



RVS COLLEGE OF ENGINEERING AND TECHNOLOGY

COIMBATORE – 641 402

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

M E - COMMUNICATION SYSTEMS

COURSE OUTCOMES

Regulation – 2017

COURSE ID	SEMESTER	COURSE CODE	COURSE NAME	COURSE OUTCOMES	
C101	I	MA5154	Applied Mathematics for Communication Engineers	CO1	Concepts on vector spaces, linear transformation, inner product spaces, eigenvalues and generalized eigenvectors.
				CO2	Apply various methods in linear algebra to solve system of linear equations.
				CO3	Able to develop a linear programming model from problem description, apply the simplex method for solving linear programming problems.
				CO4	To find Numerical solution of differential equations by single and multistep methods. Computation of probability, random variables and their associated distributions, correlations and regression.
				CO5	To apply the Conceptualize the principle of optimality and sub-optimization, formulation and computational procedure of dynamic programming. Exposing the basic characteristic features of a queuing system and acquire skills in analyzing queuing models. Using discrete time Markov chains to model computer systems.
C102	I	CU5191	Advanced Radiation Systems	CO1	The student must be familiar with fundamental antenna parameters and specifications for antenna.
				CO2	The students should understand the concepts of several aperture antennas and their advantage.
				CO3	The student must be familiar with the reasons for arrays antennas.

Department of ECE
RVS College of Engg. & Tech
Coimbatore-641 402

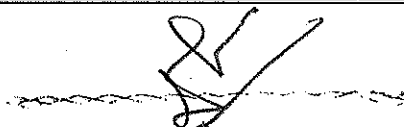
PRINCIPAL
RVS College of Engineering & Technology
Coimbatore - 641 402


				CO4	The students must understand various microstrip antenna and typical uses for them.
				CO5	The student must understand the concepts of antenna measurements.
C103	I	CU5151	Advanced Digital Communication Techniques	CO1	Develop the ability to understand the concepts of signal space analysis coherent and non coherent receivers.
				CO2	Conceptually appreciate different Equalization techniques..
				CO3	Possess knowledge on different block codes.
				CO4	Possess knowledge on convolution codes and viterbi algorithm.
				CO5	Comprehend the generation of OFDM signals and the processing of the signals.
C104	I	AP5152	Advanced Digital Signal Processing	CO1	Design a model for different random processes
				CO2	estimate spectrum using parametric and non-parametric methods.
				CO3	Design optimum filter and predictor.
				CO4	Design AR, MA, ARMA models, Weiner filter, anti aliasing and anti imaging filters, and develop FIR adaptive filter and polyphase filter structures.
				CO5	Design multirate DSP systems and Simulate spectral estimation algorithms and basic models on computing platform.
C105	I	CU5192	Optical Networks	CO1	Design and Analyze Network Components
				CO2	To Assess and Evaluate optical networks.
				CO3	The students will be able to understand several wavelength routing.
				CO4	The Student will be able to understand OTDM and various issues associated with deploying technology in different types of network
				CO5	The students will be able to design understand the control and management aspects of optical including connection management, fault management and safety management
C106	I	CU5091	Advanced Satellite Communication and Navigation Systems	CO1	To understand the Navigation, Tracking and Safety System of GPS.
				CO2	To understand the inertial navigation of GPS System.
				CO3	To understand the Sensing and Image processing systems.
				CO4	To understand the DTH and other broadcast Systems.
				CO5	To understand the Network of Systems with IPV6

C111	II	NC5251	Cognitive Radio Networks	CO1	Describe the basics of the software defined radios.
				CO2	Explain SDR hardware and software architecture.
				CO3	Describe the cognitive radios and its techniques.
				CO4	Develop the wireless networks based on the cognitive radios architecture.
				CO5	Explain the concepts behind the next generation wireless networks.
C112	II	NC5252	Advanced Wireless Networks	CO1	To Familiar with the latest 4G networks and LTE.
				CO2	To understand about the wireless IP architecture and LTE network architecture.
				CO3	To Familiar with the adaptive link layer and network layer graphs and protocol.
				CO4	To Understand about the mobility management and cellular network.
				CO5	To Understand about the wireless sensor network architecture and its concept.
C113	II	EL5071	Broadband Access Technologies	CO1	The student will be able recall the networking concept.
				CO2	The student will be able develop a comprehensive undertaking of multimedia networking
				CO3	The student will be able to study the types of VPN and tunneling protocols for security.
				CO4	The student will be able understand the traffic modelling in the network.
				CO5	The student will able learn about network security in many layers and networks management.
C114	II	CU5211	RF System Design Laboratory	CO1	To identify socially relevant issues and solve the problems
				CO2	Apply knowledge to complex problems and evolve feasible solutions.
				CO3	Able to think of creative solutions for the prototype and innovative systems.
				CO4	Able to comprehensively record and report the measured data, write reports communicate res and do oral presentations effectively.
				CO5	Able to communicate research ideas and do oral presentations effectively
C115	III	CU5301	Millimeter Wave Communication	CO1	Able to understand Millimeter devices and circuits.
				CO2	Able to design antenna for Millimeter wave frequencies
				CO3	Knowledge of Millimeter wave technology
				CO4	Knowledge of MM Wave MIMO Systems.
				CO5	Design an antennas For MM Wave Systems.

