Agnihotri College of Engineering

Nagthana Road,Wardha

Department of Electronics andCommunication

B.Tech 3rd Semester

Course Outcome's

Subject Name: Applied Mathematics - III	
Subject Code:BEEC-301T	
After successful completion of this course the student will be able to:	
CO1	Apply Laplace Transform to solve ordinary differential equations, Integral Equations and Integro-differential Equations.
CO2	Apply Fourier series in the analysis of periodic functions in terms sine and cosine encountered in engineering problems and Fourier Transform to solve integral equations.
CO3	Learn the concept of differentiating, integrating and expanding of analytic functions in complex numbers and their applications such as evaluation of integrals of complex functions.
CO4	Solve partial differential equations of first order, higher order with constant coefficients and of second order using method of separation of variables.
CO5	Reduce matrix to diagonal form, apply iteration to find largest Eigen value and vector, use Sylvester theorem and singular values decomposition.
Subject Name: COMPONENTS FOR ELECTRONIC CIRCUIT DESIGN	
Subject Code:BEEC-302T	
After successful completion of this course the student will be able to:	
CO1	Understand the principles of semiconductor physics.
CO2	Understand the principles of semiconductor diode.
CO3	Understand and analyze the mathematical model of transistors.
CO4	Understand and analyze the mathematical model of unipolar transistors.
CO5	Understand the process of Integrated Circuit Fabrication.
Subject Name: COMPONENTS FOR ELECTRONIC CIRCUIT DESIGN	
Subject Code:BEEC-302T	
CO1	Explain the basic concepts of different semiconductor components.
CO2	Understand the use of semiconductor devices in different electronic circuits.
CO3	Calculate different performance parameters of transistors.
CO4	Plot and study the characteristics of semiconductor devices.
Subject Name:DIGITAL SYSTEM DESIGN	
Subject Code:BEEC-303T	
CO1	Demonstrate the knowledge of: Logic gates, Boolean algebra including algebraic manipulation/simplification and Application of DeMorgan's Theorem, Karnaugh map reduction method.
CO2	Construct basic combinational circuits and verify their functionalities
CO3	Illustrate and apply the knowledge of different flip flops to build sequential digital circuits
CO4	Apply the fundamental knowledge about digital electronics so as to construct and analyze digital circuits like counters and sequence generators.
CO5	Demonstrate and apply programming proficiency using the various addressing modes and instructions of the target microprocessor

Subject Name :DIGITAL SYSTEM DESIGN	
Subject Code : BEEC-303P	
CO1	Demonstrate the different Boolean Laws & basics of K-map to realize combinational & sequential circuits.
CO2	Identify the various digital ICs & understand their operation.
CO3	Describe the operation & timing constraints for latches, registers, different sequential circuits.
CO4	Solve basic binary math operations using microprocessor & explain the internal architecture & its operation within the area of manufacturing & performance.
CO5	Select programming strategies & proper mnemonics & run their program on the training boards.
Subject Name: NETWORK THEORY	
Subject Code:BEEC304T	
After successful completion of this course the student will be able to:	
CO1	Apply mesh and node voltage method to model and analyze electrical circuits
CO2	Apply network theorems for the analysis of networks.
CO3	Obtain the transient and steady-state response of electrical circuits.
CO4	Synthesize waveforms and apply Laplace transforms to analyze networks.
CO5	Evaluate different Network Functions and Analyze two port network behaviors.
Subject Name: SIGNALS AND SYSTEM	
Subject Code:BEEC305T	
After successful completion of this course the student will be able to:	
CO1	Classify different types of signals and systems
CO2	Illustrate the concept of Linear Time Invariant (LTI) system and its properties.
CO3	Analyze continuous time periodic and aperiodic signals.
CO4	Analyze continuous time systems using Laplace Transform.
CO5	Analyze DT signals and systems in frequency domain using Fourier.
Subject Name: MEASUREMENTS AND INSTRUMENTATION	
Subject Code:BEEC306T	
After successful completion of this course the student will be able to:	
CO1	Select and use precise/accurate instrument for measurement of various electrical Parameters and to understand its technical specifications.
CO2	Identify and minimize errors in electrical/electronic measurement.
CO3	Understand analog and digital measurement.
CO4	Measure power and frequency with the help of function generators and different analyzers.
CO5	Understand modern trends in telemetry systems.
Subject Name: ELECTRONICS WORKSHOP- I LAB	
Subject Code:BEEC-307P	
After successful completion of this course the student will be able to:	
CO1	Explain the Basic Concepts of Different Semiconductor Components with their usage physically as per their Types.
CO2	Use of Semiconductor Devices in Different Electronic Circuits and Projects.
CO3	Calculate Different Performance Parameters of Active and Passive Devices and their Datasheets.
CO4	Plot and Study the Characteristics of Semiconductor Devices.

