

Sheet course ()

Course	MSc IN MECHANICAL ENGINEERING		
Unit	Logistics	Mandatory	<input type="checkbox"/>
		Optional	<input checked="" type="checkbox"/>
Unit scientific area	Industrial and Maintenance Engineering	Category	B

Unit category: B - Basic; C - Core Engineering; E - Specialization; P - Complementary.

Year: 1st	Semester: 1st		ECTS: 5,0			
Contact time	Total:	T:	TP: 45,0	PL:	S:	OT:

T - Lectures; TP - Theory and practice; PL - Lab Work; S - Seminar; OT - Tutorial Guidance.

Unit Director	Title	Position
Augusto António Brinque Proença	Charter Engineer	Invited Assistant Professor

Learning Objectives (knowledge, skills and competences to be developed by students)

(max. 1000 characters)

- 1 - Assume Logistics as an integrated and global system
- 2 - Understand the most relevant relationships involved in add value to customers.
- 3 - Understand the significance of Supply Chain Management
- 4 - Evaluate de most important logistical variable: Time, Space, Cost and Quality
- 5 - The students must acquire know-how and knowledge about inventory, warehousing transportation management and other logistical competencies
- 6 - The students must acquire know-how and knowledge about economic and logistics trade-off evaluation

Syllabus

(max. 1000 characters)

- 1 - Logistics concepts and terminology
- 2- Value-added role of logistics
- 3 – Logistic activities
- 4 - Warehouse management.

5 - Transportation management

6 - Information Technology

7-Logistics performance evaluation

Demonstration of consistency of the syllabus with the objectives of the course

(max. 1000 characters)

1. Assume Logistics as an integrated and global system.

Chapters : Logistics concepts and terminology and Value-added role of logistics

2. Understand the most relevant relationships involved in add value to customers

Chapters: Value-added role of logistics

3. Understand the significance of Supply Chain Management

Chapters: All Chapters

4. To evaluate de most important logistical variable: Time, Space, Cost and Quality

Chapters: All chapters

5. Acquire know-how and knowledge about inventory, warehousing transportation management and other logistical competencies

Chapters. All chapters

6. Acquire know-how and knowledge about economic and logistics trade-off evaluation

Chapters: Information Tecnology and Logisitcs performance evaluation

Teaching methodology (evaluation included)

(max. 1000 characters)

1. Continuous Assessment

Completion of two papers, one individual (NI) weighing 0.3 and another group (preferably three elements), also weighing 0.3 complemented with the development during the course of half a term test (NT) with weight 0.4.

$$NF = NT + 0.4 \times 0.3 \times 0.3 + NI \text{ NG}$$

2. Final Exam

Include in addition to the written examination (NE), also weighing 0.4, the two studies, individual and group, both of the mandatory.

$$NF = 0.4 \times 0.3 \times NE + NI + 0.3 \text{ NG}$$

3. Teaching Methodology

In order to understand the content versed, it is still desirable in accordance with the conduct of teaching, are alternating periods of exposure, resolution illustrative of problems, practical exercises and computer simulations with periods of work itself students will take place without direct contact with the professor.

Demonstration of consistency of teaching methods with the learning objectives of the course

(max. 3000 characters)

1. Continuous Assessment (Homeworks)

a. To use the knowledge gained as a basis for development of original applications, possibly in the context of research and in the context of innovation and entrepreneurship.

b. Learning in a self-guided or independent, lifelong, integrated value chains and global competitive.

2. Test

Making effective engineering in the context of efficient production and high competitiveness.

Main Bibliography

(max. 1000 characters)

DIAS, JCQ, 2005, Logística Global e Macrologística, Edições Sílabo

CARVALHO, Crespo, J. M., 1966, Logística, Edições Sílabo, 2002.

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INSTITUTO SUPERIOR DE ENGENHARIA DE LISBOA



Área Departamental de Engenharia Mecânica

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BOWERSOX, D., J., e CLOSS D.J., 1996, Logistical Management; the Integrated Supply Chain Process, Mc Graw-Hill, International Edition.

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