



# COMPETENCE – Matching competences in higher education and economy:

Experience Compilation
Ss. Cyril and Methodius University
Faculty of Mechanical Engineering,
Skopje, MACEDONIA



















# Overview of experience

► (Please list the short names of the experience you are going to present and select the relevant field [either Competence assessment, competence catalogue or pilot study] for possible transfer to the COMPETENCE project by making an "X" under the relevant field. Please present 1 to max. 3 relevant experience)

Short name	Competence assessment	Competence catalogue	Pilot study
Labour Need	X		
Analysis			





## Experience 1: (insert short name)

- ► Full name: Labor Market analysis for the Need of the Industrial Engineering and Management Profile
- ► Type of activity: Internal activity funded by owr own recource, as a additional instrument for TEMPUS JEP proposal
- Methodology:
- ▶ 1. The research was done as a complementary tool for project application for TEMPUS JEP program;
- ▶ 2. Developed survey tool based on the current curriculum
- 3. 53 graduates surveyed from 18 institutions;
- ▶ 4. 150 students from High School surveyed (potential Faculty students);
- 5. Gap analysis showed difference between acquired and needed knowledge.
- ▶ 6. Several interventions were conducted for improvement of the courses





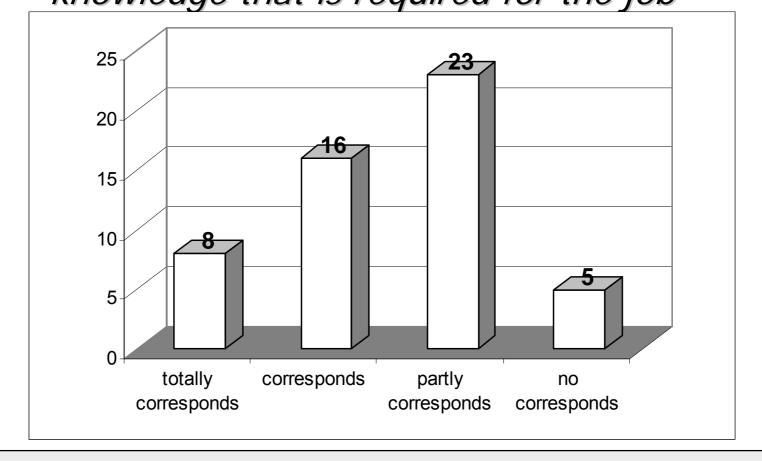
# Key data:

- Period of analysis 15.09.2003 10.11.2003
- ▶ 18 companies (53 graduates)
- ► 5 high schools with 150 students
- ► Home made methodology and survey list





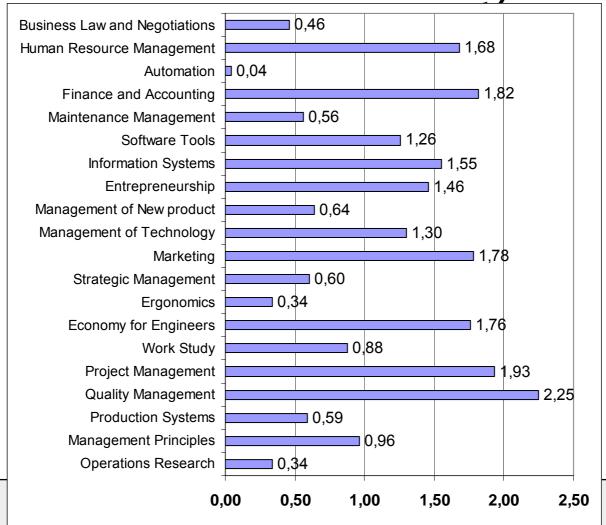
Correspondence between the subjects (courses) that IE&M graduates learned at the University and the knowledge that is required for the job







# Gap analysis between acquired and needed knowledge







### SWOT ANALYSES

#### **STRENGHTS**

- 1. IE&M curriculum is in process of implementation and some visions for possible improvements are foreseen
- 2. Good potential in qualified teachers, already recognized in many research fields
- 3. Huge interest for this curriculum among students
- 4. High degree of acceptance of IE&M graduates from the industry

#### **OPPORTUNITIES**

- 1. Direct and fast influence on revitalization of Macedonian industry
- 2. Development of curriculum and study programs for undergraduate and continuing education for subjects until now missing in our educational system
- 3. Improvement and updating our FME staff knowledge
- 4. Improvement of our students competitiveness on the labor market
- 5. Improvement of the practical knowledge of the students through development computer laboratory (virtual organization) for teaching via games, simulations etc.
- 6. Increasing the student mobility through student visits to partner institutions

#### **WEAKNESSES**

- 1. Occupation of present FME staff with many ongoing projects
- 2. Outdated curriculum
- 3. Shortage of text books and teaching materials
- 4. Outdated computer equipment
- 5. Relationship FME industry
- 6. Current very low industry interest for continuous education of their staff

#### **THREATS**

- 1. Unrecognized job title
- 2. Risk of investing in staff who can live our country because of the problems with unemployment
- 3. Risk of investing in staff who can live our country because of the problems with further low chances for upgrading their knowledge and lack of possibility for research in some areas
- 4. Industry interest in joint projects
- 5. Adequate language skills
- 6. Existence of several providers of courses related to Quality improvement and Project management





# Ideas for transfer of experiences

(Please describe your ideas on how the experience presented could be transfered to Competence [e.g. Question 1-3 of your questionnaire, or the methodology you used to assess the competences)

**Short name** Possible transfer of experience