Department of Information Technology

Course Outcomes (COs)

BE (Department of Information Technology)-2019 Pattern
Semester-VII

Course Code	Name of Subject/Course	Course Outcomes (COs)
414441	Information Stoarge and Retrival	☐ Understand the concept of Information retrieval and to apply clustering in information retrieval. ☐ Use an indexing approach for retrieval of text and multimedia data. ☐ Evaluate performance of information retrieval systems. ☐ Apply the concepts of multimedia and distributed information retrieval. ☐ Use appropriate tools in analyzing the web information. ☐ Simulate the working of a search engine and recommender system.
414442	Software Project Management	☐ Apply the practices and methods for successful Software Project Management ☐ Create Design and Evaluate Project ☐ Analyze Project Schedule and calculate Risk Management with help of tools. ☐ Demonstrate different tools used for Project Tracking, Monitoring & Control. ☐ Identify Staff Selection Process and the issues related to Staff Management. ☐ Discuss and use modern tools for Software Project Management.
414443	Deep Learning	☐ Understand the theoretical foundations, algorithms, and methodologies of Deep Learning. ☐ Apply the concepts of Convolution Neural Networks and use of popular CNN architectures. ☐ Compare Feed Forward Neural Network and Recurrent Neural Network and learn modeling the time dimension using RNN and LSTM. ☐ Elaborate unsupervised deep learning algorithms like Auto encoders. ☐ Explore Representation Learning and Transfer Learning techniques using variants of CNN architecture. ☐ Evaluate the performance of deep learning

		algorithms and to provide solution for various real-world applications.
414444C	Elective-III Multimedia Technology	☐ Calculate computational complexity using asymptotic notations for various algorithms. ☐ Apply Divide & Conquer as well as Greedy approach to design algorithms. ☐ Understand and analyze optimization problems using dynamic programming. ☐ Illustrate different problems using Backtracking. ☐ Compare different methods of Branch and Bound strategy. ☐ Understand the concept of P, NP, NP-complete, NP-Hard problems.
414445B	Elective-IV Introduction to DevOps	☐ Understand the fundamental concepts of DevOps. ☐ Link the background of DevOps with other technologies. ☐ Comprehend the concept of continuous integration and continuous delivery. ☐ Compare various stages of continuous deployment and test strategies. ☐ Justify the importance of monitoring system and reliability engineering. ☐ Use the latest tools in DevOps.
414446	Lab Practice III	☐ Understand the concept of Information retrieval and to apply clustering in information. ☐ Use appropriate indexing approach for retrieval of text and multimedia data. Evaluate performance of information retrieval systems. ☐ Apply appropriate tools in analyzing the web information. ☐ Map the concepts of the subject on recent developments in the Information retrieval field. ☐ Understand the concept of Web searching in Information retrieval and to apply for an e-commerce website. ☐ Apply appropriate recommender system for a product.
414447	Lab Practice IV	☐ Learn and Use various Deep Learning tools and packages. ☐ Build and train a deep Neural Network models for use in various applications. ☐ Apply Deep Learning techniques like CNN, RNN Auto encoders to solve real word Problems. ☐ Evaluate the performance of the model build using Deep Learning.
414448	Project Stage-I	☐ To Identify and Finalize problem statement by surveying variety of domains and to Apply the knowledge for solving realistic problem. ☐ Analyze alternative approaches, apply and use most appropriate one for feasible solution.

		☐ Perform requirement analysis and identify design methodologies. ☐ Write precise reports, technical documents in a nutshell and Participate effectively in multi-disciplinary and heterogeneous teams exhibiting team work.

Semester-VIII

Course Code	Name of Subject/Course	Course Outcomes (COs)
414450	Distributed Systems	☐ Demonstrate the core concepts of distributed systems. ☐ Understand the concept of middleware of distributed systems. ☐ Understand Inter-process communication methods and analyze different coordination algorithms. ☐ Comprehend the importance of replication to achieve fault tolerance in distributed systems. ☐ Analyze the design and functioning of existing distributed file systems, distributed multimedia, and distributed web-based systems. ☐ Understand various Recent Trends in distributed systems.
414451	Elective V : Social Computing	☐ Understand basics of Social Media Analytics. ☐ Correlate Network Measures for Social Media Data. ☐ Visualize mining in social media data. ☐ Discuss the Social Similarities. ☐ Interpret social media behavior. ☐ Apply Social Media Computations for Google+
414452	Elective VI: Blockchain Technology	☐ Understand the concept of cryptography and decentralization. ☐ Acquire fundamental knowledge of blockchain with issues associated with it. ☐ Acquire knowledge of Ethereum blockchain platform. ☐ Understand hyper ledger fabric platform. ☐ Acquire the knowledge regarding working of tokenization. ☐ Describe the applications and risk involved.
414453	Startup and Entrepreneurship	☐ Understand key concepts and framework of innovation and start-up ecosystem. ☐ Gain knowledge of how to develop start up ecosystem, its key components. ☐ Influence and manage dynamics between start up ecosystem, its key components and increase the productivity of ecosystem. ☐ Understand the role of different stakeholders in ecosystem in building and supporting growth of start-ups.

		☐ Insight into global trend in start-up ecosystem and product development. ☐ Map different start-up ecosystems and developing performance indicators.
414454	Lab Practice V	☐ Learn how to apply concept of client-server communication to develop any distributed application. ☐ Understand the topic of communication and coordination in distributed computing system. And develop distributed application with CORBA and using Message Passing Interface (MPI). ☐ Design, build and test application programs on clock synchronization for distributed systems. ☐ Analyze the design and functioning of different distributed algorithm and implement it. ☐ Design, build, test simple web service and write any distributed application to consume the web service. ☐ Learn how to apply principles of state-of-the-Art distributed systems in practical application.
414455	Lab Practice VI	☐ To implement small blockchain experimentations. ☐ Identify Consensus mechanism for Blockchain Application. ☐ Interpret the basic concepts in Blockchain technology and its applications. ☐ Identify relative application where block chain technology can be effectively used and implemented.
414456	Project Stage-II	☐ Show evidence of independent investigation. ☐ Critically analyze the results and their interpretation. ☐ Report and present the original results in an orderly way and place the open questions in the right perspective. ☐ Link techniques and results from literature as well as actual research and future research lines with the research and appreciate practical implications and constraints of the specialist subject.