

Course Outcome

On completion of the course, students will be able to:

S.Y. B.Tech (Electronics and Computer Engineering) SEM-III		
Course Code and Title		Course Outcomes
BTES301 Engineering Mathematics-III	CO1	Understand the concept of LT & ILT.
	CO2	Solve problems related to Fourier transform to Deep Learning, Signal & Image processing.
	CO3	Understand the concepts of linear algebra and apply Linear Programming, Computer Graphics and Cryptography.
	CO4	Understand the concepts of PDE and apply it in data analysis.
	CO5	Analyze function of complex variables.
BTECPC302 Electronics Devices and Circuits	CO1	Discuss operation, biasing and applications of JFET & MOSFET.
	CO2	Comply and verify parameters after exciting devices by any stated method.
	CO3	To use Transistor as a Oscillator and Negative Feedback Amplifier.
	CO4	Select appropriate transducer for the developing electronic Circuit.
	CO5	Choose appropriate actuator for the developing electronic Circuit
BTECPC303 Programming, Data Structures and Algorithm Using C	CO1	Implement linked list & perform various operations on Linked List
	CO2	Implement stack & perform operations on stack.
	CO3	Implement various types of queues & perform operations on stack.
	CO4	Implement trees & graph and traverse to solve a problem.
	CO5	Implement an algorithm & apply different searching and sorting techniques.
BTESC304	CO1	Get acquaint with computer architecture and CPU building blocks
	CO2	Understand classify and draw schematic diagrams of various computer memories

Computer Architecture and Operating Systems	CO3	Explain operations of control unit and input output of a typical computer
	CO4	Define Operating system, thread, process, inter-process communication and Solve numerical related to various CPU Scheduling Algorithm
	CO5	Understand concepts of Process Synchronization and Deadlocks and Solve associated Numerical
BTESC305 Digital Electronics & Microprocessor	CO1	Became familiar with the digital signal, positive and negative logic, Boolean algebra, logic gates, logical variables, the truth table, number systems, codes, and their conversion from others
	CO2	Learn the working mechanism and design guidelines of different combinational circuits and their role in digital system design.
	CO3	Understand the working mechanism and design guidelines of different sequential circuits and their role in the digital system design
	CO4	Assess and solve basic binary math operations using the microprocessor and explain the microprocessor's internal architecture and its operation within the area of manufacturing and performance
	CO5	Describe, list and use different types of instruction and interrupts and develop assembly language programs using various programming tools
BTECPL306 Electronics Devices & Circuits Lab and Programming, Data Structure and Algorithm Using C Lab	CO1	To Identify electronic lab instrument and Verify working of transistor and voltage regulator
	CO2	Design and test Operational amplifier applications
	CO3	Implement linear and Non Linear data structures like Queue, List, Array, Tree & graph and be able to handle operations like insertion, deletion, and traversing on them.
	CO4	Select appropriate searching and Sorting techniques for given problems.
BTECS307 SEMINAR- I	CO1	Demonstrate the Technical Knowledge of their selected Seminar Topic
	CO2	Undertake Problem identification, Formulation and Solution.
	CO3	Design engineering Solution to complex problem utilising a system approach.
	CO4	Demonstrate the knowledge ,skills and attitude of the Professional engineer.

Second Year (SEM-IV)

