

Course Outcome

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

Final Year B.Tech (Electronics and Computer Engineering) **SEM-VII**

Course Code and Title		Course Outcomes
BTECPC701 Industry 4.0 & Automation	CO1	Define essential elements of Industry 4.0
	CO2	Describe architecture of Industrial IoT
	CO3	Explain Recent Technological Components of Robots
	CO4	Understand and Recognize Industrial needs of Automation
	CO5	Identify and interpret the functionality of SCADA, HMI and DCS.
BTECPC702 Deep learning	CO1	Implement deep learning models in Python using the Keras/ PyTorch library and train them with real-world datasets.
	CO2	Design convolution networks for image classification.
	CO3	Perform regularization, training optimization, and hyperparameter selection on deep models.
	CO4	Design Recurrent Neural Networks for text and sequence classification.
	CO5	Apply Generative Deep Learning for Generating images
BTECPC703 DevOps (Development & Operations)	CO1	Understand DevOps as a practice, methodology and process for fast collaboration, integration and communication between Development and Operations team
	CO2	Master Continuous Integration, Continuous Deployment, Continuous Delivery, Configuration Management, and Continuous Monitoring
	CO3	Become an expert on technologies such as GIT, Maven, Chef, Puppet & more.
	CO4	Summarize the importance of software configuration management in DevOps
	CO5	Synthesizing the provisioning using various methodologies.
BTECPE704A Automotive Electronics	CO1	Acquire an overview of automotive components, subsystems, and basics of Electronic Engine Control in today's automotive industry.

	CO2	Use available automotive sensors and actuators while interfacing with microcontrollers / microprocessors during automotive system design.
	CO3	Understand the networking of various modules in automotive systems, communication protocols and diagnostics of the subsystems
	CO4	Design and implement the electronics that attribute the reliability, safety, and smartness to the automobiles, providing add-on comforts and get fair idea on future Automotive Electronic Systems.
BTECPE704B Consumer Electronics	CO1	List technical specification of electronics Audio system (microphone and speaker)
	CO2	Trouble shoots consumer electronics products like TV, washing machine and AC.
	CO3	Identify and explain working of various color TV transmission blocks.
	CO4	Adjust various controls of color TV receiver and troubleshoot it.
	CO5	Use various functions of Cam coder and shoot a video and take snapshots and save them in appropriate format.
BTECPE704C Satellite and Radar Engineering	CO1	Knowledge of theory and practice related to radar and Satellite communication.
	CO2	Ability to identify, formulate and solve engineering problems related to radar and Satellite communication.
	CO3	The student would be able to analyze the various aspects of establishing a geo-stationary satellite communication link.
	CO4	Acquired knowledge about Radar and Radar Equations..
BTECPE704D Web Development	CO1	Implement and analyze behaviour of web pages using HTML and CSS
	CO2	CO2 Apply the client-side technologies for web development
	CO3	CO3 Analyze the concepts of Servlet and JSP
	CO4	CO4 Analyze the Web services and frameworks
	CO5	CO5 Apply the server side technologies for web development
BTECPE704E Data Science	CO1	Apply data visualization in big-data analytics
	CO2	Apply techniques for Data Collection and Data Processing.
	CO3	Utilize EDA, inference and regression techniques

	CO4	Study methods for model development.
	CO5	Apply techniques to understand model evaluation.
BTECOE705A Nanotechnology	CO1	Discuss Meaning, Scope and Stages of Nanotechnology
	CO2	Understand various aspects of nano-technology and the processes involved in making nano components and material.
	CO3	Leverage advantages of the nano-materials and appropriate use in solving practical problems.
	CO4	Understand various aspects of nano-technology and the processes involved in making nano components and material.
	CO5	Leverage advantages of the nano-materials and appropriate use in solving practical problems.
BTECOE7 05B Cyber Security & Block Chain Technology	CO1	Discuss Meaning, Scope of cyber security
	CO2	Differentiate various Ciphers
	CO3	Apply several Cryptographic Algorithms
	CO4	Illustrate data integrity algorithms.
	CO5	Differentiate public Vs private Blockchain
BTECOE705C IOS Programming	CO1	To get insight of designing iOS application
	CO2	To get acquainted with Swift Programming language
	CO3	To be able to develop multi-screen application using XCode
	CO4	To understand the need and be able to use Different UI Controllers
	CO5	To be able to debug an application using XCode debugger
BTECOE705D Renewable Energy Sources	CO1	To provide knowledge and analyze the utility of renewable energy sources & nonconventional technologies.
	CO2	To carry out basic design of renewable energy systems
	CO3	To Understand the need of energy conversion and the various methods of energy storage
	CO4	To explain the field applications of solar energy, winds energy as alternate form of energy
	CO5	To explain bio gas generation, Geothermal &Tidal energy and its applications

BTECOE705E Smart Grid Introduction and Application	CO1	Discuss necessity of smart grid and information technology application
	CO2	Tell role of communication technology in smart grid
	CO3	Apply security for smart grid
	CO4	Identify smart metering requirement.
	CO5	Understand Automation and application in smart grid.
BTECPL707 Devops Lab & Deep Learning Lab	CO1	Learn The Fundamental Principles Of Deep Learning and Identify The Deep Learning Algorithms to solve real life problem
	CO2	Able to carry out design and implementation of deep learning models for signal/image processing applications
	CO3	Apply DevOps principles to meet software development requirements.
	CO4	Examine the different Version Control strategies
	CO5	Summarize the importance of Software Configuration Management in DevOps
BTECP708 PROJECT	CO1	Identify problems based on societal /research needs
	CO2	Able to design and develop solution to the problem
	CO3	Analyse the impact of solutions in societal and environmental context for sustainable development.
	CO4	Use standard norms of engineering practices and to plan, implement and execute the project
	CO5	Able to write effective technical report and demonstrate through presentation

Final Year B.Tech (Electronics and Computer Engineering) **SEM-VIII**

Course Code and Title		Course Outcomes
BTECF801 Project Work/ Internship	CO1	Develop technological solution for the chosen problem statement
	CO2	Write test cases to demonstrate the results of the project
	CO3	Analyse the obtained results,
	CO4	Report the findings in documented format
	CO5	Apply professional ethics to demonstrate knowledge using project management