workshops at schools, in-company training / apprenticeships)

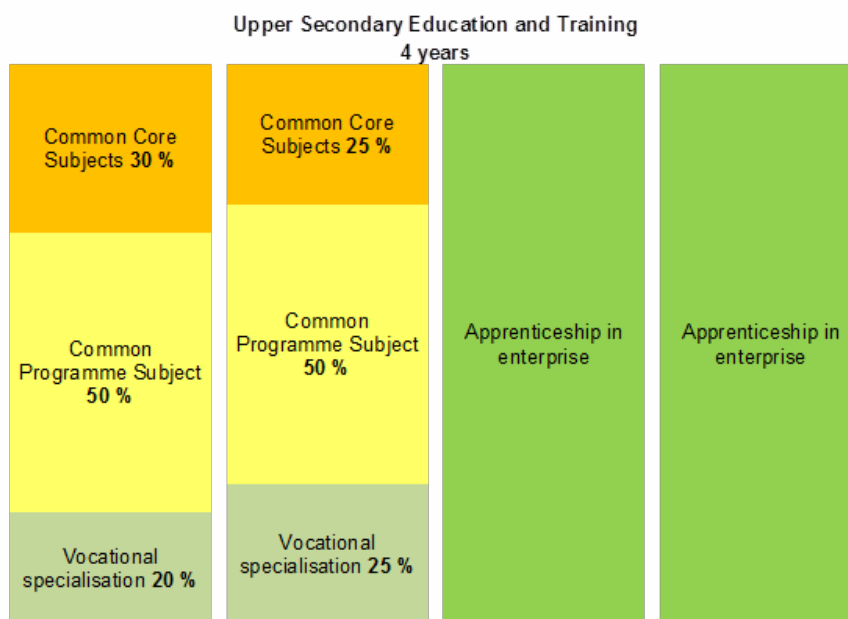
- practical training at school and / or in company training during the first 2 years
- apprenticeship in company in the second 2 years

Main target groups	Mainly young people, 16- to18-year-olds (85%). The age group 19-24 represent 9.6%, 25-29=2.1%, 30-34=1.4% and 35+ represents 1.8% (43) .
Entry requirements for learners (qualification/education level, age)	Completed lower secondary education is required.
Assessment of learning outcomes	Upper secondary VET is completed with a practical-theoretical trade or journeyman's examination (<i>Fag- eller svenneprøve</i>). In the test, candidates demonstrate their vocational skills, and explain and justify the methods chosen to solve the test assignments. A county-appointed, trade-specific examination board prepares and assesses the examination. The minimum requirement for being a board member is a formal vocational education. The county authorities award the certificate. Following the main model, the apprentice takes the final exam 4 years after starting upper secondary education. In 2018, 53.9% of candidates who entered a VET programme in 2014 passed the exam, 3.1% completed their apprenticeship but failed the exam, 14.8% failed to complete their apprenticeship and 28.1% are still undertaking their apprenticeship (44) . Learner competences are assessed continuously throughout the 4 years of education and training, in school by the teacher and in apprenticeship by the training supervisor. They must also take exams in individual subjects developed at local and county level. Learners may also be randomly selected to take nationally organised examinations in common core subjects. Most learners have passed exams in vocational subjects after 2 and 4 years of training. After 2 years in school, learners take an interdisciplinary local practical exam which covers all the vocational subjects.
Diplomas/certificates provided	Upper secondary VET practical-theoretical trade or journeyman's examination lead to an EQF level 4 qualification: a trade certificate (<i>Fagbrev</i>) for industrial and service trades or a journeyman's certificate (<i>Svennebrev</i>) for traditional crafts. The two certificates have equal status based on similar sets of theoretical knowledge and practical skills.
Examples of qualifications	Goldsmith, winder, painter, roofer.

