

WBL curriculum development



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Collaborative Training Networks A pilot experience in Emilia Romagna Region

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COTRAIN E+ PROJECT

KA2 PROJECT aiming at:

- Reinforcing dual training and WBL in all their forms, testing new approaches and methodologies to be made sustainable;
- Innovating TVET curricula through strong business-education partnerships.









Collaborative Training Networks

One company provides vocational training in collaboration with another company, or other companies

Collaborative companies are complementary in terms of processes Entrepreneurs train apprentices together, based on the complementarity of their activities. An intermediate organization (Chamber, Vet Centre) provides support and accreditation







Collaborative Training Networks allow that:



Activities of the collaborating companies cover the complete occupation profile Youngsters are trained in companies that are complementary, considering the entire production chain Youngsters are trained with a higher level of expertise in (very) specialized tasks 4

SMEs have the opportunity to be see recognized and officially valorized their training capacity 5

Co-design in the definition of the individual training plan is valorized





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Centoform developed 12 COTRAINs in the mechanical supply chain during the project's implementation



Pilot training program: IFTS mechanical Designer (EQF 4) Target: 18-24 aged



Emilia Romagna Region is the international leader in mechanical design and production



Permanent increasing demand of this professional profile



Excellent employment rate of participants after the course (90%)





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IFTS MECHANICAL DESIGNER

TRAINING PROGRAM:

800 hour course (480 theory and lab; 20 project work; 300 training in companies) Spread over 8 - 9 months from November to July; 30 hours per week

70% attendance required for entrance to the final exam

EQF 4 Certification





IFTS MECHANICAL DESIGNER

CORE SKILLS AND COMPETENCES:

- **Read and understand mechanical drawings (symbols, dimensional models, measurements, etc);**
- **C** Knowledge of materials used and their performance reaction;
- □ Ability to conceive mechanical design:
- Ability to realise project (from the idea to the final product);
- **Respect Quality and Safety Standards;**
- **Realise prototypes, Reverse Engineering, 3D printing.**



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BUILDING CTNs

STEP 3 Bonfiglioli Engineering SrI having acquired more details on 3D print → <u>improvement</u> of <u>3D skills very interesting</u> /beneficial for the company



STEP 1 Bonfiglioli Engineering Srl solid modelling, design concept of packaging machinery production using SolidWorks and PDM Enterprise software for data management

STEP 2 Solid Energy Srl set up of knowledge sharing collaboration on project , design, concept, research specially based on 3D printing.



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"Business education partnerships are fundamental for a smart and inclusive skills-ecosystem"

Francesca Bergamini- Emilia Romagna Region



Collaborative companies



Member of THE3DGROUP, the most important Italian partner in 3D digital innovation, they are very highly specialized in 3D printing, Reverse Engineering, dimensional model certification, digital measuring, ergonomics analysis, functional design techniques, ease of assembly analysis, visual design for the sectors of: Automotive Industry, Energy, Aerospace, Industrial Automation.



A member of the TASI Group - the largest group in the world uniquely focused on leak testing, measurement, and inspection - Bonfiglioli Engineering is the worldwide leader in Quality Control Solutions for all packaging requirements in Pharmaceutical, Metal Can & Aerosol, Food & Beverage and Plastic markets.







Advantages with CTNs





Co-evaluation of the achieved skills and competences





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IMPACTS ON REGIONAL VET EDUCATION SYSTEM

- Sustainability of collaborative training networks methodology in TVET training programs; (i.e., ITS);
 Co-design of training programs and support services (career guidance, teaching, assessment and evaluation) with companies as essence of the ESF calls for proposals;
- Valorization of business education-partnership and collaborative approaches in the Regional Employment Strategy.



