

## 340121 - ELEC-K4009 - Electrotechnics

Coordinating unit: 340 - EPSEVG - Vilanova i la Geltrú School of Engineering  
 Teaching unit: 709 - EE - Department of Electrical Engineering  
 Academic year: 2018  
 Degree: BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)  
 BACHELOR'S DEGREE IN ELECTRICAL ENGINEERING (Syllabus 2009). (Teaching unit Optional)  
 BACHELOR'S DEGREE IN MECHANICAL ENGINEERING (Syllabus 2009). (Teaching unit Optional)  
 ECTS credits: 6 Teaching languages: Catalan

### Teaching staff

Coordinator: JOSE IGNACIO PERAT BENAVIDES

Others: JOSE IGNACIO PERAT BENAVIDES

### Degree competences to which the subject contributes

Specific:

1. CE19. Applied knowledge in electric engineering.

Transversal:

2. EFFECTIVE USE OF INFORMATION RESOURCES - Level 2. Designing and executing a good strategy for advanced searches using specialized information resources, once the various parts of an academic document have been identified and bibliographical references provided. Choosing suitable information based on its relevance and quality.
3. SELF-DIRECTED LEARNING - Level 2: Completing set tasks based on the guidelines set by lecturers. Devoting the time needed to complete each task, including personal contributions and expanding on the recommended information sources.

### Learning objectives of the subject

#### Study load

Total learning time: 150h	Hours large group:	45h	30.00%
	Hours medium group:	0h	0.00%
	Hours small group:	15h	10.00%
	Guided activities:	0h	0.00%
	Self study:	90h	60.00%

## 340121 - ELEC-K4009 - Electrotechnics

### Content

(ENG) - TEMA 1.- Transformadors: aplicacions en equips electrònics.

Degree competences to which the content contributes:

(ENG) - TEMA 2.- Màquines elèctriques de corrent continu i corrent altern: Control i regulació de velocitat..

Degree competences to which the content contributes:

(ENG) - TEMA 3.- Màquines elèctriques no convencionals.

Degree competences to which the content contributes:

(ENG) - TEMA 4.- Dimensionament de instal·lacions elèctriques en baixa tensió.

Degree competences to which the content contributes:

(ENG) - TEMA 5.- Aparellatge elèctric. Protecció d'equips i persones.

Degree competences to which the content contributes:

### Bibliography

#### Basic:

Cogdell, J.R. Foundations of electrical engineering. 2nd ed.. Englewood Cliffs, N. J: Prentice Hall, 1996. ISBN 0130927015.

Chapman, Stephen J. Máquinas eléctricas. 4a ed. México [etc.]: McGraw-Hill, 2005. ISBN 9701049470.

Sanjurjo Navarro, Rafael. Máquinas eléctricas. Madrid: García-Maroto, 2011. ISBN 9788415214144.

Montané Sangrà, Paulino. Protecciones en las instalaciones eléctricas : evolución y perspectivas. 2a ed. Barcelona: Marcombo Boixareu, 1990. ISBN 8426706886.

Conte, Gaetano. Impianti elettrici. 5a ed. Milano: Ulrico Hoepli, 2006-2007. ISBN 9788820335557, 9788820338466.