

MATRIX ECVET



Definition of the Credit System Associated to the new Qualification - ECVET



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1 MATRIX ECVET

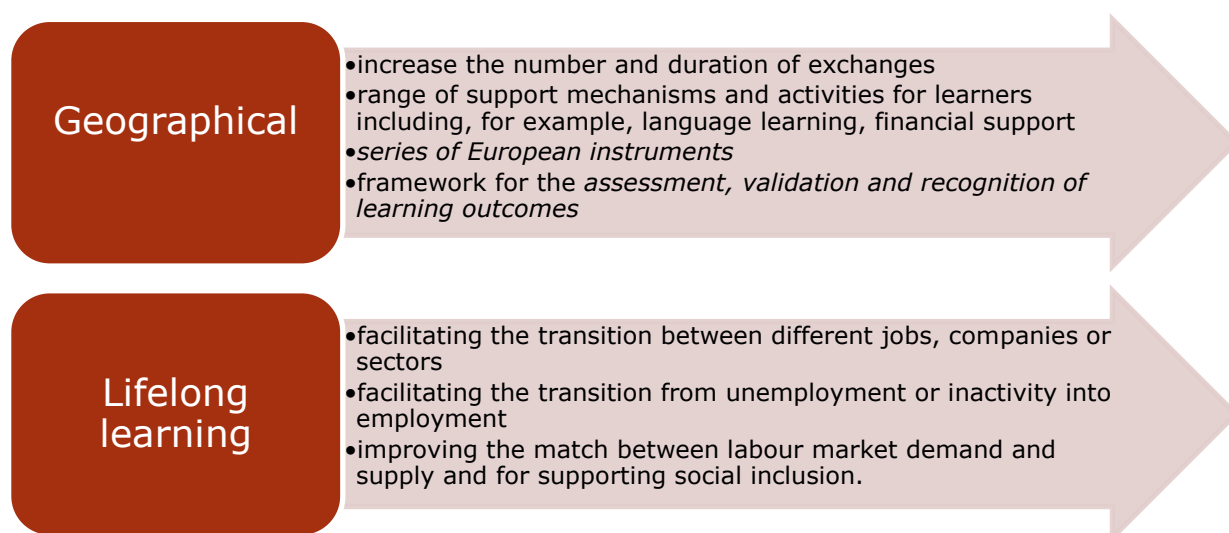
1.1 Framework

The European Credit System for Vocational Education and Training, often referred to as ECVET, is a technical framework for the transfer, recognition and (where appropriate) accumulation of individuals' learning outcomes with a view to achieving a qualification. Guided by a European-level Recommendation, ECVET relies on the description of qualifications in units of learning outcomes, on transfer, recognition and accumulation processes and on a series of complementary documents such as a Memorandum of Understanding and Learning Agreement¹.

Objective

- To facilitate the recognition of learning outcomes in accordance with national legislation, in the framework of mobility, for the purpose of achieving a qualification.
- To support the mobility of European citizens, facilitating lifelong learning - achieved in formal, non-formal and informal settings - and providing greater transparency in relation to individual learning experiences, making it more attractive to move between different countries and different learning environments.

Benefits



¹ <http://www.ecvet-toolkit.eu/introduction/what-ecvet>

Regulatory Entities for the European/National Qualifications Framework

In **Portugal** there is the Regulatory Entity for the education and training system, the **ANQEP - National Agency for Qualification and Vocational Education**. The National Qualifications Framework approved by Portuguese Law no. 782/2009 of 23 July adopts the mains to the European Qualifications Framework in accordance with the Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the For Lifelong Learning (JO, n°C 111, of 6 May 2008).

The National Agency for Qualification and Vocational Education, I.P. (ANQEP, IP) is a public institute integrated in the indirect administration of the Portuguese State, with administrative, financial and pedagogical autonomy in the development of its functions, under the superintendence and joint tutelage of the Ministries of Education, and of Labor, Solidarity and Social Security, in coordination with the Ministry of Economy.

ANQEP manages the national catalogue of qualifications, as well as sectoral councils for each area of education and training, and the catalogue is available at www.catalogo.anqep.gov.pt.

In **Romania** there are two Regulatory Entities for the education and training system. **The National Center for the Development of Vocational and Technical Education** is a specialized body subordinated to the Ministry of Education, a public institution with legal personality established by Government Decision no. 855 of November 26, 1998. The CNDIPT was established with the purpose of continuing the reform of the vocational education (IPT), which started with the assistance of the European Union through the Phare VET program RO 9405. Through the subsequent amendments and completions of the decision to set up, the institution has diversified its attributions in the development of vocational and technical education.