Progression opportunities for learners after graduation	There are many progression opportunities to post-secondary and tertiary education from upper secondary VET. With a trade or journeyman certificate, the options are: • higher vocational education (EQF level 5), 6 to 24 months specialisation/further education; • via a 1-year bridging course in core subjects (påbyggingsår); direct admission to certain specially designed bachelor programmes (Y-veien). Options without a trade or journeyman certificate are: • 5 years' experience gained in work and/or education and passing a course in core subjects (for those aged 23 or older); • recognition of relevant formal, informal and non-formal learning for people aged 25 or older who do not meet general entrance requirements; • completed 2 years in vocational college; • completing the bridge course (<i>Påbygging til generell studiekompetanse</i>) after completing the first 2 years of a VET programme. This option is a choice made by more than a quarter of upper secondary VET learners. In 2017, 8 200 learners (27.8% of VET learners) selected this option after their second year in a VET programme (45) . After 2 years in a VET programme, learners may transfer to a third year of supplementary studies that qualify them to enter higher education. This year leads to a qualification at NQF level 4B and EQF level 4. This pathway replaces the 2-year apprenticeship period, and the learners will thus not receive a trade or journeyman certificate. The third year is a 'package' course in the six key academic subjects of Norwegian, English, mathematics, natural sciences, social sciences, and history; successful candidates satisfy the general admission requirements to higher education (on par with those taking general study programmes). Apprentices also have a statutory right to a year of supplementary studies after passing the trade or journeyman test, a fifth year of training. The fifth year is supplementary studies which qualify for higher education.
Destination of graduates	Information for this programme is not available. Graduates are tracked up to 5 years after completing a vocational education. 84% of all 2016-17 graduates are employed 4 years after completing the final exam, 1.9% are in education and 3.6% have completed the apprentice without an exam; 10.6% did not complete the apprenticeship (46) .
Awards through validation of prior learning	 Validation of prior learning is always an option. The Directorate of Education and training has developed national guidelines for the assessment of prior learning in lower and upper secondary school for adults.



The 2+2 pathway apprenticeship model with structure of subjects



Source: ReferNet Norway.

The common core subjects (*fellesfag*) (Norwegian, English, mathematics, physical education, natural sciences and social sciences) are the same for all VET programmes.



The key competences are integrated in the competence aims for the subject.

Application of learning
outcomes approach



The programme is based on learning outcomes.

Share of learners in
this programme type
compared with the total
number of VET
learners

No information available on the share of learners.

At upper secondary level, 72% of the vocational programmes are structured according to the two main models (2+2 apprenticeships and 3+0 school based).

75.7% of all the learners applying for an apprenticeship signed a contract in December 2020.

[43] Statistics Norway: <https://www.ssb.no/vgu>

[44] Norwegian Directorate for Education and Training. <https://skoleporten.udir.no>

[45] Norwegian Directorate for education and training. <https://skoleporten.udir.no/>

[46] Norwegian Directorate for education and training. <https://www.udir.no/om-udir/>

Master craftsperson
programme

Master craftsperson programme (Mesterbrevordningen)

EQF level	Not applicable	ISCED-P 2011 level	Not applicable
Usual entry grade	Not applicable	Usual completion grade	Not applicable
Usual entry age	Not applicable	Usual completion age	Not applicable
Length of a programme (years)	1.5 - 2 (part-time)		
Is it part of compulsory education and training?	✗	Is it part of formal education and training system?	✗ The craftsman education is part of the formal education and training system, but is not linked to NKF/EQF
Is it initial VET?	✗	Is it continuing VET?	✓ A trade or journeyman certificate is required, as well as several years of relevant work experience.
Is it offered free of charge?	✗	Is it available for adults?	✓
ECVET or other credits	Not applicable		
Learning forms (e.g. dual, part-time, distance)	The master craftsperson programme covers general administrative subjects, e.g. organisation and management, marketing and financial control, as well as craft theory. Common subjects are delivered part-time over the course of 2 years (the training is typically combined with full-time work as an employee or owner of an SME). ICT is integrated throughout the course. Both common subjects and craft theory are offered as evening and part-time courses. Distance education courses are also available.		
Main providers	Four institutions provide master craftsman education: <i>Folkeuniversitetet</i> (FU), <i>Norges grønne fagskole – Vea, Blimester</i> and <i>Norges mesterakademi</i> (47) (48) .		
Share of work-based learning provided by schools and companies	This education targets people already in work, and the education is organised to allow for full-time work besides studies.		

Work-based learning type (workshops at schools, in-company training / apprenticeships)	• Theory studies, e.g. in administration, economics and leadership. • Both classroom teaching and web-based education supplemented by study gatherings are offered.
Main target groups	Master craftsman education is for holders of a trade or journeyman certificate who also have several years of relevant work experience and wish to set up their own business or hold a managerial position in a craft enterprise.
Entry requirements for learners (qualification/education level, age)	Trade or journeyman certificate and several years of relevant work experience.
Assessment of learning outcomes	Courses in common subjects conclude with a written examination. In craft theory, a written examination is held for each master craftsman subject. Learners may also take the examination as private candidates. The master craftsmen programme is administered by the publicly appointed Master Craftsman Certificate Committee (<i>Mesterbrevnemnda</i>, MCC), which determines training standards and practice requirements and awards the certificate. In recent years, MCC has further extended the education system for master crafts persons. As a result, learning output-based degrees from other providers can also be recognised.
Diplomas/certificates provided	Successful candidates obtain the title Master craftsman. The master craftsman certificate is awarded in 73 different crafts covering all traditional trades in which journeyman examinations are held and journeyman certificates issued, as well as some (newer) trades with craft examinations and certificates.
Examples of qualifications	Example of qualifications (out of more than 70): • masonry; • goldsmith; • woodcarving.
Progression opportunities for learners after graduation	Master craftsman education does not qualify for further education. The education qualifies for: • setting up own business; • taking a managerial position in a craft enterprise.
Destination of graduates	The education is primarily for people already in work, who undertake the education part-time.
Awards through validation of prior learning	 Validation of prior learning in order to achieve the mastercraftsman tribunal (<i>Mesterbrevnemnda</i>) is possible.
General education subjects	Master craftsman education combines general administrative subjects such as business organisation and management, marketing, financial control, and vocational theory.

