Universitat de Lleida

DEGREE CURRICULUM
ENTERPRISE PROJECTS 1

Coordination: GARRIDO NAVARRO, JUAN ENRIQUE

Academic year 2020-21

Subject's general information

Subject name	ENTERPRISE PROJECTS 1
Code	103105
Semester	UNDEFINED

Typology	Degree	Course	Character	Modality
	Master's Degree in Informatics Engineering	1	OPTIONAL	Attendance-based

Course number of credits (ECTS)	6

Type of activity, credits, and groups	Activity type	PRAULA
	Number of credits	6
	Number of groups	1

Coordination	GARRIDO NAVARRO, JUAN ENRIQUE
Department	COMPUTER SCIENCE AND INDUSTRIAL ENGINEERING
Teaching load distribution between lectures and independent student work	This course is taught in Dual training modality so that the formation of the student is developed entirely in the company
Important information on data processing	Consult this link for more information.

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
GARRIDO NAVARRO, JUAN ENRIQUE	juanenrique.garrido@udl.cat	2	
GINE DE SOLA, FRANCESC	francesc.gine@udl.cat	2	
GRANOLLERS SALTIVERI, ANTONI	toni.granollers@udl.cat	1	
LERIDA MONSO, JOSEP LLUIS	joseplluis.lerida@udl.cat	1	

Subject's extra information

The Dual training program allows the skills development in an entirely professional environment through the participation in real projects and work teams within a company. To follow this course is not required any specific knowledge, but a pro-active attitude, positive and adaptation to new situations and new teams.

Learning objectives

1. Developing the capacity to conceive, design and implement projects and/or contribute to new solutions, apply the knowledge acquired and to be capable of integrating this knowledge.
2. Developing the capacity for the integration of technologies, applications and computer engineering systems, in general and in wider and multidisciplinary contexts.
3. Developing the capacity for strategic planning, preparation, coordination and technical management in the field of the computer engineering in: systems, applications, services, networks, infrastructures or computer installations and centres or factories of software development, complying with the suitable fulfilment of the quality criteria and multidisciplinary working environments.
4. Development of integration capability and adapt to new environments and work teams.
5. Developing the capacity to communicate their conclusions to specialists and non-specialists in a clear and unambiguous manner.

Competences

University of Lleida strategic competences

- UdL1: Appropriate skills in oral and written language.

Cross-disciplinary Competences EPS

- EPS1: Capacity of planning and organizing the personal work.
- EPS2: Capacity to consider the socioeconomic context as well as the sustainability criteria in engineering solutions.

- EPS4: Capacity to conceive, design and implement projects and/or contribute to new solutions, using engineering tools.

General Competences

- CG8: Capacity to apply the knowledge acquired for solving problems in new and unfamiliar situations within broader and more multidisciplinary contexts, and to be capable of integrating this knowledge.
- CG9: Capacity to understand and apply ethical responsibility, legislation and professional ethics in computer engineering activities.

Basic Competences

- CB1: Possess knowledge and understanding that provide a basis or opportunity for originality in developing and / or applying ideas, often in a research context.
- CB2: That the students can apply their knowledge and their ability to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study.
- CB5: Students should possess learning skills that enable them to continue studying in a way that will be largely self-directed or autonomous.

Degree-specific competences

- CE1: Capacity for the integration of technologies, applications and computer engineering systems, in general and in wider and multidisciplinary contexts.
- CE2: Capacity for the strategic planning, preparation, direction, coordination, and technical and economic management in the fields of the computer engineering in: systems, applications, services, networks, infrastructures or computer installations and centres or factories of software development, complying with the suitable fulfilment of the quality criteria and multidisciplinary working environments.
- CE4: Capacity to model, design, define the architecture, implant, manage, operate, administer and keep applications, networks, systems, services and computer contents.

Subject contents

The contents of this subject are defined within the context of the company by the company tutor (CT) and validated by the university tutor (UT), as part of the dual training in which they are involved.

The CT (see the methodology section to understand the role of each person involved in the training) defines the tasks within the company that the student (ST) will carry out. These tasks in turn will define the contents that will be treated by the student and must be adjusted to the competencies and objectives to be developed in the subject.

Methodology

The Higher Polytechnic School defines a methodological framework to monitor and evaluate the dual training process. This methodological framework is generic to all the subjects that are carried out within the company in dual training.

The tutoring of each student is ensured by two figures who are essential in the success of the methodology: the company tutor (CT) and the university (UT).

The company tutor (CT) is responsible for the practical training of the student. His /Her function consists of welcoming and ensuring a correct integration of the student in the company, contributing to the acquisition of professional skills, monitoring, and evaluating the following: skills, know-how and knowing how to be in a professional environment.