The National Authority for Qualifications (ANC) regulates and coordinates the general framework of adult education and training. ANC develops the National Qualifications Framework and manages the National Register of Qualifications, the National Register of Approved Vocational Training Providers, the National Register of Graduates of Adult Training Authorization Programs. ANC also coordinates and controls the authorization and licensing process of adult vocational training providers and professional competence assessment centers, as well as the certification of professional competence assessors, obtained in ways other than the formal ones, according to Order no. 4543/468 of 23 August 2004, approving the procedure for the evaluation and certification of professional skills obtained in ways other than formal ones.

In **Spain**, the National entity in charge of regulating all the matters concerning the qualifications framework for VET is the **National Institute of Qualifications (hereinafter, INCUAL)**. It is a body dependent on the Ministry of Education. It was created by Royal Decree no. 375/1999, of March 5 and is the technical instrument

endowed with capacity and independence of criteria, which supports the General Vocational Training Council to attain the objectives of the National Qualifications and Vocational Training System.

Organic Law 5/2002, on Qualifications and Vocational Training, attributes to INCUAL the responsibility to define, elaborate and keep updated the National Catalogue of Professional Qualifications and the corresponding Modular Vocational Training Catalogue. The governing body of the Institute is the General Vocational Training Council, although it depends organically on the Ministry of Education, as laid down in Royal Decree 257/2012, of January 27. In sum, INCUAL has as its fundamental mission to elaborate and update the National Catalogue of Professional Qualifications, which is the reference that allows the integration between Vocational Training systems in the field of Education and Vocational Training for Employment, and is the benchmark for Accreditation of Professional Competences acquired through work experience and non-formal learning.

1.2 Purpose of level descriptors

Is to indicate the location of a particular qualification. They support learners, education and training providers, and employers to position and value a specific qualification in relation to other qualifications; this also applies to those awarded in another education and training subsystem or country².

1.2.1 Descriptors

Level descriptors in the European qualifications framework:

Knowledge	Skills	Responsibility and autonomy
In the context of EQF, knowledge is described as theoretical and/or factual.	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).	In the context of EQF, responsibility and autonomy is described as the ability of the learners to apply knowledge and skills autonomously and with responsibility.

○ Main NQF level descriptor elements in **Portugal**:

Knowledge	Skills	Attitudes
Facts, principles, theories and practices.	<ul style="list-style-type: none"> Cognitive skills (logical, intuitive and creative thinking); Practical skills (manual dexterity and the use of methods, materials, tools and instruments). 	<ul style="list-style-type: none"> Autonomy; Responsibility.

² http://www.cedefop.europa.eu/files/5566_en.pdf.

Detailed description for the interpretation of level descriptor domains:

Knowledge	Skills	Attitudes	Context (*)
Depth: Depth of knowledge is considered to increase progressively from the lowest to the highest level, as is the complexity and variety of knowledge Understanding and critical thinking: At the lower level, it is understood as interpretation of information and application in the context; At the highest, critical awareness of knowledge related issues in the field and at the interface with other fields.	Depth and breadth: Progressive broadening and specialisation of the range of cognitive and practical skills, from a range of restricted breadth and basic depth at qualification level 1, to an advanced range of skills at the forefront of a field of work or study at the highest level of qualification. Purpose: At the lowest level, the individuals should be capable of performing tasks and solving simple problems by interpreting basic information (task of execution), and at higher level of qualification they are expected to be capable of research and innovation to solve critical problems and perform complex tasks or to redefine existing knowledge and professional practices (research and development tasks, innovation).	Responsibility: This subdomain includes responsibility for one's own work and responsibility for others. In terms of responsibility for one's own work, a gradation was adopted from work under instruction with shared responsibility (level 1) to work taking responsibility and with a sustained commitment to the development of new ideas and new processes at the forefront of a field of work or study (level 8). As for the level of responsibility for others, there is considered to be progression from no responsibility (level 1) to responsibility for others, demonstrating authority, innovation and scientific and professional integrity (level 8). Autonomy: This subdomain is structured from no autonomy/low level of autonomy (levels 1/2) to maximum autonomy, understood as a sliding scale.	Context of application: Ranging from everyday activities at a lower level, to a specialised field of work or study and the interface between different areas at higher level. Predictability and complexity: Developing from a stable structure context at level 1, to an unpredictable and highly complex context at qualification level 8.

