



Here you will find the characteristics of all mapped training programmes. For reasons of clarity and simplicity, we have integrated the characteristics into the files for the individual mappings. They are placed before the "mappings" in order to establish a direct reference.

## 1. Electronics Technician (Germany)

Translated title of the training programme	journeyman's examination in the state-recognized training occupation Electronics technician – specialising in energy and building technology
Brief explanation of the professional fields of ac-	Analyse and remedy errors and maintain devices and systems
tivity (appr. 5 sentences)	Assemble and install components, sub-assemblies, devices and networks
	Design energy and building technology systems
	Set up and commission devices and building systems
	Install and check aerial and broadband communication equipment
	Carry out repeat checks and maintain technical building systems
	Check and assess protective measures for electrical plants and equipment
Certificate (incl. EQF-level)	ISCED 354
	This qualification corresponds to Level 4 of the German and European Qualifications Framework; cf. publication from 1 August 2013 (BAnz AT 20/11/2013 B2)
Entry requirements	Entry requirements are not governed by legislation; as a rule, young people are admitted after completing (nine or ten years of) general education.
Access to next level of education / VET-training	Master craftsman qualification in electrical engineering, state certified technician in the relevant specialisms, specialist clerk for commercial management.









## 2. Mapping Roofer (Germany)

Translated title of the training programme	journeyman's examination in the state-recognized training occupation Roofer
Brief explanation of the professional fields of activity (appr. 5 sentences)	Roofers work in companies in the roofing sector. In addition, they also work for façade coating and construction waterproofing companies, in wall and roof energy technology, as well as for construction companies. Likewise, they work in the production industry and specialist trade.  Roofers cover roofs and clad exterior walls with different materials, seal surfaces on buildings, carry out repairs, manufacture wooden structures, e.g. for roof trusses and half-timbered walls, install substructures and devices for draining surface water, install energy collectors and energy converters, e.g. solar collectors and photovoltaic elements in roof and wall surfaces, carry out lightning protection systems for external lightning protection, carry out energy-efficient measures on roofs and walls, plan work processes in the implementation of green roofs with leak-proof structures, carry out maintenance, renovations and modernizations from roofs, observe principles of occupational health and safety, health protection, environmental protection and occupational safety.
Certificate (incl. EQF-level)	German Qualifications Framework (DQR) level 4 (alignment is preliminary pursuant to "German Qualifications Framework for Lifelong Learning" - German EQF - Referencing report of 15 November 2012). Published by: Federal Ministry of Education and Research (BMBF), Berlin and Bonn; Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (Conference of the Ministers of Education and Cultural Affairs - KMK), Berlin)
Entry requirements	Entry requirements are not governed by legislation; as a rule, young people are admitted after completing (nine or ten years of) general education.
Access to next level of education / VET-training	Master roofer certified technicians in the relevant areas

# 3. Mapping for Final examination / journeyman's examination in the state-recognized training occupation Plant mechanic for sanitary, heating and air conditioning systems (Germany)

Translated title of the training programme	Final examination / journeyman's examination in the state-recognized training occupation
	Plant mechanic for sanitary, heating and air conditioning systems
Brief explanation of the professional fields of activity (appr. 5 sentences)	Plant mechanic for sanitary, heating and air conditioning systems primarily work at customers' premises on the planning, installation and maintenance of complex plants and systems in the areas of sanitary, heating, ventilation and air conditioning engineering and in the fields of environmental technology and renewable energies.
Certificate (incl. EQF-level)	ISCED 3B  German Qualifications Framework (DQR) level 4 = EQF level 4
Entry requirements	Entry requirements are not governed by legislation; as a rule, young people are admitted after completing (nine or ten years of) general education.
Access to next level of education / VET-training	Master craftsman qualification – installer and heating fitter, Certified energy networks foreman State certified technician in the relevant specialisms









