
VALIDATION EUROPASS APRENDITICE

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1. INTRODUCTION.

This guide which was developed in the context of the project DUAL-T serves as a clarification of the Europass system. First, general information about the European Qualifications Framework / National Qualifications Framework is given. This is followed by a detailed description of the Certificate Supplement. Within the framework of the project DUAL-T a description about the structure of the Certificate Supplement was created specifically. It was used to generate examples of the certificates of the pilot project



2. GENERAL INFORMATION ABOUT EUROPEAN QUALIFICATIONS FRAMEWORK / NATIONAL QUALIFICATIONS FRAMEWORK

The European Qualifications Framework serves to look at the different educational achievements within the European Union. The European Qualifications Framework allows to assess and recognise the vocational qualification of other countries in the European Union. The focus was placed on learning outcomes: namely the results of the learning process. The learning outcomes are described in three main categories:

- Knowledge.
- Skills.
- Competence.

Knowledge

In the context of EQF, knowledge is described as theoretical and/or factual. ¹

A definition by CEDEFOP states that knowledge is the outcome of the assimilation of information through learning. Knowledge is the body of facts, principles, theories and practices that is related to a field of work or study.

Skills

In the context of EQF, skills are described as:

- cognitive (involving the use of logical, intuitive and creative thinking), and
- practical (involving manual dexterity and the use of methods, materials, tools and instruments) ².

According to CEDEFOP skills mean the ability to apply knowledge and use know-how to complete tasks and solve problems.

Competence

In the context of EQF, competence is described in terms of responsibility and autonomy.

The CEDEFOP defines competence as the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development.

European Qualifications Framework

¹ See for a more detailed description <http://ec.europa.eu/ploteus/content/descriptors-page>

² <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:111:0001:0007:EN:PDF>



Each of the characteristics from knowledge, skills and competences is reflected in the 8 levels of the EQF. All of the 8 levels are defined by a set of descriptors indicating the learning outcomes relevant to qualifications at that level in any system of qualifications.³

The following table illustrates this connection and shows the different indicators of each level.⁴

EQF Level	Knowledge	Skills	Competence
1	Basic general knowledge	Basic skills required to carry out simple tasks	Work or study under direct supervision in a structured context
2	Basic factual knowledge of a field of work or study	Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools	Work or study under supervision with some autonomy
3	Knowledge of facts, principles, processes and general concepts, in a field of work or study	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information	Take responsibility for completion of tasks in work or study; adapt own behaviour to circumstances in solving problems
4	Factual and theoretical knowledge in broad contexts within a field of work or study	A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study	Exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change; supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities

³ See for a more detailed description <http://ec.europa.eu/ploteus/content/descriptors-page>

⁴ See for a more detailed description <http://ec.europa.eu/ploteus/content/descriptors-page>



5	Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge	A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems	Exercise management and supervision in contexts of work or study activities where there is unpredictable change; review and develop performance of self and others
6	Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study	Manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts; take responsibility for managing professional development of individuals and groups
7	<p>Highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research</p> <p>Critical awareness of knowledge issues in a field and at the interface between different fields</p>	Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields	Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches; take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams



Level 8	Knowledge at the most advanced frontier of a field of work or study and at the interface between fields	The most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice	Demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research
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The EQF is stimulating national governments to make recognising qualifications easier and more transparent: 36 countries voluntarily participate in the EQF (28 EU Member States, five candidate countries, and Liechtenstein, Norway and Switzerland).⁵

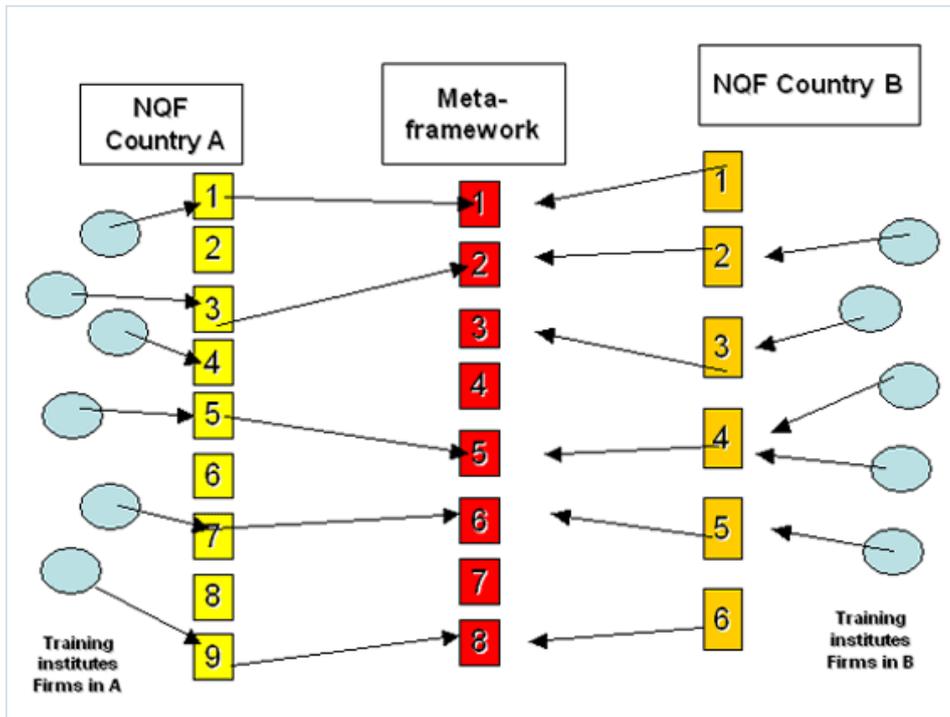
EQF serves as a framework of reference for the “transfer” of the vocational qualification.

National Qualifications Framework

The following chart illustrates this connection.⁶

⁵See for a more detailed description <http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A52013DC0897>

⁶See for a more detailed description https://www.bibb.de/images/content/na-a13_leitartikel_eqf_funk.gif



National Qualifications Frameworks are currently available in Germany and Romania. In Italy and Spain the introduction of the National Qualifications Frameworks is presently underway.

3. GENERAL INFORMATION ABOUT EUROPASS.

Presentation of the Purpose of Europass

The Europass is based on a European Council Order from 15th December 2004, when the Europass framework was adopted. In the framework it is stated that five documents are supposed to help European citizens to present their personal knowledge, competences and skills according to the needs of the national and European labour market. The Europass is understandable and comparable within the European realm.

Legal Basis

The legal basis of the Europass system are the European legal provisions DECISION No 2241/2004/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15th December 2004.

The Europass consists of a variety of documents which are supposed to reflect the competences of each document holder. These five documents include:

- Curriculum Vitae (CV)
- Language Passport
- Europass Mobility
- Certificate Supplement
- Diploma Supplement

Two documents are freely accessible and are completed by the European citizens themselves:

- Curriculum Vitae (CV)
- Language Passport

Three documents are issued by education and training authorities:

- Europass Mobility
- Certificate Supplement
- Diploma Supplement

Curriculum Vitae (CV)

The Europass CV is completed in the internet by the applicant himself/herself. The CV helps to display acquired qualifications and competences systematically and to represent a comprehensive profile of the holder. The description of competences is based on learning outcomes; this means that it shows not only formal qualifications but also further skills and knowledge: formal or non-formal education, informal skills or social competences such as social behaviour or capacity for teamwork.



Language Passport

To increase possibilities in the labour market not only technical knowledge is important but also social and intercultural competence. The Europass Language Passport was developed by the Council of Europe. It is a tool which the applicant can use himself/herself to assess his/her language skills regarding listening, reading comprehension, oral skills (interaction in discourses, coherent speech) as well as writing skills. Furthermore, acquired language diplomas and certificates are documented.

