



MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

363, Arcot Road, Kodambakkam, Chennai – 24
Approved by AICTE & Affiliated to Anna University

email Id: principal@msec.edu.in

Website : www.msec.edu.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

REGULATION – 2013

COURSE OUTCOMES (CO)

MA6351 – Transforms and Partial Differential Equations [C201]

C201.1	Formulate and solve partial differential equations
C201.2	Evaluate Fourier series of periodic functions.
C201.3	Apply the method of separation of variables to find the solution of heat and wave equation.
C201.4	Illustrate the Fourier transform techniques.
C201.5	Examine Z transform techniques and solve difference equations.

EE6352 - Electrical Engineering and Instrumentation [C202]

C202.1	Understand three phase supply and power measurement
C202.2	Understand the concepts in electrical generators, motors and transformers
C202.3	Understand the concepts in Induction machines and synchronous machines.
C202.4	Understand the basic measurement and instrumentation based devices.
C202.5	Understand the relevance of digital instruments in measurements.

EC6301 - Object Oriented Programming and Data Structures [C203]

C203.1	Understand about Object oriented programming
C203.2	Explain the virtual functions polymorphism and file handling
C203.3	Formulate the algorithm for stacks and queues
C203.4	Categorize graph algorithms topological sort and minimum spanning tree.
C203.5	Implement greedy algorithm and dynamic programming


HOD


PRINCIPAL
PRINCIPAL

MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE
363, ARCOT ROAD, KODAMBAKKAM,
CHENNAI-600 024



MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

363, Arcot Road, Kodambakkam, Chennai – 24
Approved by AICTE & Affiliated to Anna University

email Id: principal@msec.edu.in

Website : www.msec.edu.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

EC6302 - Digital Electronics [C204]

C204.1	Simplify Boolean functions using Kmap and quine Mclasky
C204.2	Design and analyze combinational circuits
C204.3	Design and analyze sequential circuits
C204.4	Implement designs using programmable logic devices
C204.5	Design and Analyze Synchronous and Asynchronous Sequential Circuits and to write simple HDL codes

EC6303 – Signals and Systems [C205]

C205.1	Analyze & classify Continuous and Discrete time signals and to identify LTI systems
C205.2	Derive the Fourier series for continuous time signals and analyze the Fourier transform and Laplace transform of different signals
C205.3	Analyze the output response of the Continuous Time systems by performing convolution and realize the continuous Time Systems
C205.4	Analyze the Discrete Time Fourier Transform and Z transform of Discrete Time signals & Understand the sampling theorem and to convert the analog signal to discrete signal
C205.5	Analyze the output response of the Discrete Time systems by performing convolution and realize the Discrete Time Systems

EC6304 – Electronic Circuits-I [C206]

C206.1	Understand the basic concept of biasing and design biasing for various types of amplifiers
C206.2	Design and analyse BJT amplifiers
C206.3	Design and analyse FET amplifiers
C206.4	Analyze the frequency response of amplifier performances
C206.5	Understand the basic concepts of IC MOSFET amplifiers


HOD


PRINCIPAL
PRINCIPAL
MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE
363, ARCOT ROAD, KODAMBAKKAM,
CHENNAI-600 024



MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

363, Arcot Road, Kodambakkam, Chennai – 24
Approved by AICTE & Affiliated to Anna University

email Id: principal@msec.edu.in

Website : www.msec.edu.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

EC6311 – Analog and Digital Circuits Laboratory [C207]

C207.1	Design regulated power supplies
C207.2	Design and analyze the frequency response of amplifiers
C207.3	Simulate amplifier using SPICE
C207.4	Design and implement combinational circuits.
C207.5	Design and implement sequential circuits.

EC6312 – OOPS and Data Structures Laboratory [C208]

C208.1	Demonstrate C++ programs for manipulating stacks, queues, linked list, trees and graphs
C208.2	Able to analyze and apply good programming design methods for program development
C208.3	Execute the different data structures for implementing solutions to practical problems

MA6451 – Probability and Random Processes [C209]

C209.1	Interpret the axiomatic formulation of Probability theory and random variables as an intrinsic need for the analysis of random phenomena
C209.2	Identify probability models, function of random variables based on one & two dimensional random variables and determine regression.
C209.3	Classify the concept of random processes and to demonstrate the specific applications to Poisson and Markov Processes.
C209.4	Evaluate correlation and spectral density of stationary random processes.
C209.5	Examine the idea of linear time invariant system.


