



**Systematic
Transition**
from prison into
the labour market

STEP2LAB

Private Industries Induction Training Course Curricula

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Foreword

IPS_Innovative Prison Systems developed this Course Curricula (QUALIFY JUST IT-Solution and Consulting, Lda.) as a partner in the project STEP2LAB: Systematic Transition from Prison into the Labour Market – No. KA220-VET-09CB2E38 and financed by the ERASMUS + programme.

ERASMUS + is an EU programme for Education, Training, Youth, and Sport (2014-2020). This publication has been accomplished during the project’s lifetime and implemented with the financial support of the European Commission through the ERASMUS + programme.

The STEP2LAB project is co-financed by the European Commission under the “KA220-VET - Cooperation partnerships in vocational education and training”.

STEP2LAB aims to support industry actors to create effective and collaborative social and labour reintegration roadmaps for prison inmates. The programme seeks individuals serving shorter sentences or at the end-of-sentence. Moreover, the target is a younger audience to capacitate and motivate them to pursue a professional career and follow a sustainable living project.

Table of Content

Introducing the STEP2LAB Private Industries Induction Course.....	5
The STEP2LAB Project.....	5
STEP2LAB Aims	5
STEP2LAB Target.....	6
STEP2LAB Objectives.....	7
The STEP2LAB Private Industries Induction Training Course.....	8
Glossary of terms, abbreviations, and acronyms	8
Assessment criteria	8
Assessment methods	9
Competences.....	9
Course unit	9
Learning outcomes.....	9
Programme (Educational).....	9
Qualification.....	10
Student-centred learning	10
Workload.....	10
Partner Identification.....	10
The STEP2LAB Private Industries Induction Course Curricula	12
Module 1: Technical Drawing (basic concepts).....	13
Aims	13
Duration.....	13
Learning Outcomes.....	14
Required Material.....	14
Structure	15
Module 2: Technical Drawing (CAD - Computer-Aided Design)	16
Aims	16
Duration.....	17
Learning Outcomes.....	17
Required Material.....	17
Structure	18
Annex I.....	20
Project Information.....	21



**Systematic
Transition**
from prison into
the labour market

Change Control	22
Document Properties.....	22
Revision Control.....	22

Introducing the STEP2LAB Private Industries Induction Course

This document relates to the STEP2LAB Private Industries Induction Course Curricula developed under the STEP2LAB project.

The document is divided in two main sections: first the STEP2LAB project is introduced, mentioning its aims, target groups, and objectives; then, a short description of this course is provided, as well as of its components. At last, the STEP2LAB Private Industries Induction Course Curricula is presented.

The STEP2LAB Project

The **“Systematic Transition from Prison into the Labour Market” (STEP2LAB)** project was financed by the European Commission within the Erasmus+ Programme.

The STEP2LAB project aims to enhance Prison Work (PW) according to the needs of the labour market, supporting a positive and inclusive return to society for imprisoned adults and youngsters. This will be achieved by developing a model that promotes cooperation between prison administrations and private industries in upskilling adult education pathways, integrating effective employment options for inmates.

STEP2LAB Aims

The project aims to create:

1. A replicable process to enhance prison services and private industries' collaboration to create and implement effective procedures for inmates' employment;
2. A model of guidance, training & insertion based on a collaborative approach between prison services and private industries, which will enhance the development of the career plan (the model includes continuous learning, job qualification and employers' preparation for the recruitment of inmates after release, tested with 96 inmates, distributed through the participant countries);
3. An standard induction training to be provided to inmates willing to acquire new competencies necessary to be employed in a specific economy industry and testing it with 96 inmates, distributed through the participant countries;

4. A training of trainer's course on setting up and managing STEP2LAB processes and models, deliverable to prison and private industries staff (Inclusion and diversity in fields of education, training, youth, and sport and vocational education and training (VET); Adapting vocational education and training to labour market needs; Efficient PW, which meets labour market needs, enhances inmates' chances of finding a job and guarantees their emotional stability while ensuring order in prisons (Álos et al., 2015)).

As stated in the application, as realised by all parties, adequate enhancement of inmates' skills through prison work strengthens their chances of landing a job once their prison sentence ends. Furthermore, it facilitates ex-inmates full reintegration into society, especially considering that employment significantly contributes to social inclusion (Gustafsson et al., 2018). Therefore, STEP2LAB focuses on enhancing prison work by developing a model to support cooperation between prison work and private industries. It does so by providing effective career options to inmates, preparing them during the sentence and favouring a positive return to society for those imprisoned and fulfilling prison sentences.

