Projects and Products Portal for Leonardo da Vinci

«Le développement des programmes et des outils de formation innovants pour les systèmes d'automatisation industriels pour les personnes employées dans les PME" - AutoMatic

2009-1BG1-LEO05-01640

http://www.adam-europe.eu/adam/project/view.htm?prj=9204

Information sur le projet

Titre: «Le développement des programmes et des outils de formation innovants pour les systèmes d'automatisation industriels pour les personnes employées dans les PME" - AutoMatic

Code Projet: 2009-1BG1-LEO05-01640

Année: 2009

Type de Projet: Projets de transfert d'innovation

Statut: Accordé

Pays: BG-Bulgarie

Accroche marketing: L'objectif général du projet AutoMatic était de développer une approche innovante de formation et les outils respectifs dans le domaine des systèmes d'automatisation industriels qui, pour être applicable dans les PME européennes. Les pays développés dans le cadre des produits du projet d'aider les employés de PME qui veulent améliorer leur qualification ou re-qualifier et d'accroître leur flexibilité par rapport à la demande du marché et la réalisation réussie sur le marché du travail commun.

Résumé: The new technologies, based on information technology automation, robotics and electrical drives have profoundly changed the industrial production and energy conservation principles. In order to utilize the improved technologies, SMEs need highly qualified staff, competent in operating with the new machines and in managing sophisticated production processes. The current project addresses the problem of low and incongruous qualification of staff employed in SMEs in terms of industrial automation systems and operating with new technologies.
The general aim of AutoMatic project is to develop an innovative training approach including curricula and respective tools in the field of industrial automation systems which to be applicable in European SMEs. Target groups of the project are employees in SMEs who want to improve their qualification or re-qualify, as well as unemployed people who want to gain initial competences.
AutoMatic was developed in close cooperation between five partners from four countries. The partnership includes two technical universities - Technical University of Gabrovo (Bulgaria) and Tallinn University of Technology (Estonia), one international university focused in ICT - Luiss University (Italy), one research institution – MERIG (Austria) and one SME consulting company – ECQ Ltd. (Bulgaria). All partners have the necessary experience not only in the respective professional area they occupy but also in transnational cooperation in different EU projects and programmes.
The tangible outcomes from the project include developed training curricula for industrial automation systems and printed books with training materials, as well as interactive training tools sourced on project web-site and on a CD. The diversity of languages of the project products will allow them to be accessed by all interested parties.
The intangible outcomes of the project include increasing the flexibility of SME employees who want to improve their qualification, ensuring the successful realization of the target groups on the labour market, increasing the motivation of target groups and their commitment for life-long learning and career planning.
The project will have an impact on the quality of vocational training in SMEs and international co-operation in the area of industrial automation systems.

Description: The project AutoMatic has developed a training approach and respective materials and tools in the field of industrial automation systems which are applicable in European SMEs. AutoMatic builds upon an existing approach developed in the pilot project “International Curricula of Mechatronics and Training Materials for Initial Vocational Training” for vocational schools developed by Tallinn Technical University, Estonia.
Information and communication technologies, automation and robotics have changed and are changing processes in industry. In parallel also on the scientific and vocational education level the integration of different fields like mechanics, electronics and information technologies (mechatronics) is practiced since years. Nevertheless many, especially small, enterprises have rather conservative approaches to new technologies and interdisciplinarity and thereby miss many opportunities by

Information sur le projet

utilizing improved technologies. SMEs need highly qualified staff, competent in operating with new machines and in managing sophisticated production processes.
AutoMatic project addresses the problem of low or missing overview about possibilities offered by industrial automation systems. It adapts and develops approaches and learning materials targeted specifically to SMEs to basically qualify staff in terms of industrial automation systems.
The developed under the project products assist SME employees who want to improve their qualification or re-qualify and will increase their flexibility with respect to market demands and successful realization on the common labour market. In addition, the project will foster the development of a high quality VET by shifting the focus from teaching-technique approach to learning-oriented approach.

Thèmes:
*** TIC
*** Entreprise, TPE, PME
*** Formation continue
** Formation tout au long de la vie
** Accès pour les personnes moins favorisées
* Marché du travail

Sectors:
*** Enseignement
** Industrie Manufacturière
** Activités Spécialisées, Scientifiques Et Techniques

Types de Produit:
Programme/curriculum
Site Internet
Modules
Enseignement à distance
CD-ROM
Matériel pour l'enseignement

Information sur le produit:
-> Training curricula for course on industrial automation systems developed especially for people employed in SMEs – there is one curriculum for the whole course, as well as separate syllabus for each of 5 training modules.

