AMRUTVAHINI COLLEGE OF ENGINEERING, SANGAMNER

Department Of Computer Engineering

Course Outcomes

Third Year – 2012 Course			
Course Code	**Course Name**	**Course Outcomes**	
Semester - I			
310241	Theory of Computation	CO1	Ability to understand Regular Expression.
		CO2	Ability to design DFA and NFA
		CO3	Ability to subdivide problem space based on input subdivision using constraint, grammar.
		CO4	Ability to design deterministic Turing machine for all input, all output , NP-complete.
		CO5	Ability to design Pushdown Automata.
		CO6	Ability to design non-deterministic Turing machine for all input, all output , NP-Hard.
310242	Operating Systems Design	CO1	Acquire conceptual understanding of file system in unix operating systems.
		CO2	Ability to analyze process and thread in IPC .
		CO3	Ability to distinguish between memory management in Win 8 and Android OS.
		CO4	Understanding of IPC mechanism and implement inter process communication.
		CO5	Learn searching , sorting tools
		CO6	Ability to understand scheduling in different operating system
310243	Data Communication and Wireless Sensor Networks	CO1	Acquire conceptual understanding in data communication.
		CO2	Understand Wireless network & its access protocol.
		CO3	Analyze design methodology for WSN platform & implements its architecture
		CO4	Learn data link layers LLC & MAC sub layer in WSN
		CO5	Design routing protocols for WSN
		CO6	Understand implementation of Infrastructure of WSN with OS.
310244	Database Management Systems Applications	CO1	Design E-R Model for given requirements and SQL Queries.
		CO2	Ability to handle Advance Databases such as NOSQL.
		CO3	Understanding of transaction Management in relational database System.
		CO4	Understanding of different database architectures.
		CO5	Ability to use advanced storage technologies, BIGDATA
		CO6	Knowledge of Advances in Databases

310245	Computer Forensic and Cyber Applications	CO1	To Understand fundamentals of Computer Networks, Networking Hardware Components and Protocols.
		CO2	To Understand Foundation of Digital forensics and digital evidence. To Learn various cyber Laws.
		CO3	To Understand and use Computer forensic tools for investigation.
		CO4	To Apply Computer forensic to computer
		CO5	To Apply and Analyze various digital evidence on Operating systems.
		CO6	To Apply computer forensics to network .also use computer forensic for real life cyber applications
310246	Programming Lab-I	CO1	Ability to write programs at systems level operating system modules
		CO2	Ability of problem solving using multi-core, advanced databases techniques and tools
		CO3	Ability to handle and programming of storage devices
		CO4	Develop the ability to handle database operations and their complexities
		CO5	Ability to develop skills of writing applications by using SQL and NoSQL
		CO6	Ability to use advance databases techniques and tools.
310247