
VOCATIONAL EDUCATION
AND TRAINING IN EUROPE

NETHERLANDS

SYSTEM DESCRIPTION



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Contributors: Karel Kans, Johan Coenen (ReferNet Netherlands) and Vicky Oraiopoulou (Cedefop)

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- VET Programme Types.
 - Lower secondary pre-vocational school-based programmes (Voorbereidend middelbaar beroepsonderwijs, VMBO) Four VMBO tracks exist ([68]): basic vocational pathway (VMBO basisberoepsgerichte), EQF level 1 advanced vocational pathway (VMBO kaderberoepsgerichte leerweg), EQF level 2 combined theoretical pathway (VMBO gemengde leerweg), EQF level 2 theoretical pathway (VMBO theoretische leerweg), EQF level 2.
 - Practical labour market-oriented programmes for students with learning difficulties (PRO - praktijkonderwijs).
 - Entry level upper secondary vocational education programmes leading to EQF level 1, ISCED 254 (MBO 1 - entreeopleiding middelbaar beroepsonderwijs).
 - Basic level upper secondary vocational education programmes leading to EQF level 2, ISCED 353 (MBO 2, basisberoepsopleiding middelbaar beroepsonderwijs).
 - Professional upper secondary vocational education programmes leading to EQF level 3, ISCED 353 (MBO 3, vakopleiding middelbaar beroepsonderwijs).
 - Middle management upper secondary vocational education programmes leading to EQF level 4, ISCED 354 (MBO 4, middenkaderopleiding middelbaar beroepsonderwijs).
 - Specialising programmes leading to EQF level 4, ISCED 453.
 - Associate degree (AD) programmes (short-cycle higher education programmes) leading to EQF level 5, ISCED 554.
 - Higher professional bachelor programmes leading to EQF level 6, ISCED 655 (HBO).
 - Professional master programmes leading to EQF level 7, ISCED 757.
- References.

CHAPTER 1.

Summary of main elements and distinctive features of VET

Summary of main elements (1)

Study results and advice from school determine the type of secondary education that learners follow after leaving primary education at age 12. In 2020/21, in the third year of secondary education, 52% of students followed lower secondary pre-vocational programmes (VMBO). VMBO is the main route to upper secondary vocational education and training (VET).

Apart from lower secondary pre-VET programmes, there are also general programmes that prepare students for higher education: integrated lower and upper secondary education (HAVO) and pre-university education (VWO).

Some 48% of students in the third year of secondary education took part in one of these programmes in 2020/21. The trend is that each year relatively more students attend integrated lower and upper secondary education (HAVO) and pre-university education (VWO), and relatively less students follow pre-vocational programmes (VMBO).

Labour-oriented practical training (*praktijk-onderwijs*) is available for learners not capable of entering pre-vocational education.

Upper secondary VET

Learners aged 16 or above can enter upper secondary VET (MBO). Most publicly funded VET is provided by large multi-sectoral regional training centres (ROCs). Sector-specific schools and agricultural training centres also provide VET programmes. Three structural elements determine provision of MBO programmes, with differentiation according to:

- level: upper secondary vocational education has four levels leading to qualifications at EQF levels 1 to 4. Student admission to a level depends on the diploma obtained in prior education. Admission to level 1 programmes is limited to learners without a prior qualification at lower secondary level. It is possible to progress within upper secondary VET; the highest level (leading to EQF 4) gives access to higher professional bachelor programmes offered by universities of applied sciences. In 2020/21, 58% of VET students were enrolled in level 4 programmes;
- area of study: upper secondary VET programmes are available in four areas (sectors): green/agriculture, technology, economics and care/welfare;
- learning pathway: upper secondary VET offers two equivalent pathways: a school-based (BOL) and a dual (BBL). In the school-based pathway, work placements in companies make up 20% to 59% of study time. In the dual pathway (apprenticeship), students combine work-based learning (at least 60% of study time) with school-based instruction; this often involves learning at work 4 days a week and 1 day at school.

Post-secondary VET

Specialised programmes (ISCED 453/EQF level 4) are open to graduates of MBO programmes (ISCED 353/EQF level 3, ISCED354/EQF level 4). Their duration is 1 year.

Higher professional education

Higher professional bachelor programmes (HBO) are open to all EQF level 4 graduates. About 40% of all MBO level 4 (middle management VET programmes) graduates in the school-based pathway enter HBO programmes (2). In the 10-year period before 2020, the percentage of VET alumni that directly continues to HBO programmes, has been slightly declining. On completion, a HBO diploma gives access to a professional master degree programme, an option not yet extensively used.

Two-year associate degree programmes (short-cycle higher education, EQF level 5) are open to all EQF level 4 graduates. Their graduates can continue to HBO programmes; the remaining study load is subject to exemptions granted by each programme.

Continuing VET

There is no institutional framework for continuing VET (CVET): provision is market-driven with many suppliers. Dual VET (the BBL pathway) can also function as CVET for adults. Social partners stimulate CVET through sectoral training and development funds. They help employees progress in their careers, sometimes even in other sectors, offer special arrangements for older workers, and support the development of effective human resource management policies at sector level. Most funds also support projects that help young people find employment or take initiatives to sustain or expand apprenticeship places.

Distinctive features (3)

The heterogeneous and multifunctional nature of upper secondary VET in the Netherlands is unique. Key distinctive features are:

- ROCs have an average student population of 8 005 in 2020/21 providing IVET for young people and adults and general education for adults (4) . They are also active in CVET, with privately funded programmes. Government-regulated VET qualifications are also offered by private providers under certain conditions;
- school-based and dual pathways in upper secondary VET lead to the same diplomas. Participation in each is influenced by the economic cycle; for instance, in periods of economic boom the number of learners in the dual pathway increases;
- the intended outcomes of qualifications are defined in the national qualifications system. Occupational standards cover one qualification profile or several interrelated ones. Social partners and education institutions represented in sectoral committees have a legal responsibility to develop and maintain these standards. Once approved by the education ministry, schools - in cooperation with enterprises providing work-based learning - develop curricula based on the qualification profiles;
- education institutions have a relatively high degree of freedom to shape VET provision. The VET law only provides a broad framework outlining key elements at system level; institutions receive a lump sum for their tasks;
- the Netherlands promotes a culture of evidence-informed VET policy and practice and encourages innovation. Recent initiatives include providing VET schools regularly with up-to-date regional labour market information and early school leaving data and implementing plan-do-check-act mechanisms as a basis for organisation and programme development. Research and intelligence are increasingly used to improve VET quality and effectiveness, both by involving professional researchers and by encouraging teachers to engage in research activities.

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- [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] <https://www.rijksoverheid.nl/documenten/kamerstukken/2020/10/08/researchned-doorstroom-mbo-hbo>
- [3] Based on Cedefop (2021). *Spotlight on VET - 2020 compilation: vocational education and training systems in Europe*. Luxembourg: Publications Office. <http://data.europa.eu/10.2801/10.2801/667443>
- [4] <https://www.mboaraad.nl/het-mbo/feiten-en-cijfers/studenten-het-mbo>

CHAPTER 2.

Main challenges and policy responses

The VET sector is challenged to take greater responsibility ('ownership') for programme innovation, quality assurance, and responding to the needs of regional business world. The policy agreement, formally signed by the education ministry and the VET schools in February 2018, validated the shared policy aims for 2019-22. Subsequently, all schools should come up with a plan for programme innovation in response to regional needs and priorities, to be implemented in close collaboration with regional stakeholders/ businesses.

There are three national priorities in the sector-based policy agreement. All VET schools have to take action to:

- improve their labour market outcomes (reducing youth unemployment);
- facilitate equal opportunities in education and training;
- support young people, particularly from disadvantaged groups.

Funding is available for activities linked to these priorities; it is partly performance-based, meaning that the total budget will depend on whether targets are met and to what extent.

Besides these priorities, schools are free to set their own goals, ideally after having consulted their regional stakeholders (5) .

A policy agreement for VET and higher education was signed in May 2021 (6) focusing on the recovery of the impact of the COVID-19 pandemic, which caused study delay and had a negative impact on the mental welfare and social development of many students. The government has made additional funding available, up to 2023/24, to recover and prevent delays which may have a negative impact on programme completion, socialisation and personal development of learners. For VET delivery, the policy agreement 2021 foresees:

- smooth intake and transfer of students;
- student wellbeing and social bonding with the study programme;
- support and guidance considering internships;
- tackling youth unemployment.

Education institutions can decide for themselves on the mix of measures they find most appropriate. The idea is that teachers, trainers and support staff have more opportunities and support to help students.

[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

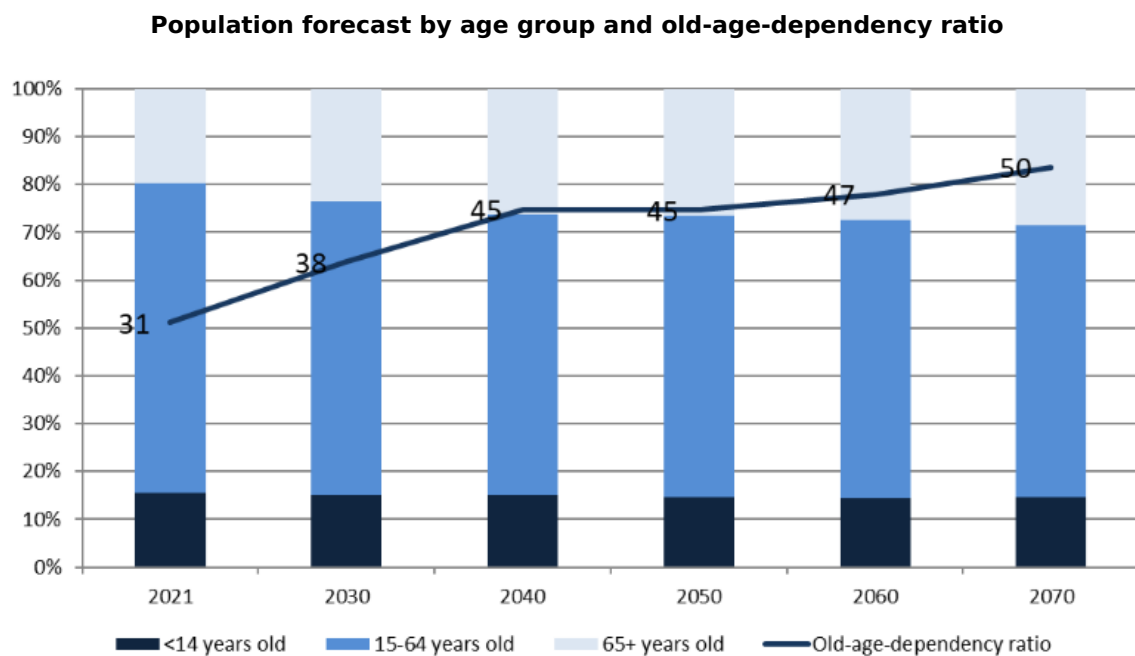
3.1 Demographics

Population in 2020: 17 407 585 (7)

It increased since 2015 by 3.0% due to positive natural growth and immigration (8) .

As in many other EU countries, the population is ageing.

The old-age-dependency ratio is expected to increase from 27 in 2015 to 44 in 2070 (9) .



Demographic changes have an impact on VET.

The expectation is that student numbers in VET will decrease from 2021 onward, due to population development and the trend in secondary education, where relatively fewer pupils choose programmes preparing for VET, and relatively more choose programmes preparing for higher education (10) .

The education ministry and the schools for upper secondary VET have agreed (11) that all VET schools should be aware of the future likely decline in student numbers in relation to the concentration and distribution of the range of study programmes on offer in the Netherlands.

3.2 Economics

Most companies in the Netherlands are micro, small and medium-sized; employing 64.9% (12) of employees. Since 2007 the number of self-employed has been continuously growing from 620 000 in 2007 to 1.4 million in 2019 and 1.5 million in 2021 (provisional data) (13) .

The Dutch economy is open and relies heavily on foreign trade. The contribution of exports to GDP is about a third, a fairly stable figure throughout the years. Around a third (32% in 2019) of the employment is related to export (14) .

Main economic sectors are (in number of people employed):

- business services;
- healthcare;
- trade;
- industry.

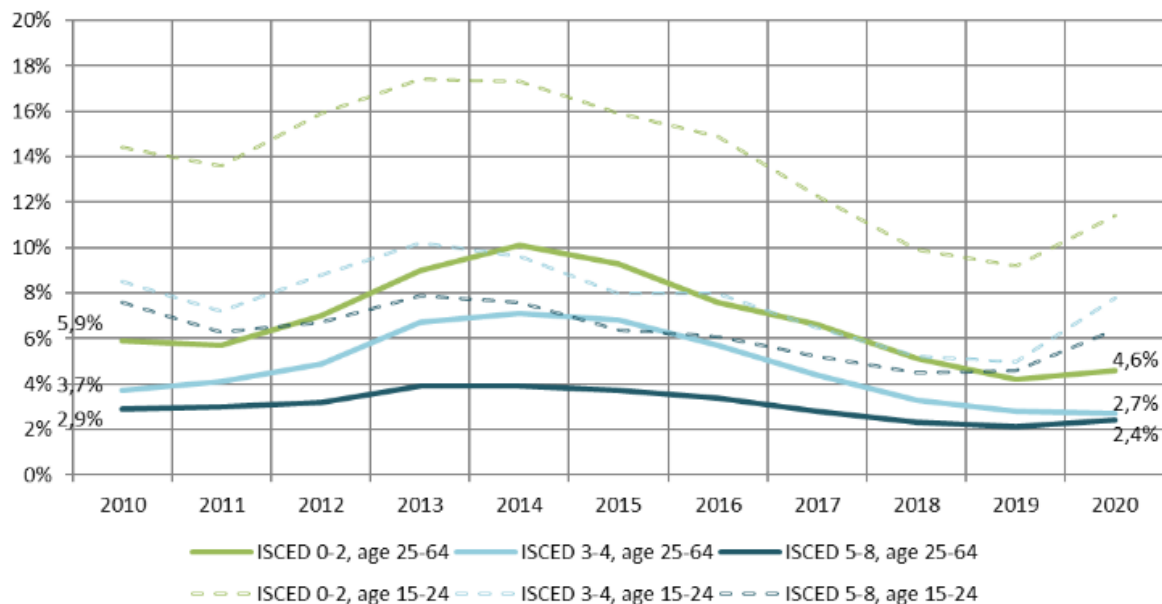
Compared to 2000, a shift in the employment structure is taking place. The importance of industry has declined, as agriculture and financial services have also become smaller. In contrast, healthcare and business services are biggest risers, while trade and education have also grown. In 1997, healthcare and industry had roughly the same number of jobs. In 2020 healthcare has more than twice as many jobs as industry (15) .

3.3 Labour market

A limited number of occupations/professions are regulated. The labour market is considered flexible.

Total unemployment (16) in 2020 was 2.8% (6.2% in EU27); it decreased by -2.3 percentage points since 2016 (17) .

Unemployment rate (aged 15-24 and 25-64) by education attainment level in 2010-20



NB: Data based on ISCED 2011; breaks in time series.

ISCED 0-2 = less than primary, primary and lower secondary education.