-> A complete training course on Industrial Automation comprising the following 5 modules:
Module 1: "ICT Based Means for Automation and Innovation"
Module 2: "Sensors in Industrial Automation"
Module 3: "Actuators in Industrial Automation"
Module 4: "Application of PLC in Industrial Automation"
Module 5: "Industrial Networks and Interfaces in Automation Systems"

-> Web site with interactive training tools complementary to the paper version of the materials. In order to make web site more interactive, the practical exercises for corresponding to the theoretical materials are also animated. For people who want to check what they have learned there is multiple-choice self-test with a large pool of questions.

Page Web du projet: http://www.automatic-project.eu/

Contractant du projet

Nom:	Technical University of Gabrovo
Ville:	Gabrovo
Pays/Région:	Severen tsentralen
Pays:	BG-Bulgarie
Type d'organisation:	Université/école supérieure spécialisée/academie
Site Internet:	http://www.tugab.bg/en

Personne de contact

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Coordinateur

Nom:	European Center for Quality Ltd.
Ville:	Sofia
Pays/Région:	Yugozapaden
Pays:	BG-Bulgarie
Type d'organisation:	Entreprise de petite et de moyenne taille (jusqu'à 250 employés)
Site Internet:	http://ecq-bg.com/

Personne de contact

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Partenaire

Partner 1

Nom:	Luiss Guido Carli University
Ville:	Rome
Pays/Région:	Lazio
Pays:	IT-Italie
Type d'organisation:	National Agency
Site Internet:	http://www.luiss.edu/

Partner 2

Nom:	Multidisciplinary European Research Institute Graz - MERIG
Ville:	Graz
Pays/Région:	Styria
Pays:	AT-Autriche
Type d'organisation:	National Agency
Site Internet:	http://www.merig.org/

Partner 3

Nom:	Tallinn University of Technology
Ville:	Tallinn
Pays/Région:	Eesti
Pays:	EE-Estonie
Type d'organisation:	National Agency
Site Internet:	http://www.ttu.ee/en

Données du projet

Automatic BG.pdf

http://www.adam-europe.eu/prj/9204/prj/Automatic%20BG.pdf

Automatic DE.pdf

http://www.adam-europe.eu/prj/9204/prj/Automatic%20DE.pdf

Automatic EN.pdf

http://www.adam-europe.eu/prj/9204/prj/Automatic%20EN.pdf

Automatic EST.pdf

http://www.adam-europe.eu/prj/9204/prj/Automatic%20EST.pdf

Automatic IT.pdf

http://www.adam-europe.eu/prj/9204/prj/Automatic%20IT.pdf

Produits

1 Project web site

2 Training course on Industrial Automation

3 CD with project materials

4 Project flyer

Produit 'Project web site'

Titre:	Project web site
Type de Produit:	Site Internet
Texte marketing:	The project website is a tool to disseminate the project results and outcomes and provide the public with access to the developed training tools.
Description:	The project website is divided in accordance with the different training modules, contains practical and interactive exercises and allows self- evaluation tests. Thus the products of the project are be suitable for individual and informal learning. The Web site contains interactive training tools complementary to the paper version of the materials. In order to make web site more interactive, the practical exercises for corresponding to the theoretical materials are also animated. For people who want to check what they have learned there is multiple-choice self-test with a large pool of questions.
Cible:	SME employers and employees VET centers Universities High schools Students Unemployed people
Résultat:	The website provides information about the project and gives access to the developed training materials. It also supports the project dissemination.
Domaine d'application:	+ Self study + Distance learning + Improving qualification + Dissemination of project results
Adresse du site Internet:	http://automatic-project.eu
Langues de produit:	allemand estonien italien bulgare anglais

Produit 'Training course on Industrial Automation'

Titre: Training course on Industrial Automation

Type de Produit: Modules

Texte marketing: Main result of the implemented project is the training course on Industrial Automation structured in 5 modules.

Description: A complete course on Industrial Automation including the following 5 modules:
Module 1: ICT Based Means for Automation and Innovation” – this book provides a basic analysis of automation and innovation fields and tries to explain their organizational impact on Small and Medium-sized Enterprises (SME).
Module 2: "Sensors in industrial automation" – the primary aim of the book is to provide basic knowledge to employees in SMEs in the field of sensors used to build automation systems.
Module 3: "Actuators in Industrial Automation" – the module provides basic knowledge about actuators implemented in automation systems for the employees of small and medium-sized businesses. Like other the other 4 books this book can also be used in the retraining and skill improvement programs for the employees of small and medium-size businesses, students and the unemployed.
Module 4: "Application of PLC in Industrial Automation" - primary aim of the book is to provide basic knowledge to employees in SMEs in the field of programmable logic controller, which are used to control automated (production) systems.
Module 5: "Industrial Networks and Interfaces in Automation Systems" is intended to provide basic knowledge for operators, who work in small and medium size companies, about utilization of standard interfaces and set up of industrial networks in automation systems.

