Course guides
300020 - PE - Probability and Statistics

Unit in charge: Castelldefels School of Telecommunications and Aerospace Engineering
Teaching unit: 749 - MAT - Department of Mathematics.
Degree: BACHELOR’S DEGREE IN TELECOMMUNICATIONS SYSTEMS ENGINEERING (Syllabus 2009). (Compulsory subject).
BACHELOR’S DEGREE IN NETWORK ENGINEERING (Syllabus 2009). (Compulsory subject).
Academic year: 2020 ECTS Credits: 6.0 Languages: Catalan, Spanish

LECTURER

Coordinating lecturer: Definit a la infoweb de l’assignatura.
Others: Definit a la infoweb de l’assignatura.

PRIOR SKILLS

X

REQUIREMENTS

X

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
1. CE 1 TELECOM. Students will acquire the ability to solve mathematical problems for engineering. An aptitude for applying knowledge of linear algebra, geometry, differential geometry, differential and integral calculus, differential equations and partial differential equations, numerical methods, numerical algorithms, statistics and optimisation. (CIN/352/2009, BOE 20.2.2009)

Transversal:
2. SELF-DIRECTED LEARNING - Level 1. Completing set tasks within established deadlines. Working with recommended information sources according to the guidelines set by lecturers.
3. TEAMWORK - Level 1. Working in a team and making positive contributions once the aims and group and individual responsibilities have been defined. Reaching joint decisions on the strategy to be followed.

TEACHING METHODOLOGY

X

LEARNING OBJECTIVES OF THE SUBJECT

X
STUDY LOAD

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self study</td>
<td>84.0</td>
<td>56.00</td>
</tr>
<tr>
<td>Hours large group</td>
<td>36.0</td>
<td>24.00</td>
</tr>
<tr>
<td>Guided activities</td>
<td>12.0</td>
<td>8.00</td>
</tr>
<tr>
<td>Hours medium group</td>
<td>12.0</td>
<td>8.00</td>
</tr>
<tr>
<td>Hours small group</td>
<td>6.0</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Total learning time: 150 h

CONTENTS

(ENG) Introducción a la combinatoria

Description: x

Full-or-part-time: 17h
Theory classes: 3h
Practical classes: 1h
Guided activities: 2h
Self study: 11h

(ENG) Conceptos básicos de la probabilidad

Description: x

Full-or-part-time: 24h 30m
Theory classes: 4h 30m
Practical classes: 2h
Laboratory classes: 1h
Guided activities: 2h
Self study: 15h

(ENG) Variables aleatorias

Description: x

Full-or-part-time: 30h
Theory classes: 9h
Practical classes: 3h
Laboratory classes: 1h
Guided activities: 2h
Self study: 15h
(ENG) Vectores aleatorios

Description:

Full-or-part-time: 27h 30m
Theory classes: 7h 30m
Practical classes: 2h
Laboratory classes: 2h
Guided activities: 2h
Self study : 14h

(ENG) Procesos estocásticos

Description:

Full-or-part-time: 33h
Theory classes: 9h
Practical classes: 3h
Guided activities: 2h
Self study : 19h

(ENG) Muestras y estimación

Description:

Full-or-part-time: 18h
Theory classes: 3h
Practical classes: 1h
Laboratory classes: 2h
Guided activities: 2h
Self study : 10h

GRADING SYSTEM

XX

EXAMINATION RULES.

X

BIBLIOGRAPHY

Basic:

Complementary: