DRONACHARYA
Group of Institutions

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Approved by: All India Council for Technical Education (AICTE), New Delhi
Affiliated to: Dr. A. P. J. Abdul Kalam Technical University (AKTU), Lucknow

DEPARTMENT OF ELECTRONICS AND COMPUTER ENGINEERING

Academic Year -2022-23
Course Outcomes

B.TECH.7th SEM

RURAL DEVELOPMENT: ADMINISTRATION AND PLANNING (KHU701)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Describe the concept, objectives, and significance of rural development in India.
(CO2)	Classify and explain major rural development programs and their objectives.
(CO3)	Analyze the structure and role of Panchayati Raj Institutions in rural administration.
(CO4)	Examine the planning process and administrative mechanisms in rural development.
(CO5)	Evaluate the effectiveness of various rural development policies and schemes.

VLSI Design (KECZ-072)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the fundamentals of VLSI design and MOS transistor theory.Language) and its role VLSI design.
(CO2)	Explain the working of CMOS inverters, combinational, and sequential logic circuits.
(CO3)	Apply the principles of VLSI design to create digital layouts using design rules.
(CO4)	Analyze performance parameters like delay, power, and area in VLSI circuits.
(CO5)	Design and evaluate VLSI subsystems using appropriate tools and methodologies.

Distributed System (KECZ-079)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Describe the basic concepts, models, and characteristics of distributed systems.
(CO2)	Explain the mechanisms of inter-process communication and synchronization in distributed systems.
(CO3)	Apply algorithms for mutual exclusion, deadlock detection, and resource management in distributed environments.
(CO4)	Analyze fault tolerance, recovery, and security issues in distributed systems.
(CO5)	Evaluate various distributed system architectures and protocols for efficiency and reliability.

VLSI Design Lab (KECZ-751A)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the basic concepts and steps of VLSI design flow.
(CO2)	Apply design rules to implement combinational and sequential logic circuits.
(CO3)	Simulate and analyze digital circuits using VLSI CAD tools (e.g., Microwind, Xilinx, etc.).
(CO4)	Examine the timing, area, and power characteristics of VLSI circuits.
(CO5)	Design and verify complex digital systems using HDL and synthesis tools.

Mini Project (KECZ 752)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Identify real-world problems and define clear project objectives.
(CO2)	Apply theoretical knowledge and engineering principles to develop a technical solution.
(CO3)	Analyze system components and perform appropriate design and implementation strategies.
(CO4)	Evaluate project outcomes and validate results through testing and feedback.
(CO5)	Demonstrate project through effective documentation, teamwork, and presentation skills.

Project (KECZ 753)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Identify and define a significant engineering problem based on societal or industrial needs.
(CO2)	Apply engineering and technological knowledge to develop effective solutions.
(CO3)	Analyze technical and practical challenges in project development and execution.
(CO4)	Evaluate alternative approaches and optimize design through testing and data interpretation.
(CO5)	Create a comprehensive project report and deliver a professional presentation of outcomes.

RENEWABLE ENERGY RESOURCES (KOE074)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Explain the importance and scope of renewable energy sources and their role in sustainable development.
(CO2)	Describe the working principles of solar, wind, biomass, and small hydro power systems.
(CO3)	Analyze the performance and feasibility of different renewable energy systems.
(CO4)	Evaluate the environmental and economic impacts of various renewable energy technologies.
(CO5)	Design and suggest suitable renewable energy systems for specific applications.