

Academic Year: (2023 / 2024)

Review date: 30-05-2023

Department assigned to the subject: Electrical Engineering Department

Coordinating teacher: SEDANO PALOMERO, JOSE ANTONIO

Type: Compulsory ECTS Credits : 3.0

Year : 4 Semester : 2

SKILLS AND LEARNING OUTCOMES

CB1. Students have demonstrated possession and understanding of knowledge in an area of study that builds on the foundation of general secondary education, and is usually at a level that, while relying on advanced textbooks, also includes some aspects that involve knowledge from the cutting edge of their field of study.

CB2. Students are able to apply their knowledge to their work or vocation in a professional manner and possess the competences usually demonstrated through the development and defence of arguments and problem solving within their field of study.

CB3. Students have the ability to gather and interpret relevant data (usually within their field of study) in order to make judgements which include reflection on relevant social, scientific or ethical issues.

COCIN1. Ability to draft, sign and develop projects in the area of industrial engineering for construction, renovation, repair, preservation, demolition, manufacture, installation, assembly or operation of: structures, mechanical equipment, energy installations, electrical and electronic installations, industrial plants and installations and automation and manufacturing processes.

COCIN2. Ability to lead engineering project activities in construction, renovation, repair, preservation, demolition, manufacture, installation, assembly or operation of: structures, mechanical equipment, energy installations, electrical and electronic installations, industrial plants and installations and automation and manufacturing processes.

COCIN5. Knowledge to perform measurements, calculations, assessments, appraisals, surveys, studies, reports, work plans and other similar jobs.

COCIN6. Ability to deal with mandatory specifications, regulations and norms.

COCIN7. Ability to analyze and assess the social and environmental impact of technical solutions.

COCIN11. Knowledge, understanding, and capacity to apply the necessary regulations while pursuing the profession of Technical Industrial Engineer.

CER12. Knowledge and capacity to organize and manage projects. Knowledge of the organizational structure and functions of a project office.

CER10. Basic and applied knowledge in environmental and sustainability technologies.

By the end of this content area, students will be able to have:

RA1.1. Knowledge and understanding to develop, execute and manage electrical engineering projects, according to good practises, standards and regulations.

RA1.4. Awareness of the wider multidisciplinary context of engineering.

RA2.2. The ability to apply their knowledge and understanding to analyse engineering products, processes and methods.

RA3.1. The ability to apply their knowledge and understanding to develop and realise designs to meet defined and specified requirements.

RA4.1. The ability to conduct searches of literature, and to use data bases and other sources of information.

RA5.4. An awareness of the non-technical implications of engineering practice.

RA6.1. Function effectively as an individual and as a member of a team.

RA6.3. Demonstrate awareness of the health, safety and legal issues and responsibilities of engineering practice, the impact of engineering solutions in a societal and environmental context, and commit to professional ethics, responsibilities and norms of engineering practice.

RA6.4. Demonstrate an awareness of project management and business practices, such as risk and change management, and understand their limitations.