## 4. Mapping Technician Building Service Engineering (Germany)

rief explanation of the professional fields of ac-	
	In this training program, students acquire the necessary professional skills in the occupational field of building systems technology. This includes all areas of technical building
vity (appr. 5 sentences)	management from the planning of a building to its construction, building operation and dismantling at the end of the building's life. During the four-year training program, the
	students will get a wide range of professional qualifications in the following fields:
	Modern heating and air conditioning technology
	Electrical engineering and information technology
	Building automation (smart building)
	Renewable energies and energy efficiency
	Security technology
	Energy-efficient building refurbishment
	Project management
ertificate (incl. EQF-level)	EQF Level 6
ntry requirements	degree (EQF 4) in a building services engineering profession like electrician or plant mechanic or similar
	or:
	At least 5 years of professional experience in the field of building services engineering
ccess to next level of education / VET-training	

## 5. Mapping – Industrial expert chief technician, Italy

Translated title of the training programme	Industrial expert chief technician IT specialist
Brief explanation of the professional fields of activity	• Software Development – a software developer is a professional who specializes in designing, creating, testing, and maintaining software applications, systems, and platforms. Languages: C, C++, Python, SQL. Operating systems: Windows, Windows Server, Linux.
	• Networking – a Certified Network Expert is a professional who has obtained skills and expertise in designing, implementing, managing, and troubleshooting complex computer networks
	App Development – App Developer is a professional who specializes in designing, creating, testing, and maintaining in Android and IOS environment
	• Control System – a Control System Expert is used to regulate and manage the behavior of dynamic systems, such as industrial processes, electrical circuits, mechanical systems, and more, to achieve desired outcomes.
	• IoT - IoT Specialist is a professional with specialized knowledge and expertise in the design, development, implementation, and management of IoT systems and solutions. The Internet of Things refers to the network of interconnected devices, sensors, and software applications that communicate and exchange data over the internet, enabling them to collect, analyze, and act upon real-time information.
Certificate (incl. EQF-level)	Diploma of Industrial expert chief technician IT specialist (EQF 4)
	Optional: certificates Cisco CCNA, Cisco IoT; Cisco Networking essentials; Cisco IT essentials









	Optional: CLP Programming in C; CPP Advanced Programming in C++; PCAP Programming Essentials in Python
Entry requirements	Compulsory Education Certificate
Access to next level of education / VET-training	Short Cycle Tertiary education
	Bachelor's degree

## 6. Mapping - Senior Technician (Spain)

Translated title of the training programme	SENIOR TECHNICIAN IN MAINTENANCE OF THERMAL AND FLUID INSTALLATIONS
Brief explanation of the professional fields of ac-	Plan, manage, and supervise the assembly and maintenance of thermal and fluid installations in buildings and industrial processes, adhering to regulations and
tivity	standards. Diagnose and locate malfunctions based on equipment symptoms and history. Start up installations by measuring parameters and making adjustments.
,	Control operating parameters by programming automatic regulation systems. Configure, plan, and budget for facilities and maintenance, ensuring quality and safety
Certificate (incl. EQF-level)	protocols are met.  EQF-level 5
Certificate (incl. Eqlevel)	
	Qualified refrigeration professional, Thermal installations in buildings, Plumbing
Entry requirements	Access to the <b>Higher Degree</b> cycles or modules requires compliance with one of the following conditions:
	• Be in possession of the Bachelor's Degree, or a certificate accrediting having passed all the Baccalaureate subjects.
	• Having passed the 3rd year of BUP (Unified Multipurpose Baccalaureate): Accreditation through academic certification of having passed all the subjects leading to obtaining the
	Bachelor's degree regulated by Law 14/1970, of August 4, General of Education and Financing of the Educational Reform, after the completion of the third year of said teachings.
	Order EFP/1210/2021 of November 2, which establishes the equivalence, for the purposes of access to vocational training courses, of certain studies and titles prior to the current
	educational system.
	Have passed the second year of any type of experimental Baccalaureate.
	Be in possession of a Technical Degree (Medium Level Vocational Training).
	Be in possession of a Higher Technician, Specialist Technician Degree or equivalent for academic purposes.
	• Have passed the University Orientation Course (COU).
	Be in possession of any University Degree or equivalent.
	• Have passed the entrance test to higher-level training cycles (it is required to be at least 19 years old in the year the test is taken or 18 for those who hold the Technician title).
	Have passed the University entrance test for those over 25 years of age
Access to next level of education / VET-training	<ul> <li>Professional specialization courses.</li> <li>Another Higher Level Vocational Training Cycle with the possibility of establishing validation of professional modules in accordance with current regulations.</li> <li>University Education with the possibility of establishing validations in accordance with current regulations.</li> </ul>