HOD


PRINCIPAL
PRINCIPAL

MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE
363, ARCOT ROAD, KODAMBAKKAM,
CHENNAI-600 024



MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

363, Arcot Road, Kodambakkam, Chennai – 24
Approved by AICTE & Affiliated to Anna University

email Id: principal@msec.edu.in

Website : www.msec.edu.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

EC6401 – Electronic Circuits II [C210]

C210.1	Understand the concepts and design of feedback amplifiers
C210.2	Understand the basic concepts, design and analyze RC, LC and crystal oscillators.
C210.3	Understand the performance of tuned amplifiers
C210.4	Understand the concepts of clipper, clamper and comparator circuits and multivibrators
C210.5	Understand the concepts of blocking oscillators and time base generators

EC6402 – Communication Theory [C211]

C211.1	Design AM systems.
C211.2	Design Angle modulated systems
C211.3	Apply the concepts of Random Process to the design of Communication systems
C211.4	Analyze the noise performance of AM and FM systems
C211.5	Gain knowledge in information theory and coding techniques

EC6403 – Electromagnetic Fields [C212]

C212.1	Apply vector calculus to understand the behavior of static electric fields in standard configurations
C212.2	Impart the knowledge on the concepts of conductors and dielectrics in static electric fields
C212.3	Apply vector calculus to understand the behavior of magnetic fields in standard configurations
C212.4	Explain about how materials affect magnetic fields
C212.5	Analyze the Maxwell's equation in different forms (Differential & Integral) and apply them to diverse engineering problems and also imparts knowledge about the electromagnetic wave propagation in lossless and lossy media

EPS

HOD

Principal

PRINCIPAL
PRINCIPAL

MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE
363, ARCOT ROAD, KODAMBAKKAM,
CHENNAI-600 024



MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

363, Arcot Road, Kodambakkam, Chennai – 24
Approved by AICTE & Affiliated to Anna University

email Id: principal@msec.edu.in

Website : www.msec.edu.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

EC6404 – Linear Integrated Circuits [C213]

C213.1	Understand the basic blocks of LIC
C213.2	Design various linear and non-linear circuits using OP-AMP
C213.3	Understand theory and applications of analog multiplier and PLL
C213.4	Understand the theory of ADC and DAC
C213.5	Design waveform generators and understand special function ICs

EC6405 – Control System Engineering [C214]

C214.1	Understand the methods of representation of systems and getting their transfer function models for analysis of physical systems and to introduce the control system components
C214.2	Provide adequate knowledge in the time response of systems and steady state error analysis and to introduce the effects of controllers
C214.3	Give basic knowledge in obtaining the open loop and closed loop frequency responses of systems and to study the design of compensators
C214.4	Understand the concept of stability of control system and methods of stability analysis
C214.5	Introduce state variable representation of physical systems

EC6411 – Circuit and Simulation Integrated Laboratory [C215]

C215.1	Analyze various types of feedback amplifiers
C215.2	Design oscillators, tuned amplifiers and multivibrators
C215.3	Demonstrate the various types of blocking oscillators
C215.4	Simulate oscillators, tuned amplifiers, wave shaping circuits and multivibrators using SPICE tool.
C215.5	Perform voltage and current time base circuits using PSPICE Tool.


HOD


PRINCIPAL
MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE
363, ARCOT ROAD, KODAMBAKKAM,
CHENNAI-600 024



MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

363, Arcot Road, Kodambakkam, Chennai – 24
Approved by AICTE & Affiliated to Anna University

email Id: principal@msec.edu.in

Website : www.msec.edu.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

EC6412 – Linear Integrated Circuit Laboratory [C216]

C216.1	Design and simulate amplifiers, oscillators using operational amplifiers.
C216.2	Design and simulate filters using op-amp and analyse its frequency response
C216.3	Analyze the working of PLL and its application as a frequency multiplier.
C216.4	Design DC power supply using ICs.
C216.5	Analyze the performance of filters, multivibrators, A/D converter and analog multiplier using SPICE.

