



# PERSONALIZED DIGITAL COURSE FOR LABOR TRAINING IN A TECHNOLOGICAL CENTER

ERASMUS PLUS PROJECT "VET STUDENTS INTO TECHNOLOGY COMPANIES"

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**VET STUDENTS INTO TECHNOLOGY COMPANIES:  
A VET students mobility network in the technological sector through a  
virtual environment with specific materials for critical thinking**

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# THE COURSE

This course, aimed at VET students, especially at risk of exclusion, generates personalized learning based on the student's previous knowledge and the characteristics of the technological company in which they will carry out their internship.

The main objective of the course is for VET students to acquire the necessary skills and abilities to participate in cutting-edge innovation projects in a technology company and fit into multidisciplinary teams. All this through the development of critical thinking and skills that promote their social and labour inclusion.

**The objective of this course is not so much to provide new knowledge as to develop specific skills for innovative work.** The course aims at allowing the students to face problems or tasks unknown to them until then. Critical thinking skills that will be addressed are self-training, assess their own way of reasoning, set objectives, raise relevant questions, state hypothesis, search for information, intellectual integrity, oral and written communication, work in multidisciplinary teams.

# METHODOLOGY

**WHAT  
METHODOLOGY  
DOES THE COURSE  
USE?**

An innovative methodology based on micro e-learning

**WHAT IS IT?**

A methodology based on solving relatively small exercises

**WHAT IS THE  
OBJETIVE?**

For students to develop the necessary skills to work in a technology company.

**HOW IS IT  
ACHIEVED?**

Through situations that induce students to reflect, to evaluate their own thinking, search for information and make decisions.

**WHAT IS THE KEY?**

CRITICAL THINKING.

# PERSONALIZATION

The course begins with an initial test that allows the tutor to customize its itinerary for each student. The selection of the course contents for each of the students is based on a self-evaluation that allows the selection of exercises related to the second block of content, since the exercises of the first block of content are common to all students, while those in the third block depend on the technology company in which they will carry out the internship.

Throughout this short initial test, students may come across questions such as:

## **If a plastic is rigid at room temperature...**

- a) ... it is certain that it is crystalline.
- b) ... it has a glass transition temperature higher than room temperature.
- c) ... it can be deformed more than 1%.
- d) ... it is sure to be semi-crystalline.

## **When must a differential relay trigger and ensure the opening of the circuit?**

- a) When a short circuit of intensity higher than that allowed by the relay occurs.
- b) When a moderate overcurrent occurs.
- c) When the current derived to earth reaches a value greater than the sensitivity of the relay.
- d) When the fault current is less than half the sensitivity of the relay.

## **One of the following 4 characteristics is applicable to the function $f(x) = \log(x + 2)$ ?**

- a) It is a straight line.
- b) It doesn't reach a value higher than 2 until  $x > 1000$ .
- c) The function decreases the more  $x$  increases.
- d) It never has the value  $f(x) = 0$ .

# CONTENTS



Introduction



Motivation. Goals. Contents



Methodology: Microlearning



Competences



Contents and micro-pills



# CONTENTS AND MICRO-PILLS

The course is classified into three content blocks:



We intend to give another point of view on how to approach problems in the company through critical thinking, because throughout the work in technology companies, students will continually encounter new situations and problems that require a solution.

For each unit, the competences that the student must have in order to access the technology sector have been specified, building a number of fundamental transversal competences to motivate, develop self-confidence and the inclusion of users, as well as foster critical thinking to work in the scientific field.

The contents of this didactic program have been created through the compilation of materials generated by the participating teachers and experts or collaborators that promote the development of certain skills in VET students. It group a broad spectrum of knowledge that allow, based on their initial knowledge, their needs and objectives, to achieve the selection of the most appropriate Teaching Units shaping a specific itinerary.

We intend for students to exercise how to address technical problems that may arise at work in a technology company. We seek to be able to grow professionally and increase our knowledge and capabilities throughout life.