Key competences	
Application of learning outcomes approach	
Share of learners in this programme type compared with the total number of VET learners	Not applicable

[47] The Norwegian national web portal for information about education and occupation.
<https://utdanning.no/>

[48] Bilmester.com. <https://www.blimester.com/omblimester>

EQF 5

Post-secondary

VET colleges,

0.5-2 years

ISCED 453, 554

Post-secondary vocation education (nationally referred as tertiary) leading to EQF level 5, ISCED 453 and 554 (fagskoleutdanning)

EQF level	5	ISCED-P 2011 level	453 and 554
Usual entry grade	Not applicable	Usual completion grade	Not applicable
Usual entry age	Not applicable Share of learners in a range of age groups is as following: • 27.7% 21-25 years old. • 19.8% 26-30 years old • 15.2% 31-35 years old • 11.4% 36-40 years old • 8.2% 41-45 years old • 6.8% 46-50 years old • 5.8% 51+ years old Data from 2020 (49) .	Usual completion age	6 months up to 2 years after study entry.
Length of a programme (years)	From 0.5 year to 2 years (up to 3 years in special cases)		
Is it part of compulsory education and training?		Is it part of formal education and training system?	
Is it initial VET?		Is it continuing VET?	
Is it offered free of charge?	Depending on the study, some are free of charge and some have a tuition fee.	Is it available for adults?	
ECVET or other credits	From 30 – 120 higher vocational education credits. In special cases, 180 credits		

Learning forms (e.g. dual, part-time, distance)	Education at this level is available as: • full-time on campus; • part-time studies to be combined with work; • online studies; • combination of online studies and campus. Training is available at school and within an enterprise.
Main providers	Post-secondary (nationally referred as tertiary) vocational colleges (<i>fagskoler</i>), private and public
Share of work-based learning provided by schools and companies	The share of work-based learning depends on the study and varies.
Work-based learning type (workshops at schools, in-company training / apprenticeships)	Work-based learning may be: • practical training at school; • in-company practice.
Main target groups	Programmes are available both for young people and for working adults. The education especially targets working adults and study is often adapted to fit a combination of work and study.
Entry requirements for learners (qualification/education level, age)	Access is based on an upper secondary general or vocational qualification, depending on the branch of study, or validated prior learning (VPL). No practical work experience is required. However, many programmes, particularly those aimed at the health and social service sector, are designed as part-time courses, where learners are required to work part-time and undertake project assignments at a workplace, often their own.
Assessment of learning outcomes	The education is based on learning outcomes and the students have to pass a final examination.
Diplomas/certificates provided	VET students at this level may receive three qualifications: • higher professional degree (120-180 credits); • professional degree (60-90 credits); • certificate without a degree.
Examples of qualifications	Mechanical engineer, electro-technician, fashion designer and pattern maker.

Progression opportunities for learners after graduation	Candidates who have completed a 2-year post-secondary VET programme qualify for engineering education and technical education at tertiary level. The framework curricula for the bachelor programmes in engineering allow for the recognition of relevant 2-year technical post-secondary vocational education as 1 year of the engineering programme. Some vocational education colleges have agreements with higher education institutions whereby their graduates are directly admitted to the second year of engineering programmes in the relevant field of study. However, such agreements often set conditions for technical vocational college learners. For instance, engineering at tertiary education level requires college candidates to spend 3½ or 4 years on completing their bachelor degree. A higher professional degree (120 credits) gives higher education access
Destination of graduates	Information not available
Awards through validation of prior learning	 Recognition of prior learning (RPL): Access based on individual assessment of formal, informal and non-formal qualifications is open to applicants aged 25 or above. Applications for admission on the basis of RPL are processed locally at each institution.
General education subjects	
Key competences	
Application of learning outcomes approach	
Share of learners in this programme type compared with the total number of VET learners	Information for this type of programme is not available. In general, there are 22 369 students at post-secondary level compared to 306 367 students at universities and university colleges. Data from 2020 (50) .

[50] SSB. Statistics Norway. <https://www.ssb.no/fagskoler>

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