EC6461 – Electrical Engineering and Control System Laboratory [C217]

C217.1	Perform experiments to study the load characteristics of DC Motors/Generators
C217.2	Design bridge network circuit to measure the values of passive component
C217.3	Analyse the stability of linear system through simulation software
C217.4	Design transfer function of DC generators
C217.5	Estimate the effect of P,PI,PID controllers using MATLAB or equivalent software

EC6501 – Digital Communication [C301]

C301.1	Gain knowledge in sampling and quantization
C301.2	Design and implement base band transmission schemes
C301.3	Design and implement band pass signalling schemes
C301.4	Analyse the spectral characteristics of band pass signalling schemes and their noise performance
C301.5	Design error control coding schemes

HOD

PRINCIPAL

PRINCIPAL
MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE
363, ARCOT ROAD, KODAMBAKKAM,
CHENNAI-600 024



MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

363, Arcot Road, Kodambakkam, Chennai – 24
Approved by AICTE & Affiliated to Anna University
email Id: principal@msec.edu.in
Website : www.msec.edu.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

EC6502 – Principles of Digital Signal Processing [C302]

C302.1	Apply DFT for the analysis of digital signals and systems
C302.2	Design IIR filters
C302.3	Design FIR Filters
C302.4	Analyse finite word length effects
C302.5	Design Multi rate filters and apply adaptive filters to equalisation

EC6503 – Transmission Lines and Waveguides [C303]

C303.1	Discuss the signal propagation through transmission lines.
C303.2	Discuss the difference between low frequency transmission and propagation at Radio Frequencies.
C303.3	Analyze impedance matching techniques using stubs.
C303.4	Analyze the different types of passive filters
C303.5	Explain the usage of wave guides and cavity resonators.

EC6351 – Environmental Science and Engineering [C304]

C304.1	The knowledge gained on flora and fauna in our environment helps to know about social environment
C304.2	The students will gain knowledge on the offensive effects of pollution in day to day life
C304.3	The students will acquire knowledge on the natural resources available and their conservation
C304.4	The students will have adequate knowledge on the concepts of adverse effects of social issues like acid rain and global warming
C304.5	The students will get knowledge about the problems faced by society due to population explosion


HOD


PRINCIPAL

PRINCIPAL
MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE
363, ARCOT ROAD, KODAMBAKKAM,
CHENNAI-600 024



MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

363, Arcot Road, Kodambakkam, Chennai – 24
Approved by AICTE & Affiliated to Anna University

email Id: principal@msec.edu.in

Website : www.msec.edu.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

EC6504 – Microprocessor and Microcontroller [C305]

C305.1	Understand architecture of 8086 and Design and implement programs on 8086 microprocessor.
C305.2	Understand signals, system bus architecture of 8086 and multiprocessor configuration.
C305.3	Design and implement interfacing of I/O circuits with 8086 microprocessor
C305.4	Understand architecture of 8051 microcontroller.
C305.5	Understand architecture of 8051 , Design and implement programs on 8051 microcontroller.

EC6511 – Digital Signal Processing Laboratory [C306]

C306.1	Simulate Linear and Circular Convolution
C306.2	Simulate FFT and IFFT algorithms
C306.3	Simulate FIR and IIR filters
C306.4	Implement programs using various addressing modes in DSP processor
C306.5	Implement signal generation and linear convolution using DSP processor

EC6512 – Communication System Laboratory [C307]

C307.1	Simulate and validate the various functional modules of a communication system
C307.2	Demonstrate their knowledge in baseband signalling schemes through implementation of digital modulation schemes
C307.3	Apply various channel coding schemes & demonstrate their capabilities towards the improvement of the noise performance of communication system
C307.4	Simulate end to end communication link

HOD

PRINCIPAL

PRINCIPAL
MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE
363, ARCOT ROAD, KODAMBAKKAM,
CHENNAI-600 024



MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

363, Arcot Road, Kodambakkam, Chennai – 24
Approved by AICTE & Affiliated to Anna University
email Id: principal@msec.edu.in

Website : www.msec.edu.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

EC6513 – Microprocessors and Microcontroller Laboratory [C308]

