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Netherlands organization for international  
cooperation in higher education

# *The Education System in the Netherlands*



## The Education System in the Netherlands

The higher education system in the Netherlands is based on a three-cycle degree system, consisting of a bachelor, master and PhD. Until 2002, the first two cycles at research universities were combined in a single integrated cycle. The three-cycle system was officially introduced in the Netherlands at the beginning of the academic year 2002-2003, but degrees from the former, integrated system can be awarded until 2007-2009. For this reason, both the old and new systems will be described here.

The Netherlands has a binary system of higher education, which means there are two types of programmes: research-oriented education (*wetenschappelijk onderwijs, WO*), traditionally offered by research universities, and professional higher education (*hoger beroepsonderwijs, HBO*), traditionally offered by *hogescholen*, or universities of professional education. In this description, the Dutch abbreviations *WO* and *HBO* will be used.

### PRIMARY AND SECONDARY EDUCATION

Children are allowed to begin school at the age of four, but are not legally required to do so until the age of five. Primary education lasts eight years (of which seven are compulsory), in the last year of which pupils are advised as to the type of secondary education they should pursue.

Secondary education, which begins at the age of 12 and is compulsory until the age of 16, is offered at several levels. *VMBO* programmes (four years) combine general and vocational education, after which pupils can continue in senior secondary vocational education and training (*MBO*) lasting one to four years. The two programmes of general education that grant admission to higher education are *HAVO* (five years) and *VWO* (six years). Pupils are enrolled according to their ability, and although *VWO* is more rigorous, both *HAVO* and *VWO* can be characterized as selective types of secondary education. The *VWO* curriculum prepares pupils for university, and only the *VWO* diploma grants access to *WO*. The *HAVO* diploma is the minimum requirement for access to *HBO*. The last two years of *HAVO* and the last three years of *VWO* are referred to as the *tweede fase* (literally, second phase), or upper secondary education. During these years, pupils focus on one of four subject clusters (*profielen*), each of which emphasizes a certain field of study in addition to satisfying general education requirements. Each cluster is designed to prepare pupils for programmes of study at the tertiary level. A pupil enrolled in *VWO* or *HAVO* can choose from the following subject clusters:

- 1) Science and Technology (*Natuur en Techniek*)
- 2) Science and Health (*Natuur en Gezondheid*)
- 3) Economics and Society (*Economie en Maatschappij*)
- 4) Culture and Society (*Cultuur en Maatschappij*)

### SENIOR SECONDARY VOCATIONAL EDUCATION AND TRAINING (MBO)

Senior secondary vocational education and training (*MBO, secundair beroepsonderwijs*) is offered in the areas of economics, technology, health, personal care, welfare and agriculture. *MBO* programmes vary in length from one to four years as well as in level (1 to 4). Graduates of *VMBO* programmes are eligible for admission to *MBO*, and completion of *MBO* programmes at level 4 qualifies pupils for access to *HBO*.

### HIGHER EDUCATION

Higher education in the Netherlands is offered at two types<sup>1</sup> of institution: research universities (*universiteiten*) and universities of professional education (*hogescholen*). Research universities include general universities, universities specializing in engineering and agriculture, and the Open University. Research universities are primarily responsible for offering research-oriented programmes (*Wetenschappelijk Onderwijs, WO*). Universities of professional education include general institutions as well as institutions specializing in a specific field such as agriculture, fine and performing arts, or teacher training. Universities of professional education are primarily responsible for offering programmes of higher professional education (*Hoger Beroepsonderwijs, HBO*), which prepare students for particular professions. These tend to be more practically oriented than programmes offered by research universities.

<sup>1</sup> The higher education system also includes a third branch, with a relatively small number of students, known as *internationaal onderwijs (IO)*, or international education. *IO* offers advanced training courses originally designed for people from developing countries whose jobs require highly specialized knowledge. Problem-oriented courses and programmes of various types, including master's programmes, are offered in a wide range of specific fields. The emphasis can be either on research or on the practical application of knowledge. Courses are given in English and last from a few weeks to two years. With one exception (the Institute of Social Studies in The Hague), the institutes of international education do not offer PhD programmes themselves but have concluded agreements with Dutch universities which enable their students to pursue doctorates. Admission requirements vary according to the course in question, but in most cases a bachelor's degree or its equivalent is required for admission to a master's degree programme, and a master's degree for admission to a PhD programme. An additional requirement is work experience. International education is subsidized by the government, which finances the institutes and provides scholarships for students.