(*) Context is considered a transversal subdomain.

Source: Portuguese National Agency for Qualifications, 2011.

Descriptors for levels 4-5

	Knowledge	Skills	Attitudes
Level 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.	<ul style="list-style-type: none"> 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.

Level 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.	<ul style="list-style-type: none"> Exercise management and supervision in contexts of work or study activities where there is unpredictable change; Review and develop performance of self and others.
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http://www.cedefop.europa.eu/files/5566_en.pdf

○ Main NQF level descriptor elements in **Romania**:

Knowledge	Skills	Responsibility and autonomy
<ul style="list-style-type: none"> Factual Theoretical 	<ul style="list-style-type: none"> Cognitive Practical 	<ul style="list-style-type: none"> Autonomy Responsibility

Descriptors for levels 4-5

	Knowledge	Skills	Responsibility and autonomy
Level 4	<ul style="list-style-type: none"> Factual and theoretical knowledge in broad contexts within a field of work or study. 	<ul style="list-style-type: none"> A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study. 	<ul style="list-style-type: none"> 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.
Level 5	<ul style="list-style-type: none"> Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge. 	<ul style="list-style-type: none"> A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems. 	<ul style="list-style-type: none"> Exercise management and supervision in contexts of work or study activities where there is unpredictable change; review and develop performance of self and others.

Source: Government of Romania, 2018³.

○ Main level descriptor elements of the **Spanish** qualifications framework (MECU, Marco Español de Cualificaciones):

Knowledge Described as theoretical and/or practical:	Skills and abilities Described as cognitive and practical	Competence Described as autonomy and responsibility
<ul style="list-style-type: none"> To have or understand knowledge. 	<ul style="list-style-type: none"> To apply knowledge; Ability to communicate in various languages; Analysis ability. 	<ul style="list-style-type: none"> Learning ability; Attitudes.

³ http://www.cedefop.europa.eu/files/5566_en.pdf

Draft descriptors for MECU levels 3 - 4

	Knowledge	Skills	Responsibility and autonomy
Level 3	<ul style="list-style-type: none"> General knowledge of facts, principles, processes and concepts in a work field or in different study areas, mainly linguistic, mathematical, natural environment, social, cultural and artistic. 	<ul style="list-style-type: none"> Application of general knowledge and the necessary skills to carry out tasks and to solve problems selecting and applying methods, tools, materials and general information in specific contexts; Communication of knowledge, abilities, feelings and activities in relatively simple contexts; Basic use of new technological resources and in communication through different artistic representations and expressions in a work or study field; Analysis and resolution of problems in a concrete context. 	<ul style="list-style-type: none"> Individual or team work or study taking responsibilities Adapting own behaviour to the circumstances in a responsible way to solve problems and to understand others.
Level 4	<ul style="list-style-type: none"> knowledge in wide contexts in various study areas or in a specialised professional field 	<ul style="list-style-type: none"> knowledge application to carry out a set of activities in defined and generally previewed contexts; Skills to resolve generally predictable problems in the knowledge areas or a field of work; Supervision of other people's everyday work taking some responsibility for the evaluation and improvement of work or study activities; To communicate knowledge, abilities, feelings and activities correctly in generally predictable contexts through different resources and forms of expression; Analysis of the consequences of one's and others' actions in generally predictable contexts; Analysis of concrete information needed to assess and solve problems within their own study or professional field; 	<ul style="list-style-type: none"> Self-management of education in a study or professional field, with maturity to improve learning and training skills at higher levels; Responsible attitudes towards education that will allow them to realise the value of new possibilities and of carrying out activities independently; Responsible attitude towards other people's work, enabling them critically to value new possibilities to make improvements; Responsible attitude regarding the application of workplace risk prevention, their own and people's safety, work quality and environmental protection where professional activity is carried out.

		<ul style="list-style-type: none"> Finding creative solutions for problems in a study or professional field. 	
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Source: Draft MECU level descriptors⁴

1.3 Units of learning outcomes

A qualification comprises in principle several units and is made up of the whole set of units. Based on the European framework, each units of learning outcomes should include different steps.

This way, according to ECVET recommendations, the specifications for a unit should include:

1	2	3	4	5	6	7
The generic title of the unit	The generic title of the qualification (or qualifications) to which the unit relates, where applicable	The EQF level of the qualification	The learning outcomes contained in the unit	Assessment of these learning outcomes	The ECVET points associated with the unit	The validity in time of the unit, where relevant

In ECVET, the allocation of points usually has two phases:

- first to a qualification as a whole;
- second to its units.

