AMRUTVAHINI COLLEGE OF ENGINEERING, SANGAMNER

Department of Electronics and Telecommunication Engineering

Course Outcomes

Final Year: 2019 Course			
Course Code	**Course Name**	**Course Outcomes**	
Semester- I			
304181	Digital Communication	CO1	Apply the statistical theory for describing a random process and its behavior in a LTI system.
		CO2	Demonstrate various digital modulation techniques used in digital communication systems and analyze their performance in presence of AWGN noise.
		CO3	Describe and analyze the digital communication system with spread spectrum modulation.
		CO4	Analyze a communication system using information theoretic approach.
		CO5	Apply error control coding techniques to improve performance of a digital communication system.
		CO6	
404182	Electromagnetic Field Theory	CO1	Solve the problems on Electric Field Intensity, Electric Flux Density and Electric Potential using the concepts of Del Operator, Gradient, Divergence, Curl, Coulomb's law, Gauss Law for Electrostatic environment.
		CO2	Solve the problems on Magnetic Field Intensity, Magnetic Flux Density, Boundary Conditions using Biot–Savart‘s Law, Ampere‘s Circuit Law for Magnetostatic environment.
		CO3	Apply the fundamentals of electrostatics to solve the problems on Boundary Conditions.
		CO4	Solve the problems on electrodynamic Fields using Faraday‘s law, Maxwell‘s equations and Poynting theorem.
		CO5	Understand the fundamentals of uniform plane waves (UPW).
		CO6	Apply the fundamentals of transmission line theory to solve the problems on reflection, dissipation, standing waves.
404183	Database Management	CO1	Ability to implement the underlying concepts of a database system.
		CO2	Design and implement a database schema for a given problem-domain using data model.
		CO3	Formulate, using SQL/DML/DDL commands, solutions to a wide range of query and update problems.
		CO4	Implement transactions, concurrency control, and be able to do Database recovery.
		CO5	Able to understand various Parallel Database Architectures and its applications.
		CO6	Able to understand various Distributed Databases and its applications.
404184	Microcontrollers	CO1	Understand the fundamentals of microcontroller and programming
		CO2	Survey and aware of various electronic components with microcontrollers
		CO3	Analyse the features of PIC 18F XXXX
		CO4	Describe the programming details in peripheral support

		CO5	Design interfacing models according to applications
		CO6	Understand the serial communication details and interfaces
404184	Fundamentals of JAVA Programming (Elective – I)	CO1	Apply the knowledge of fundamentals in Java to develop the programs for solving simple problems.
		CO2	Apply the concepts of classes and objects to write programs in Java.
		CO3	Implement the concepts of methods & Inheritance in Java.
		CO4	Use the concepts of interfaces & packages for program implementation in Java.
		CO5	Understand multithreading and Exception handling in Java to develop robust programs.
		CO6	Use Graphics class, AWT packages and manage input and output files in Java.
	Data Science and Visualization (Honours)	CO1	Describe a flow process for data science problems
		CO2	Apply concepts of statistics and probability basics for Data Analysis
		CO3	Implement classification and regression data analytical methods for real life problems.
		CO4	Implement advanced analytical methods using Python/R.
		CO5	Apply different data visualization techniques to understand the data.
		CO6	Model multi-dimensional data and visualize it using appropriate tool.
304186	Digital Communication Lab	CO1	Demonstrate the working of digital modulation techniques.
		CO2	Simulate the digital communication systems to analyze its performance in presence of noise.
		CO3	Simulate coding techniques applied in digital communication.
304190	Skill Development	CO1	Explore the skill set required for testing and measurement of electronic devices.
		CO2	Design and simulate given electronic devices using modern software tools.
		CO3	Explore the industry environment to understand the work environment
		CO4	Develop the ability to communicate effectively in written and oral presentation.
	Fundamentals of Java	CO1	Create simple programs using basic program constructs, classes, and objects in Java.

	Programming Lab		
		CO2	Implement the object oriented programming concepts in Java.
		CO3	Implement package, threads, exception handling, graphics, and file handling in Java.