

Course Syllabus

TELECOMMUNICATIONS ENGINEERING CAPSTONE DESIGN

Printed by: jfmoncay

Program: Telecommunications Engineering

1. Course number and name

TELG1021 - TELECOMMUNICATIONS ENGINEERING CAPSTONE DESIGN

2. Credits and contact hours

3 credits and 3 contact hours

3. Instructor's course or coordinator's name

FRANCISCO VICENTE NOVILLO PARALES

4. Text book, tittle, author, and year

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5. Specific course information

a. Brief description of the content of the course (catalog description)

In this capstone design project course, students will be involved in projects emphasizing design, development, and experimentation. The work covers information searches, project planning, professional education, writing skills, communication, technical presentation, and ethics. In the first part, they identify customer/user/public needs, define the problem/opportunity, collect data and analyze critical factors. In the second part, they identify solution alternatives and select the final design approach. Finally, they design a feasible solution, build prototypes and analyze and validate results.

b. Prerequisites

At least 53 approved courses

c. This course is: Required

6. Specific goals for the course

a. Specific outcomes of instruction

1.- Identify a problem/need through customer, user or public requirements.

2.- Analyze the critical factors that affect the solution approach to the identified problem/need.

3.- Design a solution approach and/or prototype applying the telecommunication engineering design methodology.

4.- Generate a feedback process in the design of the solution approach.

b. Explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course

- An ability to work as part of a multidisciplinary team.

- A recognition of the need for entrepreneurship and the abilities to become an entrepreneur.



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7. Brief list of topics to be covered

- 1.- Problem/need/opportunity definition
- 2.- Information analysis
- 3.- Value proposal
- 4.- Analysis and validation of outcomes