C308.1	Introduce ALP concepts and features
C308.2	Write ALP for arithmetic and logical operations in 8086 and 8051
C308.3	Differentiate Serial and Parallel Interface
C308.4	Interface different I/Os with Microprocessors
C308.5	Be familiar with MASM

MG6851 – Principles Of Management [C309]

C309.1	An understanding of the managerial functions like planning, organizing, staffing, leading & controlling
C309.2	The basic knowledge on international aspect of management
C309.3	The basic knowledge on management and its evolution
C309.4	A knowledge on budgetary control and their strategies
C309.5	A understanding of the motivational theories existing in the management

CS6303 – Computer Architecture [C310]

C310.1	Understand basic structure and operation of digital computers
C310.2	Design Arithmetic and Logic Unit
C310.3	Design and analyze pipelined control units
C310.4	Understand parallel processing architectures
C310.5	Evaluate performance of memory systems


HOD


PRINCIPAL

PRINCIPAL
MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE
363, ARCOT ROAD, KODAMBAKKAM,
CHENNAI-600 024



MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

363, Arcot Road, Kodambakkam, Chennai – 24
Approved by AICTE & Affiliated to Anna University

email Id: principal@msec.edu.in

Website : www.msec.edu.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CS6551 – Computer Networks [C311]

C311.1	Explain the components requirement of networks and link layer service
C311.2	Classify the Media Access Control Protocols and different Internetworking
C311.3	Demonstrate various types of routing techniques
C311.4	Outline the mechanisms involved in transport layer
C311.5	Experiment with different application layer protocols

EC6601 – VLSI Design [C312]

C312.1	Understand the basic principle of MOS transistor and learn second order effects
C312.2	Design combinational circuits using various logic families
C312.3	Analyze the timing issues of sequential circuits
C312.4	Study various architectures of ALU modules
C312.5	Learn various implementation strategies for ASIC design

EC6602 – Antenna and Wave Propagation [C313]

C313.1	understand the various parameters of antenna and to understand about radiation from current element
C313.2	analyse the various types of antennas and their design procedure.
C313.3	analyse the antenna arrays and study their radiation pattern
C313.4	analyse the special antennas such as frequency independent and broadband antennas
C313.5	understand the different modes of propagation for different frequencies.

HOD

PRINCIPAL

PRINCIPAL

MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE
363, ARCOT ROAD, KODAMBAKKAM,
CHENNAI-600 024



MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

363, Arcot Road, Kodambakkam, Chennai – 24
Approved by AICTE & Affiliated to Anna University

email Id: principal@msec.edu.in

Website : www.msec.edu.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

EC6001 – Medical Electronics [C314A]

C314A.1	Describe the basic physiology and Bio potential recording methods and their typical waveforms
C314A.2	Discuss the methods used to measure the Non electrical and Bio Chemical parameters
C314A.3	Discuss about the assist device such as Pacemaker, defibrillator, dialyzer, Heart Lung machine
C314A.4	Describe the different types of diathermy and Bio telemetry principles
C314A.5	Explore Recent trends in medical instrumentation and application of laser in medicine

EC6003 – Robotics and Automation [C314B]

C314B.1	Understand the basic concept, generation and different types of robot
C314B.2	Analyze the various drive systems of robotics
C314B.3	Understand the working principles of various sensors used in the design of robots
C314B.4	Study the concepts of different types of end effectors.
C314B.5	Understand the basic concept of dynamics and kinematics of robots & To study the various non manufacturing application of robots

EC6611 – Computer Networks Laboratory [C315]

C315.1	Demonstrate the communication between two desktop computers
C315.2	Elaborate the different protocols using socket programming
C315.3	Implement and compare the various routing algorithms experiment various simulation tools needed for communication of computers


HOD


PRINCIPAL

MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE
363, ARCOT ROAD, KODAMBAKKAM,
CHENNAI-600 024



MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

363, Arcot Road, Kodambakkam, Chennai – 24
Approved by AICTE & Affiliated to Anna University

email Id: principal@msec.edu.in

Website : www.msec.edu.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

EC6612 – VLSI Design Laboratory [C316]

