

## IS – SIMULATED ENTERPRISE FOR WORKING SKILLS IN TECHNOLOGICAL COMPANIES

### Goal of the project

The project aimed mainly at increasing the employability of university graduates in terms of training and development of the engineering practical skills required by employers, by developing and implementing an integrated information platform that simulates the real working technology companies and hiring specialists from these companies for students' practical training and for developing supporting materials. These goals were accomplished by using an innovative tool for Romanian higher education: simulated enterprise.

### Short description of the project

To implement the simulated enterprises it was established one laboratory in each partner University and tutors from the private sector were used to prepare students for the labour market through training, simulations and applied exercises. Subsequently, 240 students with outstanding results from a total of 600 learners benefited of internships in the companies.

At the Politehnica University Timisoara, the project was coordinated and managed by the Center for eLearning, with the support of the Faculty of Automation and Computers and the Faculty of Electronics and Telecommunications and with the involvement of 8 specialists from companies: OCE Canon, Continental Automotive Romania, HELLA, Flextronics Romania, ETA2U, Lasting Systems, Expert Consulting, MMD Design.

The project developed a methodology for conducting internship and student assessment that included instructional working methods, curricula for 90 hours, the assessment module and innovative use of ICT in the concept of virtual practice.



### Project implemented by

Ministry of National Education, Bucharest  
Politehnica University of Timisoara  
Politehnica University of Bucharest  
"Constantin Brancusi" University of Targu-Jiu  
Novensys Corporation, Bucharest  
Gold Agama Consulting, Bucharest

### Implementation period

01.04.2010 – 31.09.2013

### Main activities

1. Establish the administrative framework for project implementation;
2. Development of local/regional campaigns and workshops for promoting the project idea;
3. Selection of the technological companies willing to implement virtual internships;
4. Establish the requirements and development of the software application for virtual laboratories;
5. Development of the IT platform for virtually simulating the case studies prepared by companies;
6. Selection of the students;
7. Preparation of the case studies in all companies;
8. Establish a virtual laboratory in each university;
9. Running the pilot virtual internships;
10. Analysis of the results and feedbacks from students and companies;
11. Integration of the developed platform and methodology with the management systems in all partner universities.

### Results

- 214 UPT students in four study areas have been selected for project development (IT, computers and information technology, electronics and communications engineering and systems engineering)
- Tutors from 8 companies interested in selecting, recruiting and training students in skills necessary to the spirit at work have been trained within the project
- Creation of a laboratory for simulated enterprise in each partner university, that is used for assisting students to virtually do an internship in one of the partner companies
- Preparation of minimum 5 case studies in each of the 8 companies working with UPT
- Testing of the developed platform for training 212 students, on a virtual internship with the technological companies
- Development of a guide for working in a simulated enterprise.

## Applicability and transferability of the results

The developed framework can be transferred to any university looking for the implementation of virtual internships at various levels of the academic curricula.

Based on the pilot project, more technological companies can be involved in providing students with valuable skills, that might increase their employability, with the help of a software platform, thus not implying perturbation within the day to day work in the company.

Based on bilateral agreements, the universities will be able to offer valuable working experience for all their students, virtually, in the best technological companies.



## Fields of interest

Virtual internships, virtual mobilities, IT platforms for virtual training, employability skills for students, virtual laboratories and training, blended-learning, modern educational technologies, engineering teaching, curricula development, virtual campus.



Investiție în oameni!  
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### Curios să vezi cum se lucrează într-o companie de succes?

Urmează cursurile întreprinderii simulate și vei lua parte la simulări virtuale ale proceselor de lucru dintr-o companie reală, cu asistența unor tutori specializați. În plus, ai șansa la un stagiu de practică într-o companie de succes.



## Research centre

Center for eLearning

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## Research team

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