



POLITÉCNICA

INTERNATIONAL  
CAMPUS OF  
EXCELLENCE

COORDINATION PROCESS OF  
LEARNING ACTIVITIES  
PR/CL/001



E.T.S. de Ingeniería y Sistemas  
de Telecomunicación

# ANX-PR/CL/001-01

## LEARNING GUIDE

### SUBJECT

**593000611 - The Wireless Seminars**

### DEGREE PROGRAMME

59AI - Master Universitario En Comunicaciones Inalámbricas

### ACADEMIC YEAR & SEMESTER

2022/23 - Semester 2

## Index

---

### Learning guide

1. Description.....	1
2. Faculty.....	1
3. Skills and learning outcomes .....	2
4. Brief description of the subject and syllabus.....	3
5. Schedule.....	4
6. Activities and assessment criteria.....	6
7. Teaching resources.....	7

## 1. Description

---

### 1.1. Subject details

<b>Name of the subject</b>	593000611 - The Wireless Seminars
<b>No of credits</b>	4.5 ECTS
<b>Type</b>	Optional
<b>Academic year of the programme</b>	First year
<b>Semester of tuition</b>	Semester 2
<b>Tuition period</b>	February-June
<b>Tuition languages</b>	English
<b>Degree programme</b>	59AI - Master Universitario en Comunicaciones Inalámbricas
<b>Centre</b>	59 - Escuela Técnica Superior De Ingeniería Y Sistemas De Telecomunicación
<b>Academic year</b>	2022-23

## 2. Faculty

---

### 2.1. Faculty members with subject teaching role

<b>Name and surname</b>	<b>Office/Room</b>	<b>Email</b>	<b>Tutoring hours *</b>
Antonio Perez Yuste (Subject coordinator)	8304	antonio.perez@upm.es	Sin horario.
Yolanda Blanco Archilla	8203	yolanda.blanco@upm.es	Sin horario.

\* The tutoring schedule is indicative and subject to possible changes. Please check tutoring times with the faculty member in charge.

## 3. Skills and learning outcomes \*

---

### 3.1. Skills to be learned

CB10 - Que los estudiantes posean las habilidades de aprendizaje que les permitan continuar estudiando de un modo que habrá de ser en gran medida autodirigido o autónomo.

CB8 - Que los estudiantes sean capaces de integrar conocimientos y enfrentarse a la complejidad de formular juicios a partir de una información que, siendo incompleta o limitada, incluya reflexiones sobre las responsabilidades sociales y éticas vinculadas a la aplicación de sus conocimientos y juicios

CB9 - Que los estudiantes sepan comunicar sus conclusiones y los conocimientos y razones últimas que las sustentan a públicos especializados y no especializados de un modo claro y sin ambigüedades

CEM14 - Identificar áreas de aplicación en las que se puedan utilizar las técnicas y métodos de las Comunicaciones Inalámbricas.

CGI01 - Adquirir conocimientos científicos avanzados que permitan generar nuevas ideas dentro de una línea de investigación.

CGI02 - Comprender el procedimiento, valor y límites del método científico, siendo capaz de identificar, localizar y obtener datos requeridos en un trabajo de investigación, de diseñar y guiar investigaciones analíticas, de modelado y experimentales, así como de evaluar datos de una manera crítica y extraer conclusiones.

CGI05 - Adquirir el conocimiento necesario sobre los mecanismos de financiación de la investigación y transferencia de la tecnología, y sobre la legislación vigente sobre protección de resultados.

UPM1 - Uso de la lengua inglesa

UPM7 - Trabajo en contextos internacionales

## 3.2. Learning outcomes

RA14 - Apply the learned concepts to achieve the United Nations development goals

RA15 - Become aware of the ethical and professional responsibilities that must be considered during the professional activities

RA13 - Acquire advanced or specialised knowledge on any of the master's subjects

\* The Learning Guides should reflect the Skills and Learning Outcomes in the same way as indicated in the Degree Verification Memory. For this reason, they have not been translated into English and appear in Spanish.

