Department of Computer Engineering
Course Outcomes

Course Name:-	Research Methodology
Course Code:-	**510101**

At the end of course, students will be able to-

CO1:-	Carry out Literature Survey
CO2:-	Identify appropriate topics for research work in computer engineering
CO3:-	Select and define appropriate research problem and parameters
CO4:-	Design the use of major experimental methods for research
CO5:-	Use appropriate tools, techniques, and processes of doing research in Computer science
CO6:-	Demonstrate own contribution to the body of knowledge
CO7:-	Become aware of the ethics in research, academic integrity and plagiarism, Write a research report and thesis
CO8:-	Write a research report and thesis

Course Name:-	Bio-Inspired Optimization Algorithms
Course Code:-	**510102**

At the end of course, students will be able to-

CO1:-	Describe the natural phenomena that motivate the algorithms
CO2:-	Apply nature-inspired algorithms to optimization
CO3:-	Select the appropriate strategy or optimal solution based on bio-inspired algorithms

Course Name:-	Software Development and Version Control
Course Code:-	**510103**

At the end of course, students will be able to-

CO1:-	Select and apply the design patterns to software development.
CO2:-	Design software for real engineering Problems.
CO3:-	Demonstrate team work for development of software in collaborative environment.
CO4:-	Use of open source version control tool.

Course Name:-	Embedded and Real Time Operating System
Course Code:-	**510104**

At the end of course, students will be able to-

CO1:-	Recognize and classify embedded and real-time systems
CO2:-	Explain communication bus protocols used for embedded and real-time systems
CO3:-	Classify and exemplify scheduling algorithms
CO4:-	Apply software development process to a given RTOS application
CO5:-	Design a given RTOS based application

Course Name:-	Elective I (Data Mining)
Course Code:-	**510105B**

At the end of course, students will be able to-

CO1:-	Apply basic, intermediate and advanced techniques to mine the data
CO2:-	Analyze the output generated by the process of data mining
CO3:-	Explore the hidden patterns in the data
CO4:-	Optimize the mining process by choosing best data mining technique

SEMESTER-II

Course Name:-	Operation Research
Course Code:-	**510108**

At the end of course, students will be able to-

CO1:-	Identify the characteristics of different types of decision-making environments
CO2:-	Use appropriate decision making approaches and tools

	CO3:-	Build various dynamic and adaptive models
	CO4:-	Develop critical thinking and objective analysis of decision problems
	CO5:-	Apply the OR techniques for efficacy
Course Name:-		System Simulation and Modeling
	Course Code:-	**510109**
At the end of course, students will be able to-		
	CO1:-	To apply modeling to understand system behavior
	CO2:-	To design the simulation scheme for particular system
	CO3:-	To analyze the modeled and simulated systems
	CO4:-	To compare the results of simulations confined to real world application
Course Name:-		Machine Learning
	Course Code:-	**510110**
At the end of course, students will be able to-		
	CO1:-	Acquire fundamental knowledge of learning theory
	CO2:-	Design and evaluate various machine learning algorithms
	CO3:-	Use machine learning methods for multivariate data analysis in various scientific fields
	CO4:-	Choose and apply appropriate Machine Learning Techniques for analysis, forecasting, categorization and clustering of the data
Course Name:-		Elective II (Network Security)
	Course Code:-	**510111D**
At the end of course, students will be able to-		
	CO1:-	Design and choose appropriate security model
	CO2:-	Apply security means to various applications
	CO3:-	Apply security algorithms in various environments for network security
	CO4:-	Design network security solutions
	CO5:-	Select appropriate tools to thwart network attacks
Course Name:-		Seminar II
	Course Code:-	**510112**
At the end of course, students will be able to-		
	CO1:-	To use multiple thinking strategies to examine real-world issues and explore creative avenues of expression
	CO2:-	To acquire, articulate, create and convey intended meaning using verbal and non-verbal method of communication.
	CO3:-	To learn and integrate, through independent learning in sciences and technologies, with disciplinary specialization and the ability to integrate information across

	SEMESTER-III	
Course Name:-		Fault Tolerant Systems
	Course Code:-	**610101**
At the end of course, students will be able to-		
	CO1:-	Analyze the system for the requirement of fault tolerance
	CO2:-	Simulate the fault tolerance algorithms
	CO3:-	Implement diagnosis and recovery of the system
	CO4:-	Assess the reliability of the system
Course Name:-		Information Retrieval
	Course Code:-	**610102**
At the end of course, students will be able to-		
	CO1:-	Implement the concept of Information Retrieval
	CO2:-	Evaluate and Analyze retrieved information
	CO3:-	Generate quality information out of retrieved information
	CO4:-	Apply clustering and classification algorithms to analyze the information
Course Name:-		Elective III (Pattern Recognition)
	Course Code:-	**610103 D**
At the end of course, students will be able to-		
	CO1:-	Analyze various type of pattern recognition techniques
	CO2:-	Identify and apply various pattern recognition and classification approaches to solve the problems
	CO3:-	Evaluate statistical and structural pattern recognition
	CO4:-	Percept recent advances in pattern recognition confined to various applications
Course Name:-		Seminar III
	Course Code:-	**610104**
At the end of course, students will be able to-		

CO1:-	To use multiple thinking strategies to examine real-world issues and explore creative avenues of expression	
CO2:-	To acquire, articulate, create and convey intended meaning using verbal and non-verbal method of communication.	
CO3:-	To learn and integrate, through independent learning in sciences and technologies, with disciplinary specialization and the ability to integrate information across	
Course Name:-	Dissertation Stage I	
Course Code:-	**610105**	
At the end of course, students will be able to-		
CO1:-	Conduct thorough literature survey confined to the domain of choice	
CO2:-	Develop presentation skills to deliver the technical contents	
CO3:-	Furnish the report of the technical research domain	
CO4:-	Analyze the findings and work of various authors confined to the chosen domain	

SEMESTER-IV		
Course Name:-	Seminar III	
Course Code:-	**610107**	
At the end of course, students will be able to-		
CO1:-	To use multiple thinking strategies to examine real-world issues and explore creative avenues of expression	
CO2:-	To acquire, articulate, create and convey intended meaning using verbal and non-verbal method of communication.	
CO3:-	To learn and integrate, through independent learning in sciences and technologies, with disciplinary specialization and the ability to integrate information across	
Course Name:-	Dissertation Stage II	
Course Code:-	**610108**	
At the end of course, students will be able to-		
CO1:-	Show evidence of independent investigation	
CO2:-	Critically analyze the results and their interpretation ; infer findings	
CO3:-	Report and present the original results in an orderly way and placing the open questions in the right perspective	
CO4:-	Link techniques and results from literature as well as actual research and future research lines with the research	
CO5:-	Appreciate practical implications and constraints of the specialist subjec	