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GUIDE

**FOR THE IMPLEMENTATION OF THE NEW VOCATIONAL TRAINING
IN TECHNOLOGY COMPANIES**



SOMATICA
MATERIALS & SOLUTIONS



ΕΡΓΑ.Λ.
Κ. ΑΧΑΪΑΣ

ERGASTIRIAKO
KENTRO KASTORIAS

This document is a result of the project:

**BUILDING THE VOCATIONAL TRAINING OF THE
FUTURE: COMPANIES AND EDUCATIONAL
CENTERS FACING THE CHALLENGE OF THE
ORGANIZATION AND INTEGRATION OF A MORE
INCLUSIVE AND DIGITAL VET**

This project has been funded with support from the European Commission.

This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



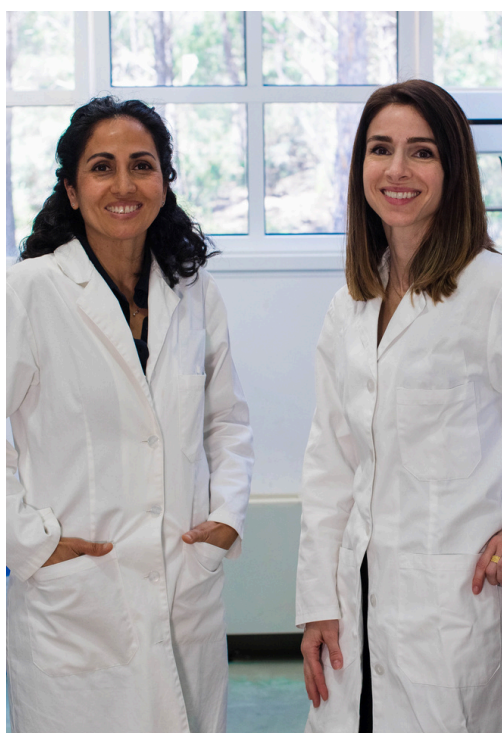
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INTRODUCTION



With the new Vocational Training model, training cycles will combine training periods in the educational centre with training periods in companies or equivalent organisations.

The training that a worker acquires in the company in which he or she works has always been valued in the business world and in society in general. Work experience involves training in transversal skills such as commitment and responsibility, integration into work teams, oral and written communication, honesty and others. What is proposed in the Vocational Training System goes, however, much further. The dual nature of vocational training implies the co-responsibility of the company in the training of the student for his or her entire professional career, both in specific competences of a given professional qualification and in skills that facilitate their adaptation to the evolution of technology, in particular to the energy transition, ecological and digital, to changes in jobs in a company or to changes in their professional careers seeking their own interests and expectations. This poses a challenge for the companies that participate in this system and the need to generate new methodologies themselves.

Cooperation between vocational training schools and companies has been highly valued and has not stopped growing in recent decades, being a recommendation of the European Union and the subject of many theoretical studies [Mikkonen 2017[1], European Commission 2015[2], Guile 2001[3], Fuller 2011[4], Vázquez-Cano 2018[5]

Depending on the characteristics of the training period in the company, dual vocational training can be general or intensive.

General

With general dual vocational training, the training period in the company will be 25% (500h) of the total duration of the training cycle. It will cover between 10% and 20% of the learning outcomes of professional modules. The training in the company will be carried out in two periods:

- **1st year with a minimum duration of 120h and a maximum of 240h.** It will preferably be carried out between March and June.
- **2nd year with a minimum duration of 260h and a maximum of 380h.** It will preferably be carried out between January and March.



Intensive

With intensive dual vocational training, the training period in the company will be 35% (700h) of the total duration of your training cycle. It will contemplate between 30 and 35% of the total learning outcomes of all the modules of the training cycle (not of each module). The training in the company will be carried out in two periods:

- **1st year with a duration of 335 hours.**
- **2nd year with a duration of 365 hours.**

In this case, it will be the educational centre that organises the training periods in the company according to their availability.