STEP2LAB Target

In concrete, the **targeted learners** include:

1. Juvenile or adult Inmates
2. Prison staff
3. Professionals working in private organisations and civil society organisations.

Specifically, STEP2LAB aims to address the needs of these target groups by providing a capacity-building package to both prison services and private industries to set an effective prison work strategy and configure a model suitable to each country's needs. It will contribute to inmates' labour market integration, retention and professional development.

Research has systematically proved that social reintegration is directly linked to re-entry into the labour market. Therefore, the development of prison workshops aims to fulfil a critical role in providing and maintaining essential work habits (ExOCOP Policy Forum Berlin, 2012; Latessa, 2012). The need to guarantee effective PW strategies is also highlighted in the UN Standard Minimum Rules for the Treatment of Prisoners (the Mandela Rules), which states that "all appropriate means shall be used, including (...) education, vocational guidance and training, social casework, employment counselling (...), in accordance with the individual needs of each prisoner, taking account of his or her (...) prospects after release" (Rule 92-1), while "actively participat(ing) in their rehabilitation" (Rule 96-1) and assuring that "the work provided (...) will maintain or increase the inmates' ability to earn an honest living after release" (Rule 98-1). The project seeks to use VET, increasing the attractiveness of such courses and promoting its flexibility of opportunities. Step2Lab foresees the implementation of induction training to boost disadvantaged groups' performance in industries that lack human resources.

Thus, this offer is highly attractive to inmates, assisting in addressing their learning motivation and needs. On the other hand, a capacity-building package will target practitioners from prison services or members of specific private industries needing human resources. This

way, Step2Lab aims to promote and develop flexible opportunities that can serve all party's needs: inmates, industries, and prison services.

This project will introduce continuous improvement protocols, define standards of cooperation with employers, and empower their staff to deliver standardised and certified induction training corresponding to the labour market offers after release. In addition, the project wants to pilot with 96 inmates distributed through the participant countries, providing vocational guidance and a package of basic competencies induction in a specific industry. It will, then, assist in developing a career plan and provide the opportunity for inmates to test internship programs while completing their prison sentences.

When considering the positive impacts of prison work on inmates, the literature exhibits some controversy. Studies show that work in prison goes far beyond an opportunity to receive an income for inmates: it is the primary instance for socialisation for prisoners, offering a context in which they can develop a sense of ownership, fulfilling an essential therapeutic and educational role in the resocialisation of inmates (Esteban et al., 2014). However, the mentioned impacts vary considerably according to various factors present in prison work models.

Another aspect mentioned in the literature is the lack of rigorous evaluations of such prison work programmes (McEvoy, 2008). STEP2LAB builds on these findings by promoting competencies for a specific target group: juveniles, adults, and organisations involved in Prison Work, either from prison administrations or from specific private industries in need of manpower.

Prison work benefits inmates and contributes to successfully re-entering society (inclusion in the community and lower recidivism) (Alós et al., 2014). The benefits of professional reintegration (inclusion and prevention of recidivism rates) and the potential to succeed in re-entering society are well established in the literature (Alós et al., 2014; Zanella, 2020). In the prison context, similarly to the general population, working merely to remain occupied has fewer benefits and positive impacts than working to develop the right skills to achieve a qualified job (Society for Human Resource Management, 2019). Redirecting efforts to promote the acquisition of skills that meet the needs of industries which lack human resources apportos more positive impact than wasting such efforts on the acquisition of competencies that serve industries which do not struggle for human resources (Alós et al., 2014). In 2017, Manyika et al. evidence that the European industry will need 400 thousand more workers by 2030. Such need will be primarily felt in the textile, clothing, leather, and footwear industries. These industries represent an annual business volume of 200 thousand billion euros and employ 2.2 million people in 225 thousand European companies.

STEP2LAB Objectives

The project's **specific objectives** include the following:

1. A replicable process to enhance prison services and private industries' collaboration to create and implement effective procedures for inmates' employment;
2. A guidance, training and insertion model based on a collaborative approach between prison services and private industries. This output will enhance the

development of the career plan while promoting continuous learning, job qualification and employers' preparation for recruiting inmates after release. This component is expected to be tested with 96 inmates distributed through the participant countries;

3. An induction training standard to be provided to inmates willing to acquire new competencies necessary to be employed in a specific economy industry and testing it with 96 inmates distributed through the participant countries;
4. A training of trainer's course on setting up and managing STEP2LAB processes and models deliverable to prison and private industries staff.

The STEP2LAB Private Industries Induction Training Course

The STEP2LAB approach aims to define a set of knowledge and skills to be provided to learners from inmates of different age groups, but with particular incidence with the younger population (juvenile). This document intends to define the curricula of the training programme for the STEP2LAB Private Industries Induction Training Course, focused on Technical Design.