From this total, ECVET points are then allocated to each unit according to their relative weight within the qualification.

1.4 ECVET – PT, ES, RO

- According to the ECVET Recommendation, a full-time formal training year corresponds to 60 credit points. Qualifications with the same level of qualification, according to the National Qualifications Framework, have the same minimum limit of number of credit points. Credit points are distributed among the units that comprise the qualification, following the below indications:
 - importance of the learning outcomes for the labour market;

⁴ http://www.cedefop.europa.eu/files/5566_en.pdf.

- complexity of the learning outcomes to be achieved;
- the amount of work required to acquire the learning outcomes, in particular the hours of training required for this purpose.

Portugal

In Portugal, on February 1, 2017, Ordinance no. 47/2017 was issued, giving account of the creation of a credit system that, in line with the modular structure of the existing training offer, enables the coherent capitalization of training units and greater mobility and flexibility in the training paths. Credit points are allocated to qualifications that integrate the National Qualification Catalogue, according to the qualification level defined in the National Qualifications Framework. A full-time formal training year corresponds to 60 credit points, as provided for in the ECVET Recommendation.

25 hours = 2.25 credit points

50 hours = 4.50 credit points

Romania

In Romania, there is no legal/regulatory provision from which credits are granted for qualifications. Currently there are discussions/proposals at competent authority level that convert to the solution indicated above, but it is still not official.

Total of ECVET points to allocate to the general component: $60 * 0,4 = 24$ ECVET points

Total of ECVET points to allocate to the technical component: $60 * 0,6 = 30$ ECVET points

Number of ECVET points, per hour, for the technical component: $30 / 950 = 0,03$ ECVET point/hour

Spain

In the case of Spain, the country does not yet have a framework and/or guidelines for the attribution of ECVET points and credits in VET programmes - although, the same equivalences used in higher education in terms of credits (the ECTS system) can apply as well to VET courses. Thus, in accordance with the ECTS system and following the general ECVET recommendation, it can be considered that one academic year in VET education is equivalent to 60 ECVET points.

It must also be taken into account that in Spain, VET profiles corresponding to levels 4 & 5 in the EQF according to the Spanish National Catalogue of Qualifications have a duration of 2000 hours (2 academic years), having each academic year a fixed duration of 1000 hours.

1.5 Clothing Technician Profile and Qualification – competence units

Competence units of the Clothing Technician profile:

Clothing Technician Profile		
Competence Units	1	Planning the production
	2	Organizing the production
	3	Monitoring the production process
	4	Executing technical sheets
	5	Performing procedure manuals
	6	Using pattern making tools (manual and digital)
	7	Operating manufacturing machines
	8	Undertaking the finishing of garments and accessories
	9	Using quality and technical standards

1.5.1 Competence's unit - Planning the production

Clothing Technician Profile		
Competence's unit	Planning the production	
Knowledge	Skills	Responsibility and autonomy
Raw materials. Sewing machines knowledge. Production process and how to program it. Skills of the Human Resources implied in the production. Machinery maintenance (basic knowledge).	Apply production planning techniques. Develop a plan to organize the place and work time. Adjust the production to manufacturing specifications. Review raw materials features. Elaborate Production Plan.	Analytical mind. Solve problems Time management. Critical thinking. Teamwork. Organizing skills. Comply with the production and standards set. To communicate effectively with the different departments. Ability to prioritize.

Learning Outcome The learner will:	Assessment criteria The learner can:	Output (expected results)
Be able to plan the production	1. Perform daily production schedule (orders, stocks of raw materials, equipment and human resources available) 2. Work sequence definition 3. Evaluate the orders that are going to be manufactured, establishing the priorities between them and work to be done.	Production Plan

1.5.2 Competence's unit - Organizing the production

Clothing Technician Profile		
Competence's unit	Organizing the production	
Knowledge	Skills	Responsibility and autonomy
Raw materials. Tools and manufacturing machines. Operation list. Pattern. Manufacturing techniques.	Select the required tools, machinery, raw materials according to the different manufacturing operations and the material of the article for the organization of the process. Determine the best manufacturing technique according to the technical sheet. Organize the manufacturing process following the established instructions. Creating the list of phases and operations according to the style. Define the production time of the piece to determine the costs.	Analytic mind. Time management. Organizing ability. Teamwork. Team management. Comply with the production and standards set.

