

# BET project

## D2.1 Learning Outcomes (LOs) protocols

### EQF 5-6

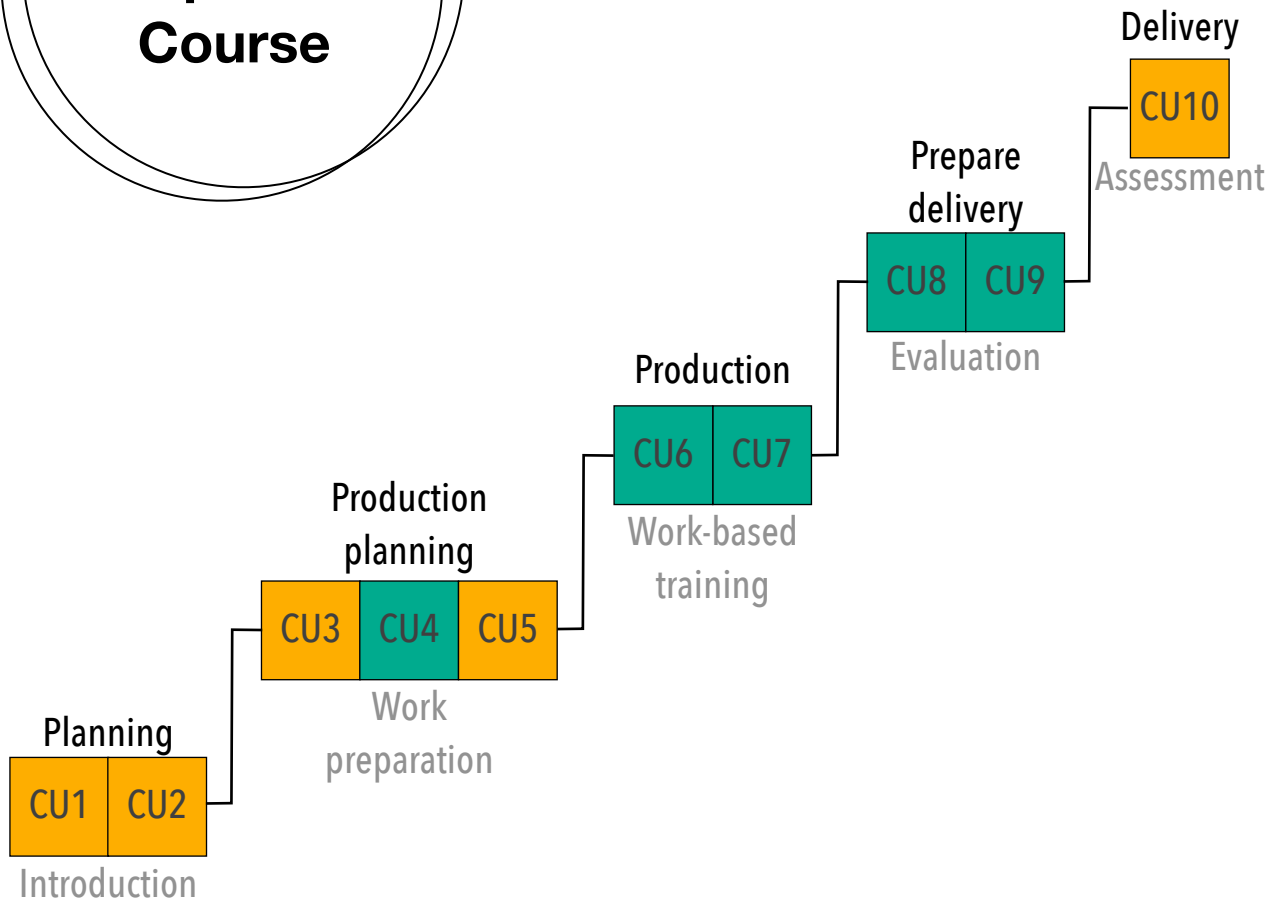
This guideline describes how to structure, organize and start using course frameworks consisting of *learning goals* (content, general learning outcomes, specific learning outcomes and general competences), *effective usage of digital libraries*, proposed *training methods* and *implementation of work-based training* activities, at EQF 4 and 5 levels. Each course is structured and organized in a discrete number of *N* unique *Competence Units (CUs)*. A CU is a specific subject module that is leveled and aggregated for site machine operatives and fabrication process technician levels.