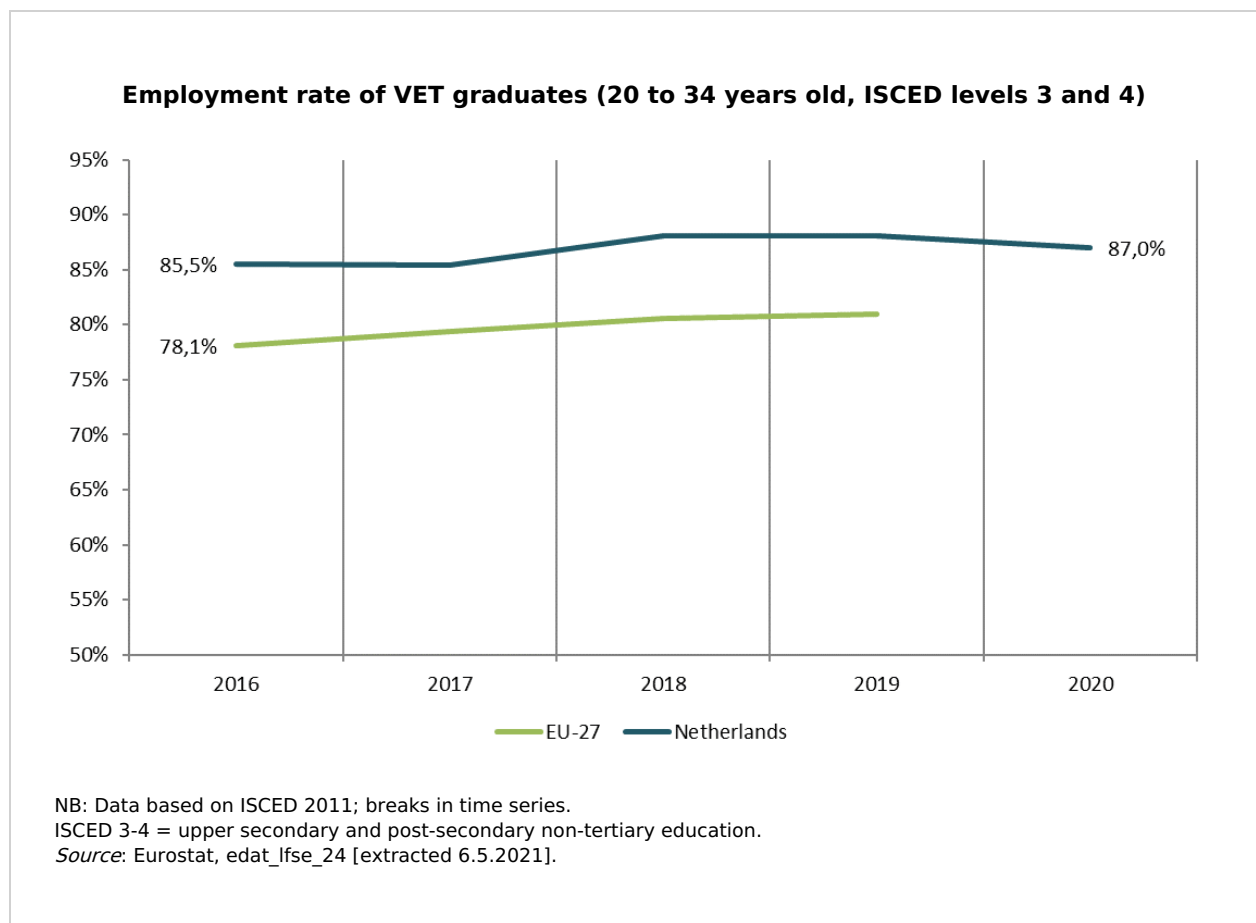
ISCED 3-4 = upper secondary and post-secondary non-tertiary education.

ISCED 5-8 = tertiary education.

Source: Eurostat, Ifsa_urgaed [extracted 6.5.2021].

Unemployment is distributed unevenly between those with low- and high-level qualifications. The gap has increased during the crisis as unskilled workers are more vulnerable to unemployment. With falling unemployment figures after 2014, the difference between the qualification levels also decreased. In 2019, unemployment rates dropped for all educational attainment levels, reaching rates comparable to 2010. In 2020 the downward trend comes to an end.

Employment rate of 20 to 34 year-old VET graduates increased from 84% in 2016 to 86.7% in 2020 (18) .



The increase (+1.5 pp) in employment of VET graduates aged 20 to 34 in 2016-19 was lower compared to the increase from 84% to 86.7% in employment of all graduates of that age (+2.7 pp) in the same period in the Netherlands (19) .

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- [7] NB: Data for population as of 1 January. Eurostat table tps00001 [extracted 7.5.2021].
 - [8] NB: Data for population as of 1 January. Eurostat table tps00001 [extracted 7.5.2021].
 - [9] Old-age-dependency ratio is defined as the ratio between the number of persons aged 65 and more over the number of working-age persons (15-64). The value is expressed per 100 persons of working age (15-64).
 - [10] <https://www.rijksoverheid.nl/documenten/rapporten/2021/04/19/referentieraming-ocw-2021>
 - [11] <https://www.rijksoverheid.nl/documenten/convenanten/2018/02/07/bestuursakkoord-mbo-2018-2022-trots-vertrouwen-en-lef>
 - [12] Netherlands - SME Fact Sheet 2021 <https://ec.europa.eu/docsroom/documents/46085>
 - [13] <https://mkbstatline.cbs.nl/#/MKB/nl/dataset/48015NED/line?dl=30B3>
 - [14] <https://longreads.cbs.nl/nederland-handelsland-2021/nederlandse-verdiensten-aan->

[internationale-handel/](#)

- [15] <https://www.cbs.nl/nl-nl/visualisaties/dashboard-arbeidsmarkt/banen-werkgelegenheid/toelichtingen/werkgelegenheidsstructuur>
- [16] Percentage of active population, 25 to 74 years old.
- [17] Source: Eurostat, une_rt_a [extracted 6.5.2021].
- [18] Eurostat table edat_lfse_24 [Extracted on 6/5/2021]
- [19] NB: breaks in time series. Eurostat table edat_lfse_24 [extracted on 6/5/2021].

CHAPTER 4.

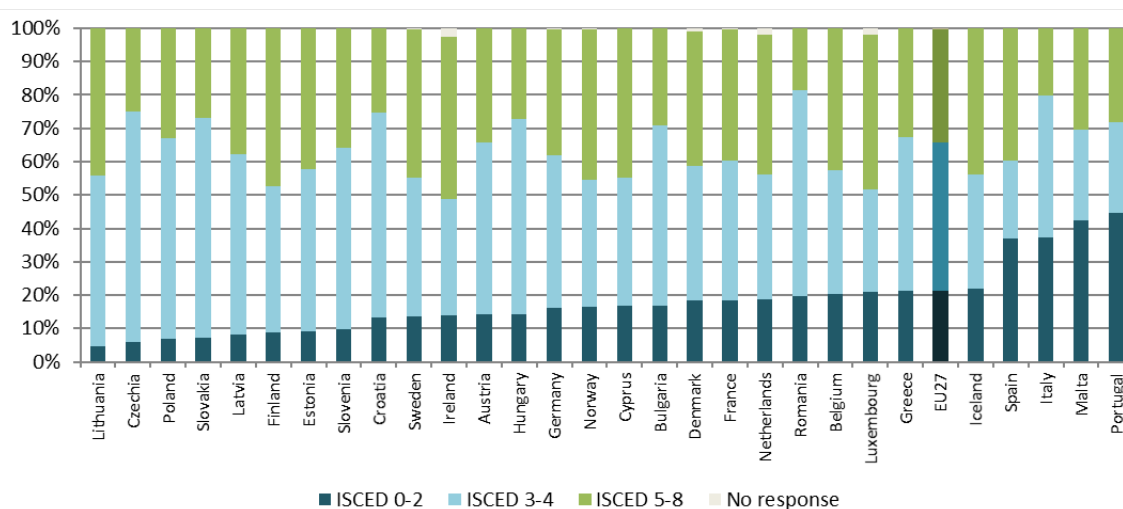
Education attainment

4.1 Share of high, medium and low level qualifications

In 2020, the share of the population aged up to 64 with higher education (41.9%) was higher in the Netherlands than the EU average (34.0%). The share of those with low or without a qualification was 18.6% (slightly lower than the EU average of 21.3%).

In 2020, tertiary attainment among 25-64-year olds was 41.9% and above the EU and national targets (both 40%) set for 2020. Female higher education attainment has risen faster than male tertiary attainment.

Population (aged 25 to 64) by highest education level attained in 2020



NB: Data based on ISCED 2011; low reliability for 'No response' in Czech Republic and Latvia.

ISCED 0-2 = less than primary, primary and lower secondary education.

ISCED 3-4 = upper secondary and post-secondary non-tertiary education.

ISCED 5-8 = tertiary education.

Source: Eurostat, lfsa_pgaed [extracted 6.5.2021].

For more information about VET in higher education in the Netherlands please see the case study from Cedefop's changing nature and role of VET in Europe project (20) .

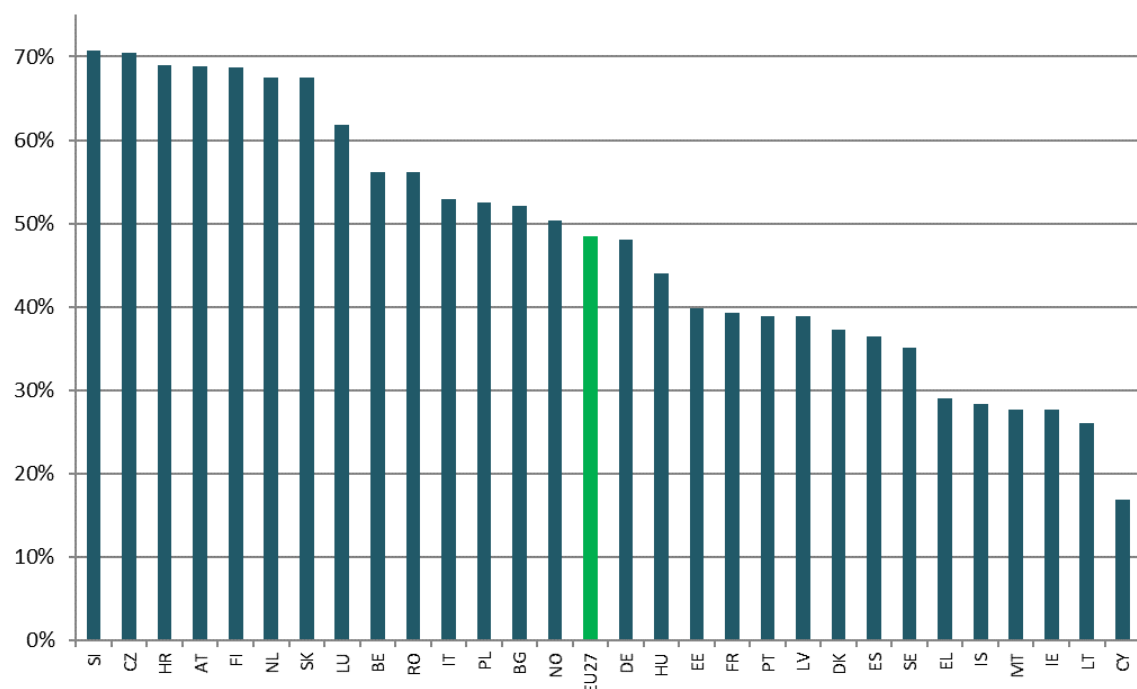
4.3 VET learners by level

Share of learners in VET by level in 2019

lower secondary	upper secondary	post-secondary
6.2%	67.5%	not applicable

Source: Eurostat, educ_uoe_enrs01, educ_uoe_enrs04 and educ_uoe_enrs07 [extracted 6.5.2021].

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

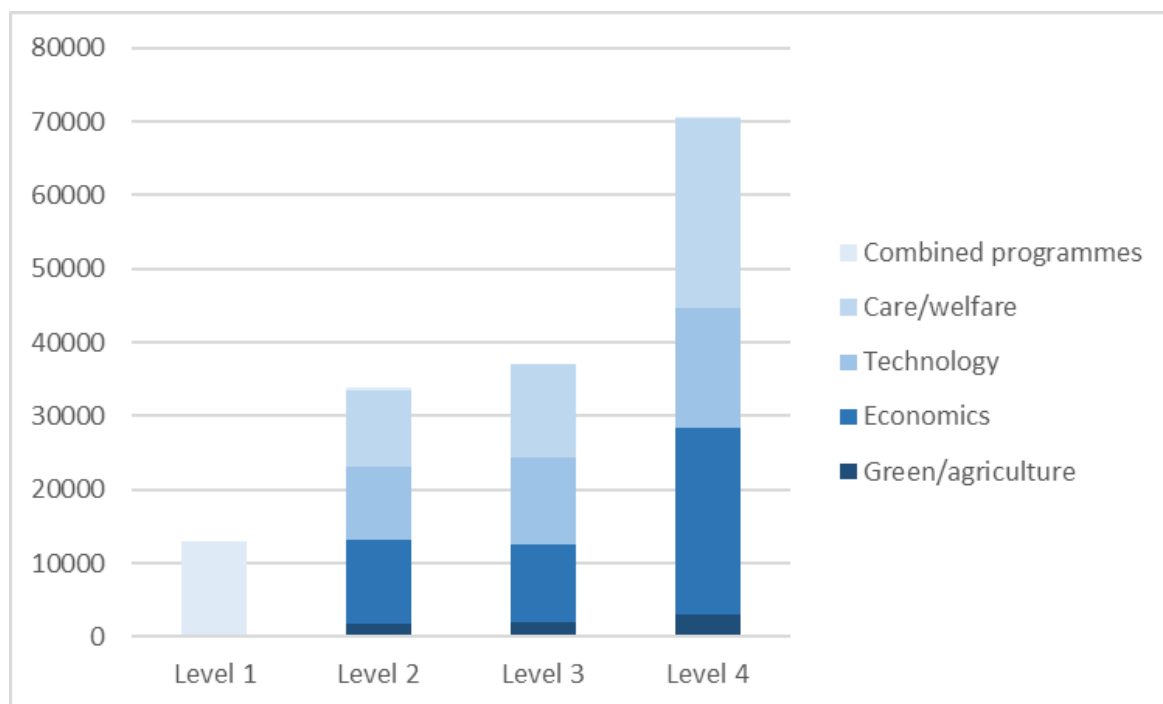


NB: Data based on ISCED 2011.

Source: Eurostat, educ_uoe_enrs04 [extracted 6.5.2021].

At upper secondary level, in 2019/20, most VET graduates completed a level 4 programme leading to EQF4. At this level, economics (21) and care/welfare programmes are the most popular choices.

Upper secondary VET graduates by level and area of study, 2019/20



NB: Provisional data

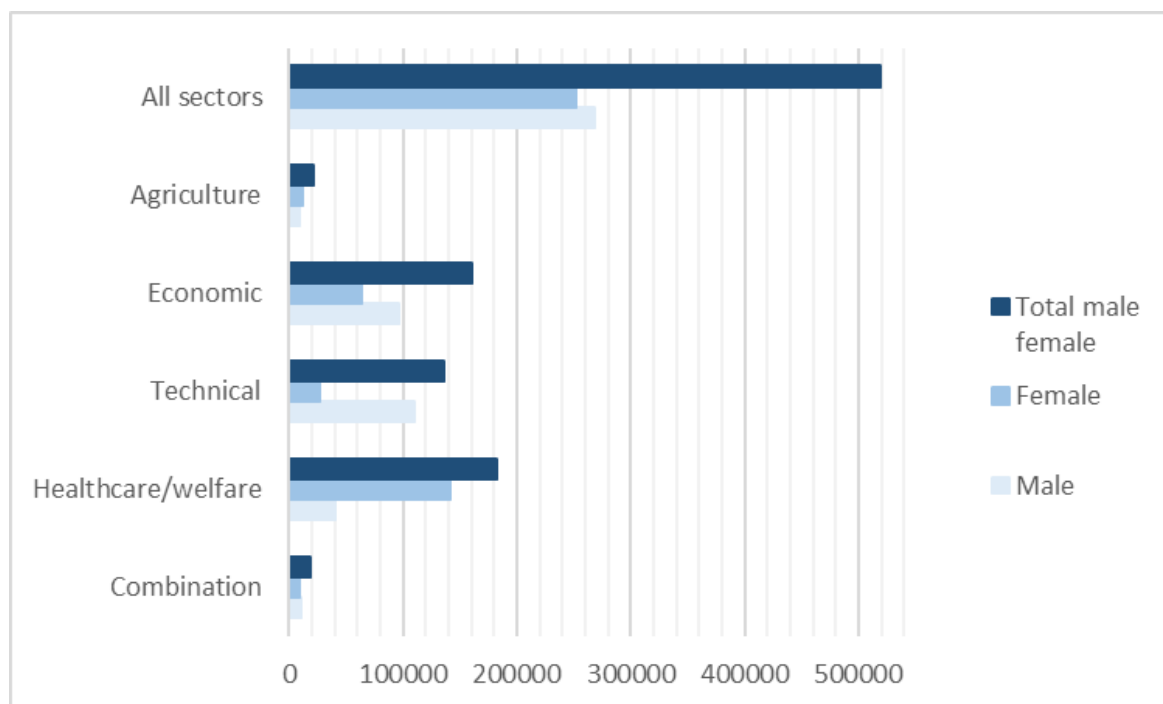
Source: CBS Statline. <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/83896NED/table?dl=F448> [extracted 16.9.2021].

Higher professional education (HBO) is an important component of Dutch higher education. In 2019/20, almost half (46%) of all higher education graduates attained a bachelor degree in higher professional education (22). Most higher professional education graduates obtained a diploma in the sectors law/administration/trade, healthcare/welfare or teacher training.

4.4 Female share

There are more males (52%) in upper secondary VET than females. The differences between sectors are large. Males are greatly overrepresented in technology education (81%); the same is true for females in health/welfare (77%). In the other sectors, the male-female ratio is more equal.

Male/ female students per sector in upper secondary VET 2020/2021



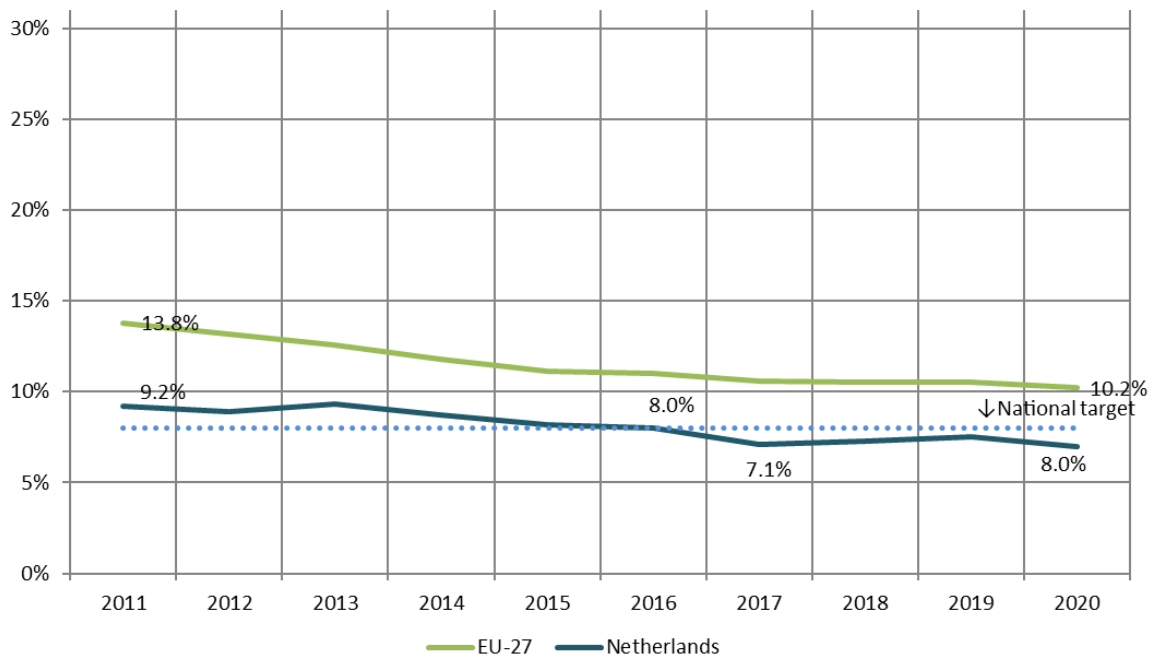
NB: Provisional data

Source: CBS. Statline database <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/83851NED/table?dl=1F876> [extracted 16.9.2021].

4.5 Early leavers from education and training

The share of early leavers from education and training has fallen from 9.2% in 2011 to 8.0% in 2020. It is well below 10.2%, the EU27 average. Since 2017 early school leaving has been below 8.0%, the national objective for 2020.

Early leavers from education and training in 2011-20



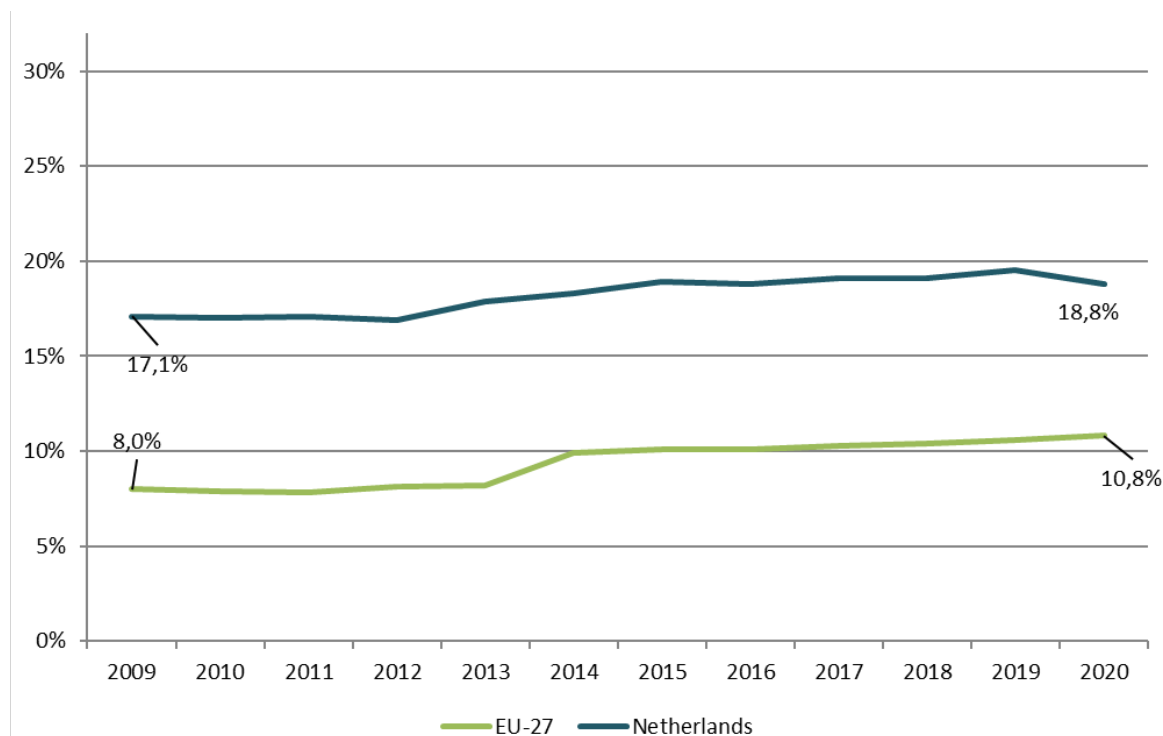
NB: Share of the population aged 18 to 24 with at most lower secondary education and not in further education or training

Source: Eurostat, edat_lfse_14 [extracted 6.5.2021] and European Commission: https://ec.europa.eu/info/2018-european-semester-national-reform-programmes-and-stability-convergence-programmes_en [accessed 14.11.2018].

The dropout-rate in upper secondary VET in 2017/18 was 5.7% (23) . The decline in absolute numbers of early school leavers has stopped in 2016. Most early school leaving takes place in upper secondary VET. The number of dropouts in that sector increased from 18 574 in 2016/17 to 22 785 in 2019/20 (24) . Goal of the government is to have no more than 20 000 early school leavers by 2021 in all sectors (25) .

4.6 Participation in lifelong learning

Participation in lifelong learning in 2009-20



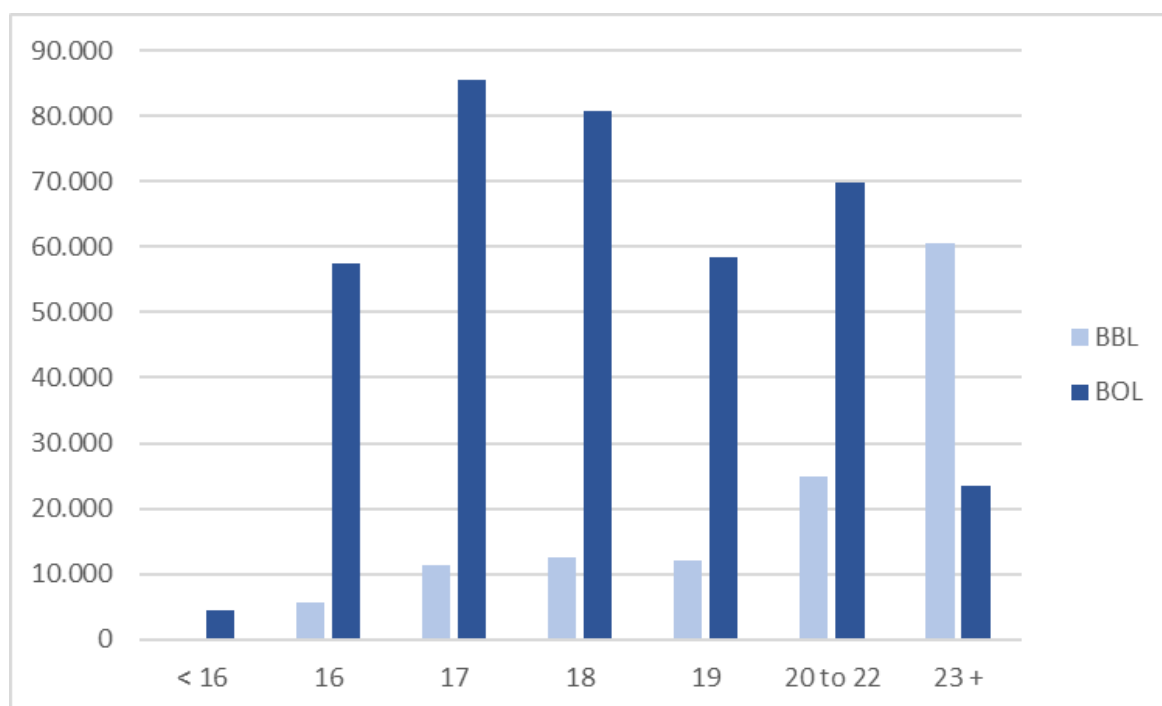
NB: Share of adult population aged 25 to 64 participating in education and training.
Source: Eurostat, trng_lfse_01 [extracted 6.5.2019].

Eurostat data show that the Netherlands is among the EU countries with the highest lifelong learning rates (EU27 average 10.8% in 2020). Since 2000, more than 15% of the adult population (25-64) has been involved in education or training (participation was 18.8% in 2020). This is a slight fall since the year before. The country met the Education and Training 2020 (ET2020) 15% benchmark a long time ago.

However, training participation is significantly below average among workers over 55 (11.8%), the low-skilled (9.5%), workers with a temporary contract, migrants and people with a migrant background from non-western countries, and people not having participated in training in the past (26) . The gap in training participation between highly educated people and those with low skills has widened between 2004 and 2020 (27) .

4.7 VET learners by age

VET learners by age and track (2020)



NB: provisional data for 2020. School-based (BOL) and dual track (BBL). Numbers in thousands.

Source: DUO 2020. <https://www.ocwincijfers.nl/sectoren/middelbaar-beroepsonderwijs/studenten/aantallen-studenten-mbo>. [extracted 17.9.2021].

Participants in the school-based track are mainly the young, while most learners (60.6%) in the dual track are 23 or over; this is because this track is also used by companies to upgrade the skills of their employees (28) .

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- [21] The area economics in upper secondary VET includes programmes in administration, logistics, retail, secretarial support, tourism, ICT, facility management and public order and security.
 - [22] CBS Statline database <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/83893NED/table?dl=DA1F>[extracted 16.9.2021].
 - [23] <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/71292ned/table?ts=1549610111391>
 - [24] <https://open.overheid.nl/repository/ronl-828b0aa4-6dd0-4983-8a27-9dfa012b69aa/1/pdf/voortgang-aanpak-voortijdig-schoolverlaten.pdf>
 - [27] https://cris.maastrichtuniversity.nl/ws/portalfiles/portal/65547353/Afscheidsrede_Prof_dr_Andries_de_Grip_24_juni_2021.pdf
 - [28] Source: DUO 2020: <https://www.ocwincijfers.nl/sectoren/middelbaar-beroepsonderwijs/studenten/aantallen-studenten-mbo>. [extracted 17.9.2021].

CHAPTER 5.

VET within education and training system

The education and training system comprises:

- preschool education (ISCED level 0); to combat educational disadvantages at an early stage, preschool education is available for toddlers (2.5 to 4 years old) (29) ;
- primary education at ISCED level 1 is for learners aged 4 to 12 years;
- general secondary education integrates lower and upper secondary general education programmes (ISCED level 2 & 3);
- lower secondary pre-vocational school-based programmes (ISCED 2);
- upper secondary vocational education programmes (ISCED 2 & 3);
- post-secondary education (ISCED level 4);
- higher (or tertiary) education has a professional education and a general (academic) strand (ISCED levels 5 - 8).

Pre-school education is not compulsory and intended for learners aged 2.5 to 4 years at risk of educational disadvantage. It is generally provided at childcare institutions.

Primary education includes 8 years of basic education until the learner reaches age 12.

Education is compulsory for learners from age 5 to 16. After this period of compulsory learning, learners need to have at least a 'starter qualification' (*startkwalificatie*): a general or basic vocational qualification at upper secondary level. This means they need to have at least a secondary education with a general (*havo or vwo*, EQF level 4) or vocational qualification (*mbo-2*, EQF level 2). 16- and 17-year-olds without a general or basic vocational qualification at upper secondary level are required to continue learning, the so-called 'qualification duty' (*kwalificatieplicht*). This arrangement was introduced in 2008 to reduce early leaving from education and training.

General secondary education includes:

- integrated lower and upper secondary programmes (pre-university education) lasting 6 years and leading to EQF4 (ISCED 244 after 3 years; ISCED 344 after 6). This prepares learners for higher education at research universities and higher professional education at universities of applied sciences (age: 12-18, also accessible to adults);
- integrated lower and upper secondary general education programmes lasting 5 years and leading to EQF4 (ISCED 244 after 3 years; ISCED 344 after 5). They lead to higher professional education. Upon completion, transfer to the fifth year of pre-university education is possible (age 12-17, also accessible to adults);
- two general programmes (the theoretical and mixed pathway) within lower secondary pre-vocational education (VMBO) (30) .

Scientific/university education offers bachelor programmes lasting 3 to 4 years (ISCED 6) and 1 to 2-year master degree programmes (ISCED 7) to adult learners. After completing a master degree programme, learners can continue in PhD programmes (ISCED 8).

The main legislation for initial VET (IVET) is:

- the Secondary Education Act (for lower secondary general and pre-vocational education);
- the Adult Education and Vocational Education Act (for upper secondary vocational education);
- the Higher Education and Scientific Research Act (for higher professional education).

The vocational track of the education system starts in lower secondary pre-vocational education with transfer possibilities to upper secondary vocational education. Upper secondary vocational education is the backbone of this track, providing labour market access. Graduates at EQF level 4 can continue their

studies in higher professional education.

There is no institutional framework for continuing vocational education and training (CVET). Provision is market-driven with many suppliers. CVET comprises a range of vocational or more general courses for jobseekers, the unemployed, employees, self-employed people, and employers. There are three types of CVET:

- upper secondary IVET programmes which are also accessible to adults;
- training for the unemployed and jobseekers, financed by the public employment service;
- private, non-government-funded training for employees, self-employed people and employers.

The backbone of the VET system is upper secondary VET, which serves both as IVET and as CVET. IVET/CVET programmes are offered either as school-based (BOL) or dual (BLL) track. The school-based track comprises 20 to 60% workplace learning, while the dual track comprises 60 to 80% workplace learning.