## 7. Mapping – Technician Refrigeration and Air Conditioning Installations (Spain)

Translated title of the training programme	Basic Professional in Housing Maintenance
Brief explanation of the professional fields of activity	Rethink the facilities according to technical documentation to ensure assembly viability, resolving related issues and reporting other contingencies for refrigeration, air conditioning and ventilation installations. Assemble electrical and control systems for refrigeration, air conditioning, and ventilation installations, ensuring quality and safety. Apply machining and joining techniques for maintenance and assembly under quality, safety, and environmental standards. Measure parameters and perform tests to verify and adjust operation. Diagnose and repair malfunctions in equipment, ensuring quality and safety to restore proper functioning.
Certificate (incl. EQF-level)	EQF 4; Handling of equipment with refrigeration systems with any load of fluorinated gas refrigerants; Qualified refrigeration professional; The qualifications of T. in refrigeration and air conditioning installations and T. in Heat Production Facilities provide, between the two jointly, the professional license in thermal installations in buildings
Entry requirements	Access to the Intermediate Degree cycles or modules requires compliance with at least one of the following conditions:  Be in possession of the title of Graduate in Compulsory Secondary Education or a higher academic level.  Be in possession of a Basic Professional Title (Basic Vocational Training).  Be in possession of a Technician or Auxiliary Technician title or equivalent for academic purposes.  Have passed the second year of the Unified and Multipurpose Baccalaureate (BUP).  Have passed the entrance test to intermediate-level training cycles (you will need to be at least seventeen years old, completed in the year the test is taken).  Have passed the University entrance test for those over 25 years of age.
Access to next level of education / VET-training	Professional specialization courses. • A cycle of Higher Level Vocational Training. • Another cycle of Medium Level Vocational Training with the possibility of establishing validation of professional modules in accordance with current regulations. • The Baccalaureate in any of its modalities.

## 8. Mapping – Basic Professional in Housing Maintenance (Spain)

Translated title of the training programme	Basic Professional in Housing Maintenance
Brief explanation of the professional fields of ac-	This professional carries out his activity as an employee in large, medium and small companies dedicated to the manufacture and assembly of mechanical
tivity	and electromechanical products, as well as the assembly and maintenance of plumbing, heating and air conditioning installations.
Certificate (incl. EQF-level)	EQF 3; The training established in the degree, in its different professional modules, guarantees the basic level of knowledge required in the professional plumbing
	license
Entry requirements	Basic degree training cycles. Simultaneous requirements:
	a) Be 15 years old, or turn fifteen during the current calendar year.









