AMRUTVAHINI COLLEGE OF ENGINEERING, SANGAMNER

Department Of Computer Engineering

Course Outcomes

Final Year – 2015 Course			
Course Code	**Course Name**	**Course Outcomes**	
Semester - I			
410241	High Performance Computing	CO1	Describe different parallel architectures, inter-connect networks, programming models
		CO2	Use efficient techniques for decomposition of task
		CO3	Develop an efficient parallel algorithm to solve given problem
		CO4	Use different techniques for the communication
		CO5	Analyze and measure performance of modern parallel computing systems
		CO6	Build the logic to parallelize the programming task
410242	Artificial Intelligence and Robotics	CO1	To Understand Basic Concepts of artificial intelligence and to Implement A* Algorithm.
		CO2	To Understand and Analyze Rule based Expert Systems. Apply suitable Algorithm to solve any AI Problem
		CO3	To Identify and apply suitable Intelligent agents for various AI applications. Also to Compare Propositional, FOL and SOL.
		CO4	To Understand and Analyze information Retrieval, NLP and ANN Concepts
		CO5	To Understand Various Hardware (Sensors, Actuators etc.) and Software Concepts for Robotics.
		CO6	To Apply Robotics for solving real world applications
410243	Data Analytics	CO1	Apply big data analytic process for solving problems.
		CO2	Apply and use statistical methods for evaluations
		CO3	Apply analytic methods in problem solution
		CO4	Apply classification algorithm in problem solution
		CO5	Use visualization tool to understand data
		CO6	Apply advanced tools and methods for analytics

410244(B)	Software Architecture and Design Patterns	CO1	Express the analysis and design of an application.
		CO2	Specify functional semantics of an application.
		CO3	Evaluate software architectures in terms of their applicability.
		CO4	Select and use appropriate architectural styles and software design patterns.
		CO5	Estimate various client side technologies and examine them for appropriate use.
		CO6	Value server side technologies and select proper technology for server side implementations.
410245(B)	Software Testing and Quality Assurance	CO1	Possible to explain importance of Software Quality
		CO2	Describe fundamental concepts in software testing such as manual testing, automation testing and software quality assurance.
		CO3	Design and develop project test plan, design test cases, test data, and conduct test operations
		CO4	Apply recent automation tool for various software testing for testing software
		CO5	Apply different approaches of quality management, assurance, and quality standard to software system
		CO6	Apply and analyze effectiveness Software Quality Tools
410246	Laboratory Practice I	CO1	To develop an efficient parallel algorithm to solve given problem
		CO2	To analyze and measure performance of modern parallel computing systems
		CO3	Apply the suitable algorithms to solve AI problems
		CO4	Identify knowledge associated and represent it by ontological engineering to plan a strategy to solve given problem.
		CO5	To present a survey on applications for Business Analytic and Intelligence.
		CO6	To write problem solutions for multi-core or distributed, concurrent/Parallel environments

410247	Laboratory Practice II	CO1	Evaluate software architectures in terms of their applicability.
		CO2	Select and use appropriate architectural styles and software design patterns.
		CO3	Estimate various client side technologies and examine them for appropriate use.
		CO4	Apply selenium automation tool for various software testing for testing software
		CO5	Understand different approaches of quality management, assurance, and apply quality standard to software system
		CO6	Apply and analyze effectiveness Software Quality Tools
410248	Project Work Stage I	CO1	Solve real life problems by applying knowledge.
		CO2	Students can learn and Analyze alternative approaches,
		CO3	Students can apply and use most appropriate one for feasible solution.
		CO4	Write precise reports and technical documents in a nutshell.
		CO5	Participate effectively in multi-disciplinary and heterogeneous teams exhibiting team work,
		CO6	Inter-personal relationships, conflict management and leadership quality.
Semester - II			
410250	Machine Learning	CO1	Distinguish different learning based applications
		CO2	Apply different preprocessing methods to prepare training data set for machine learning.
		CO3	To design and implement regression machine learning algorithm
		CO4	To design and implement naive bayes and SVM machine learning algorithm
		CO5	To design and implement Decision Trees and Ensemble Learning
		CO6	To implement and learn clustering algorithm, recommendation system and deep learning networks.

410251	Information and Cyber Security	CO1	Gauge the security protections and limitations provided by today's technology.
		CO2	Understand, implement and apply different symmetric encryption-decryption methods in order to provide confidentiality
		CO3	Understand, implement and apply public key cryptography methods ,understand authentication methods and concept of digital signature with its algorithms
		CO4	Apply knowledge of IP security, Web security, Electronic mail security and Distinguish different protocols associated with them and also understand concept of SET
		CO5	Use appropriate security solutions to protect own assets against cyber-attacks.
		CO6	Understand cyber threats and decide ways to protect Personally identifiable information
410252(C)	Embedded and Real Time Operating System	CO1	Recognize and classify embedded and real-time systems
		CO2	Interpret Network Embedded and real-time systems
		CO3	Explain communication bus protocols used for embedded and real-time systems
		CO4	Classify and Analyze real time scheduling algorithms
		CO5	Discuss Interprocess communication of RTOS Enviornment
		CO6	Apply software development process to a given RTOS application
410253(C)	Cloud Computing	CO1	Explain different concepts involved in cloud computing.
		CO2	Distinguish different Cloud file systems & understand the benefits of cloud storage
		CO3	Use of Virtualization in Cloud computing
		CO4	configure& implement Amazon EC2 web Services
		CO5	Discuss the different concept of Ubiquitous Computing
		CO6	Identify the future trends of cloud computing

410254	Laboratory Practice III	CO1	Design and implement supervised machine learning algorithm.
		CO2	Implement different supervised learning models
		CO3	Learn Meta classifiers and deep learning concepts
		CO4	Analyze threats in order to protect or defend it in cyberspace from cyber-attacks.
		CO5	Build appropriate security solutions against cyber-attacks.
		CO6	Identify information security and cyber security threats.
410255	Laboratory Practice IV	CO1	Classify and exemplify scheduling algorithms
		CO2	Apply software development process to a given RTOS application
		CO3	Design a given RTOS based application
		CO4	To install cloud computing environments.
		CO5	To develop any one type of cloud
410256	Project Work Stage II	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
		CO6	Students are able to consolidate the work as furnished report.