The descriptions of these 4 frameworks should be done at *course level* and at the *competence unit levels*. This innovative and flexible training solution methodology demonstrates how VET schools may set up, establish and deliver blended learning solutions that better respond on industry demands. The CUs should be structured and delivered according to the industry needs, whereby the CU follows the industry fabrication requirements for specific methods, processes and materials.



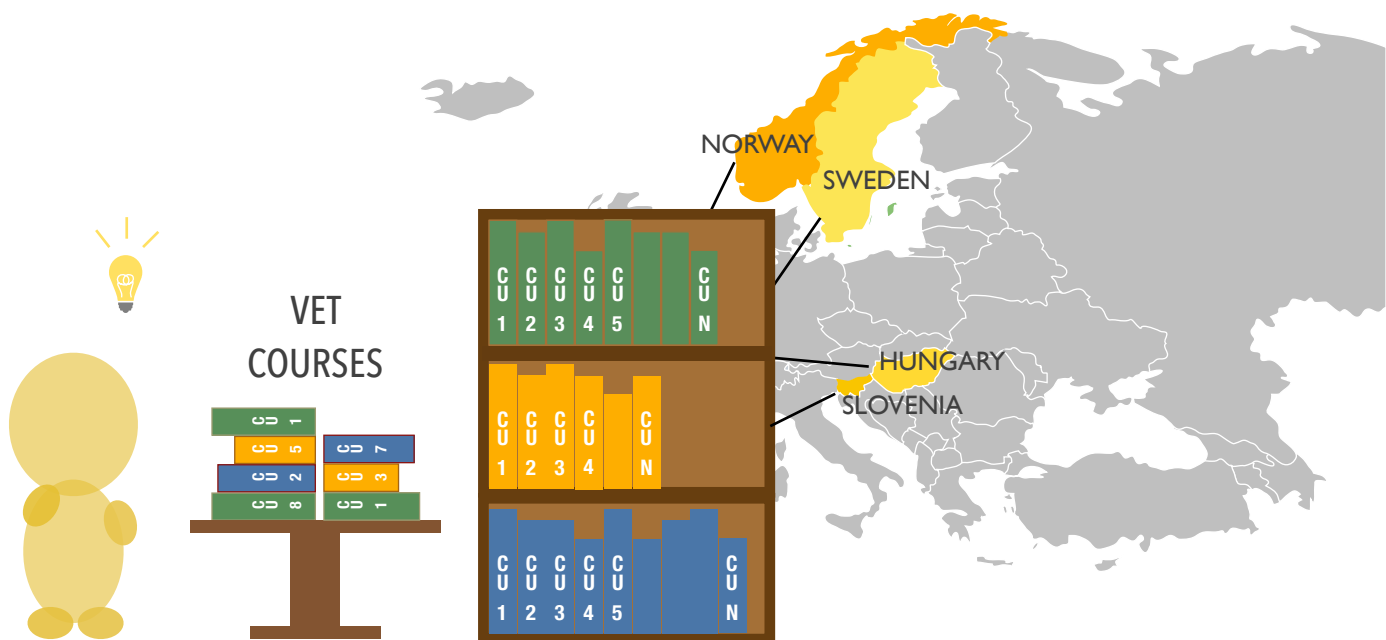
Co-funded by the  
Erasmus+ Programme  
of the European Union

# EN 1090 Inspector Course



The EN 1090 inspector course is structured in 10 Competence Units (CUs). 5 of the CUs (green boxes) apply work-based learning where the training follows the fabrication process of a product. Each CU targets various stages in the fabrication process.