The curricula presented were built based on the Council Recommendation of the 22nd of May of 2017 on the European Qualification Framework for lifelong learning. Therefore, Centro Tecnológico da Indústria de Moldes, Ferramentas Especiais e Plásticos (CENTIMFE) will fully certificate this course, an organisation certified by the Portuguese General Directorate for Employment and Industrial Relations (DGERT) of the Ministry of Labour, Solidarity and Social Security, in the scope of the development of training activities for the establishment and conduction of professional training, under Article 4 of Ordinance No. 851/2010, of the 6th of September.

The curricula of the training program for the course presented in this document are structured for application in the vocational education context, as a full-standing course or as module components of others, thus fitting the requirements for the target group.

Glossary of terms, abbreviations, and acronyms

Assessment criteria

A description of what the learner must accomplish to show that they have achieved a specific learning result, as well as the level at which they are expected to perform it. It establishes that the learning objectives that have been specified for an educational component and the learning activities that have taken place need to be suitable and compatible with the assessment techniques and criteria that will be used for that educational component.

Assessment methods

The whole spectrum of assignments, projects, performances, presentations, portfolios, written, oral, and practical tests or exams will be used to assess a learner's development and determine whether or not a unit's or module's learning objectives have been met.

Competences

Competence is defined by the European Qualifications Framework (EQF) as the use of knowledge, skills, and personal, social, and/or methodological abilities in contexts of work or study and in the pursuit of professional and personal growth. Under the EQF framework, competence is defined as responsibility and autonomy/independence.

The goal of any curriculum should be the development of skills and competencies. All course sections contribute to building a student's competencies, which are then evaluated at various points during the curriculum. Competencies may be either subject-specific or cross-disciplinary (common to any degree course). In most cases, skill improvement is a continuous process that occurs throughout a programme.

Course unit

A learning experience that is independent of others and is officially arranged. It should have a set of learning goals that are consistent and clear, specified learning activities that are in line with the amount of time that is allotted for them within the curriculum, and acceptable assessment criteria.

Learning outcomes

Statements describing what a learner knows, understands, and can accomplish when the learner has successfully completed a learning process. The degree to which students have attained the learning goals must be evaluated using processes based on clear and open standards. It is possible to link learning results not just to specific educational components but also to programmes. In both the European and the national frameworks for qualifications, they are used to indicate the level of each qualification.

Programme (Educational)

A collection of educational components that are recognised to award certification. These components are based on learning outcomes.

Qualification

Any degree, diploma, or other certificate awarded by a competent body attesting to the successful completion of a recognised educational programme, whether it be a degree, diploma, or other certificates.

Student-centred learning

Taking students seriously as active participants in their learning, this approach encourages the development of abilities like problem-solving, critical thinking, and reflective thinking that can be used in various contexts (ESU, 2010).

Workload

An estimate of the time the person typically needs to spend in formal learning settings to complete all learning activities such as lectures, seminars, projects, practical work, work placements, and individual study to attain the stated learning goals. It is essential to remember that this workload may be expected of most students and that the time it will take individual students to attain the learning goals will vary.

Partner Identification

Partner's Short Name	Partner's Name	Partner's Logo
CENTIMFE	Centro Tecnológico Da Indústria De Moldes, Ferramentas Especiais E Plásticos	
IPS	IPS_Innovative Prison Systems (Qualify Just - IT Solutions and Consulting, Lda.)	
-	Penitenciarul Mioveni	

-	Greta du Velay	
IRFIP	Istituto Religioso di Formazione e Istruzione Professionale	
CIRE	Centre d'Initiatives per a la Reinserció	
KIMW	Gemeinnützige KIMW- Qualifizierungs GmbH	

