

A. Engineering Education

In the Netherlands there are two types of engineering programs. The engineering education at the universities of professional education is application oriented (short cycle) and the engineering education at the universities of technology is theoretical oriented (long cycle). ***Only the engineers of the universities of technology (long cycle) are the object of the CLAIU-EU Register.***

See appendix I, diagram

1. Universities of professional education (Hogeschool) - bachelor level

Courses of 4 years' study (including 1 year's practical training (3U + 1T)).

The training period is an integral part of the study and is supervised by the university of professional education. Besides the engineering programs also agricultural programs are offered by these institutions (and all other disciplines).

Graduates bear the legally protected title of 'ingenieur', abbreviated to 'ing.' before their name or since 2002 the Bachelor of Engineering (BEng.) degree after their name. In accordance with the Dutch Law, universities of professional education may also offer a Master course of 1 year. Those professional masters are not always financed by the government.

Addresses and information about the programs and the institutes can be found on www.hbo-raad.nl.

2. Universities of technology (TH or TU) - master level

Until the academic year 1982-1983, all programs of the universities of technology entailed a 5 years' curriculum. As from 1983 until 1994, all university formations became 4 years' study (but in reality this remained a compressed 5 year curriculum). The law changed again and from the academic year 1995-1996 onward, university engineering education entails a 5 years' program, with exceptions for some specialisations.

Graduates bear the legally protected title of 'ingenieur', abbreviated to 'ir.' before their name or since 2002 after their name the Master of Science (MSc) degree after a 5 years' program and the Bachelor of Science (B.Sc.) degree after finishing the undergraduate program of three years.

Addresses and information about the programs and institutes can be found on:

Delft University of Technology: see www.tudelft.nl

The University of Twente: see www.utwente.nl

Eindhoven University of Technology: see www.tue.nl

The University of Groningen (3 programs in engineering): see www.rug.nl

Wageningen University (agricultural): see www.wau.nl

Open University (1 program in engineering): see www.openuniversiteit.nl

B. Academic Titles

See the academic degrees until academic year 2001-2002 – appendix II. A new legislation introduces the Bachelor/Master structure from 2002-2003 onwards. Bachelor of Engineering, BEng. for the 4 years' study at the University of Professional Education. Bachelor of Science, BSc. after 3 years' study and Master of Science, MSc after another 2 years' study at the University of Technology (TH or TU). The Bachelor/Master degrees are followed by the engineering domains.

See further – appendix II.

Accreditation and quality control

NVAO (Nederlands-Vlaamse Accreditatieorganisatie) is the Dutch-Flemish accreditation organisation. It was established by international treaty and guarantees the quality of higher education in the Netherlands and Flanders by means of accrediting study programs.

Apart from its task to guarantee the quality of higher education, NVAO contributes to the advancement of higher education in the Netherlands and Flanders. In addition, it contributes to quality awareness and draws attention to the distinctive features of study programs in higher education in the Netherlands and Flanders in national and international perspective.

The organisation achieves its mission, by:

1. Accrediting existing study programs in higher education (basic quality assessment).
2. Validating new study programs in higher education (anticipated basic quality).
3. Contributing towards stressing the distinctive features of study programs in higher education or institutions by assessing the specific quality features of existing study programs at the request of institutions.
4. Advancing both the European and the international dimension in Dutch and Flemish accreditation and maintaining international contacts in order to reach agreement and cohesion.
5. Performing other commissioned tasks. For instance, providing recommendations on lengthening the master's degree courses in university education in the Netherlands.

6. Contributing to the public debate on the developments in higher education within the scope of our primary tasks

The legal framework

In the Netherlands, the tasks of NVAO are based on the Higher Education and Research Act [Wet Hoger Onderwijs en Wetenschappelijk Onderzoek, WHW] which, in short contains, accrediting existing study programs, validating new study programs in higher education and advising on the possible lengthening of master's degree courses in university education.

For more information about accreditation see www.nvao.nl

De Nederlandse-Vlaamse Accreditatie Organisatie

Bezoekadres

Parkstraat 28

NL- 2514 JK Den Haag

Postbus 85498

NL- 2508 CD Den Haag

Tel.: +31 (0)70 312 23 00

Fax: +31 (0)70 312 23 01

E-mail: info@nvao.net

C. Academic title protection

According to the Dutch Law, only the titles in the Dutch language are protected, i.e. for the universities of technology "ingenieur, ir." and for the engineering programs of the universities of professional education "ingenieur, ing."