Learning Outcome The learner will:	Assessment criteria The learner can:	Output (expected results)
Be able to organize the production	1. Select techniques, materials and tools to be applied to ensure the manufacturing process, interpreting the technical	Product Development Plan

	<p>specifications of the design and the manufacturing order.</p> <p>2. Prepare the manufacturing process taking into account human and material resources, in order to guarantee its quality.</p> <p>3. Prepare the manufacturing process, checking the adjustment of machines and equipment involved, in order to guarantee its quality.</p>	
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1.5.3 Competence's unit - Monitoring the production process

Clothing Technician Profile		
Competence's unit	Monitoring the production process	
Knowledge	Skills	Responsibility and autonomy
<p>Production Process.</p> <p>Cutting, sewing and finishing processes.</p> <p>Machine and equipment operating functioning.</p>	<p>Check the cut pieces according to the information indicated in the production order.</p> <p>Check the joining or sewing procedure, verifying that it is carried out according to the characteristics of the material and following the sequence set according to the list of phases or operations.</p> <p>Check the manufacturing process verifying that the joining or sewing machines are handled avoiding entrapment risks.</p> <p>Check the joining or machine sewing operations, verifying the accuracy and quality of the sewing, to detect defects or anomalies.</p> <p>Ensuring that maintenance work is carried out in order to correct the anomalies.</p> <p>Ensuring compliance with health, hygiene, safety and ergonomics rules at work.</p>	<p>Observation Capacity.</p> <p>Process control.</p> <p>Analytic Mind.</p> <p>Teamwork.</p> <p>Comply with the production and standards set.</p>

	Identifying the defects and notifying the persons empowered to correct them.	
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Learning Outcome The learner will:	Assessment criteria The learner can:	Output (expected results)
Be able to monitor the production process	<ol style="list-style-type: none"> 1. Control the manufacturing process, ensuring the optimal operation of the tools of production and flow of materials to obtain articles in textile. 2. Review the joining or sewing operations carried out by hand or machine, in order to check the expected quality and ensure the correct finish. 3. Establish quality control scale. 	Quality Plan Verified product Machinery maintenance plan

1.5.4 Competence's unit - Executing technical sheets

Clothing Technician Profile		
Competence's unit	Executing technical sheets	
Knowledge	Skills	Responsibility and autonomy
Raw material fundamentals. Accessories fundamentals. Cost fundamentals. Time & Methods fundamentals. Sewing manufacturing machines fundamentals. Production process (in-depth knowledge). Human resources characteristics involved in production.	Interpret and create sketches. Adjust manufacturing specifications. Review raw-material characteristics. Ensure that the datasheet is updated whenever is needed. Ensure datasheet implementation.	Analytical mind. Problem-solving. Time management. Critical thinking. Organisational ability. Teamwork.

Learning Outcome The learner will:	Assessment criteria The learner can:	Output (expected results)
Be able to execute technical sheets	1. Follow the samples and prototypes for further product development. 2. Create the manufacture technical criteria specifications, integrate the information provided from the different departments that integrate the company, including illustrated front and back sketches and brief description of	Technical sheets

	<p>the garment, stitch types and stitching, sketched detail (where necessary) quality specifications, measurement specifications, listing of materials and accessories (used in the manufacturing), sample of each of the materials and accessories used in the garment.</p> <p>3. Ensure the correct execution of the technical sheet.</p>	
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1.5.5 Competence's unit - Performing procedure manuals

Clothing Technician Profile		
Competence's unit	Performing procedure manuals	
Knowledge	Skills	Responsibility and autonomy
Production processes understanding. Current standards.	Analyse manufacturing processes. Define manufacturing methodologies. Regulate and implement manufacture procedures.	Leadership. Analytical mind. Critical thinking. Management skills. Team management. Overview ability. Teamwork.

Learning Outcome The learner will:	Assessment criteria The learner can:	Output (expected results)
Be able to Perform procedure manuals	1. Participate in the production process definition. 2. Monitor the cutting, sewing and finishing requirements implementation.	Manufacturing flow chart Production Procedures Handbook

1.5.6 Competence's unit - Using pattern making tools (manual and digital)

Clothing Technician Profile		
Competence's unit	Using pattern making tools (manual and digital)	
Knowledge	Skills	Responsibility and autonomy
Manual and digital pattern fundamentals. Cutting plan fundamentals.	Diagnose the product viability through wearability analysis to critically assess any aspects to be corrected. Identify pattern components. Develop base patterns. Transform base patterns. Apply base pattern grading. Know how to print standard cutting planes and parts for verification. Interpret cutting plans.	Critical thinking. Problem-solving. Teamwork. Quality control along the communication process.

