Strategic Platform for Ameliorating Tunisian Higher Education on Food Sciences and Technology
585729-EPP-1-2017-1-TN-EPPKA2-CBHE-JP   "SPAAT4FOOD PROJECT"

PROFESSIONEL INTEGRATION UNIT (PIU) IN TN UNIVERSITIES

1. Current situation PIU and internship

Questions on current situation	Answers
a. How the preparation for the job market is managed now?	…………………..….
b. How the practical industry experience/internship are managed now?	…………………… Possible answer: At this point the period and content is determined by the current academic schedule and syllabus. It is focused on the knowledge acquired that complements the knowledge acquired in the courses
c. How the insertion on the work market is managed?	……………………
d. What is working?	……………………
e. What is not working?	……………………

2. Role and functionality of the Professional Insertion Unit (PIU)

Proposed solutions	
a. PIU should:	- guide the students in defining their intended professional career
	- support the students in selecting and performing the learning units in accord with their intended professional career
	- mediates, supervises and assesses the practical learning units of the students: - research projects; - supervised practical stages in enterprise (PBL) – mandatory; - unsupervised individual stages in enterprises – optional.
	- find for the students a job that is best suited to their intended professional career or their acquired skills
	- …
	- …
b. PIU will be done by maintaining for each student:	- a personal project (PP)– based on the which job he intends to take after she/he graduates - the PP lists the skills that the student should acquire: this should cover at list one job available on the market.
	- a personal Portfolio (PF) – listing the acquired skills together with the intellectual products of each stage (reports, articles, project results) documenting the achievements
	- …
	- …
c. The PIU should guide the student in order to match PP and PF at the graduation moment for insertion on the job market. In order to assure this the PIU should have access to:	- a database of skills, knowledges, competencies that can be acquired by the students in this stage of their development
	- a database of generic job profiles in the sector with associated skills and competencies
	- a database of job offer from the market - each offer includes the generic job profile and the supplementary particular skills
	- a database of learning units (courses, training, research projects, internships) that can be intermediate by the PIU and their associated skills
	- …
	- …

3. Activities at PIU:

a. Each student should have an initial discussion at the PIU in which she/he defines her/his personal project (PP) by choosing one or more generic job profiles with their associated skills and a set of particular skills she/he is particularly interested in from the available databases.

b. In regularly scheduled meetings at the PIU, the students select the learning units (offered by the syllabus at the university, other extracurricular courses and/ or by the virtual lab) that help them to acquire the skills from their PP. They also update the situation of their acquired skills by adding the results of already performed learning units and so they improve their PF.

c. Based on the results of performed learning units and on psychological test and evaluation, the PIU guide the students in choosing this learning units.
The PIU also offer support to the students in updating their PP - removing or adding job profiles or skills - according to their experiences and results and the job market evolution.

d. In order to improve the efficiency of skills acquirement in the practical learning units, the PIU should support the organising of this as Mandatory practical stages (Problem-Based Learning). PIU should cooperate with the HR of the industry and integrate this in their selection process.

These activities imply:
- collecting of relevant tasks from the industry
- choosing the tasks suitable from the point of view of the existing resources (time, materials, supervisors) for each   practical activity (mandatory practical stage, internship, research project)
- choosing the right supervisors from the university for the team
- discussing and arranging with the acquiring enterprise (which gives the tasks) the practical details
- monitoring the development
- recording the results

Type of activities and roles

| | Research project | Internship | |
		Supervised practical stages (Problem-Based Learning)	Unsupervised individual stages
Type of problems	R&D tasks which needs laboratory research with strategic impact – new product/ new processes	Operational optimisation problems with medium time and implementation effect	Day to day (tactical) operation problems
Teacher role	Lead the research to a result	Guides the students in solving the problem	Gives advices on request
Student role	Research possibilities Propose alternatives Performs autonomous the experiments	Autonomous in proposing a solution to the problem Implication in implementation depends on the factory	Completely autonomous in the frame of its assignment
Enterprise role	Gives the task Test the solution	Gives the task Gives the working environment Support data collection	Test employment

		Test feasible alternatives	
Suited for	Semester, year or graduation work	Practical part of courses Mandatory practical stages	Optional
Skills acquired	Research and analytics skills	Problem solving skills in real environment	Problem solving skills in real environment and under real constraints
Hiring potential at the end of stage	R&D Laboratory	Ready for internship	Ready to employ

4. Integration with the virtual laboratory

a. Access to the markets PIU will have access to the markets existing in the virtual laboratory: research, educational and job markets:	**- research market**	allows the selection of research topics with industry relevance for research oriented educational units (research projects, semester/ bachelor/ master/ PhD work).
	- educational market	allows the selection of learning units based on the formed skills
	- job market	allows the selection of intended job profile based on the needed skills and the finding of a job based on the acquired portfolio (of skills)
b. Access to the learning activities	Each performed and passed learning activity in the virtual laboratory will automatically transfer in the student's portfolio the acquired skills and the results of the activity (reports, projects, articles, models, etc.)	

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5. Implementation PIU and internship

Questions on implementation	Answers
How will be the PIU integrated in the actual structures?	
How PIU will be practically implemented?	Alternatives - a real room - a virtual meeting point - both
Special persons will be allocated for the PIU tasks or the tasks will be distributed to existing employees which have also other responsibilities?	
Special persons will have qualification for personal development assessment and guidance?	
The assistance in personal project (PP) definition, learning track guidance and job funding should be assisted by:	a) a human adviser b) an computer program c) both
How will be the internships integrated in the actual structures?	
How internship will be practically implemented?	
Special persons will be allocated for the internship-related tasks or the tasks will be distributed to existing employees which have also other responsibilities?	
What budgetary resources will be allocated (in the project and after) for assuring sustainability?	