The university tutor (UT) accompanies the student in his/her professional development and gives his/her support in case of difficulty. This role is especially important in the accompaniment and guidance in pedagogical matters. The UT ensures the monitoring process in the company and the relationship the student maintains with the professional environment. In addition, the UT works closely with the CT who is associated with the student's professional development.

Training process

When a student begins the master's degree and decides to do it in dual training, the first step is to explain the methodology to him/her and, therefore, to show the operation mode of the modality in which they will be involved. This will allow the student to know before the beginning of their training program, how they will work in term of skills objectives.

The dual training subjects within the "Enterprise Integrated Projects" specialty are divided over the three semesters of the master's degree. The distribution is as follows:

- The first and second semesters correspond to the subject "Enterprise Projects 1" (6 ECTS).
- The first and second semesters correspond to the subjects "Enterprise Projects 2", "Enterprise Projects 3" and "Trendig Topics" (18 ECTS).

The competencies and objectives are carried out through the completeness of tasks defined in the company. In this sense, at the beginning of each semester, through a meeting between the tutors and the student, the tasks, and competencies to be developed are defined. The (CT) will be responsible for making the formal proposal to be reviewed and analyzed by the corresponding TU. At the end of the meeting, the tasks will be defined and associated with the competencies to be developed.

At the end of each semester, a meeting will be held in which the work carried out by the student will be analyzed focused on the tasks defined at the initial meeting of the semester. This analysis is based on the tracking carried out by the CT in the daily work of the student, as well as the documentation collected by the student in the Memory of Activities. In the activity report, the student describes in detail the tasks performed, the competencies that have been discussed and, the technologies that have been used. In addition, the student performs an analysis of the level of achievement of the skills and the level of learning from a critical point of view. Based on all this documentation, TE and TU carry out the evaluation of the tasks and the level of achievement of the associated competencies.

All the information associated with the tasks to be performed by the student (description, competencies and objectives worked on) as well as its evaluation are described in the so-called "Learning Notebook". In it, all the authors involved (student, CT and UT) will be able to write their comments associated with each step performed during the dual training period in order to capture and record a personal analysis and assessments throughout the process. The UT will be responsible for guarding the learning notebook throughout the training process.

Development plan

Types	Stakeholders	Objective	Dates
Apprenticeship	UT/ST	- To know each other. - To know the dual training process. - To know the functions of all each actor.	2nd half of September
Business training	UT/CT	- To know each other. - To know the dual training process. - To know the functions of all each actor.	2nd half of September
1st Meeting	UT/CT/ST	- To analyze the integration of the ST into the enterprise. - To decide the competencies to work in the first period and the activities associated. - Issues/Pooling.	2nd half of October
2nd Meeting	UT/CT/ST	- To analyze the acquired know-how. - To present the Activity Report (MEM1). - To evaluate the first period.	2nd half of January

3rd Meeting	UT/CT/ST	- To analyze the integration of the ST into the enterprise. - To decide the competencies to work in the first period and the activities associated. - Issues/Pooling.	2nd half of February
4th Meeting	UT/CT/ST	- To analyze the acquired know-how. - To present the Activity Report (MEM2). - To evaluate the second period. This grade corresponds to the subject "Enterprise Projects 1".	2nd half of June
5th Meeting	UT/CT/ST	- To analyze the integration of the ST into the enterprise. - To decide the competencies to work in the first period and the activities associated. - Issues/Pooling. - To define the topic and plan the development of the TFM.	2nd half of September
6th Meeting	UT/CT/ST	- To analyze the acquired know-how. - To present the Activity Report (MEM3). - To evaluate the second period. This grade corresponds to the subjects "Enterprise Projects 2", "Enterprise Projects 3" and, "Trending Topics". - Overall evaluation of the dual training process.	2nd half of February

Evaluation

This subject is included in the Dual training program. The evaluation is oriented based on competencies that the students develops in the company during the evaluation period. The TE and TU evaluate the student through the Learning Notebook.

The final grade of the subject is obtained as a result of weighing the level of acquisition of the competencies of the subject with the level of the development of the skills or appreciation criteria. The calculation and weight of each of the parts is obtained by the following formula:

0.7 * Competences Grade + 0.3 * Skills Grade

The level of skills and competences acquisition is measured based on evidences such as daily monitoring, self-criticism assessment by the student of his/her learning process, detailed documentation of the learning process, activities performed, developed competencies, methodology, technologies, as well as self-assessment of the level of learning. All this information is provided by the learner through the Learning Notebook and Activity Memories.

At the end of the evaluation period, CT, UT, and student hold a meeting in which the conclusions of the learning process and the final qualification is obtained and shared. The information resulting from the evaluation process is reflected in the Learning Notebook to provide all actors with complete information about and serve as evidence of the evaluation process.

Bibliography

Notebook of Dual Training. Available in the virtual campus of Master's degree in Informatics Engineering.