

Curricular Unit Form (CUF)

Course:	FIRST CYCLE IN MECHANICAL ENGINEERING					
Curricular Unit (UC)	Organization Management and Entrepreneurship				Mandatory	
					Optional	X
Scientific Area:	Mechanical Project, Manufacturing and Industrial Maintenance					
Year: 3rd	Semester: 1st	ECTS: 4,0		Total Hours: 3h		
Contact Hours:	T:	TP: 45h	PL:	S: 2,5h	OT:	TT: 63h
Professor in charge		Academic Degree /Title		Position		
Ana Sofia Martins da Eira Dias		Doutor		Prof. Adjunto Convidado		

T- Theoretical ; TP – Theory and practice ; PL – Laboratory ; S – Seminar ; OT –Tutorial ; TT – Total of contact hours

Entry into Force	Semester: Winter	Academic Year: 2016/2017
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Objectives of the curricular unit and competences (max. 1000 characters)

- To contribute to the harmonization, coherence and integration of the complex formed by the degree with the Master of the branch in question.
- Develop skills in students to be innovative.
- Develop skills in students to be entrepreneurs.
- Promote the necessary interface between Engineering and Management.
- Provide tools and motivation students to build their own business.
- To promote the taste and motivation for change, innovation, continuous improvement.

The main skills to be acquired by students are all reflected in the following capacities:

- Use the knowledge acquired as a basis for development of original applications, possibly in the context of research and in the context of innovation and entrepreneurship;
- Making effective engineering an efficient production environment, quality and high competitiveness.

Learning self-oriented or autonomous, lifelong, with integration into competitive and global value chains.

Syllabus (max. 1000 characters)

Innovation, Entrepreneurship and New Product Development: Concepts, Application Domains, Industrial Evolution Trends; Examples of NPD Success / Failure; NPD Design Key Steps; The Strategic Management: The entrepreneur. **Strategic Management Concepts:** Marketing, building value with products / services; Market Studies; competitively. **Introduction to accounting and corporate finance:** Accounting information, sheet and income statement, financial balance; Treasury Management. **Human Resources Involvement:** Organizational Behavior, Leadership, Total Quality Management, Social Responsibility; Learner Organization. **Organizational Management:** Surrounding Economic Agents; Macroeconomics; Stakeholders. **Project Evaluation:** Project management, project evaluation: project cycle, feasibility studies, determination of cash flow. **From Idea to Business:** Feasibility Study, Financing Options, Business Plan, Support Mechanisms and Agents, Contracting and procurement.

Demonstration of the syllabus coherence with curricular unit's objectives (max. 1000 characters)

With the topics covered in the Course are explained the concepts inherent in the strategic management of the organization taking into account the surrounding market, in the context of value creation through innovative processes and entrepreneurship, applied both to DNP and continuous improvement processes.

This UC aims to consolidate acquired knowledge.

At the end of this course, students will be able to make decisions at the strategic level, based on program content and focusing on interaction in academic and industrial aspects.

The course is organized in theoretical-practical classes and also in seminars. In theoretical-practical classes, the topics that make up the program are shown and discussed and are offered to students topics for discussion and solving proposed problems.

Teaching methodologies (including evaluation) (max. 1000 characters)

Classes are taught using slides, films and presentation of explanatory diagrams of processes to address. Application exercises will be made to the matters under consideration.

Classes are accompanied by discussions of ideas and exchange of experiences on the taught syllabus. Whenever possible, will be taught seminars in ISEL or in companies / institutions that use and demonstrate the application of the contents of the Course.

The evaluation is based on performance of a group work conducting business plans based on ideas generated by the elements of each working group, with presentation and discussion of the work done.

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Demonstration of the teaching methodologies coherence with the curricular unit's objectives

(max. 3000 characters)

The teaching of theoretical-practical classes involves the exposure of the various syllabuses using problem solving embodying practical examples of various topics, audiovisual techniques and appropriate software to support presentation and examples of display in which associate the theoretical components and practice which develops contact with institutions/companies, thereby giving up greater dynamism and realism to the learning process.

It wanted to leave the learning motivation stimulated the students on the topics covered in the Course, being implemented by conducting research and external consulting group to perform the final work, whose evaluation is discussed later.

The orientation of learning is carried out complementarily by supporting out of class space.

Main Bibliography (max. 1000 characters)

- Bucha, Agostinho Inácio, *Empreendedorismo, aprender a saber ser empreendedor*, Editora hr, (2009).
- Carvalho, José Mexia Crespo de, *Ensino Superior: Modelo de gestão*, Edições Sílabo, (2003).
- Ferreira, Manuel Portugal, *Ser Empreendedor*, Edições Sílabo, (2008).
- Ferreira, J., J. Neves e A. Caetano, *Manual de Psicossociologia das Organizações*, McGraw Hill, (2001).
- Freire, Adriano, *Estratégia: Sucesso em Portugal*, Editora Verbo, (2008).
- Marques, A., Niven, P. R., *Balanced Scorecard Step-by-Step: Maximizing Performance and Maintaining Results*, 2nd Edition, John Wiley & Sons, Inc., (2006).
- Marques, A., *Concepção e Análise de Projectos de Investimento*, Sílabo, 3ª ed. (2006).
- Santos, A.J.R., *Gestão Estratégica*, Escolar Editora (2008).
- Santos, J., Wyisk, R. and Torres, J. M., *Improving Production with Lean Thinking*, John Wiley & Sons, Inc. (2008).
- Wheelen, T.L.; Hunger, J.D., *Strategic Management and Business Policy*, Pearson Education (2008).

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