The responsibility for curriculum development and assessment is in the hands of upper secondary VET schools. Various curricula and learning environments exist, even for programmes related to the same profession. Apart from internships taking place in a company, teacher teams have freedom to develop curricula and may include lectures, project-based learning, practical simulations, in-school mini-enterprises, and hybrid learning environments.

[29] Source: <https://www.rijksoverheid.nl/onderwerpen/voorschoolse-en-vroegschoolse-educatie/voorschoolse-educatie> [accessed 17.9.2021].

[30] See relevant section for further details (#1 VET BOX - Lower secondary pre-vocational school-based programmes).

CHAPTER 6.

Apprenticeship

Upper secondary VET offers two equivalent pathways: school-based (BOL) and dual (BBL) leading to the same diplomas. In the dual pathway (apprenticeship), students combine work-based learning (at least 60% of study time) with school-based instruction; this often involves learning at work 4 days a week and 1 day at school. To enrol in the dual track a contract (an employment contract in most cases) with a firm is mandatory.

The target group of the dual pathway are young people (from 16 years onwards), but also adult learners. Students in the dual pathway are, on average, older than students in the school-based pathway. 46% of those following the dual track are 23 years old or over, due to the fact that this track is also used by companies to upskill their employees (31) . See VET learners by age.

[31] Source: DUO 2018: <https://www.onderwijsincijfers.nl/kengetallen/mbo/studenten-mbo/aantallen-studenten-mbo> [extracted 17.9.2021].

CHAPTER 7.

VET governance

One of the principles underlying the education system in the Netherlands is freedom of education. This means there is freedom to establish schools, freedom to organise teaching and to determine the principles on which education is based (freedom of conviction).

Freedom to organise teaching means that both public and private schools are free to determine - within legal boundaries - what is taught and how. The education ministry sets quality standards such as the subjects to be studied, the number of teaching days/hours per year and the required teacher qualifications; they apply to both public and government-funded private education.

There are three organisational levels in the Dutch VET system: the national level, the sectoral level (especially in upper secondary VET) and the regional/local (or school) level.

In the institutional VET framework, the Cooperation Organisation for Vocational Education, Training and the Labour Market (Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven - SBB) has a key role. SBB optimises the links between VET and the labour market to deliver well-qualified professionals. The organisation is responsible for maintaining the qualifications for upper secondary VET, for accrediting and coaching companies offering work placements, and collecting suitable labour market information. Representatives from vocational education and social partners work together on the VET qualifications system, examinations, work placements, the efficiency of programmes and more. SBB also works on themes with a cross-regional and cross-sector focus.

Organisational levels and functions/roles in initial VET

Function	VMBO (ISCED 2)	MBO (ISCED 3-4)	HBO (ISCED 5)
Legislation/ financing	Ministry of Education	Ministry of Education	Ministry of Education
Qualification development	Design: national level Validity: national	Design: sectoral level by sector chambers (social partners and VET) within SBB Validity: national	Design: school level Validity: national
Curriculum development	School level	School level	School level
Examination	Partly central/national; partly school exams	School exams; external contribution of trainers in enterprises Central examination of Dutch language and basic maths (August 2015 onwards)	School exams
Quality assurance	Internal: at institution level External: Inspectorate	Internal: at institution level External: Inspectorate, special attention: exams	Internal: self-evaluation External: accreditation of HBO-programmes by NVAO European level: use of Dublin level descriptors
Promotion of interests	VO Council by associations of secondary pre-vocational school-based programmes MBO Council for upper secondary vocational education programmes	MBO Council	Association of Universities of Applied Sciences

HBO: higher professional education

NVAO: Dutch-Flemish Accreditation Organisation (*Nederlands-Vlaamse Accreditatie Organisatie*)

VO council (VO-Raad)

MBO (VET) Council (MBO Raad)

Association of Universities of Applied Sciences (*Vereniging Hogescholen*)

Source: ReferNet Netherlands, 2021

The Dutch Council for private providers of education and training (NRTO) (32) promotes the interests of private, non-subsidised providers of educational programmes in secondary education, VET and higher education. The providers have been legally recognised by the education ministry to offer regulated courses, including VET courses at upper secondary and tertiary level.

The Adult and Vocational Education Act regulates the governance of upper secondary VET schools and grants them ample space for policy making. Schools have full control over deployment and continuing professional development of teaching staff, programme offer, regional industry-specific training portfolios, organisation of learning, and choice of cooperation partners. School management is also responsible for deciding how to allocate the annual lump sum grant from the ministry to personnel costs, materials, housing and reservations for future investments. Yearly auditing reports provide insight into how the grant is spent.

Governance has internal, vertical and horizontal dimensions. The internal dimension refers to the organisation of internal management and control; the vertical dimension stands for the accountability relationships between schools and the government; the horizontal dimension captures the (accountability) relationships between a school and its local stakeholders.

[32] *Nederlandse Raad voor Training en opleiding*, NRTO <https://www.nrto.nl/over-ons/>

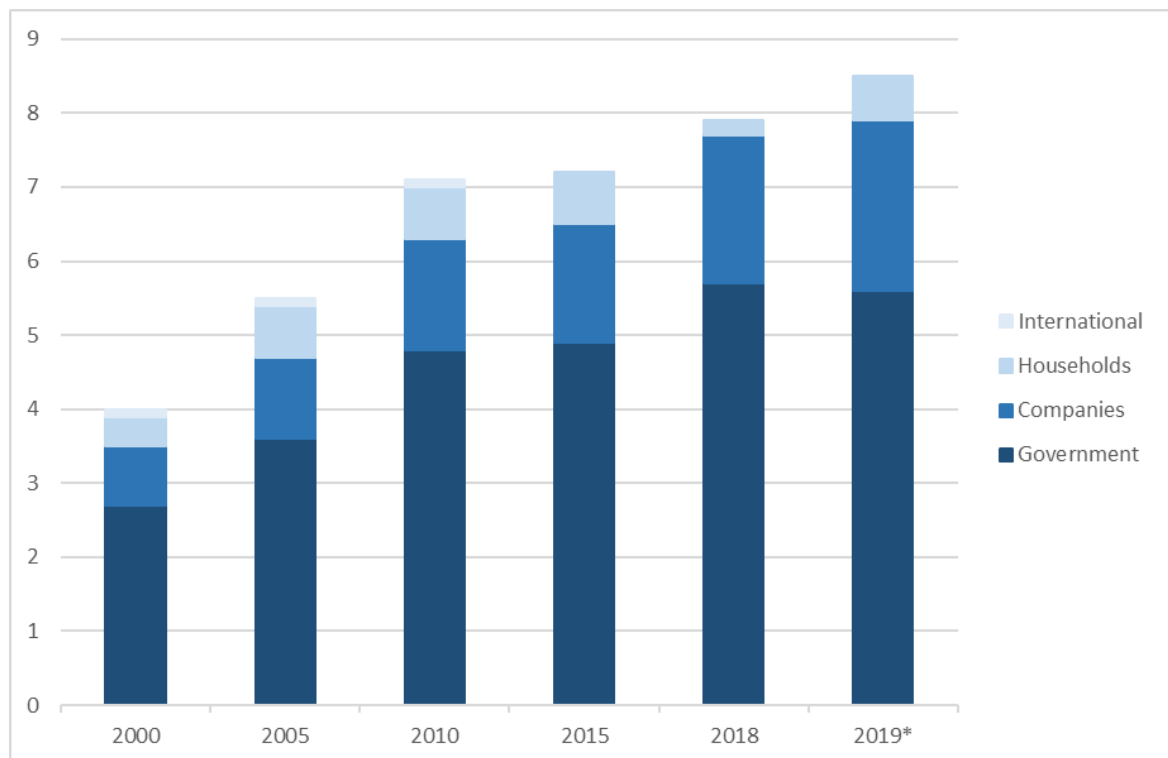
CHAPTER 8.

VET financing mechanisms

Total expenditure on education by the government, households, enterprises and non-profit organisations made up 6.0% of GDP in both 2018 and 2019. Government expenditure on education is 5.4% of GDP in 2018 and 5.2% in 2019 (33) . Total government expenditure on VET in 2019 is 0.7% of GDP; when households and enterprises are included total spending is 1.1% of GDP (34) .

In 2018 expenditure by the education ministry was EUR 8 200 per learner per year in upper secondary VET (35) . In 2019 34% of expenditure on upper secondary VET was by companies (e.g. salaries for apprentices and interns and training for employees) and households (e.g. enrolment fees and educational tools). 66% of the expenditures was by the government (36) .

Total expenditure on upper secondary VET (in billion EUR) (2000-19)



NB: * provisional data

Source: CBS, retrieved from <https://www.ocwincijfers.nl/sectoren/middelbaar-beroepsonderwijs/uitgaven/totale-uitgaven-aan-middelbaar-beroepsonderwijs> [accessed 19.9.2021].

The funding arrangements for VET are as follows:

- in prevocational education and training (VMBO) the principle is block grant funding. It gives schools considerable freedom in deciding how to spend available resources. They receive a fixed amount per student plus a fixed amount per school. Part of funding rewards good performance based on national targets agreed at sector level with governing bodies. There are also extra financial incentives for

students at risk;

- in upper secondary VET (MBO) the principle is block grant funding based in part on the number of students per course/learning track and in part on number of certificates awarded per institution (37) (38) . Additionally, funding is available for improving the quality of education. Bilateral agreements between all VET colleges and the education ministry aim to support rapid and comprehensive implementation and to encourage colleges to increase their performance in terms of equal access, qualifying vulnerable youth and greater responsiveness to labour market developments (39) (40) . VET colleges have other funding sources as well, for instance from contracted activities for companies and individuals, from municipalities for providing civic integration training courses for adults, and from student fees. Additionally, there is a subsidy scheme for companies to cover their costs when offering learning places in dual tracks (BBL);
- in higher professional education (HBO) funding is partly fixed and partly based on number of enrolled participants and output/outcome results (number of diplomas). Part of the funding is performance-based and rewards achievements towards targets set by providers themselves. Contracted activities paid by enterprises and or individuals/employees and income from tuition fees paid by students are other sources of funding. Companies benefit from subsidies when offering learning places in dual higher VET.

The education ministry administers almost all central government expenditure on education through a specialised agency (DUO, Dienst Uitvoering Onderwijs). DUO plays a key role in administration and financing State-regulated VET. There is a complex but direct financing relationship between DUO and schools for upper secondary vocational education. Funds are channelled either directly to schools or indirectly through municipalities. Municipalities fund special projects, such as to reduce early leaving from education and training).

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- [33] CBS Statline database: <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/80393ned/table?dl=102B2> [accessed 17.9.2021].
- [34] CBS Statline database: <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/80393ned/table?dl=102B2> [accessed 17.9.2021] (provisional data for 2019)
- [35] OCW <https://www.onderwijsincijfers.nl/kengetallen/onderwijs-algemeen/uitgaven/uitgaven-ocw> [accessed 17.9.2021].
- [36] OCW <https://www.ocwincijfers.nl/sectoren/middelbaar-beroepsonderwijs/uitgaven/totale-uitgaven-aan-middelbaar-beroepsonderwijs> [accessed 17.9.2021].
- [37] OCW <https://www.rijksoverheid.nl/onderwerpen/financiering-onderwijs/financiering-middelbaar-beroepsonderwijs-en-volwasseneneducatie>
- [38] In 2019 performance-based funding was abolished. This funding, which was introduced in 2014, rewarded individual schools for their good performance (length of the study of the student); this caused perverse incentives and led to undesirable school policies, e.g. considering access to schools for students with a higher drop-out risk and possibilities to switch between programmes, more information: <https://www.rijksoverheid.nl/documenten/begrotingen/2018/09/18/viii-onderwijs-cultuur-en-wetenschap-rijksbegroting-2019>
- [40] Bilateral quality agreements VET colleges and education ministry: <https://www.rijksoverheid.nl/onderwerpen/middelbaar-beroepsonderwijs/kwaliteit-mbo-opleidingen>; and relevant legislation <https://wetten.overheid.nl/BWBR0041053/2021-07-23>

CHAPTER 9.

Teachers and trainers

9.1 VET teacher types

In VET, there are:

- teachers;
- teaching assisting jobs, i.e. teacher assistant, instructor;
- in-company trainers (supervisors or tutors).

In upper secondary vocational education, teachers cooperate in teams in which tasks are divided among team members, e.g. assessment, study- and career guidance, expert teacher, education designer. The extent to which these roles are implemented differs per school. There are no fixed roles within teams, besides the role of teacher leader (41) .

The Education Professions Act (Wet BIO, 2016) regulates competence standards for teachers and other educational staff in primary, general secondary, vocational secondary and general adult education. It requires schools to maintain a competence document for all teachers.

Teachers in upper secondary vocational education must have either a first degree teaching license (master), a second degree teaching license (bachelor) or any other bachelor degree supplemented by a pedagogical didactic certificate (Pedagogisch Didactisch Getuigschrift, PDG).

In 2012 the education ministry, aiming to train better and raise the number of VET teachers, introduced:

- a distinct graduation track dedicated to VET in higher professional education (in place since 2016);
- quality criteria entering the teaching profession from another background (second career teachers).

Professional, didactic and pedagogical standards were introduced for trainers (teaching personnel responsible for the vocational skills training of learners). Since August 2018 these standards are a legal requirement (42) .

Trainers responsible for in-company learning of upper secondary VET students (both in apprenticeship and in school-based track) must be qualified at least at the same level for which he/she is supervising work-based learning. Trainers must be able to share their expertise with students and are required to have pedagogical skills (validated by diplomas/certificates). The quality of the trainers is one of the criteria for accreditation of companies providing work-based learning. Accreditation is one of the legal tasks of the Cooperation Organisation for Vocational Education, Training and the Labour Market (SBB). Training for trainers is offered by private providers.

9.2 Continuing professional development of teachers/trainers

VET institutions have relative freedom in their approach to professional development of teaching staff.

Teachers are entitled to 59 hours of training and professional development annually, complemented by additional training depending on the discipline of their expertise (43) .

Teachers also receive a personal budget for professional development of 0.8% of their annual salary. Enterprises offer short internships for VET teachers and trainers. VET teacher CPD is also promoted through regional partnerships between VET institutes and teacher training institutes. VET teachers have access to funding to help them acquire a master qualification that corresponds to the subject they are teaching (44) (45) .

More information is available in the Cedefop ReferNet thematic perspective on teachers and trainers (46)

- [42] Quality framework on competence requirements for VET trainers
<https://www.mboraad.nl/publicaties/kwaliteitskader-bekwaamheidseisen-voor-instructeurs>; and relevant legislation <https://wetten.overheid.nl/BWBR0018692/2020-08-01>
- [43] In VET institutions teachers of different disciplines are working in teams responsible for delivering educational programmes to one or more subgroups of students
- [45] See for funding for master programmes: <https://duo.nl/particulier/lerarenbeurs/>
- [46] <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/teachers-and-trainers>

CHAPTER 10.

Shaping VET qualifications

10.1 Anticipating skill needs

The set-up and governance of skill anticipation in the Netherlands can serve as an exemplar (47) . The Research Centre for Education and the Labour Market (ROA) (48) is the institute in the Netherlands that specialises in labour market forecasting and skills anticipation. Its labour market forecasts aim to increase transparency and improve the match between education and the labour market. The work is financed and jointly steered by key national education and labour market stakeholders.

Two approaches to skills anticipation can be distinguished: top-down and bottom-up. In the top-down approach, a general forecasting model covering the whole labour market uses national data sources to generate information relevant for policy makers and for guidance purposes. ROA publishes a report every second year, which includes an overview of education and labour market trends as well as analyses of expected labour market developments in the light of particular policy issues.

In the bottom-up approach, partial labour market forecast models are used, for example for a single sector or occupation or for a selection of them, with input from specific (ad hoc) data sources. This can be complementary to the top-down approach.

The national social security agency (UWV, Uitvoeringsinstituut Werknemersverzekeringen) is involved in cooperation with ROA and SBB (49) to match information on demand and supply in the labour market, at sectoral and regional levels.

