Power system operation and control

Academic Year: (2023 / 2024)

Review date: 11-03-2019

Department assigned to the subject: Electrical Engineering Department Coordinating teacher:

Type: Electives ECTS Credits : 6.0

Year : Semester : 2

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Fundamentals of electrical engineering

OBJECTIVES

1.- Ability to explain concepts realted with frequency and voltage control of powers systems, voltage stability and state estimation.

2.- Ability to solve numerical problems related with the previous concepts.

DESCRIPTION OF CONTENTS: PROGRAMME

- 1.- Introduction
- 2.- Voltage control
- 3.- Frequency-voltage regulation
- 4.- Voltage stability
- 5.- Estate Estimation

LEARNING ACTIVITIES AND METHODOLOGY

- Master lectures, doubt solving classes in small groups, student presentations, tutorials and personal work, aimed at the acquisition of knowledge.

- Practical sessions aimed at the acquisition of practical skills related to the program of the course.

ASSESSMENT SYSTEM

Continuous assessment based on work, class participation and evaluation tests of skills and knowledge (60%)

Final exam (40%)

% end-of-term-examination:	40
% of continuous assessment (assigments, laboratory, practicals):	60

BASIC BIBLIOGRAPHY

- Kundur P. Power Systems Stability and Control, McGraw Hill, 1982