



CERTIFICATE SUPPLEMENT (*)



TITLE OF THE QUALIFICATION (FI)
TITLE OF THE QUALIFICATION (SV)

**Sähkö- ja automaatiotekniikan perustutkinto, 120 ov,
sähkö- ja automaatiotekniikan koulutusohjelma/osaamisala, automaatioasentaja/sähköasentaja (FI)**

Tutkinnon perusteiden voimaantulopäivä 1.8.2009

TRANSLATED TITLE OF THE QUALIFICATION (EN)

**Vocational Qualification in Electrical and Automation Engineering, 120 credits,
Study Programme/Competence Area in Electrical and Automation Engineering,
Automation Assembler/Electrician (EN)**

Requirements of the Qualification entered into force on 1st August 2009

This translation has no legal status.

PROFILE OF SKILLS AND COMPETENCES

Composition of the qualification

The compulsory modules for all candidates are **basic skills in electrical and automation engineering (30 cr.)** and **electrical and automation installations (20 cr.)**. In addition, candidates taking the Study Programme/Competence Area in Electrical and Automation Engineering specialising as Electricians must also take the **electrical engineering and energy technology module (20 cr.)**. Those taking the Study Programme/Competence Area in Electrical and Automation Engineering specialising as Automation Assemblers must also take either **manufacturing automation (20 cr.)** or **process automation (20 cr.)**. The qualification includes optional modules that support vocational specialisation, such as **automation and information systems in properties** and **electrical network installations**. Furthermore, it is possible to choose modules from other vocational, further and specialist qualifications. In addition, students on curricular (school-based) upper secondary VET programmes may also take qualification modules developed to meet the needs of the local world of work. The total scope of vocational qualification modules is 90 credits (scopes do not apply to competence-based qualification modules). In addition, students on curricular (school-based) upper secondary VET programmes must take 20 credits of core subjects and 10 credits of free-choice qualification modules. Students may individually choose modules to expand the qualification.

Vocational skills and competences required for completion of the qualification

Automation Assemblers who have completed the qualification shall:

- know how to install regulating, manufacturing and control systems and robotics;
- know how to perform basic installation, servicing and maintenance assignments in electrical and automation engineering;
- be able to use working methods in line with occupational and electrical safety regulations;
- be able to use and handle materials, components and tools;
- know how to work in compliance with occupational safety instructions and maintain their working and functional capacity.
- be able to work in compliance with the principles of business operations and sustainability;
- be able to function proactively, co-operatively and in a quality-conscious and service-oriented manner;
- know how to draw up the necessary messages and work reports, making use of information technology;
- be able to assume responsibility for their own work, assess their own work performance and develop their vocational skills;
- be able to manage in work-related interactive situations in both national languages and in one foreign language.

Electricians who have completed the qualification shall:

- know how to perform electrical installations in properties and either building automation installations or tasks relating to installation, servicing and maintenance of electrical networks;
- know how to perform basic installation, servicing and maintenance assignments in electrical and automation engineering;
- be able to use working methods in line with occupational safety and electrical work and electrical safety regulations;
- know how to maintain their working and functional capacity;
- be able to work in compliance with the principles of business operations and sustainability;
- be able to function proactively, co-operatively and in a quality-conscious and service-oriented manner;
- know how to draw up the necessary messages and work reports, making use of information technology;
- be able to assume responsibility for their own work, assess their own work performance and develop their vocational skills;
- be able to manage in work-related interactive situations in both national languages and in one foreign language.

RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE CERTIFICATE

Those who have completed the qualification may work in installation and servicing of electrical and automation systems in properties and various plants or electricity distribution networks.

OFFICIAL BASIS OF THE CERTIFICATE

<p>Name and status of the body awarding the certificate</p> <p><i>A vocational education and training provider authorised by the Ministry of Education and Culture. The qualification certificate for an upper secondary vocational qualification completed as a competence-based qualification is awarded by the Qualification Committee appointed by the National Board of Education.</i></p>	<p>Name and status of the national/regional authority providing accreditation/recognition of the certificate</p> <p><i>Ministry of Education and Culture Finnish National Board of Education, a central administrative board operating under the auspices of the Ministry of Education and Culture</i></p>
<p>Level of the certificate (national or international)</p> <p><i>EU classification level 3 Upper secondary level, ISCED 3</i></p>	<p>Grading scale/Pass requirements</p> <p><i>Excellent 3 Good 2 Satisfactory 1 Lowest acceptable performance 1</i></p>
<p>Access to the next level of education/training</p> <p><i>The qualification confers eligibility to continue at higher education institutions.</i></p>	<p>International agreements</p>
<p>Legal basis</p> <p><i>Vocational Education and Training Act (630/1998); Vocational Education and Training Decree (811/1998) Vocational Adult Education Act (631/1998); Vocational Adult Education Decree (812/1998)</i></p>	

OFFICIALLY RECOGNISED WAYS OF OBTAINING THE CERTIFICATE

By virtue of statutes, the qualification certificate may be obtained in one of three ways:

- 1. The qualification may be completed as upper secondary vocational education and training, where the studies primarily take place at an educational institution. The education and training also include practical studies at the educational institution as well as studies at a workplace with a scope of at least 20 credits. The qualification certificate is awarded by the education provider with an authorisation granted by the Ministry of Education and Culture to provide education and training.*
- 2. The qualification may be completed as a competence-based qualification, where vocational skills are assessed regardless of how they have been acquired. The qualification certificate is awarded by the Qualification Committee appointed by the National Board of Education.*
- 3. The qualification may be completed as apprenticeship training. In this case, 70–80% and 30–20% of studies take place at a workplace and at an educational institution respectively. The student has a fixed-term contract of employment. The qualification certificate is awarded by the education provider or by the Qualification Committee.*

Entry requirements

*The syllabus of basic education (primary and lower secondary levels) or a corresponding previous syllabus in curricular upper secondary vocational education and training.
Competence-based qualifications may be completed irrespective of how the vocational skills and competences have been obtained. No formal entry requirements have been specified for those participating in competence tests.*

Additional information

*Learning outcomes are assessed nationally by field, either based on samples or covering all students. The Finnish National Board of Education is responsible for national assessments of learning outcomes.
The statutory teaching qualifications required in upper secondary vocational education and training are a higher education degree and pedagogical studies with a scope of 35 credits. In addition, teachers of vocational studies are required to have three years of experience in their teaching field.
More information (including a description of the national qualifications system) is available at: www.oph.fi/info/recognition.*

National Reference Point (NRP)

*Finnish National Board of Education
P.O. Box 380
FI-00531 Helsinki, Finland
recognition@oph.fi*

(*) 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 on transparency is available by going to: www.cedefop.eu.int/transparency

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