Department of Electronics and Telecommunication Engineering

COURSE OUTCOME 2019 PATTERN

VISION of Department
Society Growth and Welfare through Competent Electronics and Telecommunication Engineering Graduates

MISSION of Department
- To facilitate E & TC graduates with sight of innovation.   - To provide a stimulating learning environment with modern tools & technologies.   - To produce dynamic graduates with ethics and moral values.   - To impart quality education in the field of E & TC engineering to solve societal and industrial problems

CLASS: TE SEMESTER-I

COURSE: DIGITAL COMMUNICATION	
Course Outcome	Statement
CO304181.1	Explain various signals in a communication system using statistical theory.
CO304181.2	Categorize various digital modulation techniques used in digital communication system in presence of AWGN noise.
CO304181.3	Compare various higher order digital modulation techniques used in digital communication system.
CO304181.4	Describe the digital communication system with spread spectrum modulation.
CO304181.5	Estimate a communication system using information theoretic approach.
CO304181.6	Illustrate error control coding techniques to improve performance of a digital communication system.

COURSE: ELECTROMAGNETIC FIELD THEORY	
Course Outcome	**Statement**
CO304183.01	Determine the fields (E & H) due to the given source with the knowledge of basics electromagnetic principles
CO304183.02	Apply boundary conditions to the boundaries between various media to interpret behavior of the fields on either side.
CO304183.03	State and Apply Maxwell's equations (integral and differential forms) in both the forms (Static, time-varying or Time-harmonic field) for various sources.

CO304183.04	solve simple uniform plane wave (Helmholtz Equations) equations, and analyze the incident/reflected/transmitted waves at normal incidence.
CO304183.05	Interpret the transmission line equation to transmission line problems using predefined equations and smith chart
CO304183.06	Explain the relevance and applications of Electromagnetic

COURSE: DATABASE MANGEMENT	
Course Outcome	**Statement**
CO304183.1	Describe the underlying concepts of a database system.
CO304183.2	Design a database schema to implement for a given problem-domain using data model.
CO304183.3	Execute SQL/DML/DDL commands for solutions to a wide range of query and update problems.
CO304183.4	Implement transactions commands, concurrency control to do Database recovery.
CO304183.5	Explain various Parallel Database Architectures and its applications.
CO304183.6	List various Distributed Databases and its applications.

COURSE: MICROCONTROLLERS	
Course Outcome	**Statement**
CO304184.01	Describe architecture and features of 8051 Microcontroller.
CO304184.02	Interface various I/O devices to 8051 microcontroller.
CO304184.03	Elaborate architecture and features of PIC18F Microcontroller.
CO304184.04	Explain internal peripherals of PIC18F Microcontroller.
CO304184.05	Implement interfacing of various I/O devices with PIC microcontroller.
CO304184.06	Demonstrate interfacing of PIC microcontroller with various devices using different protocols.

COURSE: FJAVA PROGRAMING	
Course Outcome	Statement
CO304198.1	Understand the basic principles of Java programming language
CO304198.2	Apply the concepts of classes and objects to write programs in Java
CO304198.3	Demonstrate the concepts of methods & Inheritance
CO304198.4	Use the concepts of interfaces & packages for program implementation
CO304198.5	Explain multithreading and Exception handling in Java to develop robust programs
CO304198.6	Manage input and output files in Java

COURSE: COMPUTER NETWORK	
Course Outcome	**Statement**
C0304185.1	Implement LAN using appropriate topologies with the knowledge of network architecture.
C0304185.2	Interpret the various flow control and error control techniques at data link layer
C0304185.3	Analyze the Internet protocols and various switching techniques.
C0304185.4	Implement network protocols using simulation tool
C0304185.5	Distinguish transport layer protocols with congestion control technique
C0304185.6	Execute various application protocols

COURSE: SKILL DEVELOPMENT	
Course Outcome	**Statement**
C0304190.1	Apply knowledge of fundamentals of Basic Electronics for installation, trouble shooting and maintenance of devices.
C0304190.2	Test various biomedical instruments.
C0304190.3	Design and simulate switch mode power supply/Boost converter/PID Controller/Web Design.
C0304190.4	Apply knowledge of field visit to understand the different processes and skills required as a software/hardware professional engineer.
C0304190.5	Describe technical specification, make etc. for costing and purchasing of Device.

CLASS: TE SEMESTER-II

COURSE: CELLULAR NETWORKS	
Course Outcome	**Statement**
CO304192.01	Compute receiver noise using fundamentals of wireless communications.
CO304192.02	Elaborate OFDM and MIMO concepts.
CO304192.03	Calculate various parameters of mobile communication.
CO304192.04	Analyze link budget and steady state model of wireless system.
CO304192.05	Examine Mobile Technologies and Protocols.
CO304192.06	Summarize different issues in performance analysis.

COURSE: PROJECT MANAGEMENT	
Course Outcome	**Statement**
CO304193.1	Apply fundamental knowledge of project management for effectively handling projects.
CO304193.2	Identify the project based on its feasibility study with its effective planning.
CO304193.3	Assimilate effectively the organizational structure of project to handle project management related issues.
CO304193.4	Demonstrate Project Plan using project scheduling techniques
CO304193.5	Recognize project risks and manage finances
CO304193.6	Prepare a business plan for Product development and Entrepreneurship.

COURSE: POWER DEVICES AND CIRCUITS	
Course Outcome	**Statement**
CO304194.1	Describe power devices like SCR, GTO, MOSFET and IGBT based on the characteristic parameters
CO304194.2	Analyze various performance parameters of the AC to DC converters
CO304194.3	Calculate various performance parameters of DC to AC converters
CO304194.4	Compare various performance parameters of DC to DC converters
CO304194.5	Design various protections circuits for power devices
CO304194.6	Discuss Power Electronics applications and case studies like electric vehicles, solar systems etc

COURSE: NETWORK SECURITY

Course Outcome	Statement
C0304195.1	Analyze attacks on computers and computer security
C0304195.2	Demonstrate knowledge of cryptography techniques
C0304195.3	Apply appropriate cryptographic technique by learning Symmetric and Asymmetric key cryptography
C0304195.4	Evaluate different Message Authentication Algorithms and Hash Functions
C0304195.5	Compare various aspects of E-Mail Security
C0304195.6	Assimilate various aspects of Web Security

COURSE: ADVANCED JAVA PROGRAMMING	
Course Outcome	Statement
C0304195.1	Design and develop GUI applications using Applets.
C0304195.2	Apply relevant AWT/ swing components to handle the given event.
C0304195.3	Design and develop GUI applications using Abstract Windowing Toolkit (AWT), Swing and Event Handling.
C0304195.4	Learn to access database through Java programs, using Java Database Connectivity (JDBC)
C0304195.5	Invoke the remote methods in an application using Remote Method Invocation (RMI)
C0304195.6	Develop program for client /server communication using Java Networking classes.

COURSE: MINI PROJECT	
Course Outcome	Statement
CO304200.01	Draw inference through market survey and literature survey to decide the project topic.
CO304200.02	Apply an appropriate EDA tool for PCB artwork design.
CO304200.03	Implement the simulated design using various components with good soldering technique and effective trouble-shooting.
CO304200.04	Present technical information clearly.
CO304200.05	Justify the importance of document design by compiling Technical Report on the Mini Project work carried out.