CI07	I	CU5161	Communication Systems Laboratory	CO1	Measure and analyze various transmission line parameters.
				CO2	Use network analyzer for testing Microstrip couplers and transmission line parameters
				CO3	Design channel equalizer and measure antenna radiation pattern using simulation tool.
				CO4	Evaluate the performance of CDMA systems and Digital modulation schemes.
				CO5	Design micro strip antennas using simulation software.
CI08	II	CU5291	Advanced Wireless Communication Systems	CO1	Describe the various methods of propagation of EM signals in wireless channel and understand various channel classification and channel models.
				CO2	Discuss about the channel capacity of AWGN, flat and frequency selective fading channel and the transmitter and receiver diversity .
				CO3	Discuss MIMO channel capacity. and understand Space time Modulation and coding .
				CO4	Describe the various multiple access techniques and random access techniques for multiuser and can derive uplink and downlink channel capacity of multiuser systems.
				CO5	Explain 3G systems and 3GPP network architecture and familiar with 4G features and challenge
CI09	II	CU5201	MIC and RF System Design	CO1	Describe the various methods of propagation of EM signals in wireless channel and understand various channel classification and channel models.
				CO2	Discuss about the channel capacity of AWGN, flat and frequency selective fading channel and the transmitter and receiver diversity.
				CO3	Discuss MIMO channel capacity and understand Space time Modulation and coding.
				CO4	Describe the various multiple access techniques and random access techniques for multiuser and can derive uplink and downlink channel capacity of multiuser systems.
				CO5	Explain 3G systems and 3GPP network architecture and familiar with 4G features and challen.
CI10	II	CU5292	Electromagnetic Interference and Compatibility	CO1	Describe the sources & victims of EMI and about EMC
				CO2	Explain the different methods of coupling.
				CO3	Describe the EMI control techniques and reduce crosstalk.
				CO4	Design high speed PCB with minimum interference.
				CO5	Study the EMI standards and measurement techniques to make our world free from unwanted electromagnetic environment.

C116	II	CU5074	Ultra Wide Band Communication	CO1	Describe the multimedia Networking
				CO2	Explain UWB Signal Processing.
				CO3	Apply knowledge to UWB Technologies.
				CO4	Able to assess the performance of UWB channels.
				CO5	Design UWB antenna for various applications.
C117	III	NE5071	Network Management	CO1	To understand the current status and future of network.
				CO2	Able to study about the Macros functional model CMIP/CMIS
				CO3	Able to learn about the RMON & SNMP.
				CO4	To understand the TMN model.
				CO5	analyze and discuss the XML based network management.
C118	III	CU5311	Project Work (Phase I)	CO1	Apply relevant knowledge and skills to Identify challenging practical problems, solutions to co present scenario of Electronics and Communication Engineering Field.
				CO2	Analyze and discuss complex problems on the advanced level
				CO3	Apply technical knowledge and project management skills for solving the problem.
				CO4	Design and develop hardware and/or software for their project Specific problem..
				CO5	Able to document and present one work with requirements on structure, format, and language.
C119	II	CU5411	Project Work (Phase II)	CO1	Apply relevant knowledge and skills to Identify challenging practical problems, solutions to co present scenario of Electronics and Communication Engineering Field.
				CO2	Analyze and discuss complex problems on the advanced level
				CO3	Apply technical knowledge and project management skills for solving the problem.
				CO4	Design and develop hardware and/or software for their project Specific problem..
				CO5	Able to document and present one work with requirements on structure, format, and language.


 Department of ECE
 RVS College of Enqd. & Tech
 Coimbatore-641 402


 PRINCIPAL
 RVS College of Engineering & Technology
 Coimbatore - 641 402