Europass Mobility

In the Europass Mobility learning outcomes of any kind, any level and any objective which the holder has deepened or acquired in foreign countries of Europe are documented comprehensibly e.g. internships, professional or further training, studies. The requirement is that certain quality criteria are met. The document addresses citizens of the EU, EEA (European economic area) as well as Macedonia, Switzerland and Turkey. With the Europass Mobility companies can get a better grip of the acquired competences and assess the quality more accurately. Therefore the Europass Mobility is also of advantage for applications.

The document cannot be filled out by the applicant but can be requested through the sending organisations (normally schools, colleges or companies), education and training authorities or in particular cases by the participants of selected programs.

Certificate Supplement

The Certificate Supplement describes the knowledge and skills acquired by holders of vocational education and training certificates; it provides additional information to that already included in the official certificate and/or transcript, making it more easily understood, especially by employers or institutions abroad. However, The Europass Certificate Supplement is neither a substitute for the original certificate nor an automatic system that guarantees recognition.

Diploma Supplement

The Diploma Supplement is an explanation of the university degree. The requirements regarding the content and the organisation throughout Europe are heterogeneous. The European Diploma Supplement helps with this: It comprehensively describes the type, level as well as the context, content and status of the degree program and offers a detailed description of the studies and the therein acquired skills. The document is personal but does not replace the original diploma. The European Diploma Supplement is issued by higher education and training institutions



4. DETAILED DESCRIPTION OF THE CERTIFICATE SUPPLEMENT.

The Europass Certificate Supplement – how Vocational Qualifications are made Comparable

A vocational qualification which one has acquired in Germany is not easily comparable with an Italian or a Polish vocational qualification. The national educational structure and training contents are too different. In this case the Europass Certificate Supplement helps. It describes the country-specific standards of the respective VETs and gives a short description of the during the VET gained knowledge, skills and competences. Furthermore, references to duration, nature and level of the VET are given. Also the educational background necessary to achieve the level of VET is stated.

The Europass Certificate Supplement applies for everyone who has acquired the corresponding diploma. The Certificate Supplements are developed by the responsible authorities of each EU member country. In Germany the Certificate Supplement for dual VET is issued by the Federal Ministry of Education and Research (BMBF) and the Federal Institute for Vocational Education and Training (BIBB) together with the social partners. Certificate Supplements for full-time VET or continuing vocational training regulated by state law are developed by the Ministry of Education of the states and the Secretariat of the Standing Conference of the Ministers of Education and Cultural Affairs (KMK). Apart from the German version, the Europass Certificate Supplement is also available in English as well as in French.

Within the scope of the project DUAL-T pilot projects were developed in Spain, Italy and Romania to improve different skills, knowledge and competences. It was of special importance to the project consortium that the learning outcomes were documented.

The Certificate Supplement is an instrument for the display of the changes in the sector of skills, knowledge and competences. This allows that the certificate is being used on the national and European labour market.

The Certificate Supplement documents more detailed information on the expansion of knowledge, skills and competence. Furthermore, it is illustrated how the acquired certificate can be used on the labour market and how it can be classified in the national and European Qualifications Framework. The Certificate Supplement is issued by the responsible education authorities along with the original certificate. A more in-depth description can be found in chapter ⁴.

What are Learning Outcomes?

A learning outcome is the particular knowledge, skill or behaviour that a student is expected to exhibit after a period of study. Learning outcomes reflect a nation's concern with the level of knowledge acquisition among its student population. Measuring learning outcomes provides information on what particular knowledge

(cognitive), skill or behaviour (affective) students have gained after instruction is completed. They are typically measured by administering assessments at sub-national, national, regional and international levels. Countries decide what the purpose of the assessment is, what population will be assessed, what is to be assessed, how it is to be assessed, and how the measures are to be reported and utilised. Policy makers might decide to focus on a limited amount of domains and grade levels while others will focus on the measurement of student knowledge in a wide range of domains and grade levels. ⁷

CEDEFOP defines learning outcomes as statements of what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of knowledge, skills and competence. ⁸

5. DESCRIPTION OF THE STRUCTURE OF THE CERTIFICATE SUPPLEMENT FOR THE DUAL-T.

For the compilation of the necessary information in the Certificate Supplement a template has been developed which has been used for the respective pilot projects.

TEMPLATE – Structure of the Certificate Supplement Project DUAL-T

1. Title of the Certificate

Please fill in the title of the certificate in the national language.

2. Translated Title of the Certificate

Please fill in the title of the certificate in English.

3. Profile of the Skills and Competences

Please write down all skills and competences which the owner of this certificate has acquired during the learning process. Give the description as learning outcomes in English.

4. Range of Occupations Accessible to the Holder of the Certificate

Please give a description of possible further fields of employment of the holder of the certificate.

⁷

<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTEDUCATION/0,,contentMDK:21911176~menuPK:5495844~pagePK:148956~piPK:216618~theSitePK:282386,00.html>

⁸ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:111:0001:0007:EN:PDF>



5. Official Basis of the Certificate

Here some information about the official basis of the certificate e.g. laws. Is needed.

6. Officially Recognised Ways of Acquiring the Certificate

Here we need information which professions and further steps can be taken after acquiring the certificate e.g. after receiving the certificate can enter university.

6. EXAMPLES OF THE CERTIFICATES OF THE PILOT PROJECT.

In the context of the project DUAL-T the project partners from Spain, Italy and Romania have developed pilot projects for the testing of first approaches of the testing of first approaches of the dual VET. After the successful completion of these pilot projects the participants will receive Certificate Supplements. In the following these are portrayed. For the development of the Certificate Supplement the template which has been designed in the project has been used.

6.1 SPAIN

6.1.1 HIGHER TECHNICIAN IN INDUSTRIAL MECHATRONICS

1. Title of the Certificate

Técnico Superior en Mecatrónica Industrial

2. Translated Title of the Certificate

Higher Technician in Industrial Mechatronics

3. Profile of the Skills and Competences

General Competence:

Configuring and optimising industrial mechatronic systems, as well as planning, monitoring and/or executing the assembly and maintenance, following the protocols of quality, safety and for the prevention of occupational risks and environmental protection.

More detailed skills and competences:

“Mechanical Systems”

The holder:



- Adjusts mechanical systems, interpreting blueprints, diagrams and procedures of assembly and disassembly.
- Applies preventive maintenance techniques in mechanical systems, performing operations and interpreting maintenance plans.
- Diagnoses breakdowns and malfunctions in mechanical systems, relating the dysfunction to the cause that produces it.
- Carries out operations of corrective maintenance of mechanical systems, justifying the techniques and procedures of replacement or repair.
- Diagnoses the status of machine elements, applying the measurement and analysis techniques described in the procedure.
- Complies with the rules on labour risk prevention and environmental protection, identifying the associated risks and measures and the equipment to prevent them.

“Hydraulic and Pneumatic Systems”

The holder:

- Identifies the elements of sequential automatic systems of pneumatic/electro-pneumatic technology, attending to their physical and functional characteristics.
- Identifies the elements of sequential automatic systems of hydraulic technology / electro-hydraulic, attending to their physical and functional features.
- Configures automatic systems of pneumatic/electro-pneumatic or hydraulic/electro-hydraulic technologies, adopting the most suitable solution and fulfilling the established operating conditions.
- Assembles pneumatic/electro-pneumatic and hydraulic/electro-hydraulic automatisms, interpreting the technical documentation and performing functional tests and adjustments.
- Makes adjustments and mechanical set and measures of the magnitudes in hydraulic and pneumatic machinery, interpreting the general plans and schemes, and taking into account the adjustment data and established set.
- Diagnoses the state of elements of pneumatic and hydraulic systems, applying measurement techniques and analysis.
- Diagnoses and corrects breakdowns in hydraulic and pneumatic systems, defining and applying correction procedures.