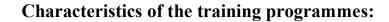
	b) Having completed the third year of Compulsory Secondary Education or, exceptionally, having completed the second year of Compulsory Secondary Education.
	c) The teaching team has proposed to the families or legal guardians the incorporation of the interested person into a basic degree training cycle.
	For those people between 15 and 18 years old who have not been educated in the Spanish educational system, they are exempt from compliance with section b),
	being important the knowledge of the language that allows them to follow the training.
Access to next level of education / VET-training	A mid-level training cycle (This degree will have preference for admission to all mid-level degrees in the professional families of Installation and Maintenance, Build-
	ing and Civil Works, Electricity and Electronics, and Carpentry and Furniture)

## 9. Mapping – Netherlands Electrician

Translated title of the training programme	First mechanic electrotechnical installations ( specialization in built environment )
Brief explanation of the professional fields of ac-	Installing Electrical Installations
tivity	<ul> <li>Laying cables for electrical installations and systems</li> <li>Completing electrical installation work</li> <li>Checking and assembling components in electrical installations and systems</li> <li>Disassembling and repairing electrical components and pipelines</li> <li>Preparing for electrical installation work</li> </ul> Guiding and Performing Electrical Installation Work in the Built Environment
	<ul> <li>Determining the position and route of components, cables, and pipelines in the built environment, reading drawings, and revising data</li> <li>Communicating and coordinating with stakeholders</li> <li>Activating and testing electrical systems in the built environment</li> <li>Instructing and supervising technician(s) and monitoring the schedule</li> <li>Assembling, checking, and testing (complex) (sub-)products in the built environment</li> </ul>
Certificate (incl. EQF-level)	EQF-level 3  We used colours to indicate the levels in the matrix below.
Fatur von inche	Level 3
Entry requirements  Access to next level of education / VET-training	Level 3: A secondary education diploma VMBO KB or higher or a level 2 VET diploma  Level 3 VET gives access to level 4 VET









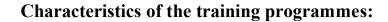


# 10. <u>Mapping – Installer (Netherlands)</u>

Translated title of the training programme	First mechanic mechanical installations (specialization in built environment )
Brief explanation of the professional fields of ac-	Designs Products or Systems
tivity	<ul> <li>Selects (sustainable) materials and components</li> <li>Prepares a cost calculation</li> <li>Collects and processes design data</li> <li>Develops designs</li> </ul>
	Prepares Work
	<ul> <li>Creates a drawing package</li> <li>Plans personnel and resources</li> <li>Collects and processes production data</li> </ul>
	Delivers a Product, Installation, and/or System
	<ul> <li>Proposes improvements for a product, installation, and/or system</li> <li>Evaluates a delivered product, installation, and/or system</li> <li>Delivers a product, installation, and/or system</li> <li>Develops procedures for the use and maintenance of a product, installation, or system</li> </ul>
Certificate (incl. EQF-level)	EQF-level 3
	We used colours to indicate the levels in the matrix below.
	Level 3
Entry requirements	Level 4: A secondary education diploma VMBO KB or higher or a level 3 VET diploma
	For these technical studies a relevant diploma is needed for entree. E.g. A student with a level 4 VET diploma in hairdressing will have to start at level 2 VET
Access to next level of education / VET-training	Level 3: A secondary education diploma VMBO KB or higher or a level 2 VET diploma











# 11. Mapping – Electronics Technician (Finland)

Translated title of the training programme	Vocational qualification in Electrical Engineering and Automation Technology
	<ul> <li>Electrician</li> <li>Automation Assembler.</li> </ul>
Brief explanation of the professional fields of ac-	Holders of a vocational qualification in electrical engineering and automation technology are able to perform installation, repair and commissioning tasks
tivity (appr. 5 sentences)	safely at real estate properties and in industry. Depending on the studies they have chosen, qualification holders may specialise in electrical installations or installations of automation or electrical networks.
	• The structure of the vocational qualification in electrical engineering and automation technology has been planned to so that the education of electricians is
	suitable for Electrical qualification 2 referred to in electrical safety legislation and the education of automation assemblers is suitable for Electrical qualification
	3
Certificate (incl. EQF-level)	OPH-4947-2021
	European Qualifications Framework (eqf) 4 ISCED 3
Entry requirements	Entry requirements are not governed by legislation; as a rule, young people are admitted after completing (nine years of) general education.
Access to next level of education / VET-training	The qualification confers eligibility for higher education studies.