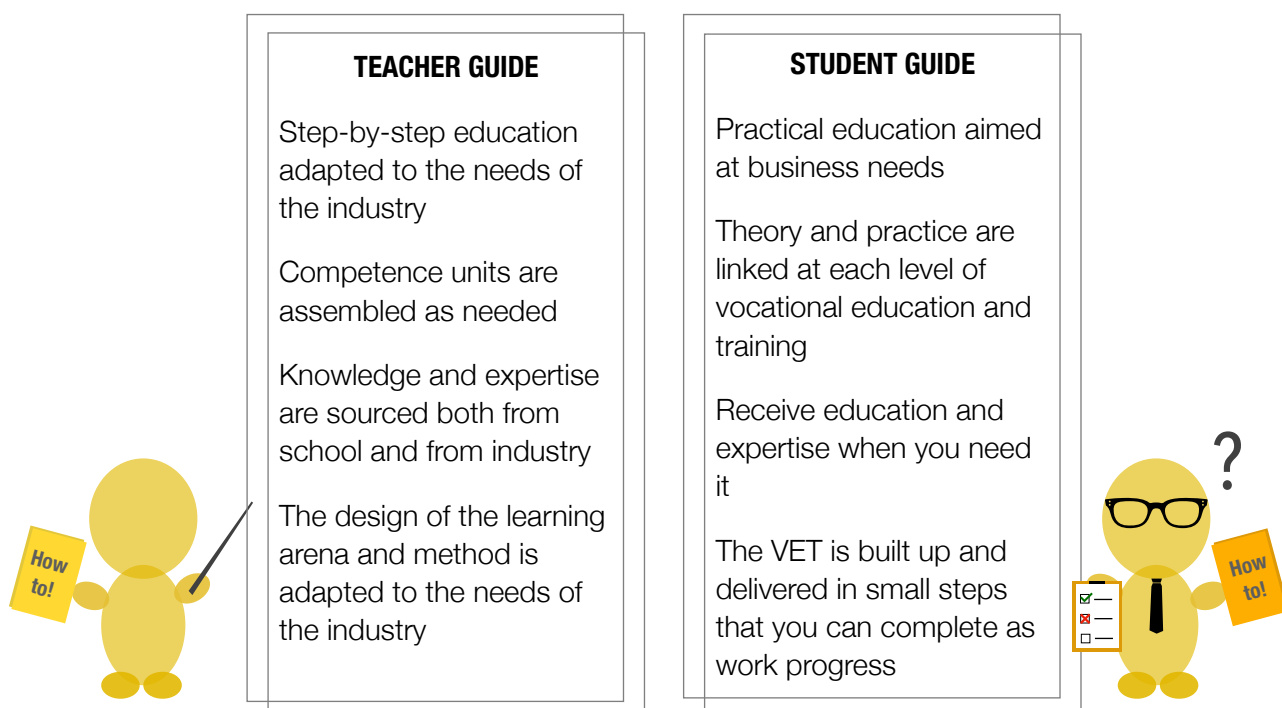
- CU1 - Introduction
- CU2 - Evaluating and inquiry
- CU3 - Design review
- CU4 - Documentation
- CU5 - Economy in welding inspection
- CU6 - Visual inspection and NDT
- CU7 - Destructive testing
- CU8 - Surface protection and dimensional control
- CU9 - Documentation before delivery
- CU10 - Summary and exam



