



# CERTIFICATE SUPPLEMENT (\*)



TITLE OF THE QUALIFICATION (FI)

TITLE OF THE QUALIFICATION (SV)

***Prosessiteollisuuden perustutkinto 120 ov, prosessinhoitaja,  
biotekniikan koulutusohjelma/osaamisala, (FI)***

Tutkinnon perusteiden voimaantulopäivä 1.8.2010

TRANSLATED TITLE OF THE QUALIFICATION (EN)

***Vocational Qualification in the Processing Industry, 120 credits, Process Operator,  
Study Programme/Competence Area in Biotechnology (EN)***

Requirements of the Qualification entered into force on 1<sup>st</sup> August 2010

This translation has no legal status.

PROFILE OF SKILLS AND COMPETENCES

***Composition of the qualification***

*The compulsory qualification modules for all candidates are **maintenance management** (20 cr.) and **production processes and process control** (30 cr.). Candidates choosing the Study Programme/Competence Area in Biotechnology must also take the **management of biotechnological processes** module (20 cr.). The qualification includes optional modules that support vocational specialisation, such as working as a process operator in development and test run operations, plant-specific production process management, application of intelligent technologies, bioenergy production, energy production, application of environmental technologies and water treatment. 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***

*Those who have completed the qualification shall know how to:*

- *work in accordance with the requirements of clean room classifications;*
- *make use of biological materials in their work;*
- *attend to quality;*
- *operate machinery and equipment used in biotechnological manufacturing or packaging processes;*
- *take representative samples, analyse these and correct the process as required;*
- *assess products through sensory evaluation;*
- *take occupational safety into account;*
- *work in compliance with the principles of business operations and sustainability;*
- *function proactively, co-operatively and in a quality-conscious and service-oriented manner;*
- *draw up the necessary messages and work reports, making use of information technology;*
- *assume responsibility for their own work, assess their own work performance and develop their vocational skills;*
- *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 function in production utilising biotechnology, such as industries manufacturing diagnostic products, brewery products, enzymes, staple and functional foods, biomaterials and biomedicines.*

OFFICIAL BASIS OF THE CERTIFICATE

<p><b>Name and status of the body awarding the certificate</b></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><b>Name and status of the national/regional authority providing accreditation/recognition of the certificate</b></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><b>Level of the certificate (national or international)</b></p> <p><i>EU classification level 3 Upper secondary level, ISCED 3</i></p>	<p><b>Grading scale/Pass requirements</b></p> <p><i>Excellent 3 Good 2 Satisfactory 1 Lowest acceptable performance 1</i></p>
<p><b>Access to the next level of education/training</b></p> <p><i>The qualification confers eligibility to continue at higher education institutions.</i></p>	<p><b>International agreements</b></p>
<p><b>Legal basis</b></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

<p><i>By virtue of statutes, the qualification certificate may be obtained in one of three ways:</i></p> <ol style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>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.</i></li> </ol>
<p><b>Entry requirements</b></p> <p><i>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.</i></p>
<p><b>Additional information</b></p> <p><i>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: <a href="http://www.oph.fi/info/recognition">www.oph.fi/info/recognition</a>.</i></p>
<p><b>National Reference Point (NRP)</b></p> <p><i>Finnish National Board of Education P.O. Box 380 FI-00531 Helsinki, Finland <a href="mailto:recognition@oph.fi">recognition@oph.fi</a></i></p>

(\*) **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](http://www.cedefop.eu.int/transparency)

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