Subject Name: - CONSUMER AFFAIRS	
Subject Code:BEEC-308P	
After successful completion of this course the student will be able to:	
CO1	Demonstrate consumer buying process and the procedure of filing a complaint.
CO2	Learn how to pursue the consumer rights under consumer protection act **1986**
CO3	Comprehend the hearings, enquiry and appeal provisions.
CO4	Analyze the role of industry regulators in consumer protection.

Agnihotri College of Engineering

Nagthana Road,Wardha

Department of Electronics and Communication

B.Tech 4th Semester

Course Outcome's

Subject Name: MICROCONTROLLER AND APPLICATIONS	
Subject Code: BEEC - 401T	
After successful completion of this course the student will be able to:	
CO1	Demonstrate the programming model of various microcontrollers.
CO2	Design and implement 8051 microcontroller-based systems for various applications.
CO3	Illustrate & program AVR / RISC microcontrollers in Integrated Development environment.
CO4	Design and implement advanced processor/controllers-based systems for various applications
CO5	Design and develop Arduino based embedded system applications.
Subject Name: MICROCONTROLLER AND APPLICATIONS	
Subject Code: BEEC - 401P	
After successful completion of this course the student will be able to:	
CO1	Demonstrate the concept of Assembly languages and higher level language programming.
CO2	Interface various peripherals with 8051, Atmega 32, MSP 430 and Arduino.
CO3	Simulate the programs on different software platforms.
Subject Name: ANALOG & DIGITAL COMMUNICATION	
Subject Code: BEEC - 402T	
After successful completion of this course the student will be able to:	
CO1	Demonstrate a basic need of modulation and various types of amplitude and angle modulation techniques required for analog communication.
CO2	Analyze various AM-FM receivers, along with the effect of noise on analog communication systems.
CO3	Explain the designing of digital communication systems by applying knowledge of the various pulse modulation techniques.
CO4	Describe various digital modulation techniques and various parameters associated with it.
CO5	Identify different types of channel coding techniques and analyze the different spread spectrum methods.
Subject Name: ANALOG & DIGITAL COMMUNICATION LAB	
Subject Code: BEEC - 403P	
After successful completion of this course the student will be able to:	
CO1	Explain the practical aspects of linear and non-linear applications of OP-AMP.
CO2	Design the various wave-shaping circuits, oscillators, signal conditioners and various application based circuits using OP-AMP and Transistors.
CO3	Demonstrate various concepts of analog communication.