Learning Outcome The learner will:	Assessment criteria The learner can:	Output (expected results)
Be able to use pattern making tools (manual and digital)	1. Digitizing base patterns. 2. Create base patterns. 3. Apply transformation techniques for base patterns. 4. Perform base pattern grading. 5. Create cutting plans. 6. Print cutting planes and pattern parts for verification.	Base patterns Cutting plan

1.5.7 Competence's unit - Operating manufacturing machines

Clothing Technician Profile		
Competence's unit	Operating manufacturing machines	
Knowledge	Skills	Responsibility and autonomy
<p>Parameters of the manufacturing machines and the adjustment mode.</p> <p>Technical possibilities of specific manufacturing machines.</p> <p>Maintenance conditions of the specific manufacturing machines.</p> <p>Technological processes of manufacturing.</p> <p>Operating systems (software) related to production equipment (basic knowledge).</p>	<p>Choosing the manufacturing machines according to the technology applied and the materials used.</p> <p>Adjusting the parameters of the manufacturing machines respecting the provisions of the technical book of the equipment and the technical specification.</p> <p>Performing the technological operations on different production machines (cutting machine, sewing machines, finishing equipment / humidothermal treatment), respecting the execution technology.</p>	<p>Technical and analytical mind.</p> <p>Teamwork.</p> <p>Quality assurance.</p> <p>Problem-solving.</p>

Learning Outcome The learner will:	Assessment criteria The learner can:	Output (expected results)
Be able to operate manufacture machines	<p>1. To set up the manufacture machines and adjusting the parameters of use according to the technical specifications.</p> <p>2. Perform the technological operations on different production machines (cutting machine, sewing</p>	<p>Specific instructions for setting the manufacturing machines for different operations</p> <p>Complex semi-finished components and finished products</p>

	<p>machines, finishing equipment/ humidothermal treatment), in compliance with the execution technology.</p> <p>3. Proper operate and keep the maintenance of equipment.</p> <p>4. Apply the norms of safety, hygiene and health.</p>	<p>Maintenance plan of the manufacturing machines</p>
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1.5.8 Competence's unit - Undertaking the finishing of garments and accessories

Clothing Technician Profile		
Competence's unit	Undertaking the finishing of garments and accessories	
Knowledge	Skills	Responsibility and autonomy
Raw materials. Auxiliary materials. Finishing equipment. Finishing techniques.	Finishing the product in compliance with the indications of the technical specification and a right use of the technology. Identifying the defects and notifying the persons empowered to correct them.	Technical and analytical mind. Teamwork. Quality assurance. Problem-solving.

Learning Outcome The learner will:	Assessment criteria The learner can:	Output (expected results)
Be able to undertake the finishing of garments and accessories	1. Finish the product in compliance with the indications of the technical specification, respectively the specific parameters of the material and the requirements of the model. 2. Respect the finish technology of garments and accessories.	Garments and accessories finished in specific parameters

1.5.9 Competence's unit - Undertaking the finishing of garments and accessories

Clothing Technician Profile		
Competence's unit	Using quality and technical standards	
Knowledge	Skills	Responsibility and autonomy
Quality procedures: quality technical instructions, rules and operational procedures. National and international standards regulations.	Applying technical standards and quality parameters. Identification of problems regarding quality standards. Continuous quality improvement.	Technical and analytical mind. Critical thinking. Teamwork. Quality assurance. Problem-solving. Management skills. Overview ability. Measurements proposal.

Learning Outcome The learner will:	Assessment criteria The learner can:	Output (expected results)
Be able to use quality and technical standards	1. Apply technical standards and quality parameters. 2. Propose measures to improve the quality.	Products according to the technical and quality standards Plan of measures to improve the quality

1.6 Clothing Technician Profile and Qualification – ECVET points

ECVET points are a numerical representation of the overall weight of learning outcomes in a qualification and of the relative weight of units in relation to the qualification. Allocation of ECVET points to a qualification is based on using a convention according to which 60 points are allocated to the learning outcomes expected to be achieved in a year of formal full time VET.⁵

To define the duration of the profile and the allocation of ECVET points, the partnership has developed a method of analysis based on importance degree.

Therefore, the table below reflects the methodology created by the partnership for the award of ECVET points.