## WO until 2002

Dutch research universities provide education and conduct research in a wide range of disciplines: language and culture, behaviour and society, economics, law, medical and health sciences, natural sciences, engineering, and agriculture. Until 2002, initial study programmes lasted four years in most fields, but five years in agriculture, engineering, mathematics and most natural sciences, at the end of which the *doctorale getuigschrift* (doctoraal degree) or *getuigschrift van het afsluitend examen* (final examination degree certificate) was awarded. Integrated study programmes in medical and health sciences lasted either five years (dentistry), or six years (medicine, pharmacy, veterinary medicine). The first year of every programme, referred to as the *propedeuse*, provided students with introductory courses fundamental to the field in question. In the years that followed, every *doctoraal* programme featured training in research methodology and completion of a thesis as required components.

Graduates of *doctoraal* programmes have been permitted by law to use a particular title, depending on the discipline. Graduates in engineering and technology and in agriculture and the natural environment received the title of *ingenieur*, abbreviated to *ir.* Graduates in law obtained the title of *meester*, abbreviated to *mr.* Graduates in all other disciplines obtained the title of *doctorandus*, abbreviated to *drs.* All graduates could also opt to use the title Master (M.) if they wished. Graduation from a *doctoraal* programme made one eligible to pursue a doctorate.

All research universities in the Netherlands were entitled to award the country's highest academic degree, the *doctoraat*, which entitles a person to use the title *doctor*, abbreviated to *dr.* The process by which a doctorate is obtained is referred to as the *promotie*. The doctorate is primarily a research degree, for which a dissertation based on original research must be written and publicly defended. The minimum amount of time required to complete a doctorate was four years.

## HBO until 2002

Dutch universities of professional education prepare students for a wide variety of careers in seven sectors: agriculture, engineering and technology, economics and business administration, health care, fine and performing arts, education (teacher training), and social welfare. Initial study programmes lasted four years, at the end of which the *Getuigschrift Hoger Beroepsonderwijs* or HBO degree was awarded. The first year of every programme, referred to as the *propedeuse*, consisted of introductory courses fundamental to the discipline in question. In addition to lectures, seminars, projects and independent study, students were required to complete an internship or work placement (*stage*) which normally takes up part of the third year of study, as well as a final project or a major paper in the fourth year.

Graduates of an HBO programme in engineering and technology or agriculture and the natural environment received the title of *ingenieur*, abbreviated to *ing.* Graduates in all other disciplines obtained the title of *baccalaureus*, abbreviated to *bc.* All graduates could also opt to use the title Bachelor (B.) if they wished. HBO graduates are fully qualified to practise their profession without any further study, licensing or registration with a professional association.

## After 2002

Since September 2002, the higher education system in the Netherlands has been organized around a three-cycle degree system consisting of bachelor, master and PhD degrees.<sup>2</sup> At the same time, the ECTS credit system was adopted as a way of quantifying periods of study. The higher education system continues to be a binary system, however, with a distinction between research-oriented education (*wetenschappelijk onderwijs, WO*) and professional higher education (*hoger beroepsonderwijs, HBO*).

The focus of degree programmes determines both the number of credits required to complete the programme and the degree which is awarded. A WO bachelor's programme requires the completion of 180 credits (3 years) and graduates obtain the degree Bachelor of Arts or Bachelor of Science (BA/BSc), depending on the discipline. An HBO bachelor's programme requires the completion of 240 credits (4 years), and graduates obtain a degree indicating the field of study (for example, Bachelor of Engineering, B. Eng., or Bachelor of Nursing, B. Nursing). The old title appropriate to the discipline in question (*bc., ing.*) may still be used.

Institutions offer WO master's programmes that in most cases require the completion of 60 or 120 credits (1 or 2 years). Some programmes require 90 (1,5 years) or more than 120 credits. In engineering, agriculture, and math and the natural sciences, 120 credits are always required. Graduates obtain the degree of Master of Arts or Master of Science (MA/MSc). The old title appropriate to the discipline in question (*drs., mr., ir.*) may still be used. An HBO master's programme requires the completion of 60 to 120 credits and graduates obtain a degree indicating the field of study (for example, Master of Social Work, MSW).

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<sup>2</sup> Degree programmes in dentistry (300 credits) and medicine and veterinary medicine (360 credits) will continue to be offered as integrated programmes until approximately 2007-2008. Programmes in pharmacy will continue to require completion of 360 credits, divided into a bachelor's and a master's phase (3 + 3 years).