The STEP2LAB Private Industries Induction Course Curricula

Course Unit/Training Programme	Private Industries Induction: Technical Drawing
Pre-requirements	<p>The acceptance requirements for enrolling in the induction course in the consortium countries are having the minimum schooling of primary school level, and the student must find himself, at least, on a Level 2 of EQF learning outcomes of knowledge, skills, responsibility, and autonomy (see annex A). The student must also possess basic mathematics knowledge with technical interest and good logical skills. In addition, the student must have a B2 level in the language the course will be provided (English, Portuguese, Spanish, French, German, Romanian or Italian). The learner must be available to complete the course (approximately 50 hours) over the span of 4 months (April-July) to complete the course and must be over 16 years old when completing the course.</p>
Course Description	<p>The course is divided into two modules and can be used in vocational education and integrated into other training systems. The module structure will also fit the requirements for micro-credential recognition.</p> <p>Technical drawings, also known as orthographic drawings, are a language understood worldwide and are a talent necessary for every designer who wants their product to be manufactured. This course introduces students to the fundamentals of orthographic technical drawing using third-angle projections. Topics covered include drawing templates, general arrangement drawings, components drawings, notating, and dimensioning. It provides the student with the foundational skills necessary for success in diverse fields (e.g., engineering, plumbing, carpentry, welding, assembly, construction, mechanics, and architecture, among others) via the study of technical drawing. During this process, the student will acquire knowledge of national and European legislation, the tools and techniques used, the basics of measurement, and the universal standard for all technical drawings. The student will also develop his ability to design technical drawings using Computer-Aided Design software, benefitting from learning how to develop professional documentation and drawings that help deliver better projects. During the lectures, a presentation of the subjects, including their context and the resolution of any implementation issues that arise, will be done. The course is structured to be provided by applying theoretical and practical approaches in classroom settings or during autonomous study periods.</p>

Module 1: Technical Drawing (basic concepts)

Aims

- General understanding of the different aspects related to Technical Drawing and its applications;
- Recognize the potential of technical drawing as a tool for research, and keep in mind the all-encompassing nature of objective language in the process of information transmission and interpretation;
- Help the students to develop the skills that will allow them to objectively and precisely represent the graphical solutions;
- Understand the principles of technical drawing so that you may apply them to the reading and interpretation of simple designs and creative goods, as well as to the development of reasoned solutions to geometrical issues in both the plane and space;
- See normalization as the ideal form of conventionalism, which seeks to simplify not only the process of production but also the act of communication to lend it a more universal quality;
- Incorporate the processes of technical drawing into a cultural domain where the significance of aesthetically relevant features is present, such as the practice of art, the design of architectural structures, or industrial design;
- Acquire an understanding of forms and accurately portray them, according to UNE and ISO standards;
- Use the information gained from technical drawing into other investigative procedures, such as those involving creative or technological endeavours;
- Promote the use of technique and logic while sketching to facilitate the communication of scientific and technological concepts;
- Hone on the student's ability to generate drawings so that they can achieve both speed and accuracy in their visual expressions;
- The student must also connect the space to the plane, interpreting the volume in the plane using the various representational systems.

Duration

Module 1, entitled “**Technical Drawing (basic concepts)**”, is expected to have a duration of 25 hours.



**Systematic
Transition**
from prison into
the labour market

Learning Outcomes

The learner is expected to attain the knowledge on:

- What Technical Drawing is and how it can be used;
- The skills to produce a Technical Drawing of a selected object;
- How to annotate and dimension a drawing;
- How to produce sections and parts drawings;
- Preparing technical drawings utilizing traditional drafting tools and techniques;
- Creating orthographic and multiview drawings via the use of methods such as mitre line building, along with line conventions and line weights;
- Learn to do freehand multiview drawings of items that have been given to you by the teacher;
- Producing a final Technical Drawing.

Required Material

To properly develop this module, the student must have access to paper, a pencil, a ruler, a pencil sharpener, and a set square. Also, the teacher will require access to a projector, computer, whiteboard, and markers.

Structure

Chapters	Sub-chapters
Chapter 0. Overview of the 1 st Module	0.1. Aims, learning objectives, and evaluation requirements
Chapter 1. Introduction to Technical Drawing	1.1. National and International Regulations 1.1.1. Each country of the partnership (optional to each country) 1.2. Technical Drawings Terminology 1.3. Elements of Technical Drawings
Chapter 2. Projections and Perspectives	2.1. Projection types 2.2. Orthogonal representation projection methods 2.2.1. European Manufacturing Drawings 2.2.2. American Manufacturing Drawings 2.3. Engineering Drawing Views 2.4. Types of Drawing Views
Chapter 3. Cuts and Sections	3.1. Definitions 3.2. Sectional Views 3.3. Simplifications and conventions when developing Technical Drawings
Chapter 4. Dimensioning Technical Drawing	4.1. Definitions 4.2. Principles of Dimensioning 4.3. Methods and Criteria 4.4. Inscriptions

Module 2: Technical Drawing (CAD - Computer-Aided Design)

