

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Academic Year -2020-21

Course Outcomes

B.TECH.6th SEM

Power System-II (KEE601)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Identify power system components on one line diagram of power system and its representation including the behaviour of the constituent components and sub systems and Analyse a network under both balanced and unbalanced fault conditions and design the rating of circuit breakers
(CO2)	Perform load flow analysis of an electrical power network and interpret the results of the analysis.
(CO3)	Describe the concept of travelling waves in transmission lines and use the travelling wave theory to determine the over voltage caused by surge propagation in transmission networks.
(CO4)	Assess the steady state and transient stability of the power system under various conditions.
(CO5)	Describe Operating Principle of a relay and classify them according to applications. Explain working

Microprocessor and Microcontroller (KEE602)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Demonstrate the basic architecture of 8085 & 8086 microprocessors
(CO2)	Illustrate the programming model of microprocessors & write program using 8085 microprocessor
(CO3)	Interface different external peripheral devices with 8085 microprocessor
(CO4)	Comprehend the architecture of 8051 microcontroller
(CO5)	Compare advance level microprocessor & microcontroller for different applications

Power Electronics (KEE603)

Course Outcome (CO)	Details of Course Outcomes
(C01)	Demonstrate the characteristics as well as the operation of BJT, MOSFET, IGBT, SCR, TRIAC and GTO and identify their use in the power switching applications.
(C02)	Comprehend the non-isolated DC-DC converters and apply their use in different Power electronics applications.
(C03)	Analyze the phase controlled rectifiers and evaluate their performance parameters.
(C04)	Apprehend the working of single-phase ac voltage controllers, cyclo-converters and their various applications.
(C05)	Explain the single-phase and three phase bridge inverters differentiate between CSI and VSI and apply PWM for harmonic reduction.

Linear Integrated Circuits (KEN061)

Course Outcome (CO)	Details of Course Outcomes
(C01)	Analyze integrated circuit designed by BJT.
(C02)	Design the higher order filters with Op-Amp.
(C03)	Use the CMOS to make digital integrated circuits
(C04)	Comprehend the non-linear application of Op-Amp
(C05)	Understand the 555 Timer and PLL.

OBJECT ORIENTED PROGRAMMING (KOE064)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the Basic concept of Object Orientation, object identity and Encapsulation.
(CO2)	Understand the Basic concept of Basic Structural Modeling.
(CO3)	Know the knowledge of Object oriented design, Object design
(CO4)	Know the knowledge of C++ Basics.
(CO5)	Understand the Basics of object and class in C++

Power System-II Lab (KEE651)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Test various relays for different characteristics and compare with the performance characteristics provided by manufacturers.
(CO2)	Understand and implement algorithm to solve problems by divide and conquer approach.
(CO3)	Analyze various types of short circuit faults
(CO4)	Demonstrate different numerical integration methods and factors influencing transient stability
(CO5)	Determine the effect of load in long transmission line

Microprocessor and Microcontroller Lab (KEE652)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Study of microprocessor system
(CO2)	Development of flow chart for understanding the data flow
(CO3)	Learning assembly language to program microprocessor based system
(CO4)	Interfacing different peripheral devices with the microprocessor
(CO5)	Building logic for microprocessor based system

Power Electronics Lab (KEE653)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the characteristics and working of various power electronic devices such as SCR, MOSFET, IGBT, and TRIAC.
(CO2)	Analyze the operation of different types of rectifiers (controlled and uncontrolled) and their performance parameters.
(CO3)	Design and evaluate DC-DC converters (buck, boost, buck-boost) and understand their applications in industrial and renewable systems.
(CO4)	Examine the working of single-phase and three-phase inverters and their control strategies.
(CO5)	Develop skills in simulating and troubleshooting power electronic circuits using hardware and simulation tools like MATLAB/Simulink or PSIM.

Constitution of India, Law and Engineering (KNC601)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the historical background and the evolution of the Indian Constitution and its importance in the functioning of the Indian democratic system.
(CO2)	Explain the fundamental rights, duties, and directive principles enshrined in the Constitution and their relevance to citizens and professionals.
(CO3)	Analyze the structure, powers, and functions of the Union, State, and Local governments as provided by the Constitution.
(CO4)	Interpret key legal provisions relevant to engineers, including intellectual property rights, environmental laws, and ethical responsibilities.
(CO5)	Apply constitutional and legal principles in personal and professional life to uphold democratic values, justice, and social responsibility.