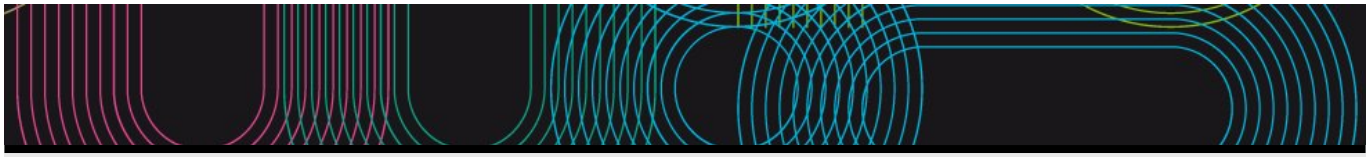

IDENTIFYING DATA				
Electrotechnology and rural electrification				
Subject	Electrotechnology and rural electrification			
Code	P03G370V01304			
Study programme	(*)Grao en Enxeñaría Forestal			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Mandatory	2nd	1st
Teaching language	Spanish Galician			
Department				
Coordinator	Moldes Eiroa, Ángel			
Lecturers	Moldes Eiroa, Ángel			
E-mail	angelmoldes@uvigo.es			
Web				
General description	(*)Se estudiarán los principios de funcionamiento de la electricidad y los circuitos eléctricos, así como los componentes, el diseño y el cálculo de una instalación eléctrica.			

Competencies	
Code	
B9	Knowledge of hydraulics, construction, electrification, forest roads, machinery and mechanization necessary both for the management of forest systems and for their conservation.
C14	Ability to know, understand and use the principles of: electrical engineering and forest electrification.
D8	Ability to solve problems, critical reasoning and decision making

Learning outcomes	
Expected results from this subject	Training and Learning Results

2R. 2018 Knowledge and understanding of the disciplines of engineering of the his speciality, to the necessary level to purchase the rest of the competitions of the qualifications, including notions of the last advances. 3R. 2018 Be conscious of the multidisciplinary context of the engineering. 4R. 2018 Capacity to #analyze products, processes and complex systems in the his field of study; choose and apply analytical methods, of calculation and experimental *relevantes of form *relevante and interpret correctly the results of these analyses. 5R. 2018 Capacity to identify, formulate and resolve problems of engineering in the his speciality; choose and apply analytical methods, of calculation and experiments properly established; Recognize the importance of the social restrictions, of health and security, environmental, economic and industrial. 6R. 2018 Capacity to project, design and develop complex products (pieces, component, products finished, etc.), processes and systems of the his speciality, that fulfil the requirements established, including the knowledge of the social aspects, of health and environmental security, economic and industrial; as well as select and apply methods of appropriate project. 7R. 2018 Capacity of the project using any knowledges advanced of the his speciality in engineering. 8R. 2018 Capacity to realize bibliographic researches, consult and use databases and other sources of information with discretion, to realize @simulación and analysis with the objective to realize investigations on technical subjects of the his speciality. 9R. 2018 Capacity to consult and apply codes of good practices and security of the his speciality. 10R. 2018 Capacity and capacity to project and realize experimental investigations, interpret results and obtain conclusions in the his field of study. 11R. 2018 Understanding of the techniques and methods of analysis, project and applicable investigation and his limitations within the scope of the his speciality. 12R. 2018 practical Competition to resolve complex problems, realize complex projects of engineering and realize specific investigations stop his speciality. 13R. 2018 Knowledge of the application of materials, teams and tools, technological processes and of engineering and his limitations within the scope of the his speciality. 15R. 2018 Knowledge of the social implications, of health and security, environmental, economic and @industrial of the practice in engineering.			
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Contents
Topic
INTRODUCTION AND AXIOMS
CIRCUITS OF CONTINUOUS CURRENT
CIRCUITS OF ALTERNATES CURRENT

TRIFÁSIC SYSTEMS BALANCED
OPERATION OF THE NATIONAL ELECTRICAL SYSTEM
ELEMENTS OF AN ELECTRICAL SYSTEM
CALCULATION OF ELECTRICAL INSTALLATIONS
ELECTRONIC REGULATION FOR LOW TENSION

Planning

	Class hours	Hours outside the classroom	Total hours
Lecturing	16	16	32
Problem solving	16	48	64
Laboratory practical	16	0	16
Computer practices	12	18	30
Problem and/or exercise solving	3	0	3
Problem and/or exercise solving	1	0	1
Essay	4	0	4

*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

Methodologies

	Description
Lecturing	EXHIBITION BY PART OF The PROFESSOR OF The THEORETICAL BASES OF The ASIGN#PUT
Problem solving	FORMULATION And RESOLUTION OF PROBLEMS RELACCIONED WITH The ASIGN#PUT
Laboratory practical	ACTIVITIES OF APPLICATION OF KNOWLEDGES IN SPACES WITH SPECIALIZED EQUIPMENT
Computer practices	ACTIVITIES OF APPLICATION OF KNOWLEDGES IN CLASSROOM OF COMPUTING

Personalized assistance

Methodologies	Description
Lecturing	
Problem solving	
Computer practices	
Laboratory practical	

Assessment

	Description	Qualification	Training and Learning Results
Laboratory practical	It EVALUATED BY MEANS OF The DELIVERY OF A MEMORY WITH The NUMERICAL RESULTS OBTAINED IN The PRACTICES	10	C14
Problem and/or exercise solving	It EVALUATED BY MEANS OF The APPROACH OF PROBLEMS THAT The STUDENT will HAVE TO ANSWER OF FORM WRITTEN	40	C14
Problem and/or exercise solving	It EVALUATED BY MEANS OF The APPROACH OF QUESTIONS THAT The STUDENT will HAVE TO ANSWER OF FORM WRITTEN	20	C14
Essay	It EVALUATED The QUALITY OF A PROJECT OF ELECTRICAL INSTALLATION CALCULATED BY The STUDENT	30	C14

Other comments on the Evaluation

Will not conserve any note of previous announcements, except the note of the work and of the practices inside the same academic year. The note obtained in the work in the announcement of January will be valid for the announcement of Julio.

Calendar of examinations:First Announcement: 24 January 2020, 10:00 HoursSecond Announcement: 22 June 2020, 12:00 Hours

Sources of information

Basic Bibliography

Complementary Bibliography

PARRA, PEREZ, PASTOR, ORTEGA, **TEORÍA DE CIRCUITOS**, 2003,

GONZÁLEZ, GARRIDO, CIDRÁS, **EJERCICIOS RESUELTOS DE CIRCUITOS ELÉCTRICOS**, 1999,

SPITTA, **INSTALACIONES ELÉCTRICAS**, 1980,

MINISTERIO CIENCIA Y TECNOLOGÍA, **R.D. 842/2002 REGLAMENTO ELECTROTÉCNICO PARA BAJA TENSIÓN**, 2002,

MINISTERIO CIENCIA Y TECNOLOGÍA, **R.D.223/2008 REGLAMENTO DE LÍNEAS ELÉCTRICAS DE ALTA TENSIÓN**, 2008,
MINISTERIO CIENCIA Y TECNOLOGÍA, **R.D.337/2014 REGLAMENTO SOBRE CONDICIONES TÉCNICAS Y GARANTÍAS DE SEGURIDAD EN INSTALACIONES ELÉCTRICAS DE ALTA TENSIÓN**, 2014,

Recommendations

Subjects that it is recommended to have taken before

Physics: Physics I/P03G370V01102
Physics: Physics II/P03G370V01202
Mathematics: Overview of mathematics/P03G370V01203
Mathematics: Mathematics and IT/P03G370V01103