



E-Tool-CNC Project

E-Learning-Tool for Maintenance on CNC

Aims of the project:

1. To use, improve and adapt the contents of all developed modules into a b-Learning system with an existing platform to be used by all partners and by Tutors and tested by Trainees from all countries;
2. To produce evaluation “Kits” for Diagnosis, Recognition and Validation of the existing Skills of the target population;
3. To adapt some used machines to create didactic materials for practical simulation, training diagnosis and repair of CNC equipments, for practical use of the Evaluation “Kits” and to create an evolution on training on CNC machines, applying remote control maintenance and retrofitting technologies with ICT support;
4. To transfer and adapt the professional profile, the skills matrix and the training plan of previous project “TEMA”, for new/all partners and to create a common proposal to be presented to each country’s National Qualification Certification Agency for Recognition, Validation and Certification of the Professional Skills of the Technician of Maintenance of CNC equipments;
5. Training E-Trainers and E-Tutors to improve their competences in E- Learning;
6. To promote the inter-relationship and share of knowledge among the learning groups as stated above;
7. To test the modules and evaluation Kits of this course in each partners’ country and for the target groups.

Out comes of the project:

1. Project Development and Implementation of Training Modules;
2. Adaptation of the modules to an e-Learning platform and production of the Evaluation Testing "Kits"; this will form the course for the Technician on Maintenance of CNC Equipments;
3. Common Proposal developed by all Partners consisting of a system for Recognition, Validation and Certification of Professional Skills of Trainees, with the Certification and Qualification as Technician on Maintenance of CNC Equipments;
4. Improvement of the Web Site of the Project "TEMA CNC" in www.tema-cnc.net ;

Envisaged Impacts of the project:

1. Recognition, Validation and Certification of Professional Skills among the different countries participating in this project, of the Technician for Maintenance of Computer Numerical Control (CNC) Equipments;
2. In the future, the Recognition, Validation and Certification of Professional Skills to be extended to more countries with a great and effective impact on the mobility of European Citizens within European Union.

TASKS OF PARTNERS
✓ To review and analyze the contents of modules that were elaborated in TEMA CNC Project, and/or to suggest/implement improvements;
✓ To Collaborate on the Development of KITS and Tests of evaluation;
✓ To improve the Professional Profile, Skills Matrix and Training Profile, for the Technician of CNC Equipments Maintenance (Repair and Retrofitting);
✓ To adapt all improved Modules to the E-Learning Platform:
✓ To install all adapted modules on the E-Learning platform;
✓ To produce printed Manuals for support to "in class" lessons;
✓ To Train the E-Trainers and E-Tutors;
✓ To Research and Develop a common Proposal for a RVCC Certification to be submitted and discussed by all partners;
✓ To apply Kits/Tests for evaluation of target groups;
✓ To Disseminate this Project.

PARTNERS

NR	ACRONYM / NAME	COUNTRY
P0	CENFIM – Centro de Formação Profissional de Industria Metalúrgica e Metalomecânica	PORTUGAL
P1	GPI - Gesellschaft für Projektentwicklung und Innovation (GPI) mbH	GERMANY
P2	SKZ ToP gGmbH - Süddeutsches Kunststoff - Zentrum - SKZ ToP gGmbH	GERMANY
P3	Fundación Metal Asturias – FMA, Foundation for Training Qualification and Employment in the Metal Sector in Asturias	SPAIN
P4	BDGSZKI - Bánki Donát Gimnázium és Szakkozépiszkola	HUNGARY
P5	ITT Dublin - Institute of Technology Tallaght	IRELAND
P6	SVS - Strommen videregaende skole	NORWAY
P7	CINEL - Centro de Formação Profissional da Indústria Electrónica	PORTUGAL
P8	Hjalmar Lundbohmsskolan	SWEDEN
P9	SCC - SOLSKI CENTER CELJE	SLOVENIA

