

29620 - Manufacturing Technology

Información del Plan Docente

Academic Year	2017/18
Faculty / School	110 - Escuela de Ingeniería y Arquitectura
Degree	430 - Bachelor's Degree in Electrical Engineering
ECTS	6.0
Year	3
Semester	First semester
Subject Type	Compulsory
Module	---

1.General information

1.1.Introduction

1.2.Recommendations to take this course

1.3.Context and importance of this course in the degree

1.4.Activities and key dates

2.Learning goals

2.1.Learning goals

2.2.Importance of learning goals

3.Aims of the course and competences

3.1.Aims of the course

3.2.Competences

4.Assessment (1st and 2nd call)

4.1.Assessment tasks (description of tasks, marking system and assessment criteria)

5.Methodology, learning tasks, syllabus and resources

5.1.Methodological overview

The learning process that is designed for this subject is based on the following:

The face teaching process will involve three main levels : lectures, problems and , laboratory , with increasing level of student participation.

In sessions with the whole group the more theoretical aspects are addressed in the form of master class and are completed with the study of technical problems and cases. The practical sessions take place in smaller groups to work

29620 - Manufacturing Technology

with specialized applications and equipment manufacturing workshop .

This process should be complemented by the non-contact work by the student through previous readings , the theoretical study of matter and problem solving .

5.2.Learning tasks

5.3.Syllabus

Block 1. Introduction to manufacturing processes. Definitions and classification .

Block 2. Processes and manufacturing technologies :

- Processes for preforming .
- Deformation processes .
- Material removal processes .
- Joining and assembly processes .

Block 3. Manufacturing Systems : characterization and strategies.

Block 4. Metrology and industrial quality.

5.4.Course planning and calendar

5.5.Bibliography and recommended resources

[BB: Bibliografía básica / BC: Bibliografía complementaria]

- [BB] Valero Ruiz, Carlos. Introducción a los procesos de fabricación / autores Carlos Valero Ruiz, Juan Carlos De Francisco Moreno ; con la colaboración de Fernando Torres, Luis Berges, María José Oliveros . - 2ª ed. Zaragoza : Kronos, 2001
- [BC] Groover, Mikell P.. Fundamentos de manufactura moderna : Materiales, procesos y sistemas / Mikell P. Groover . - 1a ed. México : Prentice-Hall Hispanoamericana, cop. 1997
- [BC] Kalpakjian, Serope. Manufactura, ingeniería y tecnología. Vol. 1, Tecnología de materiales / Serope Kalpakjian, Steven R. Schmid ; traducción Jesús Elmer Murrieta Murrieta ; revisión técnica Ulises Figueroa López, Francisco Sandoval Palafo. 7ª ed. Naucalpan de Juárez (México) : Pearson Educación, 2014
- [BC] Kalpakjian, Serope. Manufactura, ingeniería y tecnología. Vol. 2, Procesos de manufactura / Serope Kalpakjian, Steven R. Schmid ; traducción Javier Enríquez Brito ; revisión técnica Ulises Figueroa López, Francisco Sandoval Palafox, Jorge Eduardo Aguirre Aguilar . - 7ª ed. Naucalpan de Juárez (México) : Pearson Educación, 2014
- [BC] Pfeifer, Tilo. Manual de gestión e ingeniería de la calidad / Tilo Pfeifer, Fernando Torres . - 1ª. ed. española act. y amp., 1ª reimp. Zaragoza : Mira, 2002