The labour market information generated caters to the needs of:

- the young and jobseekers, as they are able to base their education choices on the mid-term labour market perspectives of different education tracks;
- different groups of policy makers, as they are able to make informed decisions on whether to open new education tracks or amend existing ones;
- companies and their sector organisations, as it gives them a chance to act on expected skills shortages in the near future;
- public and private employment services, as they use the information to shape training policies for their beneficiaries.

SBB is responsible for labour market research focused on further developing the structure of qualifications in upper secondary VET. The nine sector chambers within SBB take on this task. Education institutions are responsible for attuning their VET provision regionally. Regional training centres sometimes carry out their own market research to gain insight into expected labour market needs for qualified employees at regional level.

Private commercial training providers have their own marketing strategies (including market research), so they can offer courses that are relevant to potential target groups and labour market needs.

See also Cedefop's skills forecast (50) and European Skills Index (51) .

10.2 Designing qualifications

The qualification design process differs between parts of the VET system:

- in lower secondary pre-vocational education: examination syllabi are laid down in a framework by the education ministry and developed by the Foundation for Curriculum Development in the Netherlands (Nationaal expertisecentrum leerplanontwikkeling - SLO);
- in upper secondary VET: the national qualification system (nationally referred to as 'qualifications structure') defines the desired output of qualifications. There are three steps:
 - social partners develop and determine/validate vocational/occupational standards. This process

takes place in committees at sub-sectoral level referred to as 'market segments' in the national context;

- social partner and VET representatives develop qualification profiles (educational standards as output), which are adopted by the education ministry. This is done within SBB (52) ;
- VET colleges develop curricula in cooperation with training firms based on qualification profiles;
- in higher professional education (HBO) qualifications and programmes are developed by schools and accredited by the Dutch-Flemish Accreditation Organisation. A curriculum is part of the accreditation request. The education ministry decides whether an accredited programme is to be publicly funded or not.

Qualification and curriculum development in upper secondary VET

The qualifications system for upper secondary VET comprises competence-based qualification standards covering occupational standards for one or more (interrelated) qualification profiles. They describe desirable learning outcomes of VET programmes related to a specific vocation or group of occupations, to citizenship and further learning (53) .

Since 2016, qualifications have been clustered for better transparency and functionality. Definitions of qualifications are broadened, with a general part (language, numeracy, citizenship and career management skills), a basic vocational part applicable to all occupations in the qualification, several profile modules (specific for the profile within the qualification) and optional modules. Currently the qualification framework includes about 190 qualification files with more than 500 qualifications and more than 1000 optional modules (54) .

Broader definitions of qualifications and optional modules are expected to give VET colleges more leeway to adapt curricula to labour market needs.

Companies and education institutions jointly develop optional modules to respond quickly to innovations or emerging needs within their region. Regions will be also afforded some leeway to draft optional modules themselves to be able to respond to regional needs and/or to help learners progress through the education and training system.

The nine sector chambers within SBB are the link among sectoral education, labour market stakeholders and the executive branch of SBB; they also contribute in shaping general qualification policies, are responsible for keeping the qualification system up-to-date, promote the quality of learning in enterprises, and interpret and validate information on VET and the labour market.

Schools are primarily responsible for curricula and their modernisation. Authority with regard to learning arrangements is assigned to them by the constitution. This does not mean; however, that national government remains completely aloof. It can stimulate developments and innovations that have consequences for the modernisation of curricula.

[48] Researchcentrum voor Onderwijs en Arbeidsmarkt (ROA) <http://roa.sbe.maastrichtuniversity.nl/?portfolio=poa-project-onderwijs-arbeidsmarkt-2>

[49] Cooperation Organisation for Vocational Education, Training and the Labour Market (Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven - SBB).

[50] <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/skills-forecast>

[51] <https://skillspanorama.cedefop.europa.eu/en/indicators/european-skills-index>

[52] Cooperation Organisation for Vocational Education, Training and the Labour Market (Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven - SBB).

[53] see the SBB portal for the qualification structure: <https://kwalificatiestructuur-mijn.s-bb.nl/> e.g. the qualification for a machinist (EQF level 2): <https://kwalificatie-mijn.s-bb.nl/kwalificatie/verspaner-gewijzigd-2020/cmVzdWx0YWFOVHlwZT01O2Rvc3NpZXJJZD01MTEwO2t3YWxpZmljYXRpZUIkPTEzMjUzODA=>

[54] <https://www.rijksoverheid.nl/onderwerpen/middelbaar-beroepsonderwijs/beroepsgericht-mbo> [accessed 17.9.2021]

CHAPTER 11.

Quality assurance

A national quality assurance approach and a methodology for internal and external evaluation are in place. So far, upper secondary IVET and higher VET (HBO) have quality assurance systems, the first based on supervision and inspection, the latter based on self-evaluation, review and accreditation. A common quality assurance framework for VET providers is in place and applies also to workplace learning. For recognised CVET courses (in the official registry) offered by private providers the same rules apply as in IVET.

Quality assurance in upper secondary VET

The education ministry, through the education inspectorate, and VET providers themselves are responsible for quality assurance in upper secondary VET. The VET law mandates VET providers to set up a quality assurance system. They are relatively free to design and set up their systems, but have to ensure regular quality assessments that include the arrangements in place for teacher training. Upper secondary VET institution annual reports are the basis for external quality evaluation by the education inspectorate.

Internal monitoring and control: upper secondary VET colleges have small executive boards and internal supervisory boards. Middle management is accountable to the executive board. Participation of students, teachers and parents in decision making is regulated in the Act on Work Councils.

Vertical monitoring and control: the education Inspectorate is in charge of external supervision, checking whether statutory provisions are met and quality assurance is in place. The assessment framework covers five quality areas: (i) educational process; (ii) school climate; (iii) learning outcomes; (iv) quality assurance and ambition; and (v) financial management. Supervision is proportional in nature, meaning it is stricter where deficiencies are found, and the inspectorate follows up by monitoring whether required improvements have been put in place.

In 2017, the Inspection framework for external supervision was renewed. One of the most important changes is the distinction between statutory requirements and quality factors defined by the schools themselves. Self-defined quality factors pertain to the objectives and ambitions set by the school itself above and beyond the basic quality level. In its reports, the Inspectorate will draw a clear distinction between judgements related to statutory requirements and the assessment of performances on the self-defined quality indicators above and beyond those enshrined in law.

Horizontal dialogue: using self-chosen tools, the executive board of a VET college is expected to develop and sustain good relations with important local/regional stakeholders: employers, local governments and regional organisations.

Guidelines and standards promote a culture of continuous improvement. Stakeholders (including the inspectorate, VET providers, students/learners and teachers/trainers and VET expertise centres) have contributed to its development. Stakeholders take part in setting VET goals and objectives and their involvement in monitoring and evaluation has been agreed. An advisory committee consisting of all important VET stakeholders meets several times a year to discuss further developments. All EQAVET indicators are used (55) .

Quality, responsiveness and innovation capacity in upper secondary VET have been core policy priorities in recent years. Extra (partly performance-based) funding is introduced to increase quality. The minister responsible has concluded quality agreements with all VET institutions, which makes them responsible and accountable for their performance. The quality agreements are the basis for quality plans for 2019-22 drafted by VET providers themselves. VET colleges should elaborate strategic plans to improve the quality of VET in line with regional needs and in close collaboration with regional stakeholders, young people in a vulnerable position and equal opportunities for all students.

[55] <https://eqavet.nl/over-eqavet/>

CHAPTER 12.

Validation of prior learning

Validation of prior, non-formal and informal learning is an instrument that has been promoted in the Netherlands for the last 15 years. A comprehensive validation system that encompasses all education levels and sectors is in place.

In line with discussions and proposals made in the last few years, from 2016 onwards there are two formal validation procedures.

- Validation for the labour market: recognition/ documentation of prior learning, a formal procedure for the employed and jobseekers that leads to the award of a validated skills portfolio (certificate). Validation is possible for sectoral, formal VET and HE qualifications. This type of validation is most used. The certificate offers no legal right to exemption from learning or exams in formal VET of higher professional education. For this procedure the National Knowledge Centre Validation of Prior Learning (56) is the implementing organisation for quality assurance of these certificates.
- Validation for education: accreditation/ certification of prior learning (APL), a formal procedure in which a candidate can get his/her learning outcomes assessed against a national qualification standard to obtain a formal qualification in VET or HE. Validation supports access to education and training at all levels. Although both VET and HE qualifications can, in theory, be obtained through validation, in practice this depends on demand and is currently most common in upper secondary VET. Validation in the educational route is supervised by the education inspectorate or NVAO (57) .

Individuals themselves, or their employers, have to pay for validation. Financial support is often provided by sectoral training funds (for employers), tax benefits (for individuals), or, for people with occupational disability benefits, by the national social security agency (UWV).

For more information about arrangements for the validation of non-formal and informal learning please visit Cedefop's European database (58) .

[56] <http://www.nationaal-kenniscentrum-evc.nl/>

[57] Dutch-Flemish Accreditation Organisation (Nederlands-Vlaamse Accreditatie Organisatie).

[58] <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

Student finance act

The Student Finance Act of 2000 aims to cover the education costs of students over 18 in full-time education. The finance system for upper secondary VET students comprises four financing components: a basic grant, a supplementary grant (depending on the level of parental income), a free/discounted public transportation card and a loan. Learners do not have to refund the basic grant, the supplementary grant and their public transportation fees when they graduate within 10 years. Students in VET courses at level 1 and 2 are exempt from paying back the grants, as well as the loans (59) .

Apprentices are not eligible for this grant, as they already earn a salary and their education is not full-time. Apprentices can deduct their study costs from their income, in order to reduce the income tax that they pay.

Right of enrolment in VET

New legislation to 'ensure the right of enrolment in VET for all' was adopted in 2016 and came into effect on 1 August 2017. The main reason for the introduction of this legislation is to smooth the transition from lower secondary education to upper secondary VET, as one third of the early school leavers drops out during the transition period. This has to be achieved by better (study) guidance facilities before and during the transition phase, by bringing forward the registration date (1 April) for students leaving lower secondary education for upper secondary VET, and by strengthening the position of students in the VET college's intake procedures.

[59] <https://www.rijksoverheid.nl/onderwerpen/studiefinanciering/studiefinanciering-mbo>;

CHAPTER 14.

Incentives for enterprises to boost their participation in VET provision

A subsidy scheme for employers is meant to cover costs for guidance of upper secondary VET apprentices (those in the dual track only, BBL). A small part is available for pupils and students in pre-vocational education and higher education (60) .

CVET is partly financed through sectoral funds for training and development. Within sectoral collective labour agreements social partners agree on the conditions for stimulating enrolment of employees in CVET. There are about 85 sectoral training and development funds, which are foundations governed by social partners. Most funds are financed by a payroll levy. Employers pay this levy to the training fund for their sector and can benefit from reimbursements for the cost of training their employees. Some funds limit their activities to the distribution of financial resources while others pursue active labour market policy. To stimulate participation in education and training, the funds use a variety of measures to cover the costs of training, training leave or examinations.

[60] https://www.rvo.nl/subsidies-regelingen/subsidieregeling-praktijkleren?gclid=EAlaIQobChMIjsDH6MHC8wIVy513Ch3IQO7kEAAYASAAEglJ-_D_BwE

CHAPTER 15.

Guidance and counselling

Since 2011, career orientation and guidance (LOB) in VET was promoted through the project *Stimuleringsproject LOB in het MBO*. In this project, VET-schools cooperated in the development and implementation of career orientation and guidance systems. Since July 2017, a national expertise centre for career orientation and guidance (61) has been operational. It is cross-sectoral and supports pre-vocational education (VMBO), general secondary education (HAVO-VWO) and upper secondary VET (MBO) in improving the career orientation and guidance of pupils and students.

Labour market information caters to the needs of learners from pre-vocational education (VMBO) and upper secondary VET (MBO) and jobseekers. This information should help them to make a considered choice for an education programme, taking labour market perspectives into account. For students in both tracks (school-based and dual) in upper secondary VET looking for work-based placements in an 'accredited work placement company', SBB (62) provides information via a portal (63) . SBB also provides information on mid-term job prospects for all upper secondary VET programmes and supports pre-vocational and VET schools to inform learners about job prospects (64) .

Please also see:

- guidance and outreach, the Netherlands national report (65) ;
- Cedefop's labour market intelligence toolkit (66) ;
- Cedefop's inventory of lifelong guidance systems and practices (67) .

[61] <https://www.expertisepuntlob.nl/>

[62] Cooperation Organisation for Vocational Education, Training and the Labour Market (Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven - SBB)

[63] <https://www.stagemarkt.nl/Zoeken>

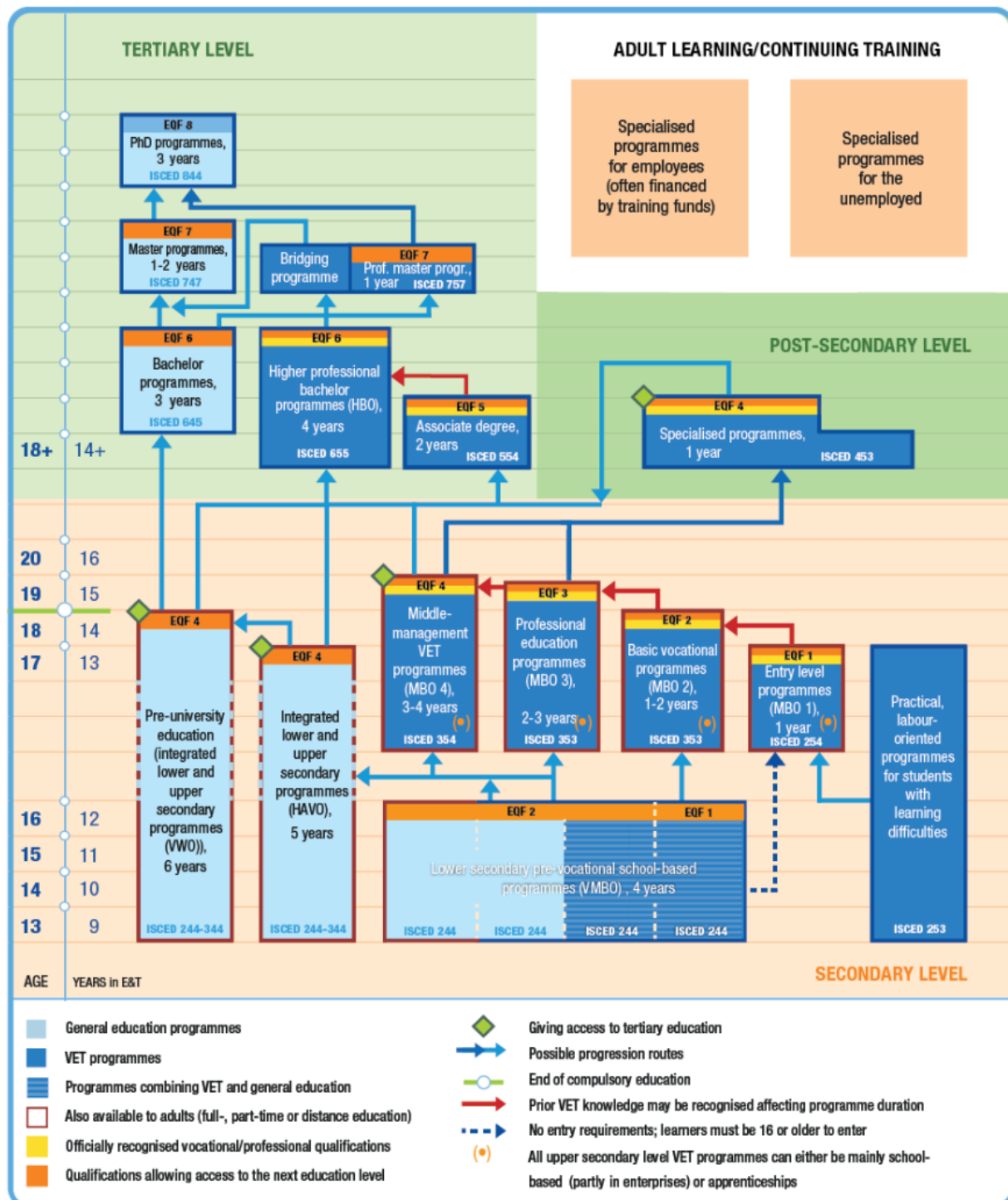
[64] <https://www.s-bb.nl/onderwijs/studie-cijfers>

[65] <http://www.cedefop.europa.eu/events-and-projects/networks/refernet/thematic-perspectives/guidance-outreach>

[66] <http://www.cedefop.europa.eu/en/toolkits/resources-guidance/toolkit/where-can-you-find-more-information-in-your-country-and-elsewhere>

[67] <https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/inventory-lifelong-guidance-systems-and-practices>

Vocational education and training system chart



NB: ISCED-P 2011.