“Electrical and Electronic Systems”

The holder:

- Identifies the elements of electronic-electrical nature in a machine, industrial equipment or automated line, describing the function they perform and their relationship with the other elements.
- Configures electronic automatisms in a machine or automated installation, adopting the most appropriate solution and meeting the operation conditions established.
- Assembles energy-supply systems and associated electronic automatisms, interpreting diagrams and applying assembling techniques.



- Diagnoses breakdowns and malfunctions in energy-supply systems and associated electronic automations, identifying the causes that produce them and relating them to the responsible elements.
- Maintains energy-supply systems and associated electronic automations, replacing elements and verifying the operation of the installation.
- Complies with the rules on labour risk prevention and environmental protection, identifying the associated risks, and the measures and the equipment to prevent them.

“Machine Elements”

The holder:

- Determines the function of the parts and the elements of a mechanical system and their relationship with other components, analysing the technical documentation.
- Obtains the data of machine materials and elements, relating their features to their functional, technical and economic requirements.
- Selects commercial components of mechatronic elements, evaluating their operating conditions.
- Calculates the magnitudes of kinematic and dynamic of operation of kinematic chains, basing on a given configuration.

“Manufacturing Processes”

The holder:

- Recognises the benefits of machinery, equipment and facilities used for mechanic manufacturing, analysing their performance and relating them to the product that will be manufactured.
- Determines manufacturing processes, analysing and justifying the sequence and the variables of the process.
- Selects the material to be mechanised, linking the technical and commercial characteristics with the product specifications to be obtained.
- Controls dimensions, geometries and surfaces of product, comparing the measures with the product specifications.
- Carries out manual machining operations, relating the procedures to the product to be obtained and applying operational techniques.
- Operates swarf removal tools, relating their performance to the process conditions and the characteristics of the final product.
- Operates with oxyfuel welding equipment, electrode and resistance as well as with manual oxyfuel welding projection and welding in a protective atmosphere, relating their performance to the process conditions and the characteristics of the final product.
- Complies with the rules on labour risk prevention and environmental protection, identifying the associated risks, and the measures and equipment to prevent them.

“Graphical Representation of Mechatronic Systems”

The holder:

- Draws mechanical products, applying rules of graphic representation.



- Establishes the characteristics of mechanical products, interpreting technical specifications according to applicable regulations.
- Represents hydraulic, electric and pneumatic automation systems, applying rules of representation and specifying the basic information of equipments and elements.
- Develops graphic documentation, using computer-aided drawing applications.

“Configuration of Mechatronic Systems”

The holder:

- Determines the features of mechatronic systems or modifications to be carried out, analysing the needs and the design conditions.
- Configures the system or its modification, selecting equipment and element and justifying the choice.
- Develops assembly and detail drawings, responding to the presented changes and selecting the most suitable systems and formats.
- Sets budgets of systems or modifications, using computer applications and databases prices.
- Develops the technical documentation of the configuration of a mechatronic system or its modifications, completing all its sections.

“Processes and Management of Maintenance and Quality”

The holder:

- Establishes the process phases of assemblage and maintenance of a machinery installation and industrial equipment, analysing the technical documentation, the plan of quality and safety and the instruction manuals.
- Develops plans of assembly and maintenance of installations, applying programming techniques and establishing procedures for execution monitoring and control.
- Prepares the catalogue of spare parts and the program of management and provisioning, establishing storage conditions of the components, tools, materials and equipment.
- Prepares budgets of assembly and maintenance of facilities, assessing construction units and applying prices.
- Determines actions for the implementation and maintenance of systems for quality assurance, for the continuous improvement of productivity in the maintenance and installation of facilities, performing basic concepts and requirements.
- Applies plans for the establishment and maintenance of excellence business models, interpreting the regulation on which it is based and the qualifications required.
- Prepares quality records, considering their features and importance for the control and improvement of the process and the product.

“Integration of Systems”

The holder:

- Identifies the elements of the regulation loop of industrial systems, relating their role to the elements making up automation processes.



- Integrates PLC in the assemblage of mechatronic systems of discrete and continuous processes, connecting and programming it as well as testing and maintaining its operation.
- Integrates handlers and/or robots in mechatronic systems of discrete and continuous processes controlled by PLC, optimising the system and verifying its operation.
- Integrates industrial communications and monitoring systems in the global assembly of mechatronic systems of discrete and continuous processes controlled by PLC, verifying its operation.
- Starts-up mechatronic systems of discrete and continuous production, integrating technologies, optimising cycles and complying with the operating conditions.
- Diagnoses breakdowns in discrete and continuous simulated mechatronic systems, identifying the nature of the breakdown, making the necessary corrective interventions to eliminate the dysfunction and restore function.

“Simulation of Mechatronic Systems”

The holder:

- Designs prototypes and mechanisms of mechatronic systems, using specific programs for three-dimensional simulation.
- Simulates a robotic cell operation, designing it and carrying out control operations.
- Simulates robotic cells and mechatronic prototypes, validating the design by using simulation software.
- Integrates data acquisition systems in simulation environments, monitoring the status of the system and verifying its performance.
- Simulates complex mechatronic processes, integrating subsystems and analysing their performance.

“Project on Industrial Mechatronics”

The holder:

- Identifies the needs of the production sector, relating them to similar projects that may satisfy them.
- Designs projects related to the competences described in the diploma, including and developing their constituting stages.
- Plans the project implementation, determining the intervention plan and the associated documentation.
- Defines the procedures to monitor and control of the project implementation, justifying the selection of the variables and the instruments used.

“Professional Training and Guidance”

The holder:

- Selects job opportunities, identifying the different possibilities of labour integration, and the alternatives of lifelong learning.
- Applies teamwork strategies, assessing their effectiveness and efficiency on the achievement of the company's goals.



- Exercises rights and complies with the duties derived from labour relationships, recognising them in the different job contracts.
- Determines the protective action of the Spanish Health Service in view of the different covered eventualities, identifying the different types of assistance.
- Assesses the risks derived from his/her activity, analysing the job conditions and the risk factors present in his/her labour setting.
- Participates in the development of a risk prevention plan for a small enterprise, identifying the responsibilities of all the agents involved.
- Applies protection and prevention measures, analysing risk situations in the labour setting of the Higher Technician in Industrial Mechatronics.

“Business and Entrepreneurial Initiative”

The holder:

- Recognizes skills related to entrepreneurial initiative, analysing the requirements derived from the different job positions and business activities.
- Defines the opportunity of creating a small enterprise, assessing the impact on the sphere of action and incorporating ethic values.
- Carries out the activities for the setting-up and implementation of a company, choosing its legal structure and identifying the associated legal obligations.
- Carries out basic administrative and financial management activities of an SME, identifying the main accounting and tax obligations and filling in documentation.

4. Range of Occupations Accessible to the Holder of the Certificate

The most relevant occupations or jobs are the following:

- Technician in planning and programming processes of maintenance of machinery installations and industrial equipment.
- Head Manager of assembly team of machinery installations and industrial equipment.
- Head Manager of maintainers of machinery installations and industrial equipment.

5. Official Basis of the Certificate

Name of the Body Awarding the Diploma on Behalf of the King of Spain:

Spanish Ministry of Education or the different Autonomous Communities according to their areas of competence. The title has academic and professional validity throughout Spain.