The Dutch Minister of Education does not protect the English titles MSc, BSc, B and M because these are granted by education institutions all over the world.

Art. 7.20 Act Higher Education and Scientific Research.

D. Admittance conditions to studies

Admission to university studies is possible after completing 6 years' pre-university scientific education, starting at the age of 12 (VWO = voorbereidend wetenschappelijk onderwijs). There are 4 pre-university study profiles. Only pupils with the study profile of 'Natuur en Techniek' and 'Natuur en Gezondheid' are admitted to the programs of the universities of technology (i.e. a prerequisite of mathematics and sciences).

Admission to studies at the universities of professional education is possible after completing 5 years' pre-university senior secondary education (HAVO = hoger algemeen voortgezet onderwijs) or with a diploma of MTS/MBO. Graduates from the universities of professional education have access to the third/ fourth academic year of programs at the universities of technology. Shortages in study courses must be made up. Access to the 'Open University Netherlands (OUN)', does not need preliminary education. Access is free to anyone at the minimum age of 18 years.

Postgraduate studies:

1. PhD-Degree:

Graduates from the universities of technology can proceed to a PhD at the universities of technology on the basis of 'promotion'. The promotion lasts 4 years as 'assistant in opleiding' (AIO). It is also possible for graduates from the universities of professional education to proceed to a PhD program. However this is less common. The title of doctor (dr.) is legally protected (article 7.18, WHW revised sept. 2002 - Act on higher education and scientific research). This title corresponds with the PhD degree.

2. Professional Doctorate

Graduates from the universities of technology, MSc. or BSc. in combination with workexperience, can proceed to a professional doctorate at the universities of technology. The program lasts two years and educates the trainees in technological design. They receive the postgraduate degree 'Professional Doctorate in Engineering (PDEng).

E. Access to the engineering profession

The engineering profession is totally free, both in public services' as well as in the private sector. However, the academic legally protected titles of 'ingenieur', 'ir' or 'ing', guarantees a certain indirect protection of the professional qualifications.

The profession is regulated for architects:

To be registered in the Architects Register as an architect or an expert in urban development, professionals have obtained the diploma architecture or urban development organised at the department civil engineering of the University of Technology of Delft or Eindhoven. Other professional activities i.e. garden and landscape architect, interior design architect can also be registered, provided that the appropriate education diplomas are obtained. Any one who can not present the requested diploma must pass successful the by law organised architect exam.

STICHTING ARCHITECTENREGISTER

Nassauplein 24

P.O.Box 85.506

NL – 2508 CE Den Haag

Tel: ++ 70-346.70.20

Fax: ++ 70-360.30.28

Email: info@architectenregister.nl

member of ACE, Architects Council of Europe

Foreigners are advised to classify their study to a similar Dutch study and degree by IBG and NUFFIC (see below).

ACADEMIC RECOGNITION OF FOREIGN DIPLOMAS

Diploma evaluation www.ib-groep.nl (diplomawaardering).

The Information Administration Organisation (Informatie Beheer Groep – ‘IBG’) in Groningen is an independent institution effective by Order of the Dutch Minister of Education, Culture and Sciences and the educational institutions. The department Diploma evaluation of IBG verifies the academic recognition of foreign academic titles and has the legal authority to transform a foreign academic title into a Dutch corresponding title.

Informatie Beheer Groep

Hoofdkantoor:

Kempkensberg 2 en 6

NL- 9722 TB Groningen

Tel.: +31 (0)50599 99 99

Fax: +31 (0)50 599 98 50

Postbus 30155

NL- 9700 LG Groningen

NUFFIC

Dutch Organisation for International Co-operation in Higher Education.

NUFFIC belongs to the international NARIC network. This organisation gives individuals advice on the correspondence of their Dutch education title with foreign degrees. It has however no legal authority for academic diploma recognition (see above).

NUFFIC
Kortenaerkade 11
Postbus 29777
NL- 2502 LT Den Haag (The Hague)
www.nuffic.nl
Tel.: +31-70-426 02 60
Fax: +31-70-426 03 99
Email: nuffic@nuffic.nl

F. Representation of the profession

KIVI NIRIA

Introduction

The Royal Institution of Engineers in the Netherlands KIVI NIRIA is a learned society, founded in 1847 by and on behalf of professional engineers, and is the oldest on the continent. Its headquarters is in The Hague. It promotes the professional, personal and social interests of its members; it is not, however, a trade union.

