



Department of Computer Engineering

Course Outcomes

Course Name:-	Design and Analysis of Algorithms
Course Code:-	410241
At the end of course, students will be able to-	
CO1:-	Formulate the problem
CO2:-	Analyze the asymptotic performance of algorithms
CO3:-	Decide and apply algorithmic strategies to solve given problem
CO4:-	Find optimal solution by applying various methods
CO5:-	Analyze and Apply Scheduling and Sorting Algorithms
CO6:-	Solve problems for multi-core or distributed or concurrent environments
Course Name:-	Machine Learning
Course Code:-	410242
At the end of course, students will be able to-	
CO1:-	Identify the needs and challenges of machine learning for real time applications.
CO2:-	Apply various data pre-processing techniques to simplify and speed up machine learning algorithms
CO3:-	Select and apply appropriately supervised machine learning algorithms for real time applications
CO4:-	Implement variants of multi-class classifier and measure its performance
CO5:-	Compare and contrast different clustering algorithms
CO6:-	Design a neural network for solving engineering problems
Course Name:-	Blockchain Technology
Course Code:-	410243
At the end of course, students will be able to-	
CO1:-	Interpret the fundamentals and basic concepts in Blockchain
CO2:-	Compare the working of different blockchain platforms
CO3:-	Use Crypto wallet for cryptocurrency based transactions
CO4:-	Analyze the importance of blockchain in finding the solution to the real-world problems.
CO5:-	Illustrate the Ethereum public block chain platform
CO6:-	Identify relative application where block chain technology can be effectively used and implemented
Course Name:-	Elective-III (Cyber Security And Digital Forensics)
Course Code:-	410244C
At the end of course, students will be able to-	
CO1:-	Analyze threats in order to protect or defend it in cyberspace from cyber-attacks
CO2:-	Build appropriate security solutions against cyber-attacks.
CO3:-	Underline the need of digital forensic and role of digital evidences.
CO4:-	Explain rules and types of evidence collection
CO5:-	Analyze, validate and process crime scenes
CO6:-	Identify the methods to generate legal evidence and supporting investigation reports
Course Name:-	Elective-IV (Software Testing And Quality Assurance)
Course Code:-	410245D
At the end of course, students will be able to-	
CO1:-	Describe fundamental concepts in software testing such as manual testing, automation testing and software quality
CO2:-	Design and Develop project test plan, design test cases, test data, and conduct test operations
CO3:-	Apply recent automation tool for various software testing for testing software
CO4:-	Apply different approaches of quality management, assurance, and quality standard to software system
CO5:-	Apply and analyze effectiveness Software Quality Tools.
CO6:-	Apply tools necessary for efficient testing framework

Course Name:-	Laboratory Practice III
Course Code:-	410246
At the end of course, students will be able to-	
CO1:-	Apply preprocessing techniques on datasets.
CO2:-	Implement and evaluate linear regression and random forest regression models.
CO3:-	Apply and evaluate classification and clustering techniques.
CO4:-	Analyze performance of an algorithm.
CO5:-	Implement an algorithm that follows one of the following algorithm design strategies: divide and conquer, greedy,
CO6:-	Interpret the basic concepts in Blockchain technology and its applications
Course Name:-	Laboratory Practice IV
Course Code:-	410247
At the end of course, students will be able to-	
CO1:-	Apply android application development for solving real life problems
CO2:-	Design and develop system using various multimedia components.
CO3:-	Identify various vulnerabilities and demonstrate using various tools.
CO4:-	Apply information retrieval tools for natural language processing
CO5:-	Develop an application using open source GPU programming languages
CO6:-	Apply software testing tools to perform automated testing
Course Name:-	Project Work Stage I
Course Code:-	410248
At the end of course, students will be able to-	
CO1:-	Solve real life problems by applying knowledge
CO2:-	Analyze alternative approaches, apply and use most appropriate one for feasible solution.
CO3:-	Write precise reports and technical documents in a nutshell
CO4:-	Participate effectively in multi-disciplinary and heterogeneous teams exhibiting team work
CO5:-	Inter-personal relationships, conflict management and leadership quality
Course Name:-	Audit Course 7 – II: Entrepreneurship Development
Course Code:-	410249
At the end of course, students will be able to-	
CO1:-	Understand the legalities in product development
CO2:-	Undertake the process of IPR, Trademarks, Copyright and patenting
CO3:-	Understand and apply functional plans
CO4:-	Manage Entrepreneurial Finance
CO5:-	Inculcate managerial skill as an entrepreneur