Source: Cedefop and ReferNet Netherlands, 2022.

VET Programme Types

EQF 1 or 2
Lower secondary
pre-vocational
school-based programmes,
4 years
ISCED 244

Lower secondary pre-vocational school-based programmes (Voorbereidend middelbaar beroepsonderwijs, VMBO) Four VMBO tracks exist ([68]): basic vocational pathway (VMBO basisberoepsgerichte), EQF level 1 advanced vocational pathway (VMBO kaderberoepsgerichte leerweg), EQF level 2 combined theoretical pathway (VMBO gemengde leerweg), EQF level 2 theoretical pathway (VMBO theoretische leerweg), EQF level 2

EQF level	1 or 2	ISCED-P 2011 level	244
Usual entry grade	9	Usual completion grade	12
Usual entry age	13	Usual completion age	16
Length of a programme (years)	4		
Is it part of compulsory education and training?	 Education is compulsory for learners from 5 to 16 years old. 16- and 17-year-olds without a general or basic vocational qualification at upper secondary level are required to continue learning, the so-called 'qualification duty' (<i>kwalificatieplicht</i>).	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?



Among the four lower education pre-vocational school-based programmes, only the theoretical pathway (*VMBO theoretische leerweg*) is available in adult education (vavo).

ECVET or other credits Information not available

**Learning forms (e.g.
dual, part-time,
distance)**

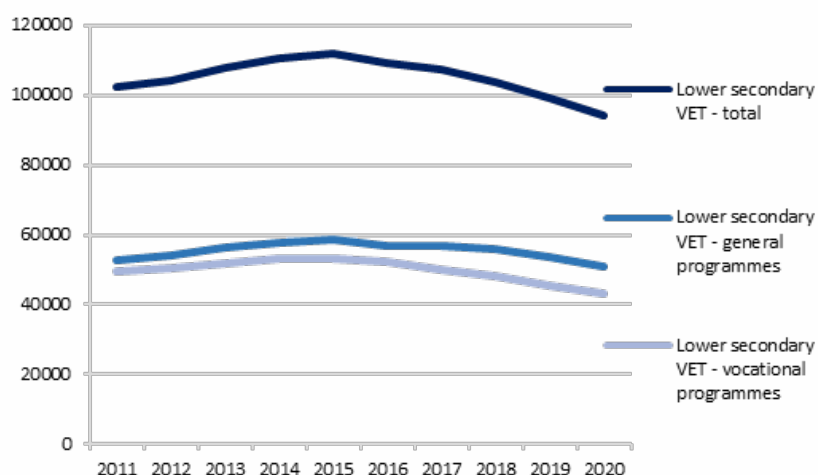
These programmes offer both vocational and general subjects. The first 2 years consist of general subjects. In years 3 and 4, learners choose a learning pathway characterised by 'level differentiation', programme orientation and transfer possibilities in the education system. The four learning pathways are:

- theoretical learning pathway (EQF level 2); those graduating from it can proceed to upper secondary vocational education, especially long courses at highest levels of upper secondary or continue in the fourth year of upper secondary general education. Programme content is general in character;
- combined theoretical pathway (EQF level 2); similar to theoretical learning pathway, apart from 10 to 15% of study time dedicated to vocational subjects (4 hours a week). Progression routes in upper secondary VET are the same as for theoretical learning pathway;
- advanced vocational pathway (EQF level 2); (12 hours a week are VET-oriented); preparation programme for long courses in upper secondary VET with mostly vocational subjects;
- basic vocational pathway (EQF level 1); (12 hours a week are VET-oriented); preparation programme for short courses in upper secondary VET with mostly vocational subjects. Within this pathway, pupils with learning difficulties can follow a dual track, combining learning and working.

In the third year of VMBO, learners in vocational programmes have to make a choice between the 10 vocational profiles.

Whereas within VMBO the vocational pathways were most popular in the past, since 2011 most learners in the third year of VMBO were in one of the two general pathways offered at this level.

**Learners in third year of VMBO by programme orientation
(2011/12 - 2020/21) (*)**



NB: (*) provisional data for 2020.

Source: DUO <https://www.ocwincijfers.nl/sectoren/voortgezet-onderwijs/leerlingen/leerlingen-in-het-derde-leerjaar-voortgezet-onderwijs> [Data extracted 16.9.2021].

Main providers	Secondary education schools
Share of work-based learning provided by schools and companies	Information not available
Work-based learning type (workshops at schools, in-company training / apprenticeships)	• practical training at school • in-company practice
Main target groups	Programmes are available for young people. The theoretical pathway is also open for adult learners via schools for secondary general education for adults (vavo) (68) .
Entry requirements for learners (qualification/education level, age)	Entry in pre-vocational education is based on the advice given by the primary education school.
Assessment of learning outcomes	Central, national examinations and school examinations are held, which are important for obtaining the diploma. The education inspectorate supervises the quality of school exams.

Diplomas/certificates provided	• pre-vocational secondary education - basic vocational pathway (vmbo bb) • pre-vocational secondary education - advanced vocational pathway (vmbo kb) • pre-vocational secondary education - combined theoretical pathway (vmbo gl) • pre-vocational secondary education - theoretical pathway (vmbo tl) Lower secondary pre-vocational diplomas have no labour market currency as learners are expected to continue in upper secondary VET or in general education. Passing the exam in Dutch language is compulsory to obtain a diploma.
Examples of qualifications	Not applicable The diplomas offered in VMBO programmes do not have labour market value; learners usually continue in upper secondary programmes.
Progression opportunities for learners after graduation	Those who complete lower secondary pre-vocational school-based programmes can continue in upper secondary VET or general education. They are not expected to enter the labour market, as their diplomas do not have such value. To facilitate progression from lower secondary pre-vocational education to upper secondary VET, pre-vocational education schools cooperate with VET schools to smooth transition.
Destination of graduates	In 2019, 90% of graduates directly progress to upper secondary vocational education programmes (69) .
Awards through validation of prior learning	
General education subjects	 The first 2 years consist of general subjects. Dutch language and basic maths.
Key competences	Information not available
Application of learning outcomes approach	Information not available
Share of learners in this programme type compared with the total number of VET learners	Information not available In 2020, 52% of the students in the third year of lower secondary education are in pre-vocational education. 24% of students in third year of secondary education are in the two vocational tracks in pre-vocational education (70) .

[68] secondary general adult education (Voortgezet algemeen volwassenenonderwijs, VAVO) <https://www.rijksoverheid.nl/onderwerpen/volwassenenonderwijs>

[69] OCW (2020): <https://www.ocwincijfers.nl/sectoren/voortgezet-onderwijs/leerlingen/leerlingenstromen-in-het-voortgezet-onderwijs> [extracted 16.9.2021].

[70] OCW (2020): <https://www.ocwincijfers.nl/sectoren/voortgezet-onderwijs/leerlingen/leerlingen-in-het-derde-leerjaar-voortgezet-onderwijs> [extracted 16.9.2021].

Practical labour-oriented
programmes for students
with learning difficulties

ISCED 253

Practical labour market-oriented programmes for students with learning difficulties (PRO - praktijkonderwijs)

EQF level	Not applicable	ISCED-P 2011 level	253
Usual entry grade	9	Usual completion grade	13
Usual entry age	13	Usual completion age	17
Length of a programme (years)	5 years		
Is it part of compulsory education and training?	 Education is compulsory for learners from 5 to 16 years old. 16- and 17-year-olds without a general or basic vocational qualification at upper secondary level are required to continue learning, the so-called 'qualification duty' (<i>kwalificatieplicht</i>).	Is it part of formal education and training system?	
Is it initial VET?	 Secondary education	Is it continuing VET?	
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)	Information not available		
Main providers	Provided by individual schools for practice-oriented education (<i>praktijkscholen</i>) or as a part of comprehensive secondary education schools.		
Share of work-based learning provided by schools and companies	Information not available		
Work-based learning type (workshops at schools, in-company training / apprenticeships)	• practical training at school • supervised internship		

Main target groups	Programme is available for young people not able to enter pre-vocational education (VMBO). It prepares learners for participation in the labour market and society. For each student a personal development plan is drawn up, including both practical and theoretical subjects, self-reliance training with assignments such as shopping, cooking, doing odd jobs around the house and traveling independently, personal empowerment and employee skills training.
Entry requirements for learners (qualification/education level, age)	Learners with learning deficits in reading, writing and/or numeracy skills, IQ between 50-88.
Assessment of learning outcomes	Information not available
Diplomas/certificates provided	School diploma and/or branch-specific certificate. No formal qualification.
Examples of qualifications	Not Applicable
Progression opportunities for learners after graduation	Graduates can progress to entry level upper secondary VET programmes (level 1).
Destination of graduates	Approximately 40% progress to entry level upper secondary VET programmes (level 1).
Awards through validation of prior learning	Information not available
General education subjects	Information not available
Key competences	Information not available
Application of learning outcomes approach	Information not available
Share of learners in this programme type compared with the total number of VET learners	Information not available Total number of learners in this programme is almost 30 000 (total number of learners in secondary education is close to 1 million) (71) .

[71] Statline Database: <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/80040ned/table?fromstatweb> [extracted 16.9.2021].

EQF 1
Entry level
Programmes,
1 year
ISCED 254

Entry level upper secondary vocational education programmes leading to EQF level 1, ISCED 254 (MBO 1 - entreeopleiding middelbaar beroepsonderwijs)

EQF level	1	ISCED-P 2011 level	254
Usual entry grade	13	Usual completion grade	13
Usual entry age	16 to 17	Usual completion age	17
Length of a programme (years)	1 Within 4 months of starting an entry course, young people over 17 are told whether they will be allowed to continue in the same study programme. This means that schools do not remain responsible for young people making insufficient learning progress.		
Is it part of compulsory education and training?	 Education is compulsory for learners from 5 to 16 years old. 16- and 17-year-olds without a general or basic vocational qualification at upper secondary level are required to continue learning, the so-called 'qualification duty' (<i>kwalificatieplicht</i>).		
Is it initial VET?	 Is it continuing VET? Upper secondary IVET programmes can also function as CVET.		
Is it offered free of charge?	 A tuition fee is compulsory from the age of 18. For 2021/22 this fee is EUR 1216.		
	Is it available for adults?		

ECVET or other credits Information not available

Learning forms (e.g. dual, part-time, distance)	These programmes offer two different learning pathways: • school-based; • apprenticeship (dual pathway) School-based and dual tracks in upper secondary VET lead to the same diplomas; there is no reference to the track on the diploma. VET legislation mandates accreditation of companies offering work placements to VET students; accreditation has to be obtained for each qualification for training places in both the dual and the school-based track. SBB (72) is responsible for the accreditation process. Names and addresses of the accredited companies are available on a national website (73) .
Main providers	Subsidised VET programmes at upper secondary level are offered by 43 regional, multi-sectoral VET colleges (ROC, <i>regionale opleidingscentra</i>), 10 specialist trade colleges (<i>vakscholen</i>: specific for a branch of industry), 10 agricultural training centres (AOC, <i>agrарische opleidingscentra</i>) and one school for people with disabilities in hearing, language and communication. Private, non-subsidised providers can offer VET programmes as long as their programmes are accredited by the ministry.
Share of work-based learning provided by schools and companies	In the school-based track (BOL, <i>beroepsopleidende leerweg</i>) practical periods in companies make up at least 20% of study time up to a maximum of 59%. The dual or apprenticeship track (BBL, <i>beroepsbegeleidende leerweg</i>), training takes place in companies at least 60% of study time.
Work-based learning type (workshops at schools, in-company training / apprenticeships)	• in-company practice (internship) is obligatory. The responsibility for curriculum development and assessment is in the hands of the upper secondary VET schools. Various curricula and learning environments exist, even for programmes related to the same profession.
Main target groups	Programmes are available for young people and also for adults.
Entry requirements for learners (qualification/education level, age)	Admission is limited to school leavers from lower secondary education without a diploma, and to graduates of practical labour market-oriented programmes.
Assessment of learning outcomes	Assessment of learning results is the responsibility of schools. The law stipulates that companies providing work-based learning have to be involved. Qualification standards serve as benchmarks for assessments. The education inspectorate supervises the quality of examinations (content, level and procedures at programme level). Central examinations in Dutch language and basic maths have been introduced but are not yet compulsory for qualification.
Diplomas/certificates provided	VET learners receive an entry level qualification (EQF 1). Diplomas are recognised by the education and training and labour authorities.
Examples of qualifications	Upper secondary VET programmes are offered in four different areas of study (nationally referred to as 'sectors'): green/agriculture, technology, economics, and health/welfare. Examples of entry level qualifications: assistant construction, living and maintenance worker, assistant service and care worker, assistant installation and construction technology worker.

Progression opportunities for learners after graduation	Entry level courses are aimed at qualifying young people to entering programmes at the next level (basic level upper secondary VET programmes), as well as guiding those not capable of taking this step, to work.
Destination of graduates	In 2020 (provisional data), approximately 71% of VET graduates with an entry level diploma (EQF 1) remained in education (and moved on to a higher level VET programme). 29% of the graduates are not in education and most probably entered the labour market (74)
Awards through validation of prior learning	 It is possible to acquire an entry level diploma by validation of prior learning.
General education subjects	
Key competences	Information not available
Application of learning outcomes approach	Information not available
Share of learners in this programme type compared with the total number of VET learners	3% of learners in upper secondary VET programmes (provisional data for 2020) (75)

- [72] Cooperation Organisation for Vocational Education, Training and the Labour Market (Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven - SBB).
- [73] <http://www.stagemarkt.nl>
- [74] Statline Database: <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/84553NED/table?ts=1631794848194> [extracted 16.9.2021].
- [75] OCW (2020): <https://www.ocwincijfers.nl/sectoren/middelbaar-beroepsonderwijs/studenten/aantallen-studenten-mbo> [extracted 16.9.2021].

EQF 2

Basic vocational
programmes

1-2 years

ISCED 353

Basic level upper secondary vocational education programmes leading to EQF level 2, ISCED 353 (MBO 2, basisberoepsopleiding middelbaar beroepsonderwijs)

EQF level	2	ISCED-P 2011 level	353
Usual entry grade	13	Usual completion grade	14
Usual entry age	16 to 17	Usual completion age	18
Length of a programme (years)	1 to 2		
Is it part of compulsory education and training?	 Individuals who have left education before obtaining a diploma at MBO 2 level (or equivalent) are defined as early school leavers. Education is compulsory for pupils from age 5 to 16. 16- and 17-year-olds without a general or basic vocational qualification at upper secondary level are required to continue learning, the so-called 'qualification duty' (<i>kwalificatieplicht</i>). This arrangement was introduced in 2008 to reduce early leaving from education and training.	Is it part of formal education and training system?	
Is it initial VET?		Is it continuing VET?	 Upper secondary IVET programmes can also function as CVET.
Is it offered free of charge?	 A tuition fee is compulsory from the age of 18. For 2021/22 this fee is EUR 1216.	Is it available for adults?	