CO4	Explain various concepts of digital communication.
CO5	Develop an application based project using industry based OPAMP.
Subject Name: ANALOG SYSTEM DESIGN	
Subject Code: BEEC - 404T	
After successful completion of this course the student will be able to:	
CO1	Describe and explain the basic concepts of OPAMP.
CO2	Demonstrate and analyze various linear applications of OPAMP
CO3	Demonstrate and analyze various non-linear applications of OPAMP
CO4	Examine and design DC Power Supply.
CO5	Examine and design various types of oscillators and filters.
Subject Name: DATA STRUCTURE & ALGORITHMS	
Subject Code: BEEC - 405T	
After successful completion of this course the student will be able to:	
CO1	Choose appropriate data structure based on the specified problem identification and analysis the algorithm.
CO2	Handle operations like searching, insertion, deletion, traversing mechanism etc. on various data structures.
CO3	Apply concepts learned in various domains like Operating Systems, DBMS etc.
CO4	Use linear and non-linear data structures like stacks, queues, linked list, trees ETC
Subject Name: HSC:NUMERICAL MATHEMATICS AND PROBABILITY USING MATLAB	
Subject Code: BEEC - 406T	
After successful completion of this course the student will be able to:	
CO1	Learn and use MATLAB effectively in various applications as a simulation tool.
CO2	Find an approximate solution of algebraic and transcendental equations, system of linear equations and first order ordinary differential equations by various numerical methods and MATLAB commands.
CO3	Apply Z- transform to solve difference equations with constant coefficients.
CO4	Analyze real world scenarios to recognize when probability is appropriate, formulate problems about the scenarios; creatively model these in order to solve the problems using multiple approaches.
CO4	Understand the impact of scientific and engineering solutions in a global and societal context.
CO6	Implement the concepts on file streams and operations in java programming for a given application programs.

Subject Name: - PROGRAMMING FOR PROBLEM SOLVING	
Subject Code: BEEC - 407T	
After successful completion of this course the student will be able to:	
CO1	Describe the basic concepts of Object Oriented Programming and design simple java programs.
CO2	Apply the knowledge of Inheritance in program development.
CO3	Develop programs using polymorphism and interfaces.
CO4	Handle various exceptions using concepts of exception handling.
CO5	Describe multithreading concepts to develop inter process communication.
CO6	Implement the concepts on file streams and operations in java programming for a given application programs.

Subject Name: - PROGRAMMING FOR PROBLEM SOLVING	
Subject Code: BEEC-407P	
After successful completion of this course the student will be able to:	
CO1	To understand the basic concept of object oriented programming and design simple JAVA program .
CO2	To apply the knowledge of inheritance in program development.
CO3	To develop programs using polymorphism and interfaces.
CO4	To handle various exceptions using concept of exception handling.
CO5	To use multithreading concept to develop inter process communication.
CO6	To understand and implement concept on file streams and operations in JAVA programming for a given application programs.
Subject Name: - INTERNSHIP	
Subject Code: BEEC-408I	
After successful completion of this course the student will be able to:	
CO1	Explore career alternatives prior to graduation.
CO2	Assess interests and abilities in their field of study by using Integrate theory and practice.
CO3	Develop work habits and attitudes necessary for job success.
CO4	Demonstrate effective management of personal behavior, ethics and attitudes.
Subject Name: - UNIVERSAL HUMAN VALUES	
Subject Code: BEEC-409T	
After successful completion of this course the student will be able to:	
CO1	Become more aware of themselves, and their surroundings (family, society, nature)
CO2	Become more responsible in life, and in handling problems with sustainable solutions, while keeping human relationships and human nature in mind.
CO3	Understand values in relationship.

CO4	Understand the role of a human being in ensuring harmony in society and nature.
CO5	Distinguish between ethical and unethical practices at work place and would contribute for making a value based society

