AMRUTVAHINI COLLEGE OF ENGINEERING, SANGAMNER

Department of Electronics and Telecommunication Engineering

Course Outcome

Final Year: 2019 Course		
Course Code	**Course Name**	**Course Outcomes**
Semester-I		
404181	Radiation & Microwave Theory	CO1: Apply the fundamentals of electromagnetic to derive free space propagation equation and distinguish various performance parameters of antenna..
		CO2: Identify various modes in the waveguide. Compare: coaxial line, rectangular waveguides & striplines and identify applications of the same
		CO3: Explore construction and working of principles passive microwave devices/components..
		CO4: Explore construction and working of principles active microwave devices/components
		CO5: Analyze the structure, characteristics, operation, equivalent circuits and applications of various microwave solid state active devices.
		CO6: Know the various microwave systems, device set ups of microwave measurement devices and Identify the effect of radiations on environmental sustainability
404182	VLSI Design and Technology	CO1: Develop effective HDL codes for digital design.
		CO2: Apply knowledge of real time issues in digital design
		CO3: Model digital circuit with HDL, simulate, synthesis and prototype in PLDs.
		CO4: Design CMOS circuits for specified applications
		CO5: Analyze various issues and constraints in design of an ASIC.
		CO6: Apply knowledge of testability in design and Build In Self Test (BIST) circuit.
404183	Cloud Computing	CO1: Understand the basic concepts of Cloud Computing
		CO2: Describe the underlying principles of different Cloud Service Models.
		CO3: Classify the types of Virtualization
		CO4: Examine the Cloud Architecture and understand the importance of Cloud Security..
		CO5: Develop applications on Cloud Platforms
		CO6: Evaluate distributed computing and the Internet of Things.
		CO1: Use basic features of java script..
		CO2: Use relevant data types for developing application in java script

404184	Elective – 3 JAVA Script	CO3: Use the function and objects as self-contained, with data passing in and out through well-defined interfaces in development of small systems..
		CO4: Apply the regular expression for Text matching and manipulation
		CO5: Explore use of the various aspects of JavaScript object models that are fundamental to the proper use of the language
		CO6: Develop the application using windows controlling and form handling
404185	Elective – 4 Deep Learning	CO1: Classify machine learning algorithms and its types.
		CO2: Discuss the concepts of deep learning and its Frameworks.
		CO3: Identify the deep learning architectures with respect to the applications.
		CO4: Demonstrate different architectures of Convolutional neural networks
		CO5: Discuss natural language processing architectures..
		CO6: Make use of various case studies and deep learning applications
404186	Lab Practice – 1 Radiation and Microwave Theory and cloud computing	CO1: Explore the usage of Refelx Klystron bench/Gunn diode bench to identify the mode characteristics of Refelx Klystron tube/I-V characteristics of Gunn diode and compute S-parameters of passive microwave devices & wavelength of microwave signal.
		CO2: Carry out the measurements of S-parameters of microwave devices using Vector network analyser.
		CO3: Design, simulate and compare performance of microwave dipole antennas of different wavelength
		CO4: Install and Simulate Cloud web applications.
		CO5: Design deployment of cloud environment and launch virtual machines.
		CO6: Analyze tools and applications of clouds through case study
404187	Lab Practice - 2	CO1:Write effective coding for digital design , analyze, synthesize and implement in PLD
		CO2: To Prepare CMOS layout in selected technology simulate and analyze rise time and fall time with and without captive load

	(VLSI Design & Elective -3)	CO3: Survey of various development boards and platforms of IOT
		CO4: Implement and discuss an IOT based system using Arduino
		CO5: Implement and discuss an IOT based system using Raspberry Pi.
Semester-II		
404190	Fiber Optic Communication	CO1: Explain the working of components and measurement equipments in optical fiber networks.
		CO2: Calculate the important parameters associated with optical components used in fiber optic telecommunication systems
		CO3: Compare and contrast the performance of major components in optical links.
		CO4: Evaluate the performance viability of optical links using the power and rise time budget analysis
		CO5: Design digital optical link by proper selection of components and check its viability using simulation tools
		CO6: Compile technical information related to state of art components, standards, simulation tools and current technological trends by accessing the online resources to update their domain knowledge.
404191	Elective – 5 Mobile Computing	CO1: Understand concepts of Mobile Communication..
		CO2: Analyse next generation Mobile Communication System
		CO3: Understand network layers of Mobile Communication..
		CO4: Understand IP and Transport layers of Mobile Communication
		CO5: Study of different mathematical models.
		CO6: Understand different mobile application
404192	Elective – 6 Remote Sensing	CO1: Describe the concepts of remote sensing and electromagnetic radiation interaction..
		CO2: Explain the sensors characteristics and analyze its resolution
		CO3: Classify different types of satellite data products and design various color composites.
		CO4: Describe the fundamentals of microwave remote sensing.
		CO5: Analyze GNSS signal structure and augmentation systems..
		CO6: Demonstrate and describe real life applications of remote sensing
		CO1: Understand Innovation, Entrepreneurship and characteristics of an entrepreneur.

404193	Innovation and Entrepreneurship	CO2: Develop a strong understanding of the Design Process and its application in variety of business settings.
		CO3: Generate sustainable ideas.
		CO4: Explore various processes required to be an entrepreneur
		CO5: Understand patents and its process of filing.
		CO6: Choose and use appropriate social media for marketing
404194	Digital Business Management	CO1: Identify drivers of digital business
		CO2: Illustrate various approaches and techniques for E-business and management
		CO3: Prepare E-business plan.
404195	Fiber Optic Lab	CO1: Estimate the numerical aperature, attenuation coefficient and bending losses in fiber optic cable
		CO2: To study different types of optical sources (LED/LASER), photodetector
		CO3: To design characteristics of phototransistors.
		CO4: Develop the digital optical link of fiber optic communication.
		CO5: Study different field instruments like Optical Power Meter, OTDR, for fiber optic communication.
		CO6: To simulate the system performance parameters of digital optical link.
404196	Lab Practice - 3 (Elective – 5) Mobile Computing	CO1: Apply concept of multiplexing techniques using JAVA/ Paython
		CO2: To Study GSM Architecture & GPRS Services
		CO3: Simulation using MATLAB of fading channel for transmission.
		CO4: Configure DHCP Server using CISCO Router.
		CO5: To understand handover mechanism & LCR, ADR in SISO Selection.
		CO6: Apply TCP/IP server for file transfer to client & server.