



ELECTRICAL AND ELECTRONICS ENGINEERING

IV Year-I Sem

HVDC TRANSMISSION (PE – IV) (EE721PE)

Course Outcomes:

After completion of this course the student is able to

- 1) Compare EHV AC and HVDC system and to describe various types of DC links
- 2) Analyze Graetz circuit for rectifier and inverter mode of operation
- 3) Describe various methods for the control of HVDC systems and to perform power flow analysis in AC/DC systems
- 4) Analyze Graetz circuit for rectifier and inverter mode of operation
- 5) Describe various protection methods for HVDC systems and classify Harmonics and design different types of filters

Principles Of Enterprenuership (MT701OE)

Course Outcomes:

- 1) Understand basics of Entrepreneurship. (Knowledge)
- 2) Explain financing and managing the new ventures. (Application)
- 3) Understand schemes and functions of different corporations. (Evaluation)
- 4) Explain industrial final support from different corporations. (knowledge)
- 5) Describe production and marketing management. (Comprehension)

DIGITAL CONTROL SYSTEMS (PE – III) (EE711PE)

Course Outcomes:

At the end of this course, students will demonstrate the ability to

- 1) Obtain discrete representation of LTI systems.
- 2) Analyze stability of open loop and closed loop discrete-time systems.
- 3) Design and analyze digital controllers.
- 4) Analyze stability of open loop and closed loop discrete-time systems.
- 5) Design state feedback and output feedback controllers.



ELECTRICAL & ELECTRONICS DESIGN LAB

(EE701PC)

Course Outcomes:

After completion of course, student will be able to

- 1) Get practical knowledge related to electrical
- 2) Fabricate basic electrical circuit elements/networks
- 3) Trouble shoot the electrical circuits
- 4) Design filter circuit for application
- 5) Get hardware skills such as soldering, winding etc.
- 6) Get debugging skills.

FUNDAMENTALS OF MANAGEMENT FOR ENGINEERS

(SM701MS)

Course Outcomes:

- 1)** The students understand the significance of Management in their Profession.
- 2) The various Management Functions like Planning,
- 3) Organizing, Staffing, Leading, Motivation and Control aspects are learnt in this course.
- 4) The various Management Functions like Planning
- 5) The students can explore the Management Practices in their domain area



PROJECT STAGE – I

Course Outcomes:

- 1) Select a suitable project making use of the technical and engineering knowledge gained from previous courses with the awareness of impact of technology on the society and their ethical responsibilities.
- 2) Collect and disseminate information related to selected project. Identify and work with the modern tools required for the implementation of the project.
- 3) Form a team and distribute the work among them. Communicate technical and general information by means of oral as well as written presentation skills with professionalism.
- 4) Refine and complete the selected project making use of the technical and engineering knowledge which meets the expected outcome.
- 5) Acquire problem solving, system integration, project management and documentation skills

Principal



ELECTRICAL AND ELECTRONICS ENGINEERING

IV Year-II Sem

Total Quality Management

(MT802OE)

Course Outcomes:

- 1) Analyze and Understand what total quality management is. (Application)
- 2) Analyze the concept of customer focus and satisfaction. (Application)
- 3) Analyze and describe Total Quality Management Organization. (Application)
- 4) Describe and explain the working principle of Seven Tools of Total Quality Management. (Knowledge)
- 5) Understand and Discuss the Cost of Quality in total quality management. (Knowledge)

ELECTRICAL DISTRIBUTION SYSTEMS (PE - VI)

(EE822PE)

Course Outcomes:

After completion of this course, the student able to

- 1) distinguish between transmission, and distribution line and design the feeders
- 2) Analyze various types of distribution systems (radial, loop, and networked) and their layout.
- 3) compute power loss and voltage drop of the feeder design protection of distribution systems
- 4) Design and analyze distribution feeders considering voltage drop, load balancing, and efficiency.
- 5) understand the importance of voltage control and power factor improvement



POWER QUALITY AND FACTS (PE - V)

(EE811PE)

Course Outcomes:

After completion of this course, the student will be able to:

- 1) Know the severity of power quality problems in distribution system
- 2) Understand the concept of voltage sag transformation from up-stream (higher voltages) to down-stream (lower voltage)
- 3) Concept of improving the power quality to sensitive load by various mitigating custom power devices. Choose proper controller for the specific application based on system requirements. Understand various systems thoroughly and their requirements
- 4) Understand the control circuits of Shunt Controllers SVC & STATCOM for various functions viz. Transient stability Enhancement, voltage instability prevention and power oscillation damping
- 5) Understand the Power and control circuits of Series Controllers GCSC, TSSC and TCSC

Project Stage – II

Course Outcomes:

- 1) Select a suitable project making use of the technical and engineering knowledge gained from previous courses with the awareness of impact of technology on the society and their ethical responsibilities.
- 2) Collect and disseminate information related to selected project. Identify and work with the modern tools required for the implementation of the project.
- 3) Form a team and distribute the work among them. Communicate technical and general information by means of oral as well as written presentation skills with professionalism.
- 4) Refine and complete the selected project making use of the technical and engineering knowledge which meets the expected outcome.
- 5) Acquire problem solving, system integration, project management and documentation skills

Principal