Agnihotri College of Engineering

Nagthana Road, Wardha

Departmentof Electronics and Communication Engineering

B.Tech 5th Semester

Course Outcome's

Subject Name: Embedded System Design	
Subject Code: BEETC-501T	
After successful completion of this course the student will be able to:	
CO1	To Describe and analyze the Requirements & Design issues of embedded systems design.
CO2	To apply the knowledge of architecture and Programming of for development of simple applications.
CO3	To Describe and Demonstrate the interfacing of various peripherals with ARM Processor.
CO4	To explain the concept of Real Time Operating System for embedded system design.
Subject Name: Embedded System Design	
Subject Code: BEETC-501P	
After successful completion of this course the student will be able to:	
CO1	Apply the knowledge of Instruction skill for the Development of Simple and Complex Programs.
CO2	Apply the programming skill for the Development of Simple application
CO3	Apply and Demonstrate the Concept of Interfacing for the Development to Embedded System.
Subject Name: Electromagnetic Waves	
Subject Code: BEEC-502T	
After successful completion of this course the student will be able to:	
CO1	Understand the different coordinate system & analyze theorem's of electric Field.
CO2	Understand magnetic fields, Apply the Maxwell's equations to solve problems in electromagnetic field theory
CO3	Analyze the propagation of wave in different transmission media.
CO4	Understand and analyze various parameters and characteristics of the rectangular waveguide.
CO5	Understand principle of radiation and radiation characteristics of an antenna.
Subject Name: Digital Signal Processing	
Subject Code: BEEC-503T	
After successful completion of this course the student will be able to:	
CO1	Analyze discrete time signals and system.
CO2	Process the signal in z domain for various discrete time systems
CO3	Draw the structures of various discrete time systems in DFI, DFII, cascade and parallel form.
CO4	Apply discrete Fourier transform, its properties &Analyze the discrete time systems in frequency domain.
CO5	Understand the filter design techniques for IIR and FIR digital filters and will be able to determine parameters affecting its response.

Subject Name: Digital Signal Processing	
Subject Code: BEEC-503P	
After successful completion of this course the student will be able to:	
CO1	Demonstrate the sampling and reconstruction of discrete time signal & perform different signal operation in developing discrete time system.
CO2	Analyze different properties of Z-transform.
CO3	Analyze different properties of discrete Time Fourier transform.
CO4	Analyze and process the signals in the discrete domain.
CO5	Design the filters to suit requirements of specific applications.
CO6	Apply the techniques, skills, and modern engineering tools like MATLAB.
Subject Name: HSC:INDUSTRIAL ECONOMICS ENTREPRENEURSHIP DEVELOPMENT (ECONOMICS)	
Subject Code: BEEC-504T	
After successful completion of this course the student will be able to:	
CO1	Understand different types of business structure.
CO2	Acquire the knowledge of different market structures and New economic policy
CO3	Grasp the functions of banks, taxations system and implications of Inflation.
CO4	Identify various sources of finance
CO5	Analyze the problems of Small Scull Industries and government's policies for them
Subject Name: Electronic Design Techniques with HDL(Elective-I)	
Subject Code: BEEC-505PE	
After successful completion of this course the student will be able to:	
CO1	Design digital systems through HDL language
CO2	Simulate, synthesizes , and implement HDL code
CO3	Implement code on FPGA/CPLD