The third cycle of higher education, leading to a doctor's degree, will be offered only by research universities in the same way as described above.

### **Requirements for Admission to Higher Education**

For access to *WO* bachelor's programmes, students are required to have a *VWO* diploma or to have completed the first year (60 credits) of an *HBO* programme. The minimum access requirement for *HBO* is either a *HAVO* diploma or a level-4 *MBO* diploma. The *VWO* diploma also grants access to *HBO*. For access to both types of higher education, pupils are required to have completed at least one of the subject clusters that fulfills the requirements for the higher education programme in question. A quota, or *numerus fixus*, applies for access to certain programmes, primarily in the medical sciences, and places are allocated using a weighted lottery. Potential students older than 21 years of age who do not possess one of the qualifications mentioned above can qualify for access to higher education on the basis of an entrance examination and assessment.

The only access requirement for the Open University is that applicants be at least 18 years of age.

For access to all master's programmes, a bachelor's degree in one or more specified disciplines is required, in some cases in combination with other requirements. Graduates with an *HBO* bachelor's degree may have to complete additional requirements for access to a *WO* master's degree programme.

### **Credit System and Grading**

Workload is measured in credits (*studiepunten*). Until 2002, one credit represented one week of full-time study (40 hours, counting both contact hours and hours spent studying and preparing assignments). Study programmes offered by research universities and universities of professional education lasting four years required completion of a total of 168 credits, or 42 credits per year. The academic year was (and still is) 42 weeks long.

Since 2002, a student's workload is measured in ECTS credits, whereby according to Dutch law one credit represents 28 hours of work and 60 credits represents one year of full-time study. The grading system has been the same for several decades: the scale is from 1 (very poor) to 10 (outstanding). The lowest passing grade is 6; 9s are seldom given and 10s are extremely rare and grades 1-3 are hardly ever used.

### **Accreditation and Quality Assurance**

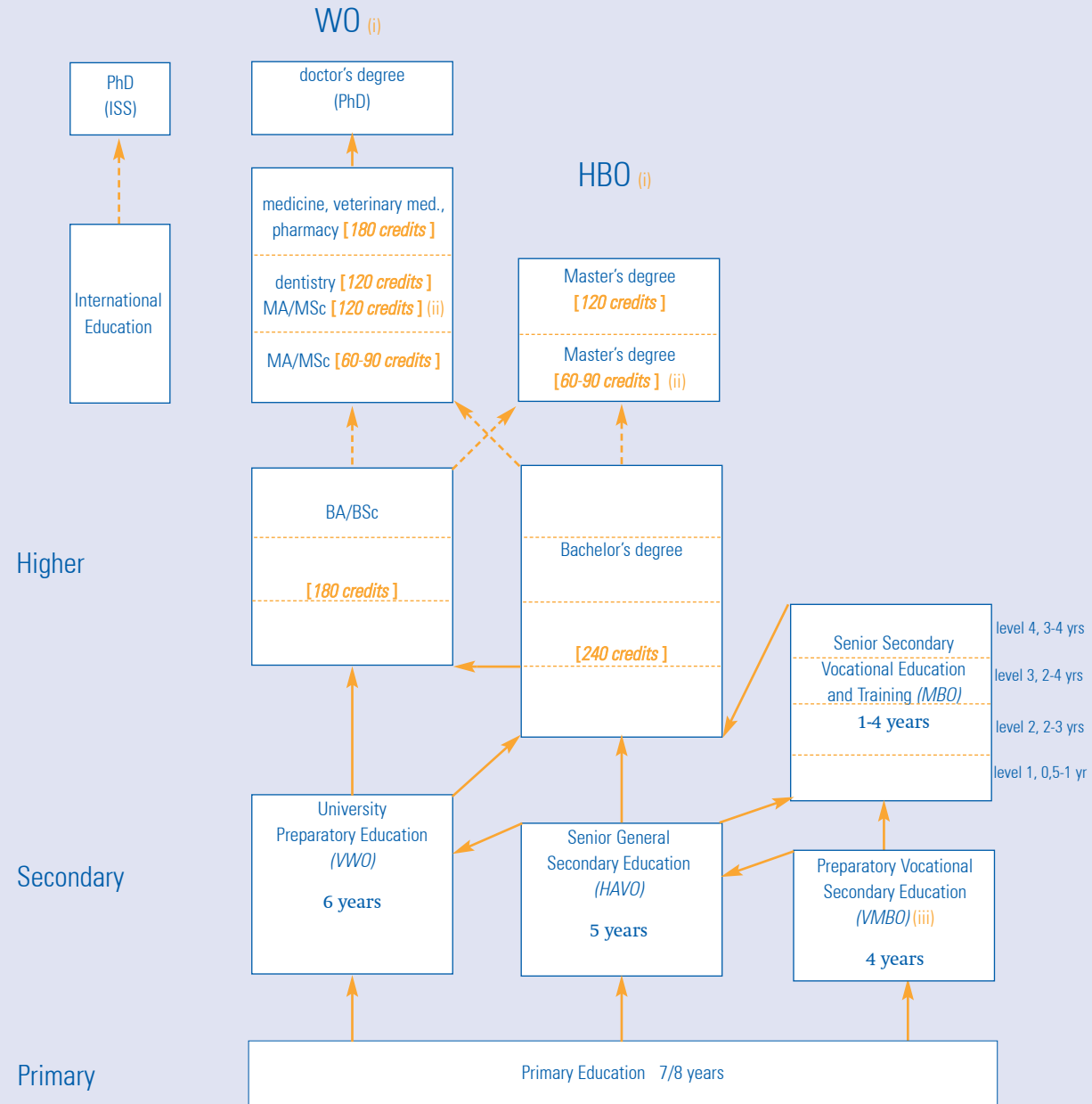
A guaranteed standard of higher education is maintained through a national system of legal regulation and quality assurance. The Ministry of Education, Culture and Science is responsible for legislation pertaining to education. The agriculture and public health ministries play an important role in monitoring the content of study programmes in their respective fields, and until 2002, the *VSNU* (Association of Universities in the Netherlands) and the *HBO-raad* (Netherlands Association of Universities of Professional Education) were responsible for implementing the system of quality assurance.