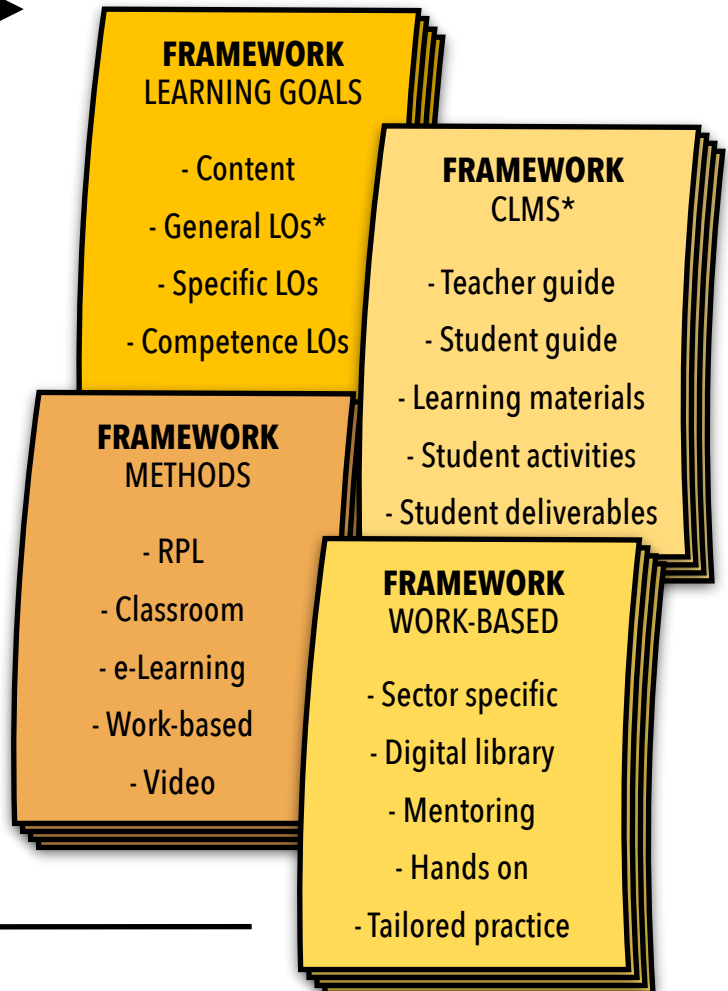
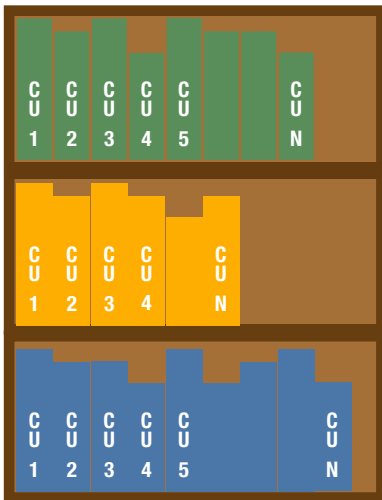
The development of a common competence framework will ease the recognition of qualification equivalencies, assisted by ECVET and shared delivery by VET specialists and industry experts. This is leading to a unitized, modernized delivery system based up on Competence Units (CUs) to be shared nationally and transnationally.

Partners will create links between their vocational education and training activities and national developments by careful negotiation with national stakeholders, ensuring complementarity with proximate ongoing initiatives. BET builds bridges between organizations that can be encouraged to work more creatively with VET providers to amplify and extend the impact of VET, nationally and transnationally within Europe.

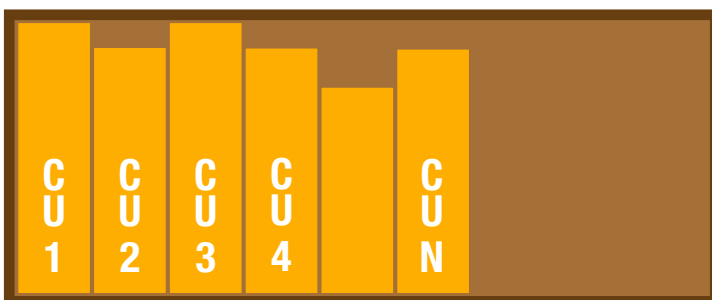
New work-based learning pedagogies, digital learning resources and tools will allow each country to create a ‘blend’ of work-based and alternative methods of VET delivery, to suit its own priorities, resources, national VET systems and stage of EQF 3-5 development.