ECVET or other credits Information not available

Learning forms (e.g. dual, part-time, distance)	These programmes offer two different learning pathways: • school-based; • apprenticeship (dual pathway). School-based and dual tracks in upper secondary VET lead to the same diplomas; there is no reference to the track on the diploma. Most learners take part in the school-based track, which also appears to be gaining popularity. Between 2008 and 2015 the share of learners in apprenticeship fell due to the economic recession. However, more structural reasons, like upward mobility and growing preferences from young people and employers for school-based education, cannot be excluded. Since 2015, the share of learners in the dual track has increased slightly, due to the increased enrolment of adults. VET legislation mandates accreditation of companies offering work placements to VET students; accreditation has to be obtained for each qualification both for training places in the dual and the school-based track. SBB (76) is responsible for the accreditation process. Names and addresses of the accredited companies are available on a national website (77) .
Main providers	Subsidised VET programmes at upper secondary level are offered by 43 regional, multi-sectoral VET colleges (ROC, <i>regionale opleidingscentra</i>), 10 specialist trade colleges (<i>vakscholen</i>: specific for a branch of industry), 10 agricultural training centres (AOC, <i>agrarische opleidingscentra</i>) and one school for people with disabilities in hearing, language and communication. Private, non-subsidised providers can offer VET programmes as long as their programmes are accredited by the ministry.
Share of work-based learning provided by schools and companies	In the school-based track (BOL, <i>beroepsopleidende leerweg</i>) practical periods in companies make up at least 20% of study time up to a maximum of 59%. The dual or apprenticeship track (BBL, <i>beroepsbegeleidende leerweg</i>), training takes place in companies at least 60% of study time.
Work-based learning type (workshops at schools, in-company training / apprenticeships)	• in-company practice (internships) The responsibility for curriculum development and assessment is in the hands of the upper secondary VET schools. Various curricula and learning environments exist, even for programmes related to the same profession.
Main target groups	Programmes are available for young people and also for adults (16-35). Participants in the school-based track are mainly the young, while most learners in the dual track are 23 or over; this is because this track is also used by companies to upgrade their employees.
Entry requirements for learners (qualification/education level, age)	Access requirements are at least a basic pre-vocational education diploma, a completed entry level upper secondary VET programme (MBO 1), or proof of successful completion of the first 3 years of upper secondary general education or pre-university education. To enrol in the dual/apprenticeship track a contract (an employment contract in most cases) with a firm is mandatory. There is no such obligation for the school-based track.

Assessment of learning outcomes	Assessment of learning results is the responsibility of schools. The law stipulates that companies providing work-based learning have to be involved. Qualification standards serve as benchmarks for assessments. The education inspectorate supervises quality of examinations (content, level and procedures at programme level). Passing central examinations in Dutch language is compulsory to obtain a diploma. Central examination in basic maths is not yet compulsory.
Diplomas/certificates provided	VET learners receive a basic level upper secondary VET qualification (EQF 2). Diplomas are recognised by the education and training and labour authorities.
Examples of qualifications	Upper secondary VET programmes are offered in four different areas of study (nationally referred to as 'sectors'): green/agriculture, technology, economics, and health/welfare. Examples: bricklayer, assembly mechanic, security officer, care and wellbeing assistant.
Progression opportunities for learners after graduation	Progression to professional upper secondary VET programmes (MBO 3) and (for some students to) middle management upper secondary VET programmes (MBO 4) is possible. It is the 'official' minimum qualification level for the labour market. The term 'official' implies that it is the minimum desirable education level for every citizen.
Destination of graduates	In 2020 (provisional data), approximately 53% of VET graduates with a basic level upper secondary VET diploma (EQF 2) remained in education, with most (97%) progressing to a higher level VET education and 3% studying at the same level of education. 47% of the graduates is not in education and most probably entered the labour market (78)
Awards through validation of prior learning	✓ It is possible to acquire a basic level upper secondary VET diploma by validation of prior learning.
General education subjects	✓ Dutch language and basic maths
Key competences	Information not available
Application of learning outcomes approach	Information not available
Share of learners in this programme type compared with the total number of VET learners	16% of learners in upper secondary VET programmes (provisional data for 2020) (79)

[76] Cooperation Organisation for Vocational Education, Training and the Labour Market (Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven - SBB)

[77] <http://www.stagemarkt.nl>

[78] Statline Database: <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/84553NED/table?ts=1631794848194> [extracted 16.9.2021].

[79] OCW (2020): <https://www.ocwincijfers.nl/sectoren/middelbaar-beroepsonderwijs/studenten/aantallen-studenten-mbo> [extracted 16.9.2021].

EQF 3

Professional education

Programmes,

2-3 years

ISCED 353

Professional upper secondary vocational education programmes leading to EQF level 3, ISCED 353 (MBO 3, vakopleiding middelbaar beroepsonderwijs)

EQF level	3	ISCED-P 2011 level	353
Usual entry grade	13	Usual completion grade	15
Usual entry age	16 to 17	Usual completion age	19
Length of a programme (years)	2 to 3		
Is it part of compulsory education and training?	 Education is compulsory for pupils from age 5 to 16. 16- and 17-year-olds without a general or basic vocational qualification at upper secondary level are required to continue learning, the so-called 'qualification duty' (<i>kwalficatieplicht</i>). This arrangement was introduced in 2008 to reduce early leaving from education and training.	Is it part of formal education and training system?	
Is it initial VET?		Is it continuing VET?	 Upper secondary IVET programmes can also function as CVET.
Is it offered free of charge?	 A tuition fee is compulsory from the age of 18. For 2021/22 this fee is EUR 1216.	Is it available for adults?	

ECVET or other credits Information not available

Learning forms (e.g. dual, part-time, distance)	These programmes offer two different learning pathways: • school-based; • apprenticeship (dual pathway) School-based and dual tracks in upper secondary VET lead to the same diplomas; there is no reference to the track on the diploma. Most learners take part in the school-based track, which also appears to be gaining popularity. Between 2008 and 2015 the share of learners in apprenticeship has decreased due to the economic recession. However more structural reasons, like upward mobility and growing preferences from young people and employers for school-based education, cannot be excluded. Since 2015, the share of learners in the dual track has increased slightly, due to the increased enrolment of adults. VET legislation mandates accreditation of companies offering work placements to VET students; accreditation has to be obtained for each qualification for training places in both the dual and the school-based track. SBB (80) is responsible for the accreditation process. Names and addresses of the accredited companies are available on a national website (81) .
Main providers	Subsidised VET programmes at upper secondary level are offered by 43 regional, multi-sectoral VET colleges (<i>ROC, regionale opleidingscentra</i>), 10 specialist trade colleges (<i>vakscholen</i>: specific for a branch of industry), 10 agricultural training centres (<i>AOC, agrarische opleidingscentra</i>) and one school for people with disabilities in hearing, language and communication. Private, non-subsidised providers can offer VET programmes as long as their programmes are accredited by the ministry.
Share of work-based learning provided by schools and companies	In the school-based track (<i>BOL, beroepsopleidende leerweg</i>) practical periods in companies make up at least 20% of study time up to a maximum of 59%. The dual or apprenticeship track (<i>BBL, beroepsbegeleidende leerweg</i>), training takes place in companies at least 60% of study time.
Work-based learning type (workshops at schools, in-company training / apprenticeships)	• in-company practice (internships) The responsibility for curriculum development and assessment is in the hands of the upper secondary VET schools. Various curricula and learning environments exist, even for programmes related to the same profession.
Main target groups	Programmes are available for young people and also for adults (16-35). For upper secondary VET (level 1 to 4): participants in the school-based track are mainly the young, while 46% of those following a dual track are 23 or over; this is because this track is also used by companies to upgrade their employees.
Entry requirements for learners (qualification/education level, age)	Access requirements are: • a pre-vocational secondary education certificate/diploma (theoretical, combined theoretical and advanced vocational pathways); or • proof of successful completion of the first 3 years of upper secondary general education or pre-university education. To enrol in the dual/apprenticeship track a contract (an employment contract in most cases) with a firm is mandatory. There is no such obligation for the school-based track.

Assessment of learning outcomes Assessment of learning results is the responsibility of schools. The law stipulates that companies providing work-based learning have to be involved. Qualification standards serve as benchmarks for assessments. The education inspectorate supervises the quality of examinations (content, level and procedures at programme level).

Central examinations in VET exist for Dutch language and basic maths. Passing the exam in Dutch language is compulsory to obtain a diploma. For basic maths this is not yet the case.

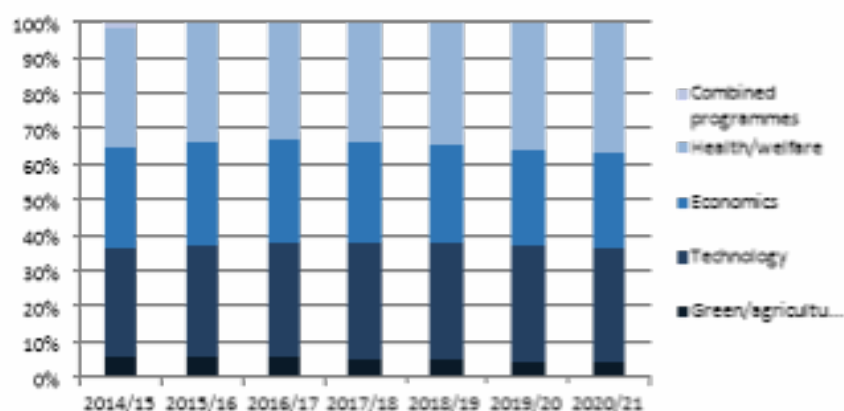
Diplomas/certificates provided VET learners receive a professional upper secondary vocational education qualification (EQF 3) (MBO 3, *vakopleiding middelbaar beroepsonderwijs*).

Diplomas are recognised by the education and training and labour authorities.

Examples of qualifications Upper secondary VET programmes are offered in four different areas of study (nationally referred to as 'sectors'): green/agriculture, technology, economics, and health/welfare.

Examples: all-round carpenter, care provider disability care, financial administrative assistant.

Participation (%) in upper secondary VET (level 1-4) by area of study (2014-20) (*)



NB: (*) provisional data for 2020

Source: DUO 2020 (Dienst Uitvoering Onderwijs - Service Institution Education).

<https://www.ocwincijfers.nl/sectoren/middelbaar-beroepsonderwijs/studenten/aantallen-studenten-mbo>

Progression opportunities for learners after graduation Progression to middle management upper secondary vocational education programmes (MBO 4) is possible, as well as to specialising programmes at post-secondary level.

Destination of graduates	In 2020 (provisional data), approximately 32% of VET graduates with a professional upper secondary VET diploma (EQF 3) stayed in education. 90% of these students progressed to a higher level of VET education, 9% studied at the same level of education and 1% regressed to a lower level of education. 68% of all graduates did not stay in education and probably entered the labour market in 2020 (82)
Awards through validation of prior learning	✓ It is possible to acquire a professional upper secondary VET diploma by validation of prior learning.
General education subjects	✓ Dutch language, basic maths
Key competences	Information not available
Application of learning outcomes approach	Information not available
Share of learners in this programme type compared with the total number of VET learners	23% of learners in upper secondary VET programmes (provisional data for 2020) (83)

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- [80] Cooperation Organisation for Vocational Education, Training and the Labour Market (Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven - SBB).
- [81] <http://www.stagemarkt.nl>
- [82] Statline Database: <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/84553NED/table?ts=1631794848194> [extracted 16.9.2021].
- [83] OCW (2020): <https://www.ocwincijfers.nl/sectoren/middelbaar-beroepsonderwijs/studenten/aantallen-studenten-mbo> [extracted 16.9.2021].

EQF 4

Middle management

VET programmes,

3-4 years

ISCED 354

Middle management upper secondary vocational education programmes leading to EQF level 4, ISCED 354 (MBO 4, middenkaderopleiding middelbaar beroepsonderwijs)

EQF level	4	ISCED-P 2011 level	354
Usual entry grade	13	Usual completion grade	15
Usual entry age	16 to 17	Usual completion age	19 or 20
Length of a programme (years)	3 to 4		
Is it part of compulsory education and training?  Education is compulsory for pupils from age 5 to 16. 16- and 17-year-olds without a general or basic vocational qualification at upper secondary level are required to continue learning, the so-called 'qualification duty' (<i>kwalificatieplicht</i>). This arrangement was introduced in 2008 to reduce early leaving from education and training.		Is it part of formal education and training system?  Yes	
Is it initial VET?  Yes		Is it continuing VET?  Upper secondary IVET programmes can also function as CVET.	
Is it offered free of charge?  A tuition fee is compulsory from the age of 18. For 2021/22 this fee is EUR 1216.		Is it available for adults?  Yes	

ECVET or other credits Information not available

Learning forms (e.g. dual, part-time, distance)	These programmes offer two different learning pathways: • school-based; • apprenticeship (dual pathway) School-based and dual tracks in upper secondary VET lead to the same diplomas; there is no reference to the track on the diploma. Most learners take part in the school-based track, which also appears to be gaining popularity. Between 2008 and 2015 the share of learners in apprenticeship has decreased due to the economic recession. However more structural reasons, like upward mobility and growing preferences from young people and employers for school-based education, could not be excluded. Since 2015, the share of learners in the dual track has increased slightly, due to the increased enrolment of adults. VET legislation mandates accreditation of companies offering work placements to VET students; accreditation has to be obtained for each qualification for training places in both the dual and the school-based track. SBB (84) is responsible for the accreditation process. Names and addresses of the accredited companies are available on a national website (85) .
Main providers	Subsidised VET programmes at upper secondary level are offered by 43 regional, multi-sectoral VET colleges (ROC, <i>regionale opleidingscentra</i>), 10 specialist trade colleges (<i>vakscholen</i>: specific for a branch of industry), 10 agricultural training centres (AOC, <i>agrarische opleidingscentra</i>) and one school for people with disabilities in hearing, language and communication. Private, non-subsidised providers can offer VET programmes as long as their programmes are accredited by the ministry.
Share of work-based learning provided by schools and companies	In the school-based track (BOL, <i>beroepsopleidende leerweg</i>) practical periods in companies make up at least 20% of study time up to a maximum of 59%. The dual or apprenticeship track (BBL, <i>beroepsbegeleidende leerweg</i>), training takes place in companies at least 60% of study time.
Work-based learning type (workshops at schools, in-company training / apprenticeships)	in-company practice (internships) The responsibility for curriculum development and assessment is in the hands of the upper secondary VET schools. Various curricula and learning environments exist, even for programmes related to the same profession.
Main target groups	Programmes are available for young people and also for adults (16-35). Participants in the school-based track are mainly the young, while 46% of those following a dual track are 23 or over; this is because this track is also used by companies to upgrade their employees.
Entry requirements for learners (qualification/education level, age)	Access requirements are: • a pre-vocational secondary education certificate/diploma (theoretical and combined theoretical pathways); or • proof of successful completion of the first 3 years of upper secondary general education or pre-university education.
	To enrol in the dual/apprenticeship track a contract (an employment contract in most cases) with a firm is mandatory. There is no such obligation for the school-based track.

Assessment of learning outcomes

Assessment of learning results is the responsibility of schools. The law stipulates that companies providing work-based learning have to be involved. Qualification standards serve as benchmarks for assessments. The education inspectorate supervises the quality of examinations (content, level and procedures at programme level).

Obligatory central examinations exist for Dutch language, English and basic maths.

Passing the exam in Dutch language and English is compulsory to obtain a diploma. For basic maths this is not yet the case.

Diplomas/certificates provided

VET learners receive a middle management upper secondary VET qualification (EQF 4).

(MBO 4, *middenkaderopleiding middelbaar beroepsonderwijs*).

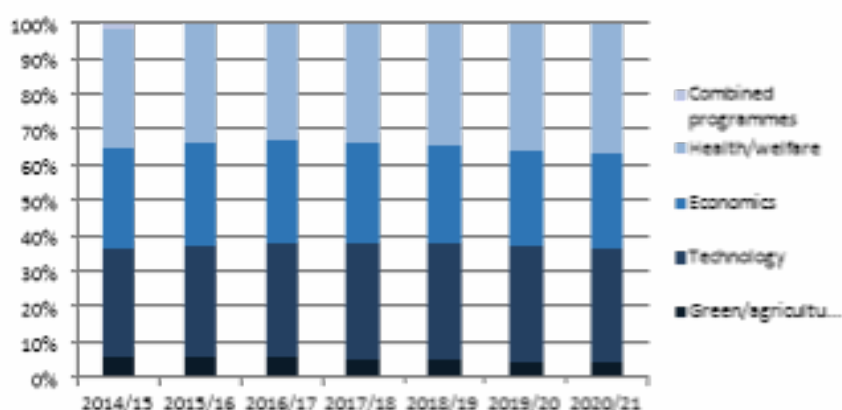
Diplomas are recognised by the education and training and labour authorities.