Aims

- General understanding of the different aspects related to Technical Drawing and its applications;
- Recognize the potential of technical drawing as a tool for research, and keep in mind the all-encompassing nature of objective language in the process of information transmission and interpretation;
- Help the students to develop the skills that will allow them to objectively and precisely represent the graphical solutions;
- Understand the principles of technical drawing so that you may apply them to the reading and interpretation of simple designs and creative goods, as well as to the development of reasoned solutions to geometrical issues in both the plane and space;
- See normalization as the ideal form of conventionalism, which seeks to simplify not only the process of production but also the act of communication to lend it a more universal quality;
- Incorporate the processes of technical drawing into a cultural domain where the significance of aesthetically relevant features is present, such as the practice of art, the design of architectural structures, or industrial design;
- Acquire an understanding of forms and accurately portray them, according to UNE and ISO standards;
- Use the information gained from technical drawing into other investigative procedures, such as those involving creative or technological endeavours;
- Promote the use of technique and logic while sketching to facilitate the communication of scientific and technological concepts;
- Acquire the abilities that enable the student to articulate graphical solutions with accuracy, precision, and objectivity;
- Use the tools of technical drawing with skill and place a high priority on both the accurate finishing of the drawing and the enhancements that a variety of graphical methods may bring to the portrayal of ideas.
- Hone on the student's ability to generate drawings so that they can achieve both speed and accuracy in their visual expressions;
- The student must also connect the space to the plane, interpreting the volume in the plane using the various representational systems.

Duration

Module 2, entitled “**Technical Drawing (CAD - Computer-Aided Design)**”, is expected to have a duration of 25 hours.

Learning Outcomes

The learner is expected to attain the knowledge on:

- What a Computer-Aided Design Technical Drawing is and how it can be used;
- The skills to produce a Computer-Aided Design Technical Drawing of a selected object;
- How to annotate and dimension a drawing on Computer-Aided Design software (e.g., AutoCAD, FreeCAD, Solidworks, among others);
- How to produce sections and parts drawings on Computer-Aided Design software;
- Creating technical drawings using Computer-Aided Design software, which requires students to specify units, limits, and layers, as well as use the tools found on the Draw, Modify, Object Snap, and Dimension toolbars in Computer-Aided Design software, and print drawings to scale in Paper Space.
- Using Computer-Aided Design software to prepare isometric and pictorial drawings of various machine components;
- Creating cross-sectional views of the machine components using Computer-Aided Design software;
- Computer-Aided Design software to create, insert, modify, and edit blocks, including creating a block library of architectural symbols in one drawing and putting the blocks into a separate drawing using Computer-Aided Design software's Design Center;
- Building 3D models of machine components using the Computer-Aided Design software program by making use of the tools that are found on the ribbon in the 3D Modeling workspace of Computer-Aided Design software;
- Producing a final Technical Drawing on Computer-Aided Design software.

Required Material

For the proper development of this module, the student will need to have access to paper, pencil, ruler, pencil sharpener, set square, computer, and access to computer assisted

design software. Also, the teacher will require access to a projector, a whiteboard, markers, a computer, and access to computer assisted design software.

Structure

Chapters	Sub-chapters
Chapter 0. Overview of the 2 nd Module	0.1. Aims, learning objectives and evaluation requirements
Chapter 1. Introduction to the CAD software	1.1. Creating new files 1.2. Initial commands and early usage of CAD
Chapter 2. Sketches creation and definition	2.1. Sketch creation 2.2. How to draw and edit Dimension Lines 2.2.1. Origin 2.2.2. Plans 2.2.3. Features 2.2.4. Dimensions 2.3. Defining sketch and relations
Chapter 3. 3D Features	3.1. Material Tool 3.1.1. Add materials to objects 3.1.2. Remove materials to objects 3.2. Repetitive Patterns 3.3. Symmetry, cuts, and sectioning
Chapter 4. 2D Drawings	4.1. Creating 2D Drawings 4.2. Applying the Principles of Dimensioning 4.3. Creating details and cuts
Chapter 5. Introduction to the Assembly	5.1. Basics of assembly 5.2. Positioning and relations



**Systematic
Transition**
from prison into
the labour market

ANNEX

Annex I

According to the description of the eight EQF levels, the set of descriptors that indicate the learning outcomes relevant as pre-requirements for learners to engage in the STEP2LAB Private Industries Induction Course focused on the development of skills in Technical Drawing are as follows:

	Knowledge	Skills	Responsibility & Autonomy
Definition of the learning outcome	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 the EQF responsibility and autonomy is described as the ability of the learner to apply knowledge and skills autonomously and with responsibility.
Level 2 of the learning outcomes	Basic factual knowledge of a field of work or study.	Basic cognitive and practical skills required to use relevant information to carry out tasks and to solve routine problems using simple rules and tools.	Work or study under supervision with some autonomy.



**Systematic
Transition**
from prison into
the labour market

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