## 4. Brief description of the subject and syllabus

---

### 4.1. Brief description of the subject

The Wireless Seminars represents a scientific forum intended for hosting and organizing educative activities, mainly oriented to the wireless market. This could gather own UPM researching oriented courses, some visiting researchers' conferences, as well as project-oriented activities organized by the research groups in the School.

### 4.2. Syllabus

1. PCB project of a wireless system
2. Android UI project of a wireless service

## 5. Schedule

### 5.1. Subject schedule\*

Week	Face-to-face classroom activities	Face-to-face laboratory activities	Distant / On-line	Assessment activities
1	PCB Project of a wireless system / Android UI project of a wireless service Duration: 04:00			
2	PCB Project of a wireless system / Android UI project of a wireless service Duration: 04:00			
3	PCB Project of a wireless system / Android UI project of a wireless service Duration: 04:00			
4	PCB Project of a wireless system / Android UI project of a wireless service Duration: 04:00			
5	PCB Project of a wireless system / Android UI project of a wireless service Duration: 04:00			
6	PCB Project of a wireless system / Android UI project of a wireless service Duration: 04:00			
7	PCB Project of a wireless system / Android UI project of a wireless service Duration: 04:00			Mid-term evaluation  Continuous assessment and final examination Presential Duration: 02:00
8	PCB Project of a wireless system / Android UI project of a wireless service Duration: 02:00			
9	PCB Project of a wireless system / Android UI project of a wireless service Duration: 02:00			
10	PCB Project of a wireless system / Android UI project of a wireless service Duration: 02:00			

11	PCB Project of a wireless system / Android UI project of a wireless service Duration: 02:00			
12	PCB Project of a wireless system / Android UI project of a wireless service Duration: 02:00			
13	PCB Project of a wireless system / Android UI project of a wireless service Duration: 02:00			
14	PCB Project of a wireless system / Android UI project of a wireless service Duration: 02:00			<b>Final term evaluation</b>  Continuous assessment and final examination Presential Duration: 02:00
15				
16				
17				

Depending on the programme study plan, total values will be calculated according to the ECTS credit unit as 26/27 hours of student face-to-face contact and independent study time.

\* The schedule is based on an a priori planning of the subject; it might be modified during the academic year, especially considering the COVID19 evolution.

## 6. Activities and assessment criteria

### 6.1. Assessment activities

#### 6.1.1. Continuous assessment

Week	Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
7	Mid-term evaluation		Face-to-face	02:00	40%	5 / 10	CGI02 CGI05 CB9 CB10 UPM7 CB8 UPM1 CGI01 UPM5 CEM14
14	Final term evaluation		Face-to-face	02:00	60%	5 / 10	CGI02 CGI05 CB9 CB10 UPM7 CB8 UPM1 CGI01 UPM5 CEM14

#### 6.1.2. Final examination

Week	Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
7	Mid-term evaluation		Face-to-face	02:00	40%	5 / 10	CGI02 CGI05 CB9 CB10 UPM7 CB8 UPM1 CGI01 UPM5 CEM14



14	Final term evaluation		Face-to-face	02:00	60%	5 / 10	CGI02 CGI05 CB9 CB10 UPM7 CB8 UPM1 CGI01 UPM5 CEM14
----	-----------------------	--	--------------	-------	-----	--------	--

### 6.1.3. Referred (re-sit) examination

No se ha definido la evaluación extraordinaria.

## 6.2. Assessment criteria

The type of course and the approach described above make more convenient to select an assessment mechanism different to the traditional final exam. A continuous evaluation methodology is here proposed for this course, based on the realisation of a project in a cooperative way and its presentation and defence in front of all the class mates.

## 7. Teaching resources

### 7.1. Teaching resources for the subject

Name	Type	Notes
Moodle Learning Management System	Web resource	Notes, examples, reports, data sheets, laboratory information
Android developers website	Web resource	<a href="https://developer.android.com/">https://developer.android.com/</a>
Android Studio: download and user guide	Web resource	<a href="https://developer.android.com/studio">https://developer.android.com/studio</a>

Khater, M. A. (2020). High-speed printed circuit boards: A tutorial. IEEE Circuits and Systems Magazine, 20(3), 34-45	Web resource	Accessed by IEEE Explore
---	--------------	--------------------------