

Qualification: INDUSTRIAL TECHNICAL ENGINEERING, SPEC. IN ELECTRICITY		Year: 2 nd	Terms offered: Full year
Code: 19219	Subject:	Type: Core	Language:
Academic Year: 2008 / 2009	ELECTRICAL INSTALLATIONS	Credits: 12.0	Spanish

Lecturers:	Theory: Melchor Gómez Pérez
	Practice: Melchor Gómez Pérez

Objectives: To know and use the Low-Voltage Electrotechnical Regulations and the Supplementary Technical Instructions. To understand the basis of the design and calculation of low-voltage electrical installations. To know the rate structure.

Syllabus / Content (theoretical and practical): <ol style="list-style-type: none"> 1. Introduction. The electrical system. 2. Cable raceways: conductors and installation systems. 3. Protections for circuits and receptors. 4. Protections for individuals. 5. Description of installations. Calculation of electrical lines. 6. Load forecasting. 7. Calculation of the service drop and service entrance conductors. Calculation of the interior or incoming connection. 8. Calculation of the grounding installation. 9. Installations in public premises 10. Installations in premises where there is a fire or explosion risk. 11. Electricity rates. 12. Power factor correction. 13. Illumination. Practice: Term 1, assemblies on scale models. Term 2, Cypelec electrical design software.
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Bibliography: <ul style="list-style-type: none"> ✓ Reglamento Electrotécnico de baja tensión R.D. 842/2002 ✓ Instalaciones eléctricas de baja tensión. N. Moreno, ... Ed. Thomson ✓ Manual de instalaciones eléctricas residenciales e industriales. E. Harper. Ed. Limusa ✓ Instalaciones eléctricas para la vivienda. J. Roldán. Ed. Thompson ✓ Instalaciones eléctricas de Baja tensión. Aplicaciones prácticas del REBT 2002. J. Roldán ✓ Instalaciones eléctricas: Resumen de REBT. J.L. Sanz. Ed. Thomson

Assessment: Projects in small groups and presentation in class. Participation in question-answer debates in class Preparation of individual topics for use in group work Assembly and simulation in the practice laboratory Final exam on the work covered.