It should be noted, as established by Order EFD/657/2024, of 25 June.[6], the competent administration will assume the management of the Social Security registration of the students during the period of training in the company and the non-subsidised cost of contributions.



HOW TO IMPLEMENT THE NEW VET MODEL IN YOUR TECH COMPANY

Step 1: Decide on the qualifications of the students and the number of places

Technology-based companies are in a favourable position to contribute to training the student in a wide range of specific skills related to their sector, even if the position in which the student is most involved during his/her stay in the company is not directly related to them.

By this we mean that a technology company, even small or medium-sized, can openly consider contributing up to 25% of their training cycle to the training of a student. The way of participating in the teaching of specific competences of the degree will undoubtedly use different methodologies from those followed in an educational centre, and perhaps this different point of view is one of the main contributions sought in dual education.

When deciding on the number of students, in addition to taking into account the job position and the capacity of the technology company to accommodate students, it will be necessary to know the characteristics of the students of the specific study center

The information available about vocational training studies in Spain is very extensive and well organized. The website of the Ministry of Education, Vocational Training and Sports of the Government of Spain [Ministry of Education 2024a[7] allows you to find all the available studies grouped into Professional Families, Levels, and Professional Certificates. This information will allow the company to decide on the intermediate degree that best suits the needs and characteristics of the company. In the Annexes you can find information and access to the intermediate level training cycles recommended for technology companies.

The initiative to seek the collaboration of the company in a vocational training cycle may come from the Vocational Training Educational Centre. If that is the case, the offer will come with a smaller range of professional families and qualifications within each of them. It will be necessary, in this case, to analyse how flexible we can be in terms of adapting the job or if it is possible to keep the job that interests the company and adapt the student's training plan, even if there is a greater part of the concepts and techniques that they have to learn during the internship.



The question is: if a Vocational Training Educational Center asks us to collaborate in a degree such as Higher Technician in Industrial Automation and Robotics, Technician in Electrical and Automatic Installations, Higher Technician in Analysis and Quality Control Laboratory, would it be feasible to adapt the job to a certain extent and assume that the complementary training we have to give the student is greater than what we thought in the previous approach?

When deciding on the number of students, in addition to taking into account the job position and the capacity of the technology company to accommodate students, it will be necessary to know the characteristics of the students of the specific study center, but probably what determines the choice that is chosen is the degree of maturity of the student that is required for the work that we think of for their collaboration and the degree of responsibility that he or she will assume.

Whatever is chosen, when the student is working in the company, they will carry out activities that they will recognize as related to subjects or concepts that they will have seen in their previous studies, but they will also have to face concepts and techniques that will be new to them and that they will have to learn to meet the objectives that are set for them. It is no different from what any graduate finds in their first job and then in each of the jobs they will perform throughout their professional career. It is good for the student to abandon as soon as possible the idea that they are only capable of carrying out tasks contained in the curriculum of the degree they have studied, only to do what they have been taught, and to change that idea for a preparation to learn how to learn that allows them to self-train throughout their lives.

Step 2: Choose and train the tutor of the technology company

Selection process

With the new model of Vocational Training, companies must have the figure of a company tutor. Each company must analyze which selection process best suits its needs. However, we propose the following process:

Identify candidates

Inform your company's employees about the opportunity to tutor students who carry out training periods in the company. It is important that they know the advantages it can bring to them. In addition, inform them about the method to submit your application, from email, making an online form, a list on the company's board...

01

Review candidates

Collect and review the requests that have been made. Take into account the availability of each candidate worker to ensure that they have enough time to dedicate to students without compromising their daily workload.

02

Interview or Meet with Candidates

Conduct an interview or meeting with the most suitable candidates.

03

Skills and Compatibility Assessment

1. To make this selection, we consider that the following criteria should be taken into account:

- Interest in the student's tutoring.
- Availability and commitment.
- Competencies in the area in which the student is going to develop his/her activity during the training period in the company.
- Skills to transmit knowledge in a clear and understandable way.
- Patience to adapt to the student's pace.
- In addition, if the worker has previous experience as a trainer, it is an advantage.

04

Final Selection

After the evaluation, the tutor who best suits the necessary profile is selected.

05

Tutor Training or Preparation

It is recommended that the tutor of the company receives training on their role as a tutor.

06

In this course we propose step by step the preparation of the training plan of a student in a technology company and we will ask our course students to prepare for them a similar notebook for a specific job in their company.

Access to the course



Tutor training

From the working group of the Erasmus + FUTUREVET 2022 project[8] we have created a training course ("COURSE FOR TECHNOLOGY COMPANIES: TRAINING ON HOW TO IMPLEMENT NEW MOBILITIES") for technology companies with the aim of showing the attractiveness of the new educational model and the opportunities it offers to the company, while helping them to modify their practices and generate the necessary figures for it, such as the company tutor.

The objective of this course is to present a methodological proposal for the training of a student of a dual vocational training cycle in his/her period of stay in the company. The new Vocational Education System proposed by Organic Law 3/2022 on the organisation and integration of Vocational Training is based on the co-responsibility of vocational training educational centres and companies in the training of students. The company is expected to participate in the achievement of certain learning outcomes of the degree that the student is studying, in addition to the results that are expected from the work activity in the company itself. This poses a challenge in terms of dedication of the company's staff, and in particular the student's tutor in the company, and requires prior programming and a method that makes the learning process effective and not too burdensome for the company in terms of time dedicated by its staff to educational tasks.

It goes without saying that many of the observations we make are very debatable and should be considered as suggestions that everyone can take to the extent they consider and improve them or adapt them to their specific situation.

Step 3: Signing agreements

Agreements between the company and the educational center

ANNEX V-C of Order EFD/657/2024, of 25 June, establishes a model collaboration agreement between the Vocational Training centre and the company or equivalent body for the development of the in-company training period.

This agreement is an agreement that establishes the commitment of both the company and the educational center for the development of the Training Plan.

In this sense, this agreement includes:

- Identify the vocational training centre, the company and the workplace.
- The objective of the agreement.
- The characteristics of the training plan.
- The duties and rights of the parties involved (company, educational centre, tutor of the centre, tutor of the company and the student).
- The causes for termination.
- Period of validity.



Access



Agreements between the company and the student

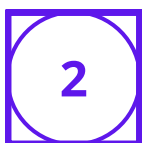
In accordance with the new law and the model agreement between the company and the educational centre provided in ANNEX V-C of Order EFD/657/2024, of 25 June, the student undertakes to "*Respect the utmost confidentiality during their training period in the company or equivalent organisation and at the end of it. In addition, the reproduction or storage of data of the company or equivalent body, or its transmission, whatever the means used for it, is not permitted without the express permission of the guardian of the company or equivalent body.*"

When an internship student arrives at a company, especially a technology company, they are likely to have access to valuable and sensitive information for the organization. This information can include details about ongoing R+D projects, business strategies, customer data, internal procedures, and many other things that the company does not want to be disclosed outside of its environment.

For this reason, from the working group of the Erasmus + FUTUREVET 2022 project[9], we recommend the signing of a confidentiality agreement between the company and the student himself.



Protect the company's intellectual property: In a technology company, R+D projects, software or new technologies are developed that are the exclusive property of the company.



Protect sensitive information: The confidentiality agreement ensures that you understand that the information you handle in the company is private and you should not share it.



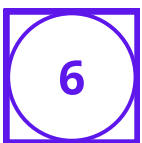
Encourage student responsibility: By signing a confidentiality agreement, the student knows and understands the importance of carefully handling the information to which he or she may have access in the company.



Avoid accidental leaks: Often, training periods are the first work experience in the technology sector that these students have. Therefore, it is important to sign a confidentiality agreement that allows them to understand that they must be careful and not share company information.