It consist of exercises proposed directly by the companies in which the students are going to carry out the internships.

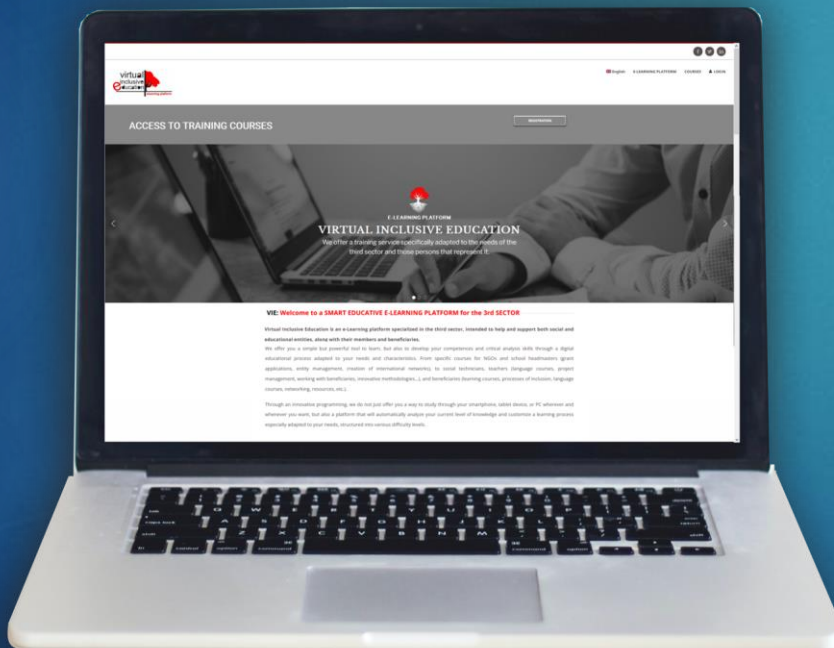
It is intended to facilitate, to a certain extent, the student's first contact with the company.

# ACCESS TO THE COURSE

This course is completely free and freely accessible.

It is implemented in the e-learning platform "VIRTUAL INCLUSIVE EDUCATION", an E-learning platform specialized in the third sector, intended to help and support both social and educational entities, along with their members and beneficiaries

Also, the course is accessible through the digital educational software "ON YOUR SIDE", one of the intellectual outputs developed within the framework of the Erasmus Plus project "VET STUDENTS INTO TECHNOLOGY COMPANIES".



# ACCESS TO THE COURSE IN ENGLISH

<https://www.virtualinclusiveeducation.com/entrance-vet-ik1/>

# ACCESS TO THE COURSE IN SPANISH

<https://www.virtualinclusiveeducation.com/es/entrada-vet-ik1/>

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# FOR ADDITIONAL INFORMATION



<http://www.criticalthinking4vet.eu/EP2019/>



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## AUTHORS:

Luis Gómez Estrada – Ikasia Technologies SL (Spain)  
José Luis Gómez Ribelles – Ikasia Technologies SL (Spain)  
Laura Gómez Estrada – Ikasia Technologies SL (Spain)  
Concha Solano Martínez - Ikasia Technologies SL (Spain)

Luca Pietra – Smallcodes SRL (Italy)  
Silvia Randaccio – Smallcodes SRL (Italy)  
Carlo Zoli– Smallcodes SRL (Italy)

Antonio Soriano Martínez – CIFP POLITÉCNICO (Spain)  
Luis David Alonso Martínez – CIFP POLITÉCNICO (Spain)

Panagiotis Karampelas – 1st Epalgematiko Lykeio Kato Achaia (Greece)  
Panagiotis Chatzipapas - 1st Epalgematiko Lykeio Kato Achaia (Greece)

António Mário Almeida – Universidade do Minho (Portugal)

Jivago Serrano Nunes – Somatica, Materials & Solutions (Portugal)

Julia María Martínez Ardil – CIFP Hespérides (Spain)  
Antonio Arroyo Jerez – CIFP Hespérides (Spain)



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