Official Duration of the Education/ Training Leading to the Diploma: 2000 hours.

Level of the Diploma (National or International)

NATIONAL: Non-University Higher Education

INTERNATIONAL:



Level 5 of the International Standard Classification of Education (ISCED5).
Level 5 of the European Qualifications Framework (EQF5).

Entry Requirements: Holding the Certificate in Post-Compulsory Secondary Education (Bachillerato) or holding the corresponding access test.

Access to Next Level of Education/Training: *This diploma provides access to university studies.*

Legal Basis. Basic regulation according to which the diploma is established:

Minimum teaching requirements established by the State: Royal Decree 1576/2011, of 4 November, according to which the diploma of Higher Technician in Industrial Mechatronics and its corresponding minimum teaching requirements are established.

6. Officially Recognised Ways of Acquiring the Certificate

Two modalities of Vocational Training Course: in class or on-line:

- The face-to-face modality is studied in schools, with regular attendance to class. It can be carried out both in ordinary centers, integrated vocational training centers and national reference centers.
- The purpose of Vocational Distance Learning is to provide vocational training for people who wish to improve their professional qualifications or prepare themselves for other professions and whose social, labour or family circumstances prevent or hinder them from attending training courses. This modality offers the possibility of studying with a flexible schedule and with the confidence of having the support and the collaboration of the teachers.

The qualifications that are obtained while attending this Formative Cycle of Superior Degree are the same in all the national territory. However, it must be taken into account that the calendar, the registration system, the evaluation and the curricula may vary according to each Autonomous Community.

6.1.2 HIGHER TECHNICIAN IN MECHANICAL MANUFACTURE DESIGN

1. Title of the Certificate

Técnico Superior en Diseño en Fabricación Mecánica

2. Translated Title of the Certificate

Higher Technician in Mechanical Manufacture Design



3. Profile of the Skills and Competences

General Competence:

Designing mechanically manufactured products, sheet-metal processing tools, moulds and patterns for polymers, casting, forging, stamping or powder metallurgy, ensuring quality, and complying with labour risk prevention and environmental protection regulations.

More detailed skills and competences:

“Graphical Representation in Mechanical Manufacture”

The holder:

- Designs mechanically manufactured products applying graphical representation rules.
- Establishes the characteristics of mechanically manufactured products, interpreting technical specifications according to regulations.
- Represents pneumatic, hydraulic and electric systems, applying representation rules and specifying the basic information of equipment and elements.
- Prepares graphical documentation for the manufacture of mechanical products using computer-aided design applications.

“Mechanical Products Designs”

The holder:

- Selects elements, tools and mechanisms used in mechanical systems and manufacturing processes, analysing their functionality and behaviour.
- Designs construction solutions of components and tools for mechanical manufacture relating the required specifications with the necessary means for their manufacture.
- Selects materials for the manufacture of products relating their characteristics with the functional, technical, economic and physical requirements of the designed products.
- Calculates components dimensions of the defined elements, tools and mechanisms analysing their requirements.
- Assesses the design quality of elements, tools and mechanisms analysing their functionality and manufacture feasibility.

“Sheet Metal Processing and Stamping Tools Design”

The holder:

- Selects sheet-metal processing or stamping tools, analysing the cutting and shaping processes.
- Designs construction solutions of sheet-metal processing and stamping tools relating the function of the piece to be obtained with the cutting and shaping processes.
- Selects materials for the manufacture of sheet-metal processing and stamping tools, relating their characteristics with the functional, technical, economic requirements of the designed products.



- Calculates the dimensions of the tool components analysing the requirements of the process and the part to be obtained.
- Assesses the design quality of sheet-metal processing and stamping tools analysing their functionality and manufacture feasibility.

“Forging Moulds and Patterns Design”

The holder:

- Selects forging moulds and patterns analysing the development of the processes.
- Designs constructive solutions of forging moulds and patterns, analysing the moulding process.
- Selects materials for the manufacture of moulds and patterns relating their characteristics with the functional, technical, economic requirements of the designed moulds and patterns.
- Calculates the dimensions of the moulds or patterns components analysing the requirements of the process and the part to be obtained.
- Assesses the design quality of forging moulds and patterns analysing their functionality and manufacture feasibility.

“Moulds Designs for Polymeric Products”

The holder:

- Selects moulds and patterns for the transformation of polymers, analysing the moulding processes.
- Designs constructive solutions of moulds and patterns relating production requirements with the used means for manufacture.
- Selects materials for the manufacture of moulds and patterns relating their characteristics with the functional, technical, economic and physical requirements of the designed products.
- Calculates the dimensions of the moulds or patterns components analysing the requirements of the process and the piece to be obtained.
- Assesses the design quality of moulds analysing their functionality and manufacture feasibility.

“Manufacturing Automation”

The holder:

- Establishes the working cycle of the used automatic machinery and equipment interpreting technical specifications and the work process.
- Selects the power elements that must be used in process automation, analysing the requirements of the system.
- Determines position and types of information gathering that must be used in the process automation, analysing the characteristics of the catcher and the function carried out.
- Designs control schemes of automated facilities selecting the technology adapted to the process to be automated.
- Represents power schemes and the automated systems control, interpreting the established regulations.



“Mechanical Manufacture Techniques”

The holder:

- Applies operational techniques used in processes of stock removal interpreting their characteristics and limitations.
- Applies operational techniques used in special machining processes interpreting their characteristics and limitations.
- Applies operational techniques used in cutting and shaping processes interpreting their characteristics and limitations.
- Identifies the characteristics and limitations of the forging and moulding processes analysing the procedures to carry them out.
- Applies operational techniques used in welding procedures interpreting their characteristics and limitations.
- Applies fitting techniques analysing the characteristics and limitations of the procedures used to carry them out.

“Project on Mechanical Products Design”

The holder:

- Identifies the needs of the production sector, relating them with the standard projects that may satisfy them.
- Designs projects related to the competences described in the diploma, including and developing their constituting stages.
- Plans the project implementation, determining the intervention plan and associated documentation.
- Defines the procedures for the monitoring and control of the project implementation, justifying the selection of variables and instruments used.

“Professional Training and Guidance”

The holder:

- Selects job opportunities, identifying the different possibilities of labour integration, and the alternatives of lifelong learning.
- Applies teamwork strategies, assessing their effectiveness and efficiency on the achievement of the company's goals.
- Exercises rights and complies with the duties derived from labour relationships, recognising them in the different job contracts.
- Determines the protective action of the Spanish Health Service in view of the different eventualities covered, identifying the different types of assistance.
- Assesses risks derived from his/her activity, analysing job conditions and risk factors present in his/her labour setting.
- Participates in the development of a risk prevention plan in a small enterprise, identifying the responsibilities of all agents involved.
- Applies protection and prevention measures, analysing risk situations in the labour setting of the Higher Technician in Mechanical Manufacture Design.

“Business and Entrepreneurial Initiative”

The holder:

- Recognises skills related to entrepreneurial initiative, analysing the requirements derived from job positions and business activities.



- Defines the opportunity of creating a small enterprise, assessing the impact on the performance setting and incorporating ethic values.
- Carries out the activities for the setting-up and implementation of a company, choosing the legal structure and identifying the associated legal obligations.
- Carries out basic administrative and financial management activities of an SME, identifying the main accounting and tax obligations and filling in documentation.

4. Range of Occupations Accessible to the Holder of the Certificate –

The most relevant occupations or jobs are the following:

- Design draughtsperson.
- CAD technician.
- Product development technician.
- Forging die development technician.
- Tool development technician.
- Mould development technician.
- Product and mould development technician.