In writing the training modules the authors have followed the contemporary level of achievements in that particular field and have tried to reduce the number of theoretical formulations and mathematical descriptions to a reasonable minimum.

Cible: SME employers and employees
VET centers
Universities
High schools
Students
Unemployed people

Résultat: The developed training course is available as printed books, online on the project website and offline on a CD.

Domaine d'application: + Self study
+ Distance learning
+ Improving qualification
+ Dissemination of project results

Adresse du site Internet:

Langues de produit: anglais
bulgare
allemand
estonien
italien

Produit 'CD with project materials'

Titre:	CD with project materials
Type de Produit:	CD-ROM
Texte marketing:	The CD provides the target groups with offline access to the full functionality of training materials available on the web site.
Description:	The CD contains information about the project in all partner languages as well as all training modules, animated exercises and self-evaluation tests.
Cible:	SME employers and employees VET centers Universities High schools Students Unemployed people
Résultat:	The CD provides information about the project and gives access to the developed training materials. It also supports the project dissemination.
Domaine d'application:	+ Self study + Distance learning + Improving qualification + Dissemination of project results
Adresse du site Internet:	
Langues de produit:	bulgare anglais italien allemand estonien

Produit 'Project flyer'

Titre:	Project flyer
Type de Produit:	Autres
Texte marketing:	The project flyer provides short information to promote the project results to the target group.
Description:	The flyer is aimed at the target groups and promotes the project outcomes and the project itself. It also invites the target group to learn about the products at the project website. The flyer is available in English, Bulgarian, German, Estonian and Italian.
Cible:	General public SME employees and employers People who want to improve their qualification Students Universities High schools
Résultat:	Printed and distribute leaflets among target groups.
Domaine d'application:	Dissemination of information about the project and its outcomes.
Adresse du site Internet:	http://automatic-project.eu
Langues de produit:	bulgare estonien anglais italien allemand

Événements

Final Valorization Conference

Date	27.09.2011
Description	The conference was attended by 80 people from different economic sectors and various organizations. On this conference the final project outcomes were presented to the general public. A movie from the conference and the presentations of the key speakers are available on CD as well.
Cible	VET providers Assocaitions Vocational secondary schools University or higher education institution Vocational training centres or organisations SMEs Large enterprise Research Centres
Public	Événement public
Informations de contact	
Date et lieu	27th September 2011 Sofia, Bulgaria

Evaluation Workshop in Bulgaria

Date	06.07.2011
Description	From 06.07.2011 to 08.07.2011 in the Technical University of Gabrovo was organized a seminar presenting developed materials to representatives of small and medium enterprises in Bulgaria. Through appropriate presentations there were shown in details the developed materials for all five modules of the project and the web-site of the project. Detailed discussions were held about each module.
Cible	SMEs employees and employers Students Unemployed people Vocational schools and training institutions
Public	Événement public
Informations de contact	
Date et lieu	06.07.2011 to 08.07.2011/ Gabrovo, Bulgaria

Événements

Evaluation Workshop in Italy

Date	23.06.2011
Description	Description: Two evaluation workshops were held in Italy, respectively on June 23th and June 24-25th 2011. The seminar on June 23 th was attended by 22 people and by 29 people on 24-25th 2011. The interest of the participants in the developed curricula and innovative training tools for industrial automation system was considerable.
Cible	SMEs employees and employers Students Unemployed people Vocational schools and training institutions
Public	Événement public
Informations de contact	
Date et lieu	23-25.06.2011 / Rome, Italy

Evaluation Workshop in Austria

Date	06.06.2011
Description	Two Evaluation Workshops were organized in Austria. The first workshop was organized in two sessions on two subsequent days. The second workshop was organized as one-day event. The participants in the workshops were acquainted with the developed training materials and also had the chance to work with the website.
Cible	SMEs employees and employers Students Unemployed people Vocational schools and training institutions
Public	Événement public
Informations de contact	
Date et lieu	06/06/2011; 07/06/2011 and 17/06/2011 in Graz, Austria.

Événements

Evaluation Workshop in Estonia

Date	28.03.2011
Description	A three-day workshop was conducted in Estonia with the participation of different SME representatives, students, academic personnel. The evaluation workshop was conducted in the period 28-30-03.2011. 29 people attended the workshop. Feedback about content of the used learning materials was received during evaluating workshop.
Cible	SMEs employees and employers Students Unemployed people Vocational schools and training institutions
Public	Événement public
Informations de contact	
Date et lieu	28-30-03.2011 / Tallinn, Estonia