europass

CERTIFICATE SUPPLEMENT(*)

the Netherlands

1. TITLE OF THE CERTIFICATE (NL)

Diploma Beroepsonderwijs
Kwalificatie: Technicus elektrotechnische systemen
Kwalificatiedossier: Mechatronische systemen

In the original language

2. TRANSLATED TITLE OF THE CERTIFICATE (EN)

Certificate Senior Secondary Vocational Education
Qualification: Technician electrotechnical systems
Qualification file: Mechatronic systems

This translation has no legal status

3. PROFILE OF SKILLS AND COMPETENCES

Core task 1: Produces (intermediate) electro-technical and mechatronic products
1.1 Interprets information from the job site and prepares for the work
1.2 Constructs (intermediate) electro-technical and mechanical engineering products
1.3 Places and checks mechanical components
1.4 Connects parts and (intermediate) products

Core task 2: Controls and directs the work process
2.1 Consults on work to be done
2.2 Plans and organises the execution of the work
2.3 Monitors the progress of the developing process
2.4 Maintains contact with stakeholders
2.5 Instructs and supervises less experienced colleagues

Core task 3: Checks and tests (intermediate) electro-technical and mechatronic products
3.1 Does preparatory work for testing activities
3.2 Checks connection of mechatronic and electro-technical components
3.3 Assists in testing installations and products
3.4 Administers and archives product data

Core task 4: Installs and modifies electro-technical products
4.1 Collects electro-technical information
4.2 Makes technical sketch of the installation or modification
4.3 Works out in detail the design of electro-technical installation
4.4 Lay conduits for electro-technical products and systems and checks them
4.5 Adjusts and regulates electro-technical products and systems
4.6 Tests installed electro-technical products and systems for functioning
4.7 Rounds off installation working duties
4.8 Builds and monitors pilot installation
4.9 Assists in testing the electro-technical pilot installation

4. RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE CERTIFICATE

A Technician electro-technical systems can work at both small and (very) large electro-technical and metal work companies within the industry and appliance production sectors. This involves both companies producing

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*** Explanatory note**
This document is designed to provide additional information about the specified certificate and does not have any legal status in itself. The format of the description is based on the following texts: Council Resolution 93/C 49/01 of 3 December 1992 on the transparency of qualifications, Council Resolution 96/C 224/04 of 15 July 1996 on the transparency of vocational training certificates, and Recommendation 2001/613/EC of the European Parliament and of the Council of 10 July 2001 on mobility within the Community for students, persons undergoing training, volunteers, teachers and trainers.
More information is available at: http://www.europass.cedefop.europa.eu/

4. Range of occupations accessible to the holder of the certificate

intermediate products to supply to other companies to be made into a full final product and production of mechatronic products and/or machines. The Technician electro-technical systems mostly works within the electro-technology and electronics branch of
industry. Furthermore he can work with ICT (hardware), measurement & control technology and equipment engineering.

5. Official basis of the certificate

Name and status of the body awarding the certificate	**Name and status of the national/regional authority providing accreditation/recognition of the certificate**
The certificate issued on completion of the programme is signed by the examination board at the school where the pupil attended the programme.	Ministry of Education, Culture and Science
Level of the certificate (national or international) Qualification level 4 of the Dutch VET qualification structure Characteristics: non-job related skills such as tactical and strategic capacities. The professional bears his or her own responsibility, which is not only related to practical implementation in terms of monitoring and supervision, but also a more formal, organisational responsibility. The range of tasks also includes drafting new procedures. NLQF-niveau 4 - EQF level 4 - ISCED 3A	**Grading scale / Pass requirements** 10 excellent 9 very good 8 good 7 very satisfactory 6 pass 5 fail 4 unsatisfactory 3 very unsatisfactory 2 poor 1 very poor
Access to next level of education/professions The Technician electro-technical systems can develop through higher professional education. The most logical options would be educations in technology/physics such as Electro-technology, Technical business economy, Industrial product design and Equipment engineering. A Technician electro-technical systems can also expand his expertise to become a Technician electro-technical installations, Planner/drafter and All-round machine builder, or expand to another technical sector such as Equipment engineer installation technology, Refrigeration and climate control technology, Building completion & renovation engineering or develop to become a specialist or supervisor in the field of electro technical industrial products and systems as a designer/product developer/project manager (through higher professional education).	**International agreements** Technician electrotechnical systems is not a regulated profession in the Netherlands. However, the education and training for this profession on qualification level 4 is regulated under the European directive 2005/36/EC, amended by directive 2013/55/EU. The regulated education and training gives access to regulated professions at the level of a diploma according to article 11 of this directive.

Legal basis
Act on Vocational Education and Training (WEB), registered number of qualification (crebo): 25343
The education and training for this qualification is offered as of 01-08-2015.

6. Officially recognised ways of acquiring the certificate

Senior secondary vocational education features two learning pathways: the school-based pathway (bol) and the training on the job pathway (bbl).
In the school-based pathway, the majority of the course consists of theory at school. The extent of the practical component (vocational practice) is between 20% and 60%. In the training on the job pathway, the extent of vocational practice is at least 60% of the course. The participant works four days a week in a training company, and attends school for theory subjects just one day a week.
In principle it is possible to follow both learning pathways, but which pathway is offered will depend on the individual educational institution.

Average duration of the education/ training leading to the certificate	**3 years (4800 study hours) (depending on previous education)**

6. Officially recognised ways of acquiring the certificate

Entry requirements
The certificate preparatory vocational secondary education (vmbo) advanced vocational programme, combined programme, or theoretical programme, or a comparable level.

7. Additional information

Dutch senior secondary VET is based on qualification files, that each contain one or more qualifications. The information included in part 3 and 4 is derived directly from the qualification file determined by the Minister of Education, Culture and Science. The complete qualification file can be found at kwalificaties.s-bb.nl, only in Dutch.

Optional subjects are linked to the qualification. The optional subjects have a total size of 15% of the course duration. The optional subjects completed by the student are listed on the certificate.

Additional information, including a description of the Dutch national qualifications system, is available at the Netherlands National Reference Point (NRP): www.s-bb.nl. The NRP is the information centre for vocational qualifications in the Netherlands. SBB has been appointed in this capacity by the Ministry of Education, Culture and Science.