SRI VASAVI INSTITUTE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

COUSE OUTCOMES SUMMARY IV-I EEE A.Y:2020-21

CO#	CO STATEMENT	BTL
	Radar Systems (C411)	
C411.1	Evaluate the range of the target by Considering various parameters with the help of Radar Range equation.	Evaluate
C411.2	Analyze the principle of FM-CW Radar and Estimate the altitude of the aircraft	Analyse
C411.3	Differentiate the principle and performance of MTI and Pulse Doppler Radar	Analyse
C411.4	Apply the essential principles of various types of tracking Radars.	Apply
C411.5	Review the operation of various types of Radar receivers and receiving antennas,	Understand
C411.6	Describe various types of Radar Displays and Examine them in real time Applications	Apply
	Digital Image Processing (C412)	
C412.1	Discriminate the different types of images and analyze the image using based on pixel values and frequency components	Understand
C412.2	Implement the various image enhancement techniques on both spatial and frequency domains based on the application and variation in the performance levels	Apply
C412.3	Interpret image restoration process in real time under blur and noisy environments.	Apply
C412.4	Apply and evaluate segmentation and morphological techniques on digital images.	Analyze
C412.5	Apply and evaluate various image compression techniques and categorize image segmentation techniques on different digital images for specific criteria	Evaluate
C412.6	Analyze the color image processing techniques.	Evaluate
	Computer Networks (C413)	
C413.1	Define the fundamentals and basic principles of computer networks	Remember
C413.2	Describe the Fourier analysis of the Physical Layer	Analyze
C413.3	Describe the various data link layer protocol techniques regarding communication system	Understand
C413.4	Describe Medium Access control Sub Layer	Understand
C413.5	Discuss various routing algorithms such as static routing and dynamic routing	Understand
C413.6	Describe the transport layer and application layer of OSI	Understand
	Optical Communications (C414)	
C414.1	Define the basic elements of optical fiber communication link, structure, Propagation and transmission properties of an optical fiber.	Remember
C414.2	Explain the different types of fibers and attenuation and dispersion losses in optical fibers	Understand
C414.3	Describe the types of fiber connectors for combining optical fibers and losses at fiber Joint	Understand
C414.4	Describe the principles of optical sources, optical detectors and power launching, coupling methods.	Understand
C414.5	Analyze the characteristics of optical fiber receivers	Analyze
C414.6	Design a optical fiber communication link and estimation of performance of optical link	Create
	Electronic Switching Systems (C415A)	
C415.1	Evaluate the time and space parameters of a switched signal	Remember
C415.2	Establish the digital signal path in time and space, between two terminals	Apply
C415.3	Evaluate the inherent facilities within the system to test some of the SLIC, CODEC and digital switch functions.	Apply
C415.4	Investigate the traffic capacity of the system..	Analyze
C415.5	Evaluate methods of collecting traffic data	Understand
C415.6	Evaluate the method of interconnecting two separate digital switches.	Understand
	Embedded Systems (C416A)	
C416.1	Describe the differences between the general computing system and the embedded system, also recognize the classification of embedded systems	Remember

C416.2	Discuss the I/O types and examples, Serial Communication devices, Parallel device ports by using embedded hardware.	Understand
C416.3	Develop an application using embedded software design	Create
C416.4	Design real time embedded systems using the concepts of RTOS	Create
C416.5	Illustrate the Embedded Software Development Process and tools.	Analyze
C416.6	Develop an embedded system implementation and testing using hardware and translation tools.	Create

System Design through Verilog (C415B)		
C415.1	Describe the basic concepts of Verilog HDL	Understand
C415.2	Model digital systems using Verilog HDL in Gate Level Modeling	Apply
C415.3	Model digital systems using Verilog HDL in Behavioral Level Modeling	Apply
C415.4	Model digital systems using Verilog HDL in Dataflow and Switch Level Modeling	Apply
C415.5	Analyze, design, simulate, Synthesis and implement Combinational and Sequential logic circuits using Verilog HDL	Create
C415.6	Evaluate and Create different Verilog models	Create
Analog IC Design(C416B)		
C416.1	Apply Large Signal & Small Signal Modeling of the MOS Devices.	Apply
C416.2	Analyze & Design CMOS Sub Circuits such as current mirrors and Voltage Reference circuits.	Create
C416.3	Analyze & Design CMOS Amplifiers	Create
C416.4	Analyze & Design Two Stage OP-AMP.	Create
C416.5	Analyze characteristics of CMOS comparator circuits.	Analyze
C416.6	Analyze CMOS oscillators & PLL Circuits	Analyze