Avoid legal problems: The agreement also lays out the legal consequences in case the student fails to comply with the agreement. In this way, the student knows and understands the repercussions in case of not complying with the agreement.



Term of Agreement. We recommend that the confidentiality agreement include a non-disclosure clause that applies even after the end of the training period in the company.

Step 4: Create the training plan

With the new vocational training model, the company, together with the educational centre, must agree on and develop the training plan that the student will carry out during the training period in the company.

The Government in Order EFD/657/2024, of 25 June.[10] has established a training plan model detailing the learning outcomes that will be carried out both in the educational centre and in the company, the distribution of hours and working hours and the data of the entities and people involved.

ANEXO XVII
Plan de formación

ESCUELA DE LA COMUNIDAD AUTÓNOMA	PLAN DE FORMACIÓN Resultados de aprendizaje en periodos de formación en empresa u organismo equiparado Régimen (general / intensivo) Fecha / Curso 20.../20...					
Certificado Profesionalidad / Gdo. Formativo / Curso de Especialización				Código:		
Alumno o Alumna				Correo electrónico:	Teléfono:	
Centro de formación				Correo electrónico:	Código:	
Tutor o tutora del centro de formación				Correo electrónico:	Teléfono:	
Empresa				Correo electrónico:	CF:	
Tutor o tutora de empresa				Correo electrónico:	Teléfono:	
Requiere medidas/adaptaciones extraordinarias por discapacidad	SÍ	Especificar:		Requiere autorización extraordinaria	SÍ	Especificar:
	NO				NO	
Intervalo de formación	Diario	Semanal	Mensual	Otros	Varias empresas	
PERIODOS DE FORMACIÓN EN EMPRESA	Calendario y horario Período...					
	Calendario y horario Período...					
	Calendario y horario Período...					
	Calendario y horario Período...					
TOTAL HORAS						

Módulo profesional	Código	Resultados de Aprendizaje	Desarrollado en empresa (marcar con x)	Desarrollado en el centro (marcar con x)
(DENOMINACIÓN)		RA 1:		
		RA 2:		
		RA 3:		
		RA 4:		
Número de horas a desarrollar en la empresa: ...		RA 1:		
		RA 2:		
		RA 3:		
		RA 4:		

Formaciones específicas y no vinculadas al currículo de Certificado Profesional / Gdo. Formativo / Curso de Especialización:

Fdo.: Tutor/a Dual centro de formación	Fdo.: Tutor/a Dual de la empresa	Fdo.: Alumno o Alumna
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Figure 1. Template of the training plan proposed as a guideline in Annex XVII of Royal Decree 659/2023, of 18 July, which develops the organisation of the Vocational Training System

From the working group of the Erasmus + FUTUREVET 2022 project[11] we propose to expand this training plan and monitor the student through the programming notebook, a digital document that the student fills out throughout his or her stay at the technology company.

The template of this document is designed so that the student, through critical and scientific thinking, has to reflect on each aspect of their activity, from the training and acquisition of learning results, to the tasks of the job that must be carried out during the period in the company.

This notebook is a guide for the student in their training process and should provide the technology company and the educational center with a follow-up that allows the student's activity to be redirected at any time to get the most out of their work. It will also facilitate a final assessment of the skills acquired and allow conclusions to be drawn for the programming of other students in the future.

We seek to ensure that the tasks entrusted to the student in the company are as formative as possible for him or her. They must serve to achieve competencies and skills that they will use throughout their professional career, possibly in companies other than ours, with different business activities or even if it is our same sector with different technologies and in continuous innovation. Therefore, the approach to the tasks that will be carried out during their training and the training to carry them out goes beyond an operating procedure, occupational risk prevention rules or waste management regulations.

The writing of the notebook takes a certain amount of time, especially at the beginning, but we hope that this time will be more than compensated by the advantages it implies in terms of the student's learning and the organization of the information that will remain in the company. It is advisable to make the task as easy as possible with regard to issues related to the editing of the results part. The notebook is a digital document, but if it is more convenient that the notes made in the workshop or in the laboratory are taken on paper, with equations, drawings or diagrams, it is recommended to allow a photo taken from that notebook on paper to be pasted as an image in the notebook.