5. Official Basis of the Certificate

Name of the Body Awarding the Diploma on Behalf of the King of Spain:

Spanish Ministry of Education or the different Autonomous Communities according to their areas of competence. The title has academic and professional validity throughout Spain.

Official Duration of the Education/ Training Leading to the Diploma: 2000 hours.

Level of the Diploma (National or International)

NATIONAL: Non-University Higher Education

INTERNATIONAL:

Level 5 of the International Standard Classification of Education (ISCED5).

Level 5 of the European Qualifications Framework (EQF5).

Entry Requirements: Holding the Certificate in Post-Compulsory Secondary Education (Bachillerato) or holding the corresponding access test.

Access to Next Level of Education/Training: *This diploma provides access to University studies.*

Legal Basis. Basic regulation according to which the diploma is established:

Minimum teaching requirements established by the State: Royal Decree 1630/2009, of 30 October, according to which the diploma of Higher Technician in



Mechanical Manufacture Design and its corresponding minimum education are established.

6. Officially Recognised Ways of Acquiring the Certificate

Two modalities of Vocational Training Course: in class or on-line:

- The face-to-face modality is studied in schools, with regular attendance to class. It can be carried out both in ordinary centers, integrated vocational training centers and national reference centers.
- The purpose of Vocational Distance Learning is to provide vocational training for people who wish to improve their professional qualifications or prepare themselves for other professions and whose social, labour or family circumstances prevent or hinder them from attending training courses. This modality offers the possibility of studying with a flexible schedule and with the confidence of having the support and the collaboration of the teachers.

The qualifications that are obtained while attending this Formative Cycle of Superior Degree are the same in all the national territory. However, it must be taken into account that the calendar, the registration system, the evaluation and the curricula may vary according to each Autonomous Community.

6.1.3 HIGHER TECHNICIAN IN PROCESSES AND QUALITY IN THE FOOD INDUSTRY

1. Title of the Certificate

Técnico Superior en Procesos y Calidad en la Industria Alimentaria

2. Translated Title of the Certificate

Higher Technician in Processes and Quality in the Food Industry

3. Profile of the Skills and Competences

General Competence:

Organising and controlling the processes of food preparation programming and supervising the necessary operations, material and human resources, applying production plans, quality, food safety, labour risks prevention and environmental protection in accordance with current legislation.

More detailed skills and competences:



“Food Technology”

The holder:

- Recognises preparation processes of the meat industry describing associated procedures and techniques.
- Characterises preparation processes of products derived from fishing and aquaculture describing their fundamentals.
- Develops the preparation processes of milks for consumption and dairy products characterising their technological fundamentals.
- Recognises the preparation processes of cans and/or vegetable soups describing associated procedures and techniques.
- Characterises preparation processes derived from cereals and sweets justifying processing operations and its sequence.
- Recognises the preparation processes of other food products describing their technological fundamentals.

“Food Biotechnology”

The holder:

- Recognises biochemistry fundamentals relating them with cell functions.
- Analyses microbiology fundamentals relating them with their application in the food industry.
- Characterises bioreactors relating them with their biotechnological applications in the food industry.
- Describes biotechnology applications to the food industry identifying involved microorganisms and processes.
- Recognises biosensors and other biotechnology applications assessing their potential to guarantee food quality.

“Food Analysis”

The holder:

- Organises the laboratory recognising its facilities, equipment and resources.
- Carries out the sampling and preparation of the sample, relating the same with the analyses to be carried out.
- Applies techniques of physical and chemical analyses to food, describing their fundamentals.
- Carries out instrumental analyses in food products justifying the selected technique.
- Writes technical reports, relating obtained results with product control and product processing.

“Treatments for the Preparation and Preservation of Food”

The holder:

- Organises the conditioning and transformation of raw materials justifying selected operations and equipment.
- Manages preservation treatments through heating describing their fundamentals and control parameters.



- Applies low temperature preservation treatments describing techniques and processing equipment.
- Supervises drying treatments and concentration of food products recognising methods and control parameters.
- Prepares food products, selecting conditioning, preparation, transformation and preservation operations.
- Organises the packaging and packing of prepared products, justifying selected techniques and equipment.

“Food Production Organisation”

The holder:

- Determines production programmes of a production unit analysing information on the process and the product.
- Coordinates work teams in production units, recognising the systems for the allocation of tasks, equipment and people.
- Supervises the production of a productive unit analysing processing control methods.
- Calculates production costs describing applied methodology.

“Marketing and Logistics in the Food Industry”

The holder:

- Plans supply identifying needs and stock.
- Monitors the recipe, dispatch and storage of goods relating them with the quality of the final product.
- Markets raw materials, auxiliary materials and prepared products recognising and applying business techniques.
- Promotes produced products, characterising and applying advertisement techniques.
- Applies technologies of information and communication to logistic and commercial management, characterising the main computer tools.

“Quality and Environmental Management in the Food Industry”

The holder:

- Applies quality management systems describing the regulations on which they are based and their requirements.
- Prepares quality records, analysing their characteristics and importance for the monitoring and improvement in the process and products.
- Monitors spillages, residues and emissions produced, recognising their environmental impact.
- Uses resources efficiently, assessing associated environmental benefits.
- Applies environmental management systems describing the regulations on which they are based and their requirements.

“Electromechanical Maintenance in Processing Industries”

The holder:



- Identifies the materials that constitute equipment and installations in the processing industry relating them with their characteristics and their use.
- Analyses mechanical elements of equipment, machinery and installations recognising their function.
- Characterises hydraulic and pneumatic installations assessing their intervention in industrial processes.
- Identifies electrical machinery relating the same with their purpose in the process.
- Characterises maintenance tasks justifying needs.

“Microbiological and Sensory Control of Food”

The holder:

- Organises the microbiology laboratory recognising facilities, equipment, resources and safety measures.
- Carries out microbiological tests, describing the fundamentals of the technique used.
- Arranges the tasting room and materials recognising its influence in the sensory characteristics.
- Carries out the sensory analysis relating drawn impressions with their application.

“Food Nutrition and Safety”

The holder:

- Recognises the basic concepts of a correct nutrition describing its characteristics.
- Recognises food products made for specific people assessing their repercussions and implications.
- Supervises the application of good hygiene practices and food handling, assessing their repercussion on the hygienic-sanitary quality of products.
- Supervises support plans or binding prerequisites, assessing their importance for hygienic-sanitary hazard control.
- Manages the self-control systems based on the HACCP, justifying the principles associated to them.
- Applies voluntary standards of food safety management, recognising their requirements.

“Integrated Processes in the Food Industry”

The holder:

- Regulates control systems in production processes recognising their components and technological fundamentals.
- Manages the preparation of a food product in the dairy industry, describing production activities, materials and equipment and automatic processing systems needs.
- Monitors the preparation of a food product in the meat industry justifying checking points and established control parameters.



- Manages the preparation of vegetable products, describing production activities, equipment and automatic processing systems. Monitors the preparation of food products in the fish industry characterising the process of preparation, equipment, checking points and control parameters. ”

“Food innovation”

The holder:

- Supervises the preparation of food with a longer shelf-life, describing their technological fundamentals.
- Manages the preparation of food adapted to new market niches, recognising particularities in each case.
- Monitors the preparation of functional food relating its properties with its influence on health.
- Manages the preparation of food adapted to sections of the population with food intolerance recognising their requirements.

“Project on Processes and Quality in the Food Industry”

The holder:

- Identifies the needs of the production sector, relating them with the standard projects that may satisfy them.
- Designs projects related to the competences described in the diploma, including and developing their constituting stages.
- Plans the project implementation, determining the intervention plan and associated documentation.
- Defines the procedures for the monitoring and control of the project implementation, justifying the selection of variables and instruments used.

