



Universitat de Lleida

DEGREE CURRICULUM  
**BUSINESS PROCESS  
INTEGRATION WITH ERP  
SYSTEMS**

Coordination: MOLTO ARIBAU, MA. MARGARITA

Academic year 2020-21

## Subject's general information

<b>Subject name</b>	BUSINESS PROCESS INTEGRATION WITH ERP SYSTEMS			
<b>Code</b>	103096			
<b>Semester</b>	UNDEFINED			
<b>Typology</b>	<b>Degree</b>	<b>Course</b>	<b>Character</b>	<b>Modality</b>
	Master's Degree in Informatics Engineering	2	OPTIONAL	Attendance-based
<b>Course number of credits (ECTS)</b>	6			
<b>Type of activity, credits, and groups</b>	<b>Activity type</b>	PRALAB	TEORIA	
	<b>Number of credits</b>	3	3	
	<b>Number of groups</b>	0	0	
<b>Coordination</b>	MOLTO ARIBAU, MA. MARGARITA			
<b>Department</b>	BUSINESS ADMINISTRATION			
<b>Teaching load distribution between lectures and independent student work</b>	This course is taught by the modality of Dual Training and there is not lectures in the University. The student is all the time in the company.			
<b>Important information on data processing</b>	Consult <a href="#">this link</a> for more information.			
<b>Language</b>	English\Catalan\Spanish (It depends on the company)			

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
MOLTO ARIBAU, MA. MARGARITA	marga.molto@udl.cat	0	

## Subject's extra information

This course is designed to focus on the issues related to the implementation and management of ERP Systems. To follow the subject is recommended previous knowledge about the structure&management of the companies

## Learning objectives

The course aims to provide a course of study that will:

- Enable students to make critical assessments in using and implementing ERP Systems.
- Develop and enhance the skills and knowledge of students about ERP Systems
- Contribute at a high level to the creation and adoption of a systematic, professional and quality approach to ERP Systems.

## Competences

### General competences of Master's Degree in Informatics Engineering

CG1 Capacity to design, calculate and design products, processes and facilities in all areas of computer engineering

CG10 Capacity to apply principles of economics and management of human resources and projects, as well as legislation, regulation and standardization of computing

### Strategic Competences of UdL

UdL2 Command of a foreign language.

### Cross-disciplinary Competences

EPS2 Capacity to consider the socioeconomic context as well as the sustainability criteria in engineering solutions.

EPS3 Capacity to convey information, ideas, problems and solutions to both a specialized and no specialized public.

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

EPS5 To be motivated for the quality and steady improvement

### Basic competences of Master's Degree in Informatics Engineering

CB2 Apply the acquired knowledge and the capacity to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study

CB4 Knowing how to communicate their conclusions -and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously

### Specific competences of Master's Degree in Informatics Engineering

CE 1 Capacity for the integration of technologies, applications and computer engineering systems, in general and in wider and multidisciplinary contexts.

CE 2 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.

CE 3 Capacity for the direction of research, development and innovation projects, in companies and technological centres, with guarantee of security for people and resources, the final quality of the products and his certification.

CE 6 Capacity to ensure, manage, audit and certify the quality of the developments, processes, systems, services, applications and computer products.

CE 8 Capacity to analyse the information needs that arise and to carry out all the stages of the process of construction of an information system

## 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

This subject is taught by the Dual Training Education System, which is based on the complementarity principle of learning in an academic degree and training in a professional environment in a company. The student alternates his/her time between university and the company where he/she is employed.

The 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 Resource Planning Systems" 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 “Business Vision in ERP Systems” (6 ECTS).
- The first and second semesters correspond to the subjects “Management and Functional Areas in ERP Systems”, “Business Process Integration with ERP Systems” 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 analysed 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.

## Development plan

Types	Stakeholders	Objective	Dates
<b>Apprenticeship</b>	UT/ST	<ul style="list-style-type: none"> <li>• To know each other.</li> <li>• To know the dual training process.</li> <li>• To know the functions of all each actor.</li> </ul>	2 <sup>nd</sup> half of September
<b>Business training</b>	UT/CT	<ul style="list-style-type: none"> <li>• To know each other.</li> <li>• To know the dual training process.</li> <li>• To know the functions of all each actor.</li> </ul>	2 <sup>nd</sup> half of September
<b>1<sup>st</sup> Meeting</b>	UT/CT/ST	<ul style="list-style-type: none"> <li>• To analyse the integration of the ST into the enterprise.</li> <li>• To decide the competencies to work in the first period and the activities associated.</li> <li>• Issues/Pooling.</li> </ul>	2 <sup>nd</sup> half of October
<b>2<sup>nd</sup> Meeting</b>	UT/CT/ST	<ul style="list-style-type: none"> <li>• To analyse the acquired know-how.</li> <li>• To present the Activity Report (MEM1).</li> <li>• To evaluate the first period.</li> </ul>	2 <sup>nd</sup> half of January
<b>3<sup>rd</sup> Meeting</b>	UT/CT/ST	<ul style="list-style-type: none"> <li>• To analyse the integration of the ST into the enterprise.</li> <li>• To decide the competencies to work in the first period and the activities associated.</li> <li>• Issues/Pooling.</li> </ul>	2 <sup>nd</sup> half of February

<b>4<sup>th</sup> Meeting</b>	UT/CT/ST	<ul style="list-style-type: none"> <li>• To analyse the acquired know-how.</li> <li>• To present the Activity Report (MEM2).</li> <li>• To evaluate the second period. This grade corresponds to the subject " Business Vision in ERP Systems".</li> </ul>	2 <sup>nd</sup> half of June
<b>5<sup>th</sup> Meeting</b>	UT/CT/ST	<ul style="list-style-type: none"> <li>• To analyse the integration of the ST into the enterprise.</li> <li>• To decide the competencies to work in the first period and the activities associated.</li> <li>• Issues/Pooling.</li> <li>• To define the topic and plan the development of the TFM.</li> </ul>	2 <sup>nd</sup> half of September
<b>6<sup>th</sup> Meeting</b>	UT/CT/ST	<ul style="list-style-type: none"> <li>• To analyse the acquired know-how.</li> <li>• To present the Activity Report (MEM3).</li> <li>• To evaluate the second period. This grade corresponds to the subjects "Management and Functional Areas in ERP Systems", "Business Process Integration with ERP Systems" and, "Trending Topics".</li> <li>• Overall evaluation of the dual training process.</li> </ul>	2 <sup>nd</sup> 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:

$$0.7 * \text{Competences Grade} + 0.3 * \text{Skills Grade}$$

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.