Parts of the notebook

1

The first of which corresponds to the training plan established in Order EFD/657/2024, of 25 June.

2

PART 2 of the training plan programming and monitoring notebook is aimed at the workplace in the company. We pose a series of questions to the student that they must answer by looking for the necessary information, analyzing it critically and making the effort to understand that information in depth. We consider it extraordinarily formative for the student to put in writing the fundamental points of what their work is going to be, which will force them to reflect on it, see what they have not understood and ask relevant questions and consult with their tutors. Then the tutor in the company will approve what the student has written or refute it if it is not correct or is not well expressed.

With this we hope to complete basic training on the principles on which the production, control or management processes in which the student will be involved are based. It does not mean that this part of the training has to be done prior to the start of the tasks, it is probably preferable that the student is given some time each day to carry out the exercises, programming objectives to be met from time to time and adapting these milestones to the progress of the student, because each one will need more or less attention and will advance at different speeds in the work.

3

PART 3 of the notebook is the part where the student will collect their results day by day, like a laboratory notebook. This part of the notebook is designed to lead the student to reflect on each of the tasks they are in charge of. The notebook has an entry for each task. A degree will be given and the student will write a brief description of the task they are going to carry out and that, naturally, their tutor or other technicians from the company will have explained to them. In line with critical thinking, the task will be presented as a problem to be solved and the student will also be asked to make it explicit.

One point that we consider important in this approach is the establishment of a hypothesis. With the experience of the company and with what the student can deduce from previous tasks or from conversations with their tutor and with other people in the company, before starting an assignment they must express in writing the result that is expected to be obtained.

This is one of the keys to scientific thinking, to express a hypothesis and contrast it with the results obtained from experimentation and then accept it as valid or modify or reject it. In our case, we also use it as a way of forcing reflection on the result obtained from a given trial.

Probably, the student in his/her educational center will be following a methodology based on blackboard classes, study of subject notes taken in class or bibliography recommended by the teacher, problem solving individually or in groups and workshop or laboratory practices. During their stay in the company, the teaching methodology must necessarily be different, it cannot be expected and it is not desirable that teaching in the company tries to imitate teaching in the educational center. A different methodology is expected, closer to the methods that the professional will have at their disposal when they seek to acquire training throughout their professional career. In this sense, the methodology that we propose here seeks to achieve the basic learning outcomes expected, but also to influence the competence of learning to learn.

4

Therefore, we continue with our training programming and monitoring notebook and in a PART 4 that we call Training Contents we are going to ask the student a series of questions, questions or problems that will lead them to look for information, analyze it and understand it.

We would order these questions by learning outcome and include a cell for the student to collect the sources where they have studied, what they need to study this topic and the place for them to write down why they have earned them confidence.

Download the template



Step 5: Evaluate the student

During the training period in the company, the company tutor, in coordination with the tutor of the educational center, must be in charge of evaluating the student.

The evaluation of each learning outcome will be carried out in terms of "passed" or "not passed" and this evaluation will be sent to the tutor of the educational center, who will be in charge of adjusting the evaluation and grade of the student according to the company's report.

To this end, Order EFD/657/2024, of 25 June, published in the Official State Gazette (BOE) no. 158, of 1 July 2024, establishes the evaluation document for the training period in the company or equivalent body.