This system has been recently converted to a system of accreditation. As of 2002, responsibility for accreditation lies with the Netherlands-Flemish Accreditation Organization (*NVAO*). According to the section of the Dutch Higher Education Act dealing with the accreditation of higher education (2002), all degree programmes offered by research universities and universities of professional education will be evaluated according to established criteria, and programmes that meet those criteria will be accredited: i.e. recognized for a period of six years. Only accredited programmes will be eligible for government funding, and students will receive financial aid and graduate with a recognized degree only when enrolled in, or after having completed, an accredited degree programme. Accredited programmes will be listed in the Central Register of Higher Education Study Programmes (*CROHO*) and the information will of course be available to the public. The *NVAO* plans to review all study programmes by 2006. Before that time, all programmes that are registered in *CROHO* that have adhered to the quality assurance regulations, are considered to be recognized by law.

Besides the accreditation of degree programmes, the Netherlands has a system by which the Ministry of Education, Culture and Science recognizes higher education institutions by conferring on them the status of either *bekostigd* (funded) or *aangewezen* (approved). *Bekostigd* indicates that the institution is fully financed by the government. *Aangewezen* indicates that the institution does not receive funds from the government and has to rely on its own sources of funding. Whether a degree programme is offered by a 'funded' or an 'approved' institution, it must be accredited and registered in *CROHO* to be considered recognized.

According to legislation regarding accreditation, institutions are required to write on degree certificates the date that the degree programme in question was granted accreditation. At this stage, only a few programmes have actually been accredited. Because accreditation is an ongoing process, it will be important that people who review Dutch degrees make sure that a programme was accredited at the time the degree was awarded. Once accredited, the validity of the accreditation of that particular degree is of course permanent.

# Diagram of the Dutch Education System



(i) WO = wetenschappelijk onderwijs  
HBO = hoger beroepsonderwijs

(ii) Most WO master's degrees require completion of 60-90 credits; those in engineering, mathematics, natural sciences, and agriculture require 120 credits, and those in pharmacy 180 credits. Programmes in dentistry (300 credits) and medicine/veterinary medicine (360 credits) are still offered as integrated programmes leading to only one degree. HBO master's degrees require completion of between 60 and 120 credits.

(iii) Only 1 of 4 types of VMBO qualifies for access to HAVO

\* a solid arrow (→) indicates a right to access  
\* a dotted arrow (---→) indicates that some form of selection or bridging requirement may be applied.