“Professional Training and Guidance”

The holder:

- Selects job opportunities, identifying the different possibilities of labour integration, and the alternatives of lifelong learning.
- Applies teamwork strategies, assessing their effectiveness and efficiency on the achievement of the company's goals.
- Exercises rights and complies with the duties derived from labour relationships, recognising them in the different job contracts.
- Determines the protection action of the Spanish Health Service in view of the different covered eventualities, identifying the different types of assistance.
- Assesses risks derived from his/her activity, analysing job conditions and risk factors present in his/her labour setting.
- Participates in the development of a risk prevention plan in a small enterprise, identifying the responsibilities of all agents involved.
- Applies protection and prevention measures, analysing risk situations in the labour setting of the Higher Technician in Processes and Quality in the Food Industry.

“Business and Entrepreneurial Initiative”



The holder:

- Recognises skills related to entrepreneurial initiative, analysing the requirements derived from job positions and business activities.
- Defines the opportunity of creating a small enterprise, assessing the impact on the performance setting and incorporating ethic values.
- Carries out the activities for the setting-up and implementation of a company, choosing the legal structure and identifying the associated legal obligations.
- Carries out basic administrative and financial management activities of an SME, identifying the main accounting and tax obligations and filling in documentation.

“On the Job Training”

The holder:

- Identifies the company’s structure and organisation relating the same to the production and marketing of the products obtained.
- Applies labour and ethic habits in his/her professional activity according to the characteristics of the job position and the procedures established by the company.
- Supports the organisational activities of the processes of food production, recognising established goals, production activities, procurement, storage and dispatch of raw materials, auxiliary materials and processed products.
- Collaborates in the production control of a food unit, supervising work areas, equipment effectiveness to guarantee performance in conditions of hygiene, efficiency, environmental safety and protection in accordance with established procedures.
- Participates in quality control activities carrying out physicochemical, instrumental, microbiological and organoleptic analyses.
- Participates in the application of quality management, food safety, labour risk prevention and environmental management systems, proposing actions for the improvement of the process and products and applying the specific regulations of the sector.

4. Range of Occupations Accessible to the Holder of the Certificate –

The most relevant occupations or jobs are the following:

- Line, manufacturing plant, department or warehouse manager
- Shift manager
- Equipment, processes and products supervisor
- Production manager
- New products preparation and processes development manager
- Food analysis technician
- Sensory analysis technician
- Quality control laboratory technician
- Quality inspector or counsellor
- Food safety management manager
- Procurement manager
- Packaging and packing line manager



- Environmental control and labour safety manager
- Commercial agent.

5. Official Basis of the Certificate

Name of the Body Awarding the Diploma on Behalf of the King of Spain:

Spanish Ministry of Education or the different Autonomous Communities according to their areas of competence. The title has academic and professional validity throughout Spain.

Official Duration of the Education/ Training Leading to the Diploma: 2000 hours.

Level of the Diploma (National or International)

NATIONAL: Non-University Higher Education

INTERNATIONAL:

Level 5 of the International Standard Classification of Education (ISCED5).

Level 5 of the European Qualifications Framework (EQF5).

Entry Requirements: Holding the Certificate in Post-Compulsory Secondary Education (Bachillerato) or holding the corresponding access test.

Access to Next Level of Education/Training: *This diploma provides access to University studies.*

Legal Basis. Basic regulation according to which the diploma is established:

Minimum teaching requirements established by the State: Royal Decree 451/2010 of 16 April, according to which the diploma of Higher Technician in Multi-platform Applications Development and its corresponding minimum teaching requirements are established.

6. Officially Recognised Ways of Acquiring the Certificate

Two modalities of Vocational Training Course: in class or on-line:

- The face-to-face modality is studied in schools, with regular attendance to class. It can be carried out both in ordinary centers, integrated vocational training centers and national reference centers.
- The purpose of Vocational Distance Learning is to provide vocational training for people who wish to improve their professional qualifications or prepare themselves for other professions and whose social, labour or family circumstances prevent or hinder them from attending training courses. This modality offers the possibility of studying with a flexible schedule and with the confidence of having the support and the collaboration of the teachers.



The qualifications that are obtained while attending this Formative Cycle of Superior Degree are the same in all the national territory. However, it must be taken into account that the calendar, the registration system, the evaluation and the curricula may vary according to each Autonomous Community.

6.2 ITALY

6.2.1 RESPONSIBLE OF DAIRY PRODUCTION

1. Title of the Certificate

ADDETTO ALLA PRODUZIONE CASEARIA

2. Translated Title of the Certificate

Responsible of dairy production

3. Profile of the Skills and Competences

A typical holder of the certificate is able to:

- Application of principles of dairy technology and related application
- Transformation processes of dairy products
- Composition and food process transformation
- Process of making cheese / milk processing phases
- Quality, safety and hygienic control of dairy production
- Process Control of Raw Materials
- Workplace hygiene procedures
- Packaging of dairy products :
- Marketing Techniques application
- Create fresh and aged dairy products, using specific methodologies and technologies at different stages of processing.

4. Range of Occupations Accessible to the Holder of the Certificate

A typical holder of this certificate will be able to work as an expert in the agrifood sector for the dairy production.

5. Official Basis of the Certificate



OFFICIAL BASIS OF THE CERTIFICATE	
NAME AND STATUS OF THE BODY AWARDING THE CERTIFICATE	NAME AND STATUS OF THE NATIONAL AUTHORITY PROVIDING ACCREDITATION/RECOGNITION OF THE CERTIFICATE
Name: Euroconsulting SRL Place: Padova Address: Piazza Modin, 12 - 35129 Phone: 0498935156 E-mail: formazione_lavoro@ecgroup.it Website: http://www.ecgroup.it/news/ Status: Since 1999, Euroconsulting has been consulting and training and since 2010 has developed a new area dedicated to work	Name: Regione Veneto Address: Palazzo Balbi - Dorsoduro, 3901 30123 Venezia Phone: 041.2792111 E-mail: segr.generale@pec.regione.veneto.it
LEVEL OF THE CERTIFICATE (NATIONAL OR INTERNATIONAL) NATIONAL EQF: 4	GRADE SCALE/PASS REQUIREMENTS 4 Levels: Sufficient Good Very Good Excellent
ACCESS TO NEXT LEVEL OF EDUCATION University	INTERNATIONAL AGREEMENT
LEGAL BASIS: National Law n. 107/2015, "Buona scuola" (Good School Law)	

6. Officially Recognised Ways of Acquiring the Certificate

OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE	<p>School/vocation training path:120 hours</p> <p>Working environment:452 hours</p> <p>Total duration of learning path which led to certification: 84 hours (70% of the school path hours) and 316 hours (70% of the working environment).</p>
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ENTRY REQUIREMENTS	Minimal requirements to be admitted : High School Diploma with specific preference for Agrarian specialization, English Level A2
ADDITIONAL INFORMATION	The training course meets the requirements of Regione Veneto

6.2.2 RESPONSIBLE OF ADMINISTRATIVE AND FINANCIAL MANAGEMENT IN AGRIFOOD SECTOR

1. Title of the Certificate

TECNICO DELLA GESTIONE ECONOMICO-AMMINISTRATIVA E COMMERCIALE DELL'IMPRESA AGROALIMENTARE

2. Translated Title of the Certificate

Responsible of administrative and financial management in agrifood sector

3. Profile of the Skills and Competences

A typical holder of the certificate is able to:

- Administrative management
- Commercial management
- Legal framework understanding
- Billing and Invoicing management procedures
- Document Transport Management
- Accounting registration procedures
- Cost Analysis
- Sales Strategy
- Communication Strategy and identification of specific tools
- Trade relations Strategy
- Professional use and management of social network
- Budget management
- Digital marketing
- Meeting organisation

4. Range of Occupations Accessible to the Holder of the Certificate –

A typical holder of this certificate will be able for: Administrative, accounting, technical, commercial and financial competencies that could be offered in several company typologies.



