

Course Unit Description - (GISEQ)

(Integrated Management of Security, Quality and Environment)

(Mestrado em Engenharia Electrotécnica - Sistemas Eléctricos de Energia)

Academic year: 2009/2010

Subject group: Sistemas de Energia

	Semestral	Compulsory
Mode of study	Diurno	Hours/Week T-Teórica
Year	2 ^o	PL-Prática-Laboratorial
Semester	1 ^o	OT-Orientação Tutorial

ECTS 5

Objectives

Give to the students the different concepts and strategy to promote the understanding and the integration the quality, safety and environment management.

To promote the knowledge about the specifics standards related to the quality, safety and environment.

Course Contents

1. QUALITY MANAGEMENT

Standard Quality evaluation until ISO 9001

The NP EN ISO 9001:2000 – Quality management systems. Requirements.

The NP EN ISO 9000:2005 – Quality management systems. Fundamentals and vocabulary.

Methods to improve the quality.

The importance of IEC in the power systems development

Quality service regulation

Power Quality

2. ENVIRONMENTAL MANAGEMENT

Environmental Concepts.

The NP EN ISO 14001:2004 – Environmental management systems. Requirements with guidance for use.

Environmental law

Environmental Community programs

European Council n°761/2001

Environmental technologies

Environmental questions in the power systems

3. OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT

Concepts and law about Occupational health and safety Management

Risk Managements

NP 4397:2001 – Occupational health and safety management systems. Specification

4. INTEGRATED MANAGEMENT SYSTEMS

Compare about the tree management systems.

Partial and total integration;

Implementation integrated management systems.

Integrated management systems manual;

Integrated management systems audit;

Benefice about the integration of 3 systems;

Recommended reading

BIBLIOGRAPHY

[1] Implementação de Sistemas Integrados de Gestão. Qualidade, ambiente e segurança, Gilberto Santos, Publindústria, 2008, ISBN 978-972-8953-26-4

[2] Qualidade. Sistemas de gestão da qualidade, 3ª edição, A. Ramos Pires, Sílabo, 2004, ISBN 972-618-333-2

[3] Controle da Qualidade, J. M. Juran, Frank M. Gryna, McGraw Hill, 1991.

[4] Princípios da Gestão da Qualidade, Robert Fey, Jean-Marie Gogue, Fundação Calouste Gulbenkian, 1983.

[5] A Gestão da Qualidade, Fernando Nogueira Ganhão, Artur Pereira, Editorial Presença, 1992.

[6] Controle da Qualidade Total, Armand V. Feigenbaum, McGraw Hill, 1994.

[7] Gestão Ambiental, J. F. Santos Oliveira, LIDEL – Edições Técnicas, 2005, ISBN 972-757-328-2

[8] NP EN ISO 9001:2000 – Sistemas de Gestão da Qualidade. Requisitos.

[9] NP EN ISO 9000:2005 - Sistemas de Gestão da Qualidade. Fundamentos e vocabulário.

[10] NP EN ISO 14001:2004 – Sistemas de gestão ambiental. Requisitos e linhas de orientação para a sua utilização.

[11] EMAS – Regulamento do Conselho Europeu n°761/2001 de 19 Março.

[12] NP 4397:2001 – Sistemas de gestão da segurança e saúde do trabalho. Especificações.

[13] NP EN ISO 19011:2003 – Linhas de orientação para auditorias a sistemas de gestão da qualidade e/ou de gestão ambiental.

Teaching Methods

In this discipline the teaching method consists of three kinds of lecture sessions: theoretical, practice and tutorial collective sessions, organized as follows: Theoretical classes – These sessions involve conventional lecturing, supported by slide shows about concepts and techniques. In this sessions, is important participation of the students.

Practice – Experimental classes, where students are invited to solve specific problems related to discipline contents.

Tutorial classes – Students are stimulated to develop the proposed research projects and other problems (or exercises) under teacher´s supervision. Students work under a self-learning environment facing the arising challenges.

Assessment methods

EVALUATION DURING LEARNING PERIOD:

- a) Students performance to solve specific problems related to discipline contents (Practice classes).
- b) Students performance to develop the proposed research projects and other problems (or exercises) under teacher´s supervision (Tutorial classes).

NF = a) +b)

Note: The students with out evaluation during learning period should solve all problems and develop all research projects preview

EVALUATION IN FINAL EXAMINATION:

Realization one test, in the intermediate period - PE.

EVALUATION OF DISCIPLINE

(0,5 NF + 0,5 PE)

MARK IMPROVEMENT

This classification is obtained by another examination, similar in structure to the final examination.

	Name
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Lecturer:	Fernando Mauricio Teixeira de Sousa Dias (FMD) Fernando Manuel Domingues Fernandes (FDF)