Work packages

1. management & coordination

2. Improvements & adaptation

- Analysis of all modules produced in TEMA-CNC Project, and to suggest/implement improvements.
- Development of Kits/tests for evaluation;
- Improvement of the overall course for the Technician of Maintenance of CNC Equipments;
- Adaptation of all Modules to the E-Learning platform;

3.1. Simulator

- Project and production of a Simulator for Detection and Repair of failures in CNC Equipments, by Retro-fitting of an used CNC Machine. (Coordinator)
- Elaboration of all drawings and schemes related to the Simulator, as well as manuals concerning practical training on the diagnosis of failures on a CNC Equipment (Coordinator) ;

3.2. E-Learning Platform & Manuals

- Structure and Configuration of the E- Learning Platform;
- Charging up of the Platform with all reviewed modules, adapted for E- Learning;
- - Testing the E-learning Platform;
- Production of printed Manuals to support “ in classroom” sessions.

4. Train the Trainers

- Training the E – Trainers and E - Tutors , by all partners and by means of the E-Learning Platform that will be ready by this time;
- The coordinator of this Project CENFIM will manage and “tutor” this Training;
- On the 5th Coordination Meeting of the partnership (by 25th March 2011), an “in classroom” training/session will be made for the E- Trainers and E- Tutors. The Simulator will be used to apply some of the contents of the respective module.

5.1. Proposal for a RVCC Certification

- Conception of a common proposal for the Recognition, Validation and Certification of Competences/Skills for the Technician of Maintenance of CNC Equipments, based on the Competences Matrix, Professional and Training Profile competencies produced by the partnership.

5.2.

- Presentation to the National Certification Institutions in each Partner's Country, of the common Proposal for the RVCC of the Technician of Maintenance of CNC Equipments.

6. Pilot Courses

- Pilot Course for testing the E – Learning platform and improved modules;
- Implementation of developed “kits” and tests;
- Using the E-Learning platform as well as other audio-visual means, such as video-conference, multimedia boards in the application of “kits/tests”;
- Using the Simulator for the diagnosis and repair of failures in CNC Equipments;
- Improving the final structure of the E- Learning course for Technician for Maintenance of CNC Equipments ;

7. Dissemination activities

- Dissemination of this Project by all partners in each of their own Countries, and by means of Seminars, Workshops, and also by implementation of some modules, tests on E- Learning Training;
- Transfer of results of this project in each Partner's Country/Region to:
 - Other Training Institutions;
 - Target Groups;
 - Companies with CNC Equipments.

8. Internal Project Evaluation

- Management/Follow up of this Project's Quality;
- Every three months Reports; These Reports will include activities' Reports, Financial Reports, problems encountered and solutions or proposals made;
- Evaluation will always be an Item in each agenda's Meeting ;
- The Coordinator CENFIM will define actions to be taken in relation to any problems affecting the Quality of the Project, being consulted all partners

Work Packages

WP	2009	2010												2011											
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
WP1	█																								
WP2		█	█	█	█	█																			
WP3.1		█	█	█	█	█	█	█	█	█	█	█	█	█											
WP3.2						█	█	█	█	█															
WP4										█	█	█	█	█	█	█	█	█							
WP5.1										█	█	█	█	█	█										
WP5.2																	█	█	█	█	█	█	█	█	
WP6																	█	█	█	█	█	█	█	█	
WP7	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	
WP8	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	
MEET	1				2					3				4	5				6				7		

Duration: 01.12.2009 – 30.11.2011

PARTNERSHIP MEETINGS

NR	PLACE / PARTNER	COUNTRY/CITY	DATE (provided)
1	CENFIM	PORTUGAL - Lisboa	3 and 4 of December 2009
2	BDGSZKI	HUNGARY	6 and 7 of May 2010
3	GPI / SKZ	GERMANY	7 and 8 of October 2010
4	SCC	SLOVENIA	13 and 14 January 2011
5	CENFIM	PORTUGAL – Trofa	24 and 25 of March 2011
6	ITT Dublin	IRELAND	21 and 22 of July 2011
7	Fundación Metal	SPAIN	24 and 25 of November 2011