C316.1	Develop the HDL code for basic as well as advanced digital integrated circuits
C316.2	Import the logic modules into FPGA Boards
C316.3	Perform the Synthesization, Place and Route the digital IPs.
C316.4	Design, Simulate and Extract the layouts of Analog IC block using EDA tools
C316.5	Simulate the modern chip manufacturing software tools

GE6674 – Communication and Soft Skills - Laboratory Based [C317]

C317.1	Take international examination such as IELTS and TOEFL.
C317.2	Make presentations and Participate in Group Discussions
C317.3	Successfully answer questions in interviews

EC6701 – RF and Microwave Engineering [C401]

C401.1	Represent the multiport network using scattering matrix and analyze the multiport network.
C401.2	Analyze the stability of RF amplifier for various source and load impedances.
C401.3	Discuss about active and passive Microwave devices, components, their characteristics, their working, and their applications.
C401.4	Understand the generation of microwave signals and to understand various microwave sources.
C401.5	Discuss the microwave parameters, different measurement devices.


HOD


PRINCIPAL

PRINCIPAL
MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE
363, ARCOT ROAD KODAMBAKKAM,
CHENNAI - 600 024



MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

363, Arcot Road, Kodambakkam, Chennai – 24
Approved by AICTE & Affiliated to Anna University

email Id: principal@msec.edu.in

Website : www.msec.edu.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

EC6702 – Optical Communication and Networks [C402]

C402.1	Analyse of optical fiber System and classification of Mode Theory
C402.2	Determine the Attenuation method and classify Different Types of Dispersion Method
C402.3	Analyse optical sources and fiber Amplifiers Technique
C402.4	Understand Optical Receivers and measuring Technique
C402.5	Understand Application of Different optical Network Systems

EC6703 – Embedded and Real Time Systems [C403]

C403.1	Understand the basic characteristics, Design and classification of embedded system.
C403.2	Understand the basic concepts of bus protocols, interrupts, memory and I/O devices.
C403.3	Understand the programming concepts of embedded system.
C403.4	Develop real time algorithm for task scheduling.
C403.5	Discuss the design of various real time application of embedded system and various tools for building RTOS.

IT6005 – Digital Image Processing [C404A]

C404A.1	Discuss fundamentals of Digital image and components of image processing system .
C404A.2	Apply image enhancement techniques using time and frequency domain.
C404A.3	Apply image restoration and segmentation techniques.
C404A.4	Use image compression models and techniques and apply concepts of wavelets.
C404A.5	Represent features of images and able to recognize.


HOD


PRINCIPAL
PRINCIPAL

MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE
363, ARCOT ROAD, KODAMBAKKAM,
CHENNAI-600 024



MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

363, Arcot Road, Kodambakkam, Chennai – 24
Approved by AICTE & Affiliated to Anna University
email Id: principal@msec.edu.in
Website : www.msec.edu.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

EC6004 – Satellite Communication[C404B]

C404B.1	Analyze the satellite orbits.
C404B.2	Analyze the earth segment and space segment.
C404B.3	Analyze the satellite Link design
C404B.4	Analyze the Multiple Access Methods
C404B.5	Apply the basics of satellite Networks and design of satellite application

EC6007 – Speech Processing [C405A]

C405A.1	Understand the Fundamentals of speech production
C405A.2	Explain Distortion measures and time alignment
C405A.3	Implement Hidden Markov Models
C405A.4	Deal with the issues in speech recognition and explain the concept of text to speech synthesis
C405A.5	Apply the knowledge of Speech processing in real time applications

EC6011 – Electromagnetic Interference & Compatibility [C405B]

C405B.1	Understand the basic concept of EMI / EMC related to product design & development
C405B.2	Analyze the different EM coupling principles and its impact on performance of electronic system
C405B.3	Instill knowledge on the EMI coupling mechanism and its mitigation techniques
C405B.4	Impart comprehensive insight about the current EMC standards and about various measurement techniques
C405B.5	Understand basic concepts of EMIC testing methods and working principles of instruments for measurement & analysis


HOD


PRINCIPAL

PRINCIPAL
MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE
363, ARCOT ROAD, KODAMBAKKAM,
CHENNAI-600 024



MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

363, Arcot Road, Kodambakkam, Chennai – 24
Approved by AICTE & Affiliated to Anna University

email Id: principal@msec.edu.in

Website : www.msec.edu.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

EC6016 – Opto Electronic Devices [C406]