# COURSE LIBRARY



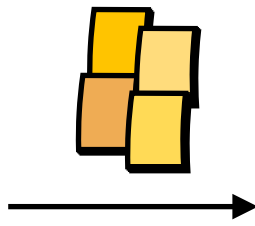
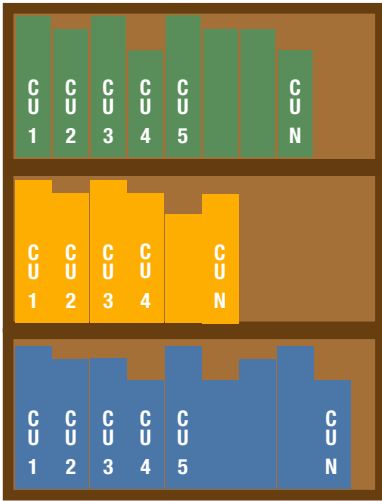
# ONE VET COURSE



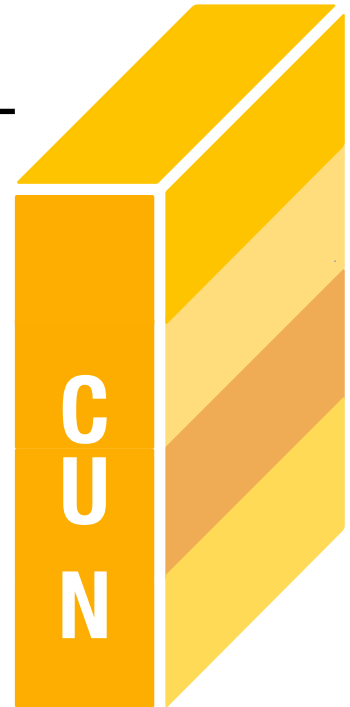
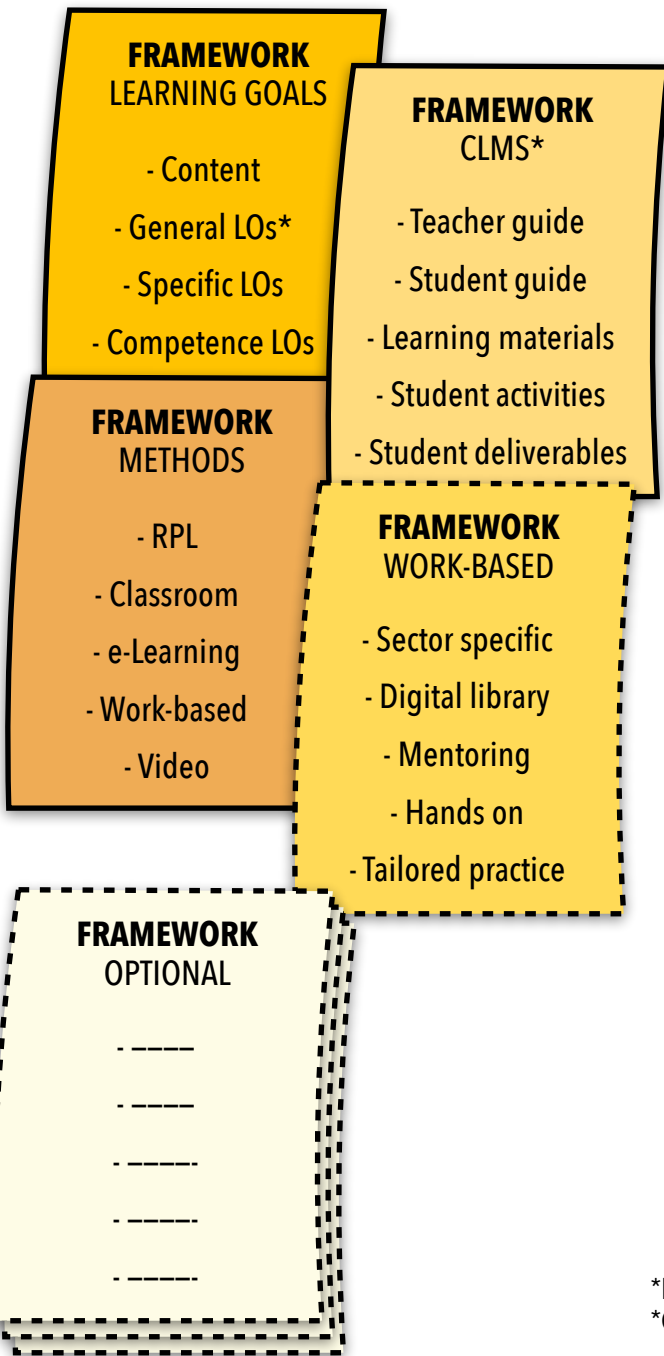
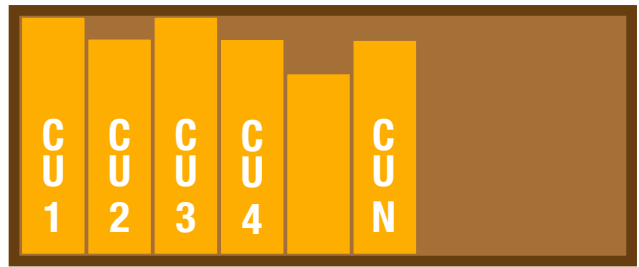
\*LOs: Learning Outcomes