Technological Training							
Clothing Technician Profile and Qualification Training framework	Competence's unit (CU)	Training/module	Labour market	Complexity	Training hours	ECVET points	
	CU1 Planning the production	Raw materials	+	+	+	1	
		Determination of provisioning	++	++	+	1	
		Storage Management	++	+	+	1	
		Technical information for industrial clothing	+	++	++	1	
	CU2 Organizing the production	Production schedule	+++	+++	+++	3	
		Layout methods	+++	+++	+++	3	
		Production control	++	++	++	2	
	CU3 Monitoring the production process	Quality control in processes	+	++	+	1	
		Occupational risk protection and environmental protection	++	+	++	1	
	CU4 Executing technical sheets	Technical data sheets development	++	++	++	2	
	CU5 Performing procedure manuals	Technical manuals and procedures	+	+	+	1	
		Working methods	++	+++	+++	3	
		Work measurement	++	+++	+++	3	
	CU6 Using pattern making tools (manual and digital)	Manual pattern making - initiation	++	++	++	2	
		Cutting fundamentals	++	++	+	1	
		CAD - pattern making initiation	++	++	+	2	
	CU7 Operating manufacturing machines	Fabrics cutting technology	+	++	+	1	
		Technical and clothing products assembling technique	++	+++	+++	3	
	CU8 Undertaking the finishing of garments and accessories	Products finishing process	+	++	+	1	
	CU9 Using quality and technical standards	Fabrications necessary technical documentation	+	++	+	1	
		Semi-finished components and finished products quality control	+	++	+	1	
	Transversal training	Interpersonal communication and assertiveness	+++	+	+	1	
		Team leadership and motivation	+++	+	+	1	
		English language - textile industry	++	++	++	1	
		Time management and work organisation	+++	++	++	2	
	TOTAL						40
	Apprenticeship in labour context			+++	++	+++	20
	TOTAL (Technological training + Apprenticeship in labour context)						60
Labour market: + low importance to extreme importance +++							
complexity: + low complexity to extreme complexity +++							
training hours: + less to more +++							

⁵ The European Credit System for Vocational Education and Training ECVET. Get to know ECVET better Questions and Answers (2011).

1.7 Profile match

The partnership defined that the profile would be level 4 in EU, PT, ES, RO and that each country would adopt its national system.

PT, ES, RO defined the duration of each unit and the credit points according to their national system. It was agreed that the profile to be implemented in PT, ES, RO would follow the national system of each country as regards the duration of each unit. However, since the professional profile was agreed by the three countries, this cooperative approach ensures that units are suitable for the purpose of credit transfer in the context of mobility among the partner institutions concerned. The profile framework was cooperatively defined, informing the partner entities which units are transferable for mobility purposes, in order to enable that the credit for these units is recognised when the learner returns to his/her home Institution.

Profile Match			
Indicators	Portugal	Romania	Spain
Qualification designation	Clothing Technician	Clothing Technician	Clothing Technician
Area	Clothing	Clothing	Clothing
Level of Qualification	4	4	4
Body awarding the qualification or competent authority	ANQEP - National Agency for Qualification and Vocational Education	ANC – National Authority for Qualifications CNDIPT - National Centre for the Development of Vocational and Technical Education	INCUAL - National Institute of Qualifications
Credit System	ECVET	ECVET	ECVET
Quality Assurance procedures	Quality Management in Education & Training, ISO 9001 & ISO 29990 NP 4512:2012	Quality Management in Education & Training, ISO 9001 & ISO 29990 HG nr. 21/2007 HG nr. 1534/2008 HG nr. 22/2007	Quality Management in Education & Training, ISO 9001 & ISO 29990
Qualification documents	Certificate of Attendance, Europass Certificate Supplement, Europass Mobility,	Certificate of Attendance, Europass Certificate Supplement, Europass	Certificate of Attendance, Europass Certificate Supplement, Europass

	Competences Certificate	Mobility, Competences Certificate	Mobility, Competences Certificate
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2 Glossary

Key terminologies based on the recommendation of the European Parliament and of the council of 18 June 2009 [2009/C 155/02] on the establishment of a European Credit System for Vocational Education and Training (ECVET)⁶:

Qualification – formal outcome of an assessment and validation process which is obtained when a competent institution determines that an individual has achieved learning outcomes to given standards;

Learning outcomes - means statements of what a learner knows, understands and is able to do on completion of a learning process and which are defined in terms of knowledge, skills and competence;

Unit of learning outcomes – (unit) means a component of a qualification, consisting of a coherent set of knowledge, skills and competence, that can be assessed and validated;

Credit for learning outcomes - (credit) means a set of learning outcomes of an individual which have been assessed and which can be accumulated towards a qualification or transferred to other learning programmes or qualifications;

