

## *Department of Computer Engineering*

### **Course Outcomes (CO)**

#### Syllabus Pattern:-2019

Class:-BE

Semester:- I

Sr. No	Subject	Course Outcomes (CO)
1	<b>410241: Design and Analysis of Algorithms</b>	<p>CO1: Formulate the problem</p> <p>CO2: Analyze the asymptotic performance of algorithms</p> <p>CO3: Decide and apply algorithmic strategies to solve given problem</p> <p>CO4: Find optimal solution by applying various methods</p> <p>CO5: Analyze and Apply Scheduling and Sorting Algorithms.</p> <p>CO6: Solve problems for multi-core or distributed or concurrent environments</p>
2	<b>410242: Machine Learning</b>	<p>CO1: Identify the needs and challenges of machine learning for real time applications.</p> <p>CO2: Apply various data pre-processing techniques to simplify and speed up machine learning algorithms.</p> <p>CO3: Select and apply appropriately supervised machine learning algorithms for real time applications.</p> <p>CO4: Implement variants of multi-class classifier and measure its performance.</p> <p>CO5 : Compare and contrast different clustering algorithms.</p> <p>CO6: Design a neural network for solving engineering problems.</p>
3	<b>410243: Blockchain Technology</b>	<p>CO1: Interpret the fundamentals and basic concepts in Blockchain</p> <p>CO2: Compare the working of different blockchain platforms</p> <p>CO3: Use Crypto wallet for cryptocurrency based transactions</p> <p>CO4: Analyze the importance of blockchain in finding the solution to the real-world problems.</p> <p>CO5: Illustrate the Ethereum public block chain platform</p> <p>CO6: Identify relative application where block chain technology can be effectively used and implemented.</p>

4	<p style="text-align: center;"><b>410244(D): Object oriented Modeling and Design</b></p>	<p>CO1: Describe the concepts of object-oriented and basic class modelling.  CO2: Draw class diagrams, sequence diagrams and interaction diagrams to solve problems.  CO3: Choose and apply a befitting design pattern for the given problem  CO4: To Analyze applications, architectural Styles &amp; software control strategies  CO5: To develop Class design Models &amp; choose Legacy Systems.  CO6: To Understand Design Patterns</p>
5	<p style="text-align: center;"><b>410245 (D): Software Testing and Quality Assurance</b></p>	<p>CO1: Describe fundamental concepts in software testing such as manual testing, automation testing and software quality assurance.  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.</p>
6	<p style="text-align: center;"><b>410248: Project Work Stage I</b></p>	<ul style="list-style-type: none"> <li>• Solve real life problems by applying knowledge.</li> <li>• Analyze alternative approaches, apply and use most appropriate one for feasible solution.</li> <li>• Write precise reports and technical documents in a nutshell.</li> <li>• Participate effectively in multi-disciplinary and heterogeneous teams exhibiting team work</li> <li>• Inter-personal relationships, conflict management and leadership quality.</li> </ul>

## *Department of Computer Engineering*

### **Course Outcomes (CO)**

#### Syllabus Pattern:-2019

Class:-BE

Semester:- II

Sr. No	Subject	Course Outcomes (CO)
1	<b>410250: High Performance Computing</b>	<p>CO1: Understand various Parallel Paradigm</p> <p>CO2: Design and Develop an efficient parallel algorithm to solve given problem</p> <p>CO3: Illustrate data communication operations on various parallel architecture</p> <p>CO4: Analyze and measure performance of modern parallel computing systems</p> <p>CO5: Apply CUDA architecture for parallel programming</p> <p>CO6: Analyze the performance of HPC applications</p>
2	<b>410251: Deep Learning</b>	<p>CO1: Understand the basics of Deep Learning and apply the tools to implement deep learning applications</p> <p>CO2: Evaluate the performance of deep learning models (e.g., with respect to the bias-variance trade-off, over fitting and under fitting, estimation of test error).</p> <p>CO3: To apply the technique of Convolution (CNN) and Recurrent Neural Network (RNN) for implementing Deep Learning models</p> <p>CO4: To implement and apply deep generative models.</p> <p>CO5: Construct and apply on-policy reinforcement learning algorithms</p> <p>CO6: To Understand Reinforcement Learning Process</p>
3	<b>410252(C): Software Defined Networks</b>	<p>CO1: Interpret the need of Software Defined networking solutions.</p> <p>CO2: Analyze different methodologies for sustainable Software Defined Networking solutions. CO3: Select best practices for design, deploy and troubleshoot of next generation networks.</p> <p>CO4: Develop programmability of network elements.</p> <p>CO5: Demonstrate virtualization and SDN Controllers using Open Flow protocol</p> <p>CO6: Design and develop various applications of SDN</p>
4	<b>410253(C): Business Intelligence</b>	<p>CO1: Differentiate the concepts of Decision Support System &amp; Business Intelligence</p> <p>CO2: Use Data Warehouse &amp; Business Architecture to design a BI system.</p> <p>CO3: Build graphical reports</p> <p>CO4: Apply different data preprocessing techniques on dataset</p> <p>CO5: Implement machine learning algorithms as per business needs</p> <p>CO6: Identify role of BI in marketing, logistics, and finance and telecommunication sector</p>

5	<b>410256: Project Work Stage II</b>	<b>CO1: Show evidence of independent investigation</b> <b>CO2: Critically analyze the results and their interpretation.</b> <b>CO3: Report and present the original results in an orderly way and placing the open questions in the right perspective.</b> <b>CO4: Link techniques and results from literature as well as actual research and future research lines with the research.</b> <b>CO5: Appreciate practical implications and constraints of the specialist subject</b>
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