Membership is open to graduates and students (from 1st year onwards) of the Dutch Universities of Technology of Delft, Eindhoven and Twente, the Agricultural University of Wageningen, the technical faculties of the University of Groningen and to all graduates and students of the faculties/ institutes of technology and agriculture from the universities of professional education (hbo). The university engineering education in the Netherlands entails a 5 years' program and the education of the universities of professional education entails a 4 years' program. Currently, KIVI NIRIA has more than 28.000 members, of whom about 1.500 are students. The statutes are listed in the appendix III.

Organisation

The members of the Representative Council (60) and of the Executive Board (12) are chosen from and by the members of KIVI NIRIA. Duration is for a period of three years, with the possibility of continuation for a further three years. The Executive Board and the daily Management Committee (6 members) are chaired by the President. The basis and the heart of the Institution are its 34 Divisions, which are active in the following disciplinary fields:

* Applied Physics * Marine Engineering * Architecture / Structural Building * Mechanical Engineering * Automatic Control * Mechanical Engineering Design * Automobile Engineering * Mechanics * Business Administration * Mining Engineering * Civil Engineering * Nuclear Engineering * Offshore Engineering * Petroleum Engineering *

Defence Technology * Philosophy and Technology * Electrical Engineering * Polytechnic lectures * Environmental Engineering * Process Technology * Geotechnology * Production Technology * Biomedical Engineering * Sales Engineering * Technology, Society & Economics * Heat Technology * Telecommunication * History of Technical Science * Traffic and Transport Engineering * Industrial Design Engineering * Transportation Engineering * Information Technology * Tunnelling and Underground Works * Water Management

In addition to these specialised Divisions and an energetic Junior Division, which has 4.000 young members including students, there are 18 regional Departments. The Divisions and Departments organise annually approximately 600 events such as seminars, symposia, excursions, conferences, lectures and courses on various technical and technology related subjects.

The Institution publishes a fortnightly magazine De Ingenieur, which was founded in 1887 and has a current circulation of 35.000 and about 100.000 readers. In addition, members can also subscribe to various professional journals at attractive reduced rates. Furthermore, the Institution publishes a variety of reports, brochures and suchlike on technical and technology related subjects and issues regulations and directives for professional practice. Some publications are in English. Like the quarterly Journal A for Automation Control.

International contacts

KIVI NIRIA is a member of CLAIU-EU (Council of Associations of long cycle Engineers of a University or Higher school of engineering of the European Union) and of FEANI (European Federation of National Engineering Associations).

Agreements of Co-Operation

Apart from these memberships, the Institution has agreements of co-operation with a number of engineering institutions and societies such as in the UK, the Institution of Civil Engineers(ICE) and the Institution of Mechanical Engineers (IMechE) and in the USA the American Society of Mechanical Engineers (ASME) and the American Society of Civil Engineers (ASCE).

Most divisions take part in international conferences in their field of science or technology in co-operation with their counterparts. Some divisions are members of European and/or international federations active in the same disciplinary field, such as the Convention of National Societies of Electrical Engineers of Western Europe (EUREL), the European Federation of Chemical Engineers (EFChE) and the International Federation of Automatic Control (IFAC).

They may also act as an observer in organisations such as the European Committee of Civil Engineers (ECCE).

Address

Koninklijk Instituut Van Ingenieurs (KIVI NIRIA)
23 Prinsessegracht
P.O. Box 30424
2500 GK The Hague
The Netherlands

Internet: www.ingenieurs.net

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International facsimile: ++ 31 70 391 98 40

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F. LIST OF APPENDICES

APPENDIX I: SCHEME OF THE PATHS OF ENGINEERING EDUCATION

APPENDIX II: UNIVERSITIES OF TECHNOLOGY / ENGINEERING PROGRAMS

APPENDIX III: STATUTES KIVI-NIRIA

APPENDIX IV: ACT OF 8TH OCTOBER 1992 ON HIGHER EDUCATION AND SCIENTIFIC RESEARCH (REVIEWED SINCE 2002)