SEMESTER-II

Course Name:-	High Performance Computing
Course Code:-	410250
At the end of course, students will be able to-	
CO1:-	Understand various Parallel Paradigm
CO2:-	Design and Develop an efficient parallel algorithm to solve given problem
CO3:-	Illustrate data communication operations on various parallel architecture
CO4:-	Analyze and measure performance of modern parallel computing systems
CO5:-	Apply CUDA architecture for parallel programming
CO6:-	Analyze the performance of HPC applications
Course Name:-	Deep Learning
Course Code:-	410251
At the end of course, students will be able to-	
CO1:-	Understand the basics of Deep Learning and apply the tools to implement deep learning applications.
CO2:-	Evaluate the performance of deep learning models (e.g., with respect to the bias-variance trade- off, overfitting and
CO3:-	To apply the technique of Convolution (CNN) and Recurrent Neural Network (RNN) for implementing Deep
CO4:-	To implement and apply deep generative models

CO5:-	Construct and apply on-policy reinforcement learning algorithms.
CO6:-	To Understand Reinforcement Learning Process
Course Name:-	Elective-V (Natural Language Processing)
Course Code:-	410252 A
At the end of course, students will be able to-	
CO1:-	Describe the fundamental concepts of NLP, challenges and issues in NLP.
CO2:-	Analyze Natural languages morphologically, syntactical and semantically OR Describe the concepts of morphology,
CO3:-	Illustrate various language modelling techniques.
CO4:-	Integrate the NLP techniques for the information retrieval task.
CO5:-	Demonstrate the use of NLP tools and techniques for text-based processing of natural languages.
CO6:-	Develop real world NLP applications.
Course Name:-	Elective-VI (Business Intelligence)
Course Code:-	410253C
At the end of course, students will be able to-	
CO1:-	Differentiate the concepts of Decision Support System & Business Intelligence
CO2:-	Use Data Warehouse & Business Architecture to design a BI system
CO3:-	Build graphical reports
CO4:-	Apply different data preprocessing techniques on dataset
CO5:-	implement machine learning algorithms as per business needsi
CO6:-	Identify role of BI in marketing, logistics, and finance and telecommunication sector
Course Name:-	Laboratory Practice V
Course Code:-	410254
At the end of course, students will be able to-	
CO1:-	Apply basic principles of elective subjects to problem solving and modeling.
CO2:-	Use tools and techniques in the area of software development to build mini projects
CO3:-	Design and develop applications on subjects of their choice.
CO4:-	Generate and manage deployment, administration & security.
Course Name:-	Laboratory Practice VI
Course Code:-	410255
At the end of course, students will be able to-	
CO1:-	Differentiate the concepts of Decision Support System & Business Intelligence
CO2:-	Use Data Warehouse & Business Architecture to design a BI system
CO3:-	Build graphical reports
CO4:-	Apply different data preprocessing techniques on dataset
CO5:-	implement machine learning algorithms as per business needsi
CO6:-	Identify role of BI in marketing, logistics, and finance and telecommunication sector
Course Name:-	Project Work Stage II
Course Code:-	410256
At the end of course, students will be able to-	
CO1:-	Show evidence of independent investigation
CO2:-	Critically analyze the results and their interpretation
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 subject
Course Name:-	Audit Course 8– IV: MOOC-learn New Skill
Course Code:-	410257
At the end of course, students will be able to-	
CO1:-	To acquire additional knowledge and skill.