

### **GENERAL INFORMATION**

Course information 1		
Name	Internship	
Code	INT	
Degree	Master in the Electric Power Industry (MEPI)	
Year	1 <sup>st</sup>	
Semester	Annual	
ECTS credits	6 ECTS	
Туре	Elective	
Department	Electrical Engineering	
Area	Power Systems	
Coordinator	Luis Olmos Camacho	

Instructor		
Name	Luis Olmos Camacho	
Department	Electrical Engineering	
Area	Regulation and Economics of Energy	
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Office hours	Arrange an appointment through email.	



### **DETAILED INFORMATION**

Contextualization of the course

Contribution to the professional profile of the degree

The objective of the Internship is for the student to apply the skills acquired throughout the masters program to real tasks to be carried in an entity of the power sector, and to obtain some experience of working in a professional environment.

**Prerequisites** 

None prerequisites apply.

## CONTENTS

Contents		
Theory (Laboratory sessions marked in red)		
Chapter 1. Collection of proposals and allocation of internships to students		
1.1. 1.2.	Collection and refinement of proposals for internships Allocation of internships to students	
Chapter 2. Monitoring of the progress with the internship work		
2.1.	Interaction with internship supervisor	
Chapter 3. Reporting on the work carried out		
3.1. 3.2.	Report by student Report by supervisor	



### **Competences and Learning Outcomes**

#### Competences

#### **General Competences / Basic Competences**

- CG1. Haber adquirido conocimientos avanzados y demostrado, en un contexto de investigación científica y tecnológica o altamente especializado, una comprensión detallada y fundamentada de los aspectos teóricos y prácticos y de la metodología de trabajo en uno o más campos de estudio.
- CG2. Saber aplicar e integrar sus conocimientos, la comprensión de estos, su fundamentación científica y sus capacidades de resolución de problemas en entornos nuevos y definidos de forma imprecisa, incluyendo contextos de carácter multidisciplinar tanto investigadores como profesionales altamente especializados.
- CG6. Haber desarrollado la autonomía suficiente para participar en proyectos de investigación y colaboraciones científicas o tecnológicas dentro de su ámbito temático, en contextos interdisciplinares y, en su caso, con una alta componente de transferencia del conocimiento.
- CG7. Ser capaces de asumir la responsabilidad de su propio desarrollo profesional y de su especialización en uno o más campos de estudio.

#### Specific Competences

INT1. Demostrar la capacidad de desarrollar una actividad profesional en el seno de alguna de las empresas colaboradoras con el Título bajo la supervisión de un profesional del sector.

#### Learning outcomes

Upon the completion of the Master's Internship, the students will have to be able to:

- LO1. Become acquainted with work in a professional environment, acquiring and applying skills related to team work, personal accountability, and discipline of work in such an entity.
- LO2. Undertake projects in a professional environment.



# **TEACHING METHODOLOGY**

### **General methodological aspects**

The internship work is to be carried without a company cooperating with the program and should be supervised by an experienced professional within the electricity sector.

Entities within the electricity sector shall offer some internships at the beginning of the academic year. These shall be allocated by the thesis coordinator within the University. The coordinator shall put students in contact with potential internship supervisors in companies according to their academic and professional preferences and profile. The coordinator shall monitor the quality of tasks performed by students within companies and shall be responsible for the final assessment of the internship work.

The individual work developed by the student is essential and it should cover the activities that follow.

Out-of-class activities – Master's Thesis	Competences
<ul> <li>Regular meetings with internship coordinator (4 hours)</li> </ul>	CG1, CG6, CG7
<ul> <li>Identification of a topic (8 hours)</li> </ul>	CG6, CG7
• Work within a professional team (140 hours): becoming part of a team undertaking some activities within a department of an entity in the electricity sector, while the student's work is monitored by the internship supervisor.	CG1, CG2, CG6, CG7, INT1
<ul> <li>Drafting of report (28 hours)</li> </ul>	CG1, CG2



## **ASSESSMENT AND GRADING CRITERIA**

Assessment activities	Grading criteria	Weight
Internship work (assessed by the supervisor)	<ul> <li>Performance of the student as a member of the professional team</li> </ul>	60%
Professional environment (assessed by the student)	<ul> <li>Description on the company where he has undertaken the internship</li> <li>Tasks accomplished</li> <li>Conclusions of the work carried out</li> <li>Personal thoughts and proposals for improvement</li> </ul>	40%

# **GRADING AND COURSE RULES**

The internship coordinator within Pontifical Comillas University shall be responsible of grading the internship work carried out by the student, acting as coordinator of the corresponding subject. Aspects to take into account in the assessment and their relative weights follow.

### Grading

Regular assessment

- Assessment of the student's performance (report by the thesis supervisor), accounts for 60%
- Assessment of the internship report written by the student, accounts for 40%

### **Course rules**

Students who commit an irregularity in any graded activity will receive a mark of zero in the activity and disciplinary procedure will follow (cf. Article 168 of the General Regulations (Reglamento General) of Comillas Pontifical University).

## WORK PLAN AND SCHEDULE<sup>1</sup>

In and out-of-class activities	Date/Periodicity	Deadline
Presentation and discussion of planning and rules	Week 1	
Presentation of possible topics	Week 7 (discussion 1 <sup>st</sup> set), week 14 (discussion 2 <sup>nd</sup> set)	
Selection of topics		Week 10, week 18
Monitoring of work progress	Throughout the academic year	
Internship work	Throughout the academic year	

<sup>&</sup>lt;sup>1</sup> A detailed work plan of the subject can be found in the course summary sheet (see following page). Nevertheless, this schedule is tentative and may vary to accommodate the rhythm of the class.



	At the end of the	
Submission of reports	academic year	
	(beginning of July)	

STUDENT WORK-TIME SUMMARY			
IN-CLASS HOURS			
Regular meetings with internship coordinator			
4			
OUT-OF-CLASS HOURS			
Identification of topic	Development of internship work		Drafting of report
8	140		28
	ECTS credits:	redits: 6 (180 hours)	