C406.1	Understand basic principles of light and semiconductor physics
C406.2	Design display devices and analyze various types of LASERS
C406.3	Design various thermal and photo detectors
C406.4	Understand different types of optoelectronic modulators
C406.5	Explore Optoelectronic Integrated Circuits

EC6711 – Embedded Laboratory [C407]

C407.1	Write programs in ARM for a specific Application
C407.2	Interface memory and Write programs related to memory operations
C407.3	Interface A/D and D/A convertors with ARM system
C407.4	Analyse the performance of interrupt
C407.5	Write programmes for interfacing keyboard, display, motor and sensor

EC6712 – Optical & Microwave Laboratory [C316]

C408.1	Different characteristics of klystron and Gunn diode
C408.2	Solve theoretical S – Parameter measurement with the practical value.
C408.3	Implement S – Matrix characterization.
C408.4	Evaluate the radiation pattern, gain and directivity of any antenna.
C408.5	Design fiber optic analog and digital link.


HOD


PRINCIPAL



MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

363, Arcot Road, Kodambakkam, Chennai – 24
Approved by AICTE & Affiliated to Anna University

email Id: principal@msec.edu.in

Website : www.msec.edu.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

EC6801 – Wireless Communication [C409]

C409.1	Analyse of Basic wireless technology
C409.2	Analyse the Large scale propagation & small scale fading
C409.3	Determine the cellular System.
C409.4	Compare multi path Mitigation techniques
C409.5	Determine the systems with Transmit / Receive Diversity in MIMO Systems Implementation & Analysis the MIMO Systems

EC6802 – Wireless Networks [C410]

C410.1	Understand the architecture, protocol stack and services offered by Wireless Local Area Networks
C410.2	Understand the basics of mobile IP networks, mechanism behind packet delivery and various routing protocols of MANETs
C410.3	Understand the TCP operation in wired networks and its extension to 3G wireless networks
C410.4	Understand the architecture of UMTS, protocol layers and various services offered by 3G networks
C410.5	Understand the motivation behind 4G evolution and various technologies developed for 4G networks

GE6075 – Professional Ethics in Engineering [C411]

C411.1	Gain awareness on human values for professional excellence and stress management
C411.2	Gain knowledge on engineering ethics, moral issues & uses of ethical theories
C411.3	Understand the role of engineers as responsible experimenters along with courses of ethics in engineering field .
C411.4	Gain awareness of responsibilities of an engineer for safety and risk along with risk benefit analysis
C411.5	Acquire knowledge on global issues and able to apply ethical principles to resolve situations that arise in their professional lives


HOD


PRINCIPAL

MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE
363, ARCOT ROAD, KODAMBAKKAM,
CHENNAI-600 024



MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

363, Arcot Road, Kodambakkam, Chennai – 24
Approved by AICTE & Affiliated to Anna University

email Id: principal@msec.edu.in

Website : www.msec.edu.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

GE6757 – Total Quality Management [C412]

C412.1	Select and apply appropriate techniques in identifying customer needs, as well as the quality impact that will be used as inputs in TQM methodologies
C412.2	Have a strategy to create and maintain a quality culture that will move the organization towards world-class status
C412.3	Understand the TQM concept and techniques for managing, controlling and improving quality at the workplace.
C412.4	Know business excellence models and be able to assess organizations performance through data collection and analysis
C412.5	Have a strategy to implement total quality practices at the workplace and effect savings on the input cost of an organization.

EC6811 – Project [C413]

C413.1	Identify challenging practical problems, solutions to cope up with present scenario of Electronics and Communication Engineering field.
C413.2	Analyse the various methodologies and technologies and discuss with team for solving the problem
C413.3	Apply technical knowledge and project management skills for solving the problem.
C413.4	Design and develop hardware and/or software for their project specific problem.
C413.5	prepare the project reports and give proper explanation during the presentation and demonstration.

HOD

PRINCIPAL

MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE
363, ARCOT ROAD, KODAMBAKKAM,
CHENNAI-600 024