\*CLMS: Content Learning Management System

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# ONE VET COURSE



\*LOs: Learning Outcomes

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# A Unitized, Modern Delivery System

A priority for the EU is to ensure the free flow of goods and services within the Union. To achieve this, several guidelines have been drawn up in various commercial sectors.

Within the constructing product market industry, which includes everything within the construction of houses, roads, bridges, etc., 10 European standards have been developed. These Eurocodes include all aspects of the development of construction projects, from calculation methodology to the preparation of a contract.

The Construction Products Regulation (CPR) No. 305/2011 lays down harmonized rules for the marketing of construction products in the EU. The Regulation provides a common technical language to assess the performance of construction products. It ensures that reliable information is available to professionals, public authorities, and consumers, so they can compare the performance of products from different manufacturers in different countries. CPR requires all metal producing and processing companies wanting to sell construction products in the European Union to certify their factory production control (FPC). For successful FPC therefore all EU companies dealing with construction products needs competent in house EN 1090-1 Inspector(s).

EN 1090 is an important element within the Eurocode system. It covers the entire fabrication process of steel structures. This European standard covers deliverances of steel structures regarding workmanship and the documentation requirements. Once the supplier has implemented EN 1090 and has been certified, the supplier can CE label the products and deliver them to the market within the entire EU area.

## EN 1090 Inspector

The course "EN 1090 Inspector" targets the knowledge and competence requirements that an inspector must have to follow up and document the requirements as specified within EN 1090. After completing the course, the inspector shall be able to evaluate the contract and the planning of the fabrication, to document the quality performed. The inspector is responsible for ensuring that the correct documentation is prepared and delivered, so that the company can CE label its products.

## Competence units

This course is organized into several competence units. Each unit covers a limited area within the planning and implementation of the fabrication process. The competence unit is a standalone course element that can be delivered when needed. The company can improve their employees' knowledge and expertise on a «pick and mix basis» that apply work-based training practices. The competence units are designed so that they naturally follow a fabrication process, thereby providing flexible and adapted vocational training according to both the needs of the company and their employees.

## International diploma

After completing all the competence units, the employees will satisfy the international requirements of a European welding inspector. It is possible to combine this with a final international exam that gives a recognized, international diploma.