5. Official basis of the certificate

OFFICIAL BASIS OF THE CERTIFICATE	
NAME AND STATUS OF THE BODY AWARDING THE CERTIFICATE	NAME AND STATUS OF THE NATIONAL AUTHORITY PROVIDING ACCREDITATION/RECOGNITION OF THE CERTIFICATE
<p>Name: JOB & SCHOOL Registered place Address: PORDENONE - Corso Garibaldi, 47 - Tel. 0434.208533 - Fax 0434.208534 Place of the course address: Gruaro (VE) - Via dell'Artigianato, 01 Tel. 0421.280436 Fax 0421.282945 Website: www.job-school.com Email: info.gruaro@job-school.com</p> <p>Status: Since 20 years, JOB & SCHOOL has been consulting and training and since 2010 has developed a new area dedicated to work</p>	<p>Name: Regione Veneto Address: Giunta Regionale Palazzo Balbi - Dorsoduro, 3901 30123 Venezia Centralino: 041.2792111 P. IVA: 02392630279 Email: segr.generale@pec.regione.veneto.it</p>
<p>LEVEL OF THE CERTIFICATE (NATIONAL OR INTERNATIONAL)</p> <p>Level: EQF 4</p>	<p>GRADE SCALE/PASS REQUIREMENTS</p> <p>4 Levels:</p> <p>Sufficient Good Very Good Excellent</p>
<p>ACCESS TO NEXT LEVEL OF EDUCATION</p> <p>Technical, Professional or High School Diploma</p>	<p>INTERNATIONAL AGREEMENT</p>
<p>LEGAL BASIS</p> <p>National Law n. 107/2015, "Buona scuola" (Good School Law)</p>	



6. Officially Recognised Ways of Acquiring the Certificate

<p>OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE</p>	<p>School/vocation training path:144 hours Working environment:452 hours Non formal apprenticeship assessed Total duration of learning path which led to certification: 101 hours (70% of the school path hours) and 316 hours (70% of the working environment).</p>
<p>ENTRY REQUIREMENTS</p>	<p>High School Diploma in Economic , Commercial and Linguistic Specialization</p>
<p>ADDITIONAL INFORMATION</p>	<p>The training course meets the requirements of Regione Veneto</p>

6.3 ROMANIA

6..3.1 AUTO MECHANIC COD COR/NC 7231.2.2

1. Title of the Certificate

MECANIC AUTO

2. Translated Title of the Certificate

Auto mechanic

3. Profile of the Skills and Competences

Auto mechanics mount, install, maintain and repair engines and mechanical equipment related to cars, delivery trucks, motorcycles and other vehicles.

Auto mechanics carry out a series of maintenance the vehicles supplied, and also a other duties functional evaluation of they, qualitative and quantitative status of the automotive mechanical parts; other duties are: performing adjustment, installation, maintenance and repair operations on automotive systems, mechanisms and installations; driving and operating vehicles for troubleshooting at locations requested by customers, besides, they have to test engines and other



subassemblies that operate on mechanical principles to detect malfunction, replace defective parts, ensuring the standards set out in the vehicle's technical book, perform adjustments on the engine subassemblies (carburetors, injection pumps, steering, braking, suspension, etc.). Auto mechanics operate in protected areas (workshops, warehouses, etc.). Although there are situations (ex. emergency work, technical assistance on public roads) when activities are conducted outdoors / unprotected spaces.

General professional skills:

- Execution of technical documentation
- Systems maintenance
- Using of measuring and testing equipment
- Using of tools, devices and materials

Specialized professional skills:

- Diagnosis of malfunctions
- Carrying out maintenance and repair work on engine mechanisms
- Systems sealing: lubrication, cooling, fueling
- Executing maintenance and repair works on gearbox and suspensions
- Executing maintenance and repair work on the steering system
- Performing maintenance and repair work on the brake system
- Executing maintenance and repair work on the transmission system•
Diagnosis of malfunctions
- Carry out maintenance and repair work on engine mechanisms
- Systems sealing: lubrication, cooling, fueling
- Executing maintenance and repair works on bridges and suspensions.
- Executing maintenance and repair work on the steering system.
- Performing maintenance and repair work on the brake system.
- Executing maintenance and repair work on the transmission system

4. Range of Occupations Accessible to the Holder of the Certificate

The most relevant occupations or jobs are the following:

- Auto mechanic

5. Official Basis of the Certificate

Name of the Body Awarding the Diploma: Ministry of Labor, Family and SocialProtection.

Official Duration of the Education/ Training Leading to the Diploma: 720 hours

Level of the Diploma (National or International) NATIONAL: Non-University Higher Education



INTERNATIONAL:

Level 3 of the International Standard Classification of Education (ISCED5). Level 5 of the European Qualifications Framework (EQF5).

Entry Requirements: Holding the Certificate in Post-Compulsory Secondary Education (high school graduation) or passing the corresponding access test.

Access to Next Level of Education/Training: This diploma provides access to University studies.

Legal Basis. Basic regulation according to which the diploma is established:

Minimum teaching requirements established by the State: Government Decision no. 129/2000, Order of the Minister of Labor n°701/2003, Order of the Minister of Labor n°51/2007, Government Decision no. 67 of 24 January 2007

In Romania, the National Europass Centre was established by the Government Decision n°. 67 / January 24, 2007 regarding participation of Romania within community programmes. NEC is part of the National Agency for Community Programmes in the Field of Education and Vocational Training, the Agency that manages at national level the Lifelong Learning Programme, Erasmus Mundus, Tempus and Youth in Action. Here you can see more information on the Agency's mission, organization and personnel.

The National Europass Centre is responsible for:

- Development and implementation of the Europass national strategy,
- Development of Europass and Youthpass information and promotion activities,
- Providing support for filling-in and issuing the Europass Mobility and Youthpass Certificate,
- Coordinating the issuing process of the Europass Mobility together with the issuing institutions,
- Coordinating the Europass promoters' network which organize local information and promotion activities. All Europass documents are issued free of charge.

6. Officially Recognised Ways of Acquiring the Certificate

Modalities of Vocational Training Course:

The classroom-based modality is studied in schools, with regular attendance to classes. It can be carried out in ordinary centers, integrated vocational training centers and national reference centers.



The qualifications obtained while attending this Formative Cycle Degree are the same in all the national territory. However, it must be taken into account that the calendar, the registration system, the evaluation and the curricula may vary by sector.