Agnihotri College of Engineering

Nagthana Road,Wardha

Departmentof Electronics and Communication

B.Tech 6th Semester

Course Outcome's

Subject Name: COMPUTER COMMUNICATION NETWORKS	
Subject Code: BEEC-601T	
After successful completion of this course the student will be able to:	
CO1	Describe the basics of Computer Network, Data Communication, Network topologies transmission media and switching techniques
CO2	Analyze the services and features of various protocols of Data Link Layer and MAC sub-layer.
CO3	Apply the concept of IP Addressing techniques and its various protocols of Network Layer
CO4	Describe the transport layer, Application Layer services and its protocol Headers and analyze the congestion control protocols.
CO5	Explain the function of Application Layer and Presentation layer paradigm and protocols
Subject Name: COMPUTER COMMUNICATION NETWORKS	
Subject Code: BEEC-601P	
After successful completion of this course the student will be able to:	
CO1	To analyze and select various cables and Connectors used for networking with computer network security.
CO2	To verify the implementation results on software like NS2 and simulate different networking models and implement different networking protocols
CO3	To understand different data transmission techniques using TCP and UDP Protocol for evaluating the different IP addresses for various systems.
Subject Name: INTERNET OF THINGS (IOT)	
Subject Code: BEEC-602T	
After successful completion of this course the student will be able to:	
CO1	Analyze different design levels of IoT.
CO2	Analyze IOT Architecture.
CO3	Describe network and communication aspects.
CO4	Design a portable IoT using Rasperry Pi and Aurdino.
CO5	Analyze applications of IoT in real time scenario.
Subject Name: INTERNET OF THINGS (IOT)	
Subject Code: BEEC-602P	
After successful completion of this course the student will be able to:	
CO1	Understand the concept of IOT.
CO2	Implement interfacing of various Sensors with Arduino/Raspberry Pi.
CO3	Demonstrate the ability to transmit data wirelessly between different Devices
CO4	To show an ability to upload/ Download sensor data on cloud and server
Subject Name: Wireless Senser Network	
Subject Code: BEEC-603T	
After successful completion of this course the student will be able to:	
CO1	Demonstrate advanced knowledge and understanding of the engineering principle of sensor design, signal processing, established digital communications techniques, embedded hardware and software, sensor network architecture, sensor networking principles and protocols

CO2	Demonstrate a computing science approach, in terms of software techniques, for wireless sensor networking with emphasis on tiny sensors, sensor specific programming languages, RFID technology, embedded architectures, software program design and associated hardware, data fusion
CO3	Demonstrate knowledge of the associated business, legislative, safety and commercial issues; future technological advances and the way these will impact on the engineering product enterprise process.
Subject Name: Wireless Senser Network LAB	
Subject Code: BEEC-603P	
After successful completion of this course the student will be able to:	
CO1	To analyze and evaluate the performance of wireless sensor network by using simulation tools (NS-2).
CO2	To understand the basic concepts and components of wireless sensor networks, including sensors nodes, communication protocols, data routing ,network architecture and its applications
CO3	To simulate and analyze wireless sensor network and involve NS-2 architecture, command line interface and simulation script language (TCL) used in NS-2.
Subject Name: DATA BASE MANAGEMENTSYSTEM(PE-II)	
Subject Code: BEEC-604PE	
After successful completion of this course the student will be able to:	
CO1	Understands basic database concepts and data modeling techniques used in data base design.
CO2	To understand the basic concepts and components of wireless sensor networks, including sensors nodes, communication protocols, data routing, network architecture and its applications.
CO3	Study query processing and perform optimization on query processing.
CO4	Understand the concept of transaction processing and different recovery techniques used in RDBMS.
CO5	different recovery techniques used in RDBMS
Subject Name: Control System Engineering (Elective-II)	
Subject Code: BEEC-604PE	
After successful completion of this course the student will be able to:	
CO1	Understand the basic linear feedback principles and find out the transfer function using various methods
CO2	Sketch the root locus and determine the location of the closed loop poles.
CO3	Analysis of Time response
CO4	Understand the different types of controller
CO5	Analysis of State space model
Subject Name: Antenna and Wave Propagation (Elective-II)	
Subject Code: BEEC-604PE	
After successful completion of this course the student will be able to:	
CO1	Describe transmission line characteristics.
CO2	Calculate antenna parameters (radiation pattern, beam width, lobes, directivity, gain, impedance, efficiency, polarization)
CO3	Analyze wire antennas (monopoles, dipoles, and loops).
CO4	Analyze and design antenna arrays.
CO5	Describe the operation of broadband and traveling wave antennas.
CO6	To study the features of Antenna array, Micro strip antenna and reflector antenna.
Subject Name: CONSUMER ELECTRONICS (OPEN ELECTIVE-I)	
Subject Code: BEEC-605OE	
After successful completion of this course the student will be able to:	