Examples of qualifications

Upper secondary VET programmes are offered in four different areas of study (nationally referred to as 'sectors'): green/agriculture, technology, economics, and health/welfare.

Examples: planner installations, dental nurse, catering manager.

Participation (%) in upper secondary VET (level 1 to 4) by area of study (2014-20) (*)



NB: (*) provisional data for 2020

Source: DUO 2020 (Dienst Uitvoering Onderwijs - Service Institution Education).

<https://www.ocwincijfers.nl/sectoren/middelbaar-beroepsonderwijs/studenten/aantallen-studenten-mbo>

Progression opportunities for learners after graduation	Progression is possible to: • higher professional education (HBO); • 2-year associate degree programmes (short-cycle higher education, EQF 5); • specialising programmes at post-secondary level.
Destination of graduates	In 2020 (provisional data), approximately 39% of VET graduates with a middle management upper secondary vocational education qualification (EQF 4) diploma remained in education. 93% of these students progressed to a higher level of VET education, 6% studied at the same level of education, while 1% regressed to a lower level of VET education. 61% of graduates did not stay in education and most probably entered the labour market (86) .
Awards through validation of prior learning	✓
General education subjects	✓ English, Dutch language, basic math
Key competences	Information not available
Application of learning outcomes approach	Information not available
Share of learners in this programme type compared with the total number of VET learners	58% of learners in upper secondary VET programmes (provisional data for 2020) (87)

- [84] Cooperation Organisation for Vocational Education, Training and the Labour Market (Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven - SBB).
- [85] <http://www.stagemarkt.nl>
- [86] Statline Database: <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/84553NED/table?ts=1631794848194> [extracted 16.9.2021].
- [87] OCW (2020): <https://www.ocwincijfers.nl/sectoren/middelbaar-beroepsonderwijs/studenten/aantallen-studenten-mbo> [extracted 16.9.2021].

EQF 4
Specialising programmes, 1 year ISCED 453

Specialising programmes leading to EQF level 4, ISCED 453

EQF level	4	ISCED-P 2011 level	453
Usual entry grade	16	Usual completion grade	16
Usual entry age	20	Usual completion age	20
Length of a programme (years)	1		
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?	✓
	A tuition fee is compulsory from the age of 18. For 2021/2022 this fee is EUR 1216.		
ECVET or other credits	Information not available		
Learning forms (e.g. dual, part-time, distance)	These programmes offer two different learning pathways: • school-based; • apprenticeship (dual pathway) School-based and dual tracks in upper secondary VET lead to the same diplomas; there is no reference to the track on the diploma.		
Main providers	Subsidised VET programmes at upper secondary level are offered by 43 regional, multi-sectoral VET colleges (ROC, <i>regionale opleidingscentra</i>), 10 specialist trade colleges (<i>vakscholen</i>: specific for a branch of industry), 10 agricultural training centres (AOC, <i>agrарische opleidingscentra</i>) and one school for people with disabilities in hearing, language and communication. Private, non-subsidised providers can offer VET programmes as long as their programmes are accredited by the ministry.		
Share of work-based learning provided by schools and companies	In the school-based track (BOL, <i>beroepsopleidende leerweg</i>) practical periods in companies make up at least 20% of study time up to a maximum of 59%. The dual or apprenticeship track (BBL, <i>beroepsbegeleidende leerweg</i>), training takes place in companies at least 60% of study time.		

Work-based learning type (workshops at schools, in-company training / apprenticeships)	• in-company practice (internships) The responsibility for curriculum development and assessment is in the hands of the upper secondary VET schools. Various curricula and learning environments exist even for programmes related to the same profession.
Main target groups	Professional and middle management upper secondary VET programmes graduates.
Entry requirements for learners (qualification/education level, age)	Access requirements are a completed professional or middle management upper secondary VET programme (MBO 3 or 4).
Assessment of learning outcomes	Assessment of learning results is the responsibility of schools. The law stipulates that companies providing work-based learning have to be involved. Qualification standards serve as benchmarks for assessments. The education inspectorate supervises the quality of examinations (content, level and procedures at programme level). Obligatory central examinations exist for Dutch language, English and basic maths. Passing the exam in Dutch language and English is compulsory to obtain a diploma. For basic maths this is not yet the case.
Diplomas/certificates provided	VET learners receive a specialist upper secondary VET qualification at VET level 4 (<i>MBO 4</i>)
Examples of qualifications	<i>Leidinggevende team/afdeling/project</i> (Manager team/department/project), <i>Technisch Leidinggevende</i> (technical manager), <i>Instructeur mbo</i> (instructor upper secondary vocational education), <i>Patissier</i> (pastry chef), <i>Specialist vruchtbaarheid en voortplanting</i> (specialist fertility and reproduction) (88)
Progression opportunities for learners after graduation	Progression to higher professional education, especially dual or part-time tracks, is possible.
Destination of graduates	Information not available
Awards through validation of prior learning	✓
General education subjects	✓ Dutch language, English, basic math
Key competences	Information not available
Application of learning outcomes approach	Information not available
Share of learners in this programme type compared with the total number of VET learners	Information not available

[88] <https://wetten.overheid.nl/BWBR0037678/2021-08-01>

EQF 5

Associate degree,

2 years

ISCED 554

Associate degree (AD) programmes (short-cycle higher education programmes) leading to EQF level 5, ISCED 554

EQF level	5	ISCED-P 2011 level	554
Usual entry grade	14+	Usual completion grade	15+
Usual entry age	18 for upper secondary general education 20+ for upper secondary VET graduates	Usual completion age	19+
Length of a programme (years)	2		
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?	✗ A tuition fee is compulsory. For 2020/21 this fee is EUR 2143. For students starting for the first time in higher professional education, tuition fees are reduced by half. In 2021/22 tuition fees for all students in higher education are reduced by half (set at EUR 1084) as compensation for the months of online-only education during the COVID-19 pandemic.	Is it available for adults?	✓
ECVET or other credits	120 ECTS (89) points		
Learning forms (e.g. dual, part-time, distance)	Information not available		
Main providers	Universities of applied sciences (<i>hogescholen</i>) providing these programmes are publicly financed providers. Non-subsidised, private providers can offer similar programmes if they have appropriate accreditation.		
Share of work-based learning provided by schools and companies	The responsibility for curriculum development and assessment is in the hands of the universities of applied science. Various curricula and learning environments exist, even for programmes related to the same profession.		

Work-based learning type (workshops at schools, in-company training / apprenticeships)	Information not available
Main target groups	AD programmes are of particular interest to those with a VET qualification from professional or middle management upper secondary VET programmes (MBO 3 or 4).
Entry requirements for learners (qualification/education level, age)	Access requirements are a completed middle management upper secondary VET programme (MBO 4). Access is also possible to graduates of upper general secondary education.
Assessment of learning outcomes	The responsibility for assessment is in the hands of the universities of applied science. The Dutch-Flemish accreditation body (NVAO) accredits the programmes once every 6 years. Official recognition of programmes is granted as long as they are accredited by NVAO.
Diplomas/certificates provided	Associate degree (AD) diploma (in Dutch: associate degree).
Examples of qualifications	Information not available
Progression opportunities for learners after graduation	Graduates can continue to higher professional bachelor programmes; their remaining study load is subject to exemptions granted by each programme.
Destination of graduates	Information not available
Awards through validation of prior learning	Information not available
General education subjects	✗
Key competences	Information not available
Application of learning outcomes approach	Information not available
Share of learners in this programme type compared with the total number of VET learners	3.5% of students in higher professional education (AD, professional bachelor and professional master programmes) are in associate degree programmes (provisional data for 2020) (90) . This percentage has increased substantially in the past 2 years (91) .

[89] European credit transfer and accumulation system.

[90] OCW (2020): <https://www.ocwincijfers.nl/sectoren/hoger-onderwijs/kengetallen-hoger-beroepsonderwijs/studenten/ingeschrevenen-hoger-beroepsonderwijs> [extracted 16.9.2021].

[91] OCW (2020): <https://www.ocwincijfers.nl/sectoren/hoger-onderwijs/kengetallen-hoger-beroepsonderwijs/studenten/deelnemers-associate-degrees> [extracted 16.9.2021]

EQF 6
Higher professional bachelor programmes 4 years ISCED 655

Higher professional bachelor programmes leading to EQF level 6, ISCED 655 (HBO)

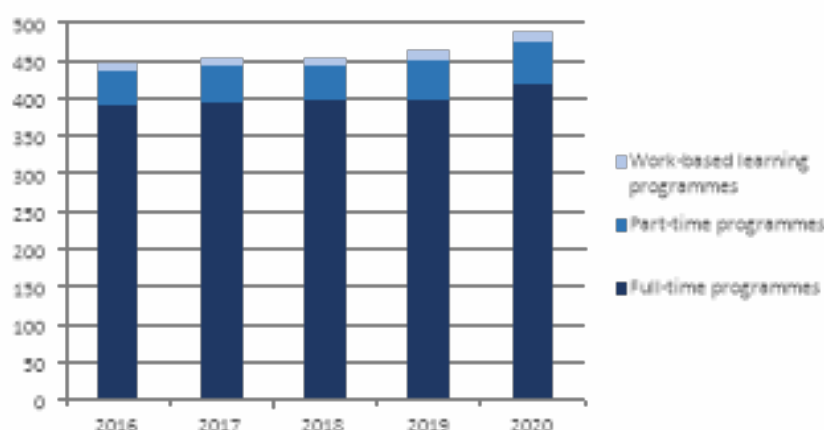
EQF level	6	ISCED-P 2011 level	655
Usual entry grade	14+	Usual entry age	18 for upper secondary general education 20+ for upper secondary VET graduates
Length of a programme (years)	4		
Is it part of compulsory education and training?	✗	Is it part of formal education and training system?	✓
Is it initial VET?	✗	Is it continuing VET?	✗
Is it offered free of charge?	✗ A tuition fee is compulsory. For 2020/21 this fee is EUR 2143. For students starting for the first time in higher professional education, tuition fees are reduced by half. In 2021/22 tuition fees for all students in higher education are reduced by half (set at EUR 1084) as compensation for the months of online-only education during the COVID-19 pandemic.	Is it available for adults?	✓

ECVET or other credits 240 ECTS (92) points

Learning forms (e.g. dual, part-time, distance)

Higher professional education provides programmes for professions requiring both theoretical knowledge and specific skills. They are almost always closely linked to a particular profession or group of professions and most programmes include an internship. Higher professional education can also be attended part-time as part of professionally oriented adult education, and, for the last 10 years, in dual learning tracks.

Students (in 1 000s) in higher professional education, 2016-20 (*)



NB: (*) provisional data for 2020

Source: DUO 2020 (Dienst Uitvoering Onderwijs - Service Institution Education).

<https://www.ocwincijfers.nl/sectoren/hoger-onderwijs/kengetallen-hoger-beroepsonderwijs/studenten/ingeschrevenen-hoger-beroepsonderwijs>

Main providers

Higher professional bachelor programmes are provided by publicly financed universities of applied sciences (*hogescholen*). Non-subsidised, private providers can offer similar programmes if they have appropriate accreditation.

Share of work-based learning provided by schools and companies

The responsibility for curriculum development and assessment is in the hands of the universities of applied science. Various curricula and learning environments exist even for programmes related to the same profession.

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

- internships
- dual learning

Main target groups

Higher VET programmes are open to learners aged 17 or older.

Entry requirements for learners (qualification/education level, age)

Admission requires an upper secondary general or vocational education (EQF level 4) qualification. Some bachelor programmes apply additional admission criteria relating to the subjects learners studied in prior studies. Generally, these criteria do not apply to middle management upper secondary VET (MBO 4) graduates, as they currently have a legal right to enter higher professional programmes. However, by law, universities of applied science can apply stricter admission criteria also for MBO 4 graduates for specific programmes.

Assessment of learning outcomes

The responsibility for assessment is in the hands of the universities of applied science. The Dutch-Flemish accreditation body (NVAO) accredits the programmes once every 6 years. Higher professional bachelor degrees are awarded by the institutions themselves. Official recognition of programmes is granted as long as they are accredited by NVAO.

Diplomas/certificates provided	Learners can receive a higher professional bachelor degree upon successful completion of their studies.
Examples of qualifications	The programmes cover one or more of seven areas of study: 'green'/agriculture, technology, economics and services, health care, behaviour and society, culture and arts, and teacher training.
Progression opportunities for learners after graduation	A professional bachelor degree gives access to professional master degree programmes in higher professional education and university master degree programmes. A bridge programme for professional bachelor graduates often precedes their entry into an academic master programme. After completing the first year of a professional bachelor programme, entrance to a university bachelor programme is possible.
Destination of graduates	Information not available
Awards through validation of prior learning	✓
General education subjects	✗
Key competences	Information not available
Application of learning outcomes approach	Information not available
Share of learners in this programme type compared with the total number of VET learners	94% of all students in higher professional education (AD, professional bachelor and professional master programmes) are in professional bachelor programmes (provisional data for 2020) (93) .

[92] European credit transfer and accumulation system.

[93] OCW (2020): <https://www.ocwincijfers.nl/sectoren/hoger-onderwijs/kengetallen-hoger-beroepsonderwijs/studenten/ingeschrevenen-hoger-beroepsonderwijs> [extracted 16.9.2021].

EQF 7

Professional master
programmes

1 year

ISCED 757

Professional master programmes leading to EQF level 7, ISCED 757

EQF level	7	ISCED-P 2011 level	757
Usual entry age	21+	Usual completion age	22+
Length of a programme (years)	1		
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?	Information not available
Is it offered free of charge?	✗ A tuition fee is compulsory. For 2020/21 this fee is EUR 2143. In 2021/22 tuition fees for all students in higher education are reduced by half (set at EUR 1084) as compensation for the months of online-only education during the COVID-19 pandemic.	Is it available for adults?	✓
ECVET or other credits	Information not available		
Learning forms (e.g. dual, part-time, distance)	Information not available		
Main providers	Professional master programmes are provided by publicly financed universities of applied sciences (<i>hogescholen</i>). Non-subsidised, private providers can offer similar programmes if they have appropriate accreditation.		
Share of work-based learning provided by schools and companies	The responsibility for curriculum development and assessment is in the hands of the universities of applied science. Various curricula and learning environments exist, even for programmes related to the same profession.		
Work-based learning type (workshops at schools, in-company training / apprenticeships)	Information not available		

Main target groups	Higher professional bachelor programmes graduates
Entry requirements for learners (qualification/education level, age)	Access is provided to holders of a higher professional bachelor degree.
Assessment of learning outcomes	The responsibility for assessment is in the hands of the universities of applied science. The Dutch-Flemish accreditation body (NVAO) accredits the programmes once every 6 years. Higher professional bachelor degrees are awarded by the institutions themselves. Official recognition of programmes is granted as long as they are accredited by NVAO.
Diplomas/certificates provided	Professional master degree
Examples of qualifications	Information not available
Progression opportunities for learners after graduation	Those who complete a professional master degree can enter a Ph.D. programme.
Destination of graduates	Information not available
Awards through validation of prior learning	Information not available
General education subjects	✗
Key competences	Information not available
Application of learning outcomes approach	Information not available
Share of learners in this programme type compared with the total number of VET learners	2.8% of all students in higher professional education (associate degree, professional bachelor and professional master programmes) are in professional master programmes (provisional data for 2020) (94) .

[94] OCW (2020): <https://www.ocwincijfers.nl/sectoren/hoger-onderwijs/kengetallen-hoger-beroepsonderwijs/studenten/ingeschrevenen-hoger-beroepsonderwijs> [extracted 16.9.2021].

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