

Dr. D.Y. Patil Institute of Engineering, Management and Research, Akurdi, Pune

Subject:	High Perform	ance Computing	Subject Code:	410250	
CO1	411.1	Understand various Parallel Paradigm			
CO2	411.2	Design and Develop an effici	Design and Develop an efficient parallel algorithm to solve given problem		
CO3	411.3	Illustrate data communication operations on various parallel architecture			
CO4	411.4	Analyze and measure performance of modern parallel computing systems			
CO5	411.5	Apply CUDA architecture for parallel programming			
CO6	411.6	Analyze the performance of HPC applications			

Subject:	Deep Learnin	g	Subject Code:	410251
CO1	412.1	Understand the basics of Deep Learning and apply the tools to implement deep learning applications		
CO2	412.2	Evaluate the performance of deep learning models (e.g., with respect to the bias-variance trade-off, overfitting and underfitting, estimation of test error).		
CO3	412.3	Apply the technique of Convolution (CNN) and Recurrent Neural Network (RNN) for implementing Deep Learning models		
CO4	412.4	Implement and apply deep generative models		
CO5	412.5	Construct and apply on-policy reinforcement learning algorithms		



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CO6	412.6	To Understand Reinforcement Learning Process
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Subject:	Elective V : Natural Language Processing		Subject Code:	410252(A)
CO1	413A.1	Describe the fundamental concepts of NLP, challenges and issues in NLP		
CO2	413A.2	Analyze Natural languages morphologically, syntactical and semantically OR Describe the concepts of morphology, syntax, semantics of natural language		
CO3	413A.3	Illustrate various language modelling techniques		
CO4	413A.4	Integrate the NLP techniques for the information retrieval task		
CO5	413A.5	Demonstrate the use of NLP tools and techniques for text-based processing of natural		
CO6	413A.6	Develop real world NLP applications		

Subject:	Elective VI: Business Intelligence		Subject Code:	410253(C)
CO1	414C.1	Differentiate the concepts of Decision Support System & Business Intelligence		
CO2	414C.2	Use Data Warehouse & Business Architecture to design a BI system.		
CO3	414C.3	Build graphical reports		
CO4	414C.4	Apply different data preprocessing techniques on dataset		



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CO5	414C.5	Implement machine learning algorithms as per business needs
CO6	414C.1	Identify role of BI in marketing, logistics, and finance and telecommunication sector

Subject:	Laboratory P	ractice V	Subject Code:	410255	
CO1	415.1	Analyze and measure performance of sequential and parallel algorithms.			
CO2	415.2	Design and Implement solutions for mu	Design and Implement solutions for multicore/Distributed/parallel environment.		
CO3	415.3	Identify and apply the suitable algorithms to solve AI/ML problems.			
CO4	415.4	Apply the technique of Deep Neural network for implementing Linear regression and classification.			
CO5	415.5	Apply the technique of Convolution (CNN) for implementing Deep Learning models.			
CO6	415.6	Design and develop Recurrent Neural Network (RNN) for prediction.			

Subject:	Laboratory Practice VI		Subject Code:	410256
CO1	416.1	Apply basic principles of elective subjects to problem solving and modeling.		blem solving and modeling.
CO2	416.2	Use tools and techniques in the area of software development to build mir projects		



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CO3	416.3	Design and develop applications on subjects of their choice.
CO4	416.4	Generate and manage deployment, administration & security.

Subject:	Project Work Stage II		Subject Code:	410256
CO1	417.1	Show evidence of independent investigation		
CO2	417.2	Critically analyze the results and their interpretation.		
CO3	417.3	Report and present the original results in an orderly way and placing the open questions in the right perspective.		
CO4	417.4	Link techniques and results from literature as well as actual research and future research lines with the research.		
CO5	417.1	Appreciate practical implications and constraints of the specialist subject		