Course Code and Title		Course Outcomes
BTECPC401 Python Programming	CO1	Develop small programs to demonstrate use of python tokens in IDE.
	CO2	Develop python program to demonstrate use of operators, control flow and sequences
	CO3	CO3 Develop python function for a given problem.
	CO4	Develop python program to demonstrate use of classes and objects.
	CO5	Develop python program to demonstrate file handling and make database connectivity.
BTECPC402 Database Management Systems	CO1	Use the basic concepts of Database Systems in Database system
	CO2	Apply SQL queries to interact with Database
	CO3	Apply normalization on database design to eliminate anomalies
	CO4	Analyze database transactions and can control them by applying ACID properties.
	CO5	Study of NOSQL database and oriented using MongoDB.
BTHM403 Basic Human Rights	CO1	Students will be able to understand the history of human rights.
	CO2	Students will learn to respect others caste, religion, region and culture.
	CO3	Students will be aware of their rights as Indian citizen.
	CO4	Students will be able to understand the importance of groups and communities in the society.
	CO5	Students will be able to realize the philosophical and cultural basis and historical perspectives of human rights.
BTBS404 Probability Theory and Random Processes	CO1	Understand the fundamental knowledge of the concepts of probability and have knowledge of standard distributions which can describe real life phenomenon
	CO2	Understand the basic concepts of one and two dimensional random variables and apply in engineering applications
	CO3	Apply the concept random processes in engineering disciplines
	CO4	Understand and apply the concept of correlation and spectral densities

	CO5	The students will have an exposure of various distribution functions and help in acquiring skills in handling situations involving more than one variable. Able to analyze the response of random inputs to linear time invariant systems
BTECPE405A Microcontroller and Advanced Processor	CO1	Explain the internal organization of microprocessors & microcontrollers and the general structures of microcontrollers
	CO2	Get acquainted with the programming tools of 8051
	CO3	Understand the concepts of interfacing with processors and controllers (ADC, DAC & stepper motor.etc)
	CO4	Describe the programmer's model of the ARM processor and Become aware of the Thumb mode of operation of ARM.
	CO5	Analyze the functioning of hardware devices and interfacing them into ARM7 Processor.
BTECPE405B Data Analysis	CO1	Apply preprocessing techniques to convert raw data so as to enable further analysis
	CO2	Apply exploratory data analysis and create insightful visualizations to identify patterns
	CO3	Understand how to derive the probability density function of transformations of random variables and use these techniques to generate data from various distributions
	CO4	Understand the statistical foundations of data science and analyze the degree of certainty of predictions using statistical test and models
	CO5	Introduce machine learning algorithms for prediction and to derive insights
BTECPE405 C Electromagnetic Engineering and Wave Propagation	CO1	Formulate the wave equation and solve it for uniform plane wave.
	CO2	Understand characteristics and wave propagation on high frequency transmission lines.
	CO3	Carryout impedance transformation on Transmission Line & Calculate reflection and transmission of waves at media interface.
	CO4	Understand principle of radiation and radiation characteristics of an antenna & Analyze the given wire antenna and its radiation characteristics.
	CO5	Identify the various applications of electromagnetic wave & suitable antenna for a given communication system.
BTECPE405D LINUX Operating System	CO1	Ability to use various Linux commands that are used to manipulate system operations at admin level and a prerequisite to pursue job as a Network administrator.
	CO2	Ability to write Shell Programming using Linux commands.

	CO3	Ability to design and write application to manipulate internal kernel level Linux File System.
	CO4	Ability to develop IPC-API's that can be used to control various processes for synchronization
	CO5	Ability to develop Network Programming that allows applications to make efficient use
BTECPL406 Python Programming Lab and Database Management System Lab	CO1	Demonstrate the use of concept like conditional statement, looping statement Write, Test and Debug Python Programs
	CO2	Understand Strings, Lists, Tuples and Dictionaries in Python
	CO3	Implement various DDL,DML,DCL & TCFL commands in SQL
	CO4	Understand the concepts of constraints, views and triggers, Join in SQL.
BTECS407 SEMINAR- II	CO1	Demonstrate the Technical Knowledge of their selected Seminar Topic
	CO2	Undertake Problem identification, Formulation and Solution.
	CO3	Design engineering Solution to complex problem utilising a system approach.
	CO4	Demonstrate the knowledge ,skills and attitude of the Professional engineer.
BTESP408 Internship - II	CO1	Explore career alternatives prior to graduation
	CO2	Assess interests and abilities in their field of study.
	CO3	Develop work habits and attitudes necessary for job success.
	CO4	Develop communication, interpersonal and other critical skills in the job interview process.