Seminar 2

Academic Year: (2021 / 2022) **Review date: 10-07-2020**

Department assigned to the subject: Systems Engineering and Automation Department

Coordinating teacher: BLANCO ROJAS, MARIA DOLORES

Type: Compulsory ECTS Credits : 3.0

Year : 1 Semester : 2

OBJECTIVES

BASIC COMPETENCES

CB6 Possess and understand knowledge that provides a basis or opportunity to be original in the development and / or application of ideas, often in a research context

CB7 That students know how to apply the knowledge acquired and their ability to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their area of study

CB8 That students are able to integrate knowledge and face the complexity of making judgments based on information that, being incomplete or limited, includes reflections on social and ethical responsibilities linked to the application of their knowledge and judgments

CB10 That students have the learning skills that allow them to continue studying in a way that will be largely self-directed or autonomous

GENERAL COMPETENCES

CG5 Capacity for basic analysis of the requirements for information management and treatment of large volumes of data.

CG6 Capacity to adapt to changes in requirements associated with new products, new specifications and environments.

CG7 Be able to generate new ideas (creativity) and to anticipate change.

CG8 Use skills for teamwork and to relate to others autonomously.

SPECIFIC COMPETENCES

CE1 Ability to design automatic process systems (production machinery, transport and storage systems and quality control) and the interconnection between their different modules (industrial protocols)

CE2 Ability to integrate and program the different industrial process control systems both from a hardware and software point of view

CE6 Ability to design and control some next-generation wireless networks in industrial applications

CE10 Programmatic data processing capabilities in solving particular problems of the connected industry

CE11 Ability to design customizable and adaptable mechanical parts and objects

LEARNING RESULTS

At the end of the subject matter, the student must:

- Know concrete models and use cases of Connected Industry 4.0.

-Analyze and design practical cases of application of Connected Industry 4.0 models

DESCRIPTION OF CONTENTS: PROGRAMME

The content of the seminars will be on advanced topics in Connected Industry 4.0 presented by national or international experts.

To determine each year.

% end-of-term-examination:	70
% of continuous assessment (assigments, laboratory, practicals…):	30