Competent institution - means an institution which is responsible for designing and awarding qualifications or recognising units or other functions linked to ECVET, such as allocation of ECVET points to qualifications and units, assessment, validation and recognition of learning outcomes, under the rules and practices of participating countries;

Assessment of learning outcomes - means methods and processes used to establish the extent to which a learner has in fact attained particular knowledge, skills and competence;

Validation of learning outcomes - means the process of confirming that certain assessed learning outcomes achieved by a learner correspond to specific outcomes which may be required for a unit or a qualification;

Recognition of learning outcomes - means the process of attesting officially achieved learning outcomes through the awarding of units or qualifications;

ECVET points - means a numerical representation of the overall weight of learning outcomes in a qualification and of the relative weight of units in relation to the qualification.

⁶ [https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32009H0708\(02\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32009H0708(02)&from=EN)

3 Conclusions

ECVET definition is very important to ensure the transparency and recognition of the new qualification at EU level.

The definition of the Credit System Associated to the new Qualification (ECVET) was elaborated applying the methodology described in the EQF to validate the training curriculum and following the descriptors (Knowledge, Skills, Responsibility and Autonomy) for defining levels in the EQF.

The level was defined by a set of descriptors indicating the learning outcomes relevant to qualification at that level in any system of qualifications. Using a methodology based in learning outcomes was ensured that the content and profile of qualifications correspond to what is expected trainee to know, to understand and be able to do. Thus, it allows people to move more easily between education and training institutions and sectors.

The matrix includes precise guidelines with the profile match process in Portugal, Spain and Romania and describes the following aspects:

- Qualification designation
- Area
- Level of qualification
- Description of qualification
- Body awarding the qualification or competent authority
- Credit system
- Quality Assurance Procedures
- Qualification documents

The contents and the duration of the units defined are different in each partner country, because the partners followed the national structure of the professional profiles. Each UC will be finished in the same country. However, it will be ensured the recognition and transferability of the profile/qualification.

The matrix is a useful document that can help other VET providers in definition of new profiles.

4 Bibliography

Publications:

CEDEFOP (2018). *Analysis and overview of NQF level descriptors in European countries*. Luxembourg: Publications Office. Cedefop research paper; no66. Available through B-on: http://www.cedefop.europa.eu/files/5566_en.pdf

CEDEFOP (2018). *National qualifications framework developments in Europe 2017*. Luxembourg: Publications Office. Cedefop information series; no 4163. Available through B-on: <http://www.cedefop.europa.eu/en/publications-and-resources/publications/4163>

Curado, Catarina et al.(2015). *Guia metodológico: conceção de qualificações baseadas em resultados de aprendizagem*. ANQEP - Agência Nacional para a Qualificação e o Ensino Profissional, I.P, 1ª edição. Available through B-on: <http://www.catalogo.anqep.gov.pt/boDocumentos/getDocumentos/554>

European Commission – Education and Culture (2011). *The European Credit System for Vocational Education and Training ECVET. Get to know ECVET better Questions and Answers*. Available through B-on: [https://www.cedefop.europa.eu/files/ECVET_QUESTION_ANSWERS_Feb_2011_en\(download_ID_17648\).pdf](https://www.cedefop.europa.eu/files/ECVET_QUESTION_ANSWERS_Feb_2011_en(download_ID_17648).pdf)

EUR-LEX (2009). *Recommendation of the European Parliament and of the Council of 18 June 2009 on the establishment of a European Credit System for Vocational Education and Training (ECVET) (Text with EEA relevance)*. Available through B-on: <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32009H0708%2802%29>

Websites consulted:

ANQEP. Catálogo Nacional de Qualificações. Available through B-on: <http://www.catalogo.anqep.gov.pt/Qualificacoes>

European Commission – Education and Training. *EU policy in the field of vocational education and training (VET)*. Available through B-on: https://ec.europa.eu/education/policies/eu-policy-in-the-field-of-vocational-education-and-training-vet_en

European ECVET Network. *Supporting individuals to transfer and cumulate their learning outcomes throughout Europe*. Available through B-on: <http://www.ecvet-secretariat.eu/en>

ECVET Toolkit User Guide. Available through B-on: <http://www.ecvet-toolkit.eu/introduction/what-ecvet>

ANC-Autoritatea Națională pentru Calificări. Cadrul European al Calificărilor (CEC).
Available through B-on: <http://site.anc.edu.ro/eqf/>



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