1st Year M.E. Electrical Power System : Semester -I : Course Outcomes

EP2101 : Advanced Control Systems

Course Outcomes:

After successful completion of this course the students will be able to

CO 1: Determine the stability of discrete time systems using different techniques like Jury stability.

CO 2: Implement different Tunable PID controllers.

CO 3: Design of digital controller using root locus plot, Z plane synthesis and frequency response.

CO 4: Solve problems related to State space representation of discrete time systems and determine the stability of discrete time systems.

CO 5: Determine the controllability and observability of single and multivariable systems.

CO 6: Apply knowledge in designing Controllers and Observers.

EP2102 :Computer Aided Power System Analysis

Course Outcomes :

After successful completion of this course the students will be able to

CO 1: To do the mathematical modelling of power system component, formulate different network matrices and graph theory concepts to any network

CO 2: To do the load flow analysis and short circuit analysis

CO 3: To do the fault analysis an explain the aspects of computer programming applied to electrical network

CO 4: To do the state estimation using various methods

CO 5: To do the reactive allocation and scheduling

CO 6 : To explain Load frequency control and its application, optimal hydro thermal scheduling and Concepts of AI

EP2103 : Digital Signal Processing & Applications

Course Outcomes :

After successful completion of this course the students will be able to

CO 1 : Understand the fundamental concepts of signals, systems, and signal processing in both continuous and discrete domains.

CO 2 : Analyse the classification of discrete-time signals and linear time-invariant (LTI) systems.

CO 3 : Obtain frequency spectrum of various signals.

CO 4: Design digital filter for specified application.

CO 5: Apply the knowledge of Multi-rate signal processing

CO 6: Illustrate the application of DSP Processor

EP2104 : Advanced Electric Drives

Course Outcomes:

After successful completion of this course the students will be able to

CO 1 : Select a drive based on its mechanical Features , duty cycle ,rating for Particular application.

CO 2 : Demonstrate various modern speed, torque control techniques of DC motor drives.

CO 3 : Demonstrate power electronics-based speed control technique for AC motor drives.

CO 4 : Understand the analysis , performance and stability synchronous and asynchronous Motor drives.

EP2105 Digital Protection of Power Systems

Course Outcomes:

After successful completion of this course the students will be able to

CO 1 : Understand the basic of numerical relays and its working

CO 2 : Develop the distance protection scheme for transmission lines using numerical relays.

CO 3 : Develop the various protection scheme for generators and transformer using numerical relays

CO 4 : do the relay setting and coordination among different relays used in the protection scheme of various zones of the power system.