CO1	Describe various audio gadgets used in domestic and commercial applications
CO2	Describe various video gadgets used in domestic and commercial applications
CO3	. Explain satellite communication technology along with DTH for day to day application
CO4	Describe various types of home appliances used in domestic life like washing machine, oven RO plant, Mixer, grinder, vacuum cleaner etc.
CO5	Understand various types of home appliances used in domestic life like printers, food processors, Induction devices, scanner and fax machines etc.
Subject Name: Environmental Engineering (Open Elective-I)	
Subject Code: BEEC-605T	
After successful completion of this course the student will be able to:	
CO1	Explore the components of biosphere and impact of human activity on environment. waste generation and treatment.
CO2	Summarize the causes and sources of pollutants, and their impact on global environment.
CO3	Develop ethics and scientific awareness about
CO4	Identify sources and types of wastes and its management.
CO5	Understand noise, noise pollution and control
Subject Name: HSC:EFFECTIVE TECHNICAL COMMUNICATION	
Subject Code: BEEC-606T	
After successful completion of this course the student will be able to:	
CO1	To provide the graduates to use written communication in work and personal experience beyond college
CO2	To acquaint student for active participation in reading and writing.
CO3	To teach the skills needed to successfully communicate in modern word through written materials
CO4	To identify and select many types of writing frequently required in variety of careers
CO5	To improve the graduates ability to differentiate among and to use facts, inferences and judgment in professional careers.
Subject Name: MINI PROJECT (INTERNSHIP)	
Subject Code: BEEC-607I	
After successful completion of this course the student will be able to:	
CO1	Understand various PCB design
CO2	Interface basic Electronics circuits to Arduino
CO3	Build a mini project based on Electronic components and Arduino and Raspberry Pi.

Agnihotri College of Engineering

Nagthana Road,Wardha

Department of Electronics and Communication

B.Tech 7th Semester

Course Outcome's

Subject Name: WIRELESS AND MOBILE COMMUNICATION PEC-III	
Subject Code: BEEC701PE-T	
After successful completion of this course the student will be able to:	
CO1	Design a model of Cellular Communication System and analyze their operation and performance.
CO2	Quantify the causes and effects of path loss and signal fading on received signal Characteristics and design systems to reduce the effects of same.
CO3	To construct and analyze the GSM system, use the IRS technology to increase the range and quality of GSM signal.
Subject Name: ROBOTICS & AUTOMATION PEC-III	
Subject Code: BEEC701PE-T	
After successful completion of this course the student will be able to:	
CO1	Explain the concepts of industrial robots in terms of classification, specifications and coordinate systems, along with the need and application of robots And automation
CO2	Examine different sensors and actuators for applications like maze solving and self-driving cars.
CO3	Design a 2R robot and an end-effector and solve the kinematics and dynamics of motion for robots
CO4	Explain navigation and path planning techniques along with the control architectures adopted for robot motion planning.
Subject Name: DATA SCIENCE AND CLOUD COMPUTING	
Subject Code: BEEC702PE-T	
After successful completion of this course the student will be able to:	
CO1	Identify the basic concepts and technologies involved in dealing with Data science process.
CO2	Apply data management for exploring and fixing data.
CO3	Understand different types of statistical data analysis.
CO4	Apply and use different technologies for data visualization.
CO5	Analyze applications of IoT in real time scenario.
Subject Name: MICROWAVE & RADAR ENGINEERING	
Subject Code: BEEC702PE-T	
After successful completion of this course the student will be able to:	
CO1	Understand the use of active and passive microwave devices
CO2	Analyze scattering matrix, Different UHF components with the help of scattering parameter.
CO3	Understand the use of different Klystrons.
CO4	Analyze the different power distribution Tees.
CO5	Acquisition of technical competence in specialized areas of Radar engineering.
CO6	Identify, formulate and model problems and find Radar engineering solutions based on a system approach.