CENTRO EDUCATIVO		DOCUMENTO DE EVALUACIÓN Resultados de aprendizaje en periodos de formación en empresa u organismo equiparado Régimen _____ (general / intensivo) Fecha _____ / Curso 20.../20... Curso 1º (...) o 2º (...)					
Ciclo formativo / Curso de especialización						Código:	
Alumno o Alumna				Correo electrónico:		Teléfono:	
Centro de formación				Correo electrónico:		Código:	
Tutor o tutora del centro de formación				Correo electrónico:		Teléfono:	
Empresa				Correo electrónico:		CIF:	
Tutor o tutora de empresa				Correo electrónico:		Teléfono:	
Requiere medidas/adaptaciones extraordinarias por discapacidad	SI	Especificar:			Requiere autorización extraordinaria	SI	Especificar:
	NO					NO	
Intervalo de formación	Diaro	Semanal	Mensual	Otros	Varias empresas		
PERIODOS DE FORMACIÓN EN EMPRESA	Calendario y horario Período...: Calendario y horario Período...: Calendario y horario Período...: Calendario y horario Período...: Calendario y horario Período...:						
TOTAL HORAS							
Módulo profesional y código	Resultados de Aprendizaje	Superado	No superado	Motivación de la valoración general de la adquisición de los resultados de aprendizaje y las competencias para la empleabilidad (capacidad de integración, trabajo en grupo, puntualidad, etc.			
(DENOMINACIÓN)	RA 1:						
	RA 2:						
	RA 3:						
	RA 4:						
(DENOMINACIÓN)	RA 1:						
	RA 2:						
	RA 3:						
	RA 4:						
Sello		Fdo.: Tutor/a Dual de la empresa					

Figure 1. ANNEX V-B. Evaluation document of the training period in a company or similar organization. Order EFD/657/2024, of June 25, by which the curriculum is determined and certain organizational aspects are regulated for the intermediate level training cycles in the area of management of the Ministry of Education, Vocational Training and Sports.

In addition, from the Erasmus + FUTUREVET 2022 project working group[11] we propose in the training plan a PART 5 in which the student self-assesses. We base this part on the evaluation criteria that appear in the decrees that regulate the degree. These evaluation criteria will also help us to check whether the in-house training we have prepared actually covers the content that the expected learning outcomes are expected to have.

PART 5.- Self-assessment	
The following questions are based on the evaluation criteria set out in the Royal Decree establishing the title of your training cycle. Think about whether what you have studied in relation to each question and the exercises you have done seems sufficient for you to master each of these aspects. Please enter a comment to this effect in the box on the right.	
Evaluation criteria CA1	
CA2	
CA3	
....	



ANNEXES

BRANCH	VET STUDIES	BOE	CURRICULUM
ELECTRICITY AND ELECTRONICS	Electrical and Automatic Installations Technician	<u>Royal Decree 177/2008</u> <u>Royal Decree 499/2024</u>	<u>Order EDU/2185/2009</u>
ELECTRICITY AND ELECTRONICS	Telecommunications Installations Technician	<u>Royal Decree 1632/2009</u> <u>Royal Decree 499/2024</u>	<u>Order EDU/391/2010</u>
MECHANICAL MANUFACTURING	Metal and Polymer Molding Forming Technician	<u>Royal Decree 387/2011</u> - <u>Royal Decree 499/2024</u>	<u>Order EDU/1561/2011</u>

BRANCH	VET STUDIES	BOE	CURRICULUM
MECHANICAL MANUFACTUR ING	Machining Technician	<u>Royal Decree 1398/2007</u> <u>Royal Decree 499/2024</u>	<u>Order ESD/3390/2008</u>
COMPUTER SCIENCE AND COMMUNICAT IONS	Microcomputer Systems and Networks Technician	<u>Royal Decree 1691/2007</u> <u>Royal Decree 499/2024</u>	<u>Order EDU/2187/2009</u>
CHEMISTRY	Laboratory Operations Technician	<u>Royal Decree 554/2012</u> <u>Royal Decree 499/2024</u>	<u>Order ECD/78/2013</u>
CHEMISTRY	Chemical Plant Technician	<u>Royal Decree 178/2008</u> <u>Royal Decree 499/2024</u>	<u>Order EDU/2186/2009</u>



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[2] Order EFD/657/2024, of 25 June, which determines the curriculum and regulates certain organisational aspects for medium-level training cycles in the field of management of the Ministry of Education, Vocational Training and Sports.