6.3.2 TECHNICIAN MECHANIC COD COR/NC 3115.0.9

1. Title of the Certificate

MAISTRU MECANIC AUTO

2. Translated Title of the Certificate

Technician mechanic

3. Profile of the Skills and Competences

Technician mechanic is an occupation requiring theoretical and practical training to organize, coordinate, monitor and evaluate vehicle verification, maintenance, operation and repair activities so that they maintain their constructive and functional parameters and comply with the rules Technical specifications mentioned above. This level of training involves relevant theoretical knowledge, considers independent work activities and requires coordination and supervision tasks. Improving at this level indicates that the person who has acquired it can solve complex situations demonstrating significant experience and practice, related to an extensive area of work situations. Technician mechanic works in automobile repair shops, in automobile manufacturing or importing companies, or in periodical technical inspections. Depending on the specifics of the working processes, technician mechanic has the following duties:

- establishes and maintains professional relationships collaborative with the team, the subordinated employees and the clients, in order to increase the productivity of the work and the profit;
- uses the calculation techniques provided
- organizes the workshop and plans the activities of the subordinate employees to ensure their safety and health at work, avoiding fires, incidents and accidents at work as well as occupational illnesses.
- assures the quality procedures of the performed works, formulates indicators for measuring the efficiency of the process and evaluates the application of the procedures for the realization of the process indicators,
- assures environmental protection in the work process;
- instructs the subordinate staff to know their job duties and both the labor legislation, and the occupational safety and health legislation;



- provides where appropriate, the technical documentation necessary for the fitting, adjustment, verification, testing, diagnosis, maintenance and repair of the vehicles;
- coordinates the installation, adjustment, verification, maintenance and repair of automobiles and provides technical assistance to them;
- supervises work processes, corrects erroneous executions, improves process sequences;
- formulates objectives, coordinates and manages material and human resources for the development of medium-scale projects;
- applies self-assessment and internal evaluation procedures for process efficiency and management of allocated human and material resources;
- tests and car diagnosis to determine their technical condition;
- draws up the necessary documents for carrying out the activity and for the records of the performed works;
- performs the Periodic Technical Inspection of Road Vehicles.

General Professional skills:

- Execution of technical documentation
- Systems maintenance
- Using of measuring and testing equipment
- Using of tools, devices and materials

Acquired competences:

- Organization of workshop and jobs
- Coordination of the maintenance of the equipment / work equipment
- Application of environmental protection rules
- Application of quality procedures
- Analysis the construction, operation and technical state of motor vehicles
- Organization of car maintenance activities
- Management of motor vehicle repair activities
- Technical inspection of motor vehicles

4. Range of Occupations Accessible to the Holder of the Certificate

The most relevant occupations or jobs are the following:

- Technician mechanic

5. Official Basis of the Certificate

Name of the Body Awarding the Diploma: Ministry of Labor, Family and Social Protection.

Official Duration of the Education/ Training Leading to the Diploma: 540 hours



Level of the Diploma (National or International) NATIONAL: Non-University Higher Education

INTERNATIONAL:

Level 3 of the International Standard Classification of Education (ISCED5). Level 5 of the European Qualifications Framework (EQF5).

Entry Requirements: Holding the Certificate in Post-Compulsory Secondary Education

(high school graduation) or passing the corresponding access test.

Access to Next Level of Education/Training: This diploma provides access to University studies.

Legal Basis. Basic regulation according to which the diploma is established:

Minimum teaching requirements established by the State: Government Decision no.

129/2000, Order of the Minister of Labor n^o701/2003, Order of the Minister of Labor n^o51/2007, Government Decision no. 67 of 24 January 2007

In Romania, the National Europass Centre was established by the Government Decision n^o. 67 / January 24, 2007 regarding participation of Romania within community programmes. NEC is part of the National Agency for Community Programmes in the Field of Education and Vocational Training, the Agency that manages at national level the Lifelong Learning Programme, Erasmus Mundus, Tempus and Youth in Action. Here you can see more information on the Agency's mission, organization and personnel.

The National Europass Centre is responsible for:

- Development and implementation of the Europass national strategy,
- Development of Europass and Youthpass information and promotion activities,
- Providing support for filling-in and issuing the Europass Mobility and Youthpass Certificate,
- Coordinating the issuing process of the Europass Mobility together with the issuing institutions,
- Coordinating the Europass promoters' network which organize local information and promotion activities.

All Europass documents are issued free of charge.

6. Officially Recognised Ways of Acquiring the Certificate

Modalities of Vocational Training Course:



- The classroom-based modality is studied in schools, with regular attendance to classes. It can be carried out in ordinary centers, integrated vocational training centers and national reference centers.

The qualifications obtained while attending this Formative Cycle Degree are the same in all the national territory. However, it must be taken into account that the calendar, the registration system, the evaluation and the curricula may vary by sector.

6.3.3 ELECTRICIAN IN ELECTRICAL INSTALLATIONS COD COR/NC 7245.2.7

1. Title of the Certificate

Electrician in instalatii electrice

2. Translated Title of the Certificate

Electrician in electrical installations

3. Profile of the Skills and Competences

Electricians specialized in electrical installations perform technical tasks of assembly, construction, operation, maintenance and repair of appliances, installations and distribution systems of electric power; and ensure the operation of the appliances and installations; an electrician also performs installation schemes for electrical installations and circuits, contributes to estimating the quantities and costs of materials and labor required, assures the technical control of the installations and maintains electrical systems and appliances for operation according to specifications and regulations. Workers in this group, maintain and repair electrical installations and equipment.

Electricians in the building sector trace electrical installations perform works to support their various pieces, mount component parts (tubes, conductors, wires, lamps, etc.); and executes electrical connections, and power distribution networks for buildings among other finishing works.

Acquired competences:

1. Safe work with materials, work equipment, tools and devices
2. To communicate
3. Quality Assurance
4. Health and safety of work
5. Team working
6. Mounting low-voltage installations
7. Mounting and using electric machines



8. Use of low-voltage installations
9. Maintenance of machines of low voltage electrical appliances and installations
10. Use of basic electrical devices in electrical installations and equipment
11. Setting up installations for powering electric machines
12. Electrical installations
13. Exploitation of the maintenance and the repair of equipment from power plants
14. Development of secondary circuits in electro-energetic installations

4. Range of Occupations Accessible to the Holder of the Certificate

The most relevant occupations or jobs are the following:

- Electrician in electrical installation

5. Official Basis of the Certificate

Name of the Body Awarding the Diploma: Ministry of Labor, Family and Social Protection.

Official Duration of the Education/ Training Leading to the Diploma: 720 hours

Level of the Diploma (National or International) NATIONAL: Non-University

Higher Education

INTERNATIONAL:

Level 3 of the International Standard Classification of Education (ISCED5).

Level 5 of the European Qualifications Framework (EQF5).

Entry Requirements: Holding the Certificate in Post-Compulsory Secondary Education (high school graduation) or passing the corresponding access test.

Access to Next Level of Education/Training: This diploma provides access to University studies.

Legal Basis. Basic regulation according to which the diploma is established:

Minimum teaching requirements established by the State: : Government Decision no. 129/2000, Order of the Minister of Labor n^o701/2003, Order of the Minister of Labor n^o51/2007, Government Decision no. 67 of 24 January 2007

In Romania, the National Europass Centre was established by the Government Decision n^o. 67 / January 24, 2007 regarding participation of Romania within community programmes. NEC is part of the National Agency for Community Programmes in the Field of Education and Vocational Training, the Agency that manages at national level the Lifelong Learning Programme, Erasmus Mundus, Tempus and Youth in Action. Here you can see more information on the Agency's mission, organization and personnel.

The National Europass Centre is responsible for:

- Development and implementation of the Europass national strategy,
- Development of Europass and Youthpass information and promotion activities,
- Providing support for filling-in and issuing the Europass Mobility and Youthpass Certificate,
- Coordinating the issuing process of the Europass Mobility together with the issuing institutions,
- Coordinating the Europass promoters' network which organize local information and promotion activities.

All Europass documents are issued free of charge.

6. Officially Recognised Ways of Acquiring the Certificate

Modalities of Vocational Training Course

- The face-to-face modality is studied in schools, with regular attendance to class. It can be carried out both in ordinary centers, integrated vocational training centers and national reference centers.

The qualifications that are obtained while attending this Formative Cycle Degree are the same in all the national territory. However, it must be taken into account that the calendar, the registration system, the evaluation and the curricula may vary by sector.



7. BIBLIOGRAPHY

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