Subject Name: OPTICAL COMMUNICATION PEC-V	
Subject Code: BEEC703PE-T	
After successful completion of this course the student will be able to:	
CO1	Learn the basic elements and behavior of optical fiber.
CO2	Analyze the different kinds of losses, signal distortion in optical wave
CO3	Classify various optical source materials, LED structures, LASER diodes.
CO4	Explore the fiber optic receivers such as PIN, APD diodes, receiver operation & performm
CO5	Understand the operational principle of WDM, SONET, and Optical Amplifiers
Subject Name: BIOMEDICAL ENGINEERING PEC-V	
Subject Code: BEEC703PE-T	
After successful completion of this course the student will be able to:	
CO1	Analyze the biomedical signals.
CO2	Describe x-ray, MRI, CT, VR technologies and infra-red imaging.
CO3	Explain Biomedical sensors & understand the measurements.
CO4	Describe different medical instruments & their applications?
CO5	Understand hospital information system & relevant training & simulation technologies.
Subject Name: MECHATRONICS OE-II	
Subject Code: BEEC7040E-T	
After successful completion of this course the student will be able to:	
CO1	To model and simulate physical systems.
CO2	Incorporate sensors, actuators and interfacing modules
CO3	Develop logic to automate, and.supervise arsystem
CO4	Design mechatronics subsystem\system\process to meet consumer and industry need by incorporating State-of-the-art technologies
CO5	Conduct experiments to demonstrate the knowledge of Automation, Supervisory control and Human machine interfaces.
Subject Name: Intellectual Property RIGHTS	
Subject Code: BEETC706A	
After successful completion of this course the student will be able to:	
CO1	Read about the concepts of Intellectual Property Rights.
CO2	Distinguish and understand the world of Intellectual Property.
CO3	Explain why it needs to be protected? How is it protected?
CO4	Analyze discuss and debate about the latest legal problems confronting the world and the solutions being offered.
CO5	Consider new and upcoming areas of Intellectual Property (IP) like Biotechnology, Domain
CO6	Names, Creative Commons etc.

Agnihotri College of Engineering

Nagthana Road,Wardha

Department of Electronics and Communication

B.Tech 8th Semester

Course Outcome's

Subject Name: ARTIFICIAL INTELLIGENCE PEC-VI	
Subject Code: BEEC801PE-T	
After successful completion of this course the student will be able to:	
CO1	Develop an understanding what is involved in AIML.
CO2	Understand learning algorithms of AIML.
CO3	Understand deep learning
CO4	Apply the knowledge for the selection of tools and languages for problem solving.
CO5	Understand the use of AIML for real world problem.
Subject Name: MEMS PEC-III	
Subject Code: BEEC801PE-T	
After successful completion of this course the student will be able to:	
CO1	Apply the principles behind the operation of MEMS devices
CO2	Choose a micromachining technique for a specific MEMS fabrication process
CO3	Understand recent advancements in the field of MEMS and devices
Subject Name: VLSI SIGNAL PROCESSING PEC-VII	
Subject Code: BEEC802PE-T	
After successful completion of this course the student will be able to:	
CO1	To learn pipelining & parallel processing techniques.
CO2	To understand folding & unfolding techniques in multirate system
CO3	To address folding techniques used to design time multiplexed architecture.
Subject Name: ANDROID APPLICATION MOBILE DEVELOPMENT PEC-VII	
Subject Code: BEEC802PE-T	
After successful completion of this course the student will be able to:	
CO1	Identify various concepts of mobile programming that make it unique from programming for other platforms,
CO2	Critique moblle applications on their design pros and cons,
CO3	Utilize rapid prototyping techniques to design and develop sophisticated mobile interfaces,
CO4	Program mobile applications for the Android operating system that use basic and advanced phone features, and
CO5	Deploy applications to the Android marketplace for distribution.
Subject Code: PROJECT PHASE II	
Subject Code: BEEC803P	
After successful completion of this course the student will be able to:	
CO1	Analyze or Design the Electronics/telecommunication /allied Engineering problems by using appreciate methodology in a team work.
CO2	Interpret the communication skills of team members and
CO3	Use of Modern tools in the field of Electronics Engineering