[3] Erasmus+ Programme project 2022-1-ES01-KA220-VET-000089436 "Building the vocational training of the future: companies and educational centers facing the challenge of the organization and integration of a more inclusive and digital VET.". <http://www.criticalthinking4vet.eu/ep2022/>

[4] Order EFD/657/2024, of 25 June, which determines the curriculum and regulates certain organisational aspects for medium-level training cycles in the field of management of the Ministry of Education, Vocational Training and Sports.

[5] Order EFD/657/2024, of 25 June, which determines the curriculum and regulates certain organisational aspects for medium-level training cycles in the field of management of the Ministry of Education, Vocational Training and Sports.

[6] Order EFD/657/2024, of 25 June, which determines the curriculum and regulates certain organisational aspects for medium-level training cycles in the field of management of the Ministry of Education, Vocational Training and Sports.

[7] Ministry of Education, Vocational Training and Sports (2024a). All FP <https://todofp.es/inicio.html> accessed Sept 2024

[8] Erasmus+ Programme project 2022-1-ES01-KA220-VET-000089436 "Building the vocational training of the future: companies and educational centers facing the challenge of the organization and integration of a more inclusive and digital VET.". <http://www.criticalthinking4vet.eu/ep2022/>

[9] Erasmus+ Programme project 2022-1-ES01-KA220-VET-000089436 "Building the vocational training of the future: companies and educational centers facing the challenge of the organization and integration of a more inclusive and digital VET.". <http://www.criticalthinking4vet.eu/ep2022/>

[10] Order EFD/657/2024, of 25 June, which determines the curriculum and regulates certain organisational aspects for medium-level training cycles in the field of management of the Ministry of Education, Vocational Training and Sports.

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[12] Order EFD/657/2024, of 25 June, which determines the curriculum and regulates certain organisational aspects for medium-level training cycles in the field of management of the Ministry of Education, Vocational Training and Sports.

[13] Order EFD/657/2024, of 25 June, which determines the curriculum and regulates certain organisational aspects for medium-level training cycles in the field of management of the Ministry of Education, Vocational Training and Sports.

AUTHORS



Luis Gómez Estrada – Ikasia Technologies SL

Luis Gómez Estrada, was born in Valencia in 1980, with a Bachelor's degree in Industrial Design by "Universidad Politécnica de Valencia", experienced in the research field at the "Instituto de Biomecánica de Valencia" (UPV). Actually is CEO of Ikasia technologies and has experience as head of the 3D department in an engineering services companies. He has a broad experience in European and international project's management and coordination.



José Luis Gómez Ribelles – Ikasia Technologies SL

José Luis Gómez Ribelles is a full professor at the Universitat Politècnica de València, carrying out his research work at the Centre for Biomaterials and Tissue Engineering, CBIT, of that university. He is currently the principal investigator of one of the research units of the CIBER-BBN of the Instituto de Salud Carlos III. His current line of research focuses on the development of biomaterials for tissue engineering and regenerative medicine.



Laura Gómez Estrada – Ikasia Technologies SL

Qualified as a VET Technician, Laura has been incorporated in Ikasia in 2018 in the scientific and educational project development team. Having exhibited organization and managing skills, has since been responsible for projects coordinated by Ikasia included in the Erasmus + Programme in the field of professional education. Laura is a easygoing, and hardworking person. Her diverse professional parkours led to the development of a broad range of skills, from organization to and interpersonal skills, which she transposes to her professional everyday life.



Luis Amaro Ribeiro Martins - Ikasia Technologies SL

Luis Martins is a Phd student at the Universitat Politècnica de València. After graduating applied biology from the Universidad e do Minho took a master in Biophysics and Bionanosystems on the same university. Additionally, has pedagogic competences and advanced english from Cambridge University and competences aided design, 3D printing and basic programming. Luis has experience in tutoring, orienting students projects or laboratorial internships.



Raquel Navarro Cerveró - Redtree Making Projects

Raquel Navarro Cerveró is a social worker, an equality agent and has a Master Degree in Labour Risk Prevention, and she have worked with the association movements in Valencia for more than 15 years. Through her professional and associative career, Raquel has fulfilled responsibilities that have allowed her to develop a broad experience as Social Worker and Projects Technician, creating and managing associative and social economy projects to promote equality and social justice.



Jivago Nunes - Somatica, Materials & Solutions

Jivago Nunes have a degree on Optoelectronics and Lasers, and a Master in Materials Engineering, and worked as a scientific researcher during 5 years. After that, he has been the CTO of the company Somatica, Materials and Solutions, Lda. for the last 10 years and, as an entrepreneur, he have created 5 companies during the last 7 years.



Carlo Zoli - Smallcodes

Electronic Engineer; CEO of Smallcodes Ltd. Founder of Smallcodes Ltd as a social and technological company focused on education and linguistic technologies, with a special interest in minority languages and cultures, dialectology studies and historical linguistics.



Silvia Randaccio - Smallcodes

Silvia Randaccio has a degree in European and Extra-European languages, with a thesis in computational linguistics for the Arabic language. She currently follows numerous projects for the development of linguistic software, teaching materials, e-learning platforms and digital archives, for minority languages but also for other product sectors. She also manages digital marketing, SEO and web graphics.

She has also undertaken several external collaborations as a consultant, teacher and project partner for various entities that have allowed her to learn about new realities and work sectors.



Luca Pietra - Smallcodes

Engineer and new member of SMALLCODES through ScarabLab. He is currently involved in deepening his knowledge of the various programming languages and supporting senior programmers in the implementation of software for health informatics.



Miltiadis Liamis - Ergastiriako Kentro Kastorias

Teacher Mechanical Engineer with a master's degree in Educational Sciences: Organization and Management of Education - Educational Leadership.



Panagiotis Karampelas - 1st Epalgematiko Lykeio Kato Achaias

He works as a teacher in secondary technical education with specialization in computers and design implementation circuits and also the design and development of algorithmic structures. Now days is the Headmaster in VET Secondary School. He has 2 Masters, Economics in Education and In School Managment.

Also, Manage and Organize Erasmus Plus Projects (KA1-KA2) and E-Twinning.



Dimitrios Fligos- 1st Epalgematiko Lykeio Kato Achaias

Dimitrios Fligkos has studied IT in Athens University of Economics. He started his teaching career at 1st Epagelmatiko Lykeio Kato Achaias in 2002. He teaches IT and technology. Since 2002 he has taken part in many national and EU projects. He is responsible to organise students and teachers mobilities as well for the projects documentation. He has worked a lot to integrate ECVET system in the mobilities. He is also responsible to organise training activities for foreign students in the area. He has a key role to apply the mobility charter for vet high quality standards in projects planning and implementation.



Juan Tormos Capilla - IES Enrique Tierno Galván

VET teacher by the specialty of Electrotechnical Facilities since 1991. Tiene the linguistic training in foreign languages. He has participated as coordinator in three transnational projects, as well as in national innovation projects, linguistic immersion by the University of Paris, in the promotion of curricular enrichment and attention to students. He has held the position of deputy director of the IES, Head of Department, coordinator / tutor of FCT and member of several School Councils.



Maria Georgiou - Ergastiriako Kentro Kastorias

Graduate of the department of Applied Informatics, University of Macedonia in Thessaloniki. She specialized in Computer Science and Technology: problem solving using computers, software development databases, web applications e.t.c. She also has a master's degree in Graphic Arts – Multimedia. She works as an IT teacher in Secondary Education, with experience in VET Education. As a Director of Ergastiriako Kentro, She also organizes and implements Erasmus+ Projects.



José Juan Seijo Solaz - IES Enrique Tierno Galván

Industrial engineer. Teacher of Vocational Training in the branch of electricity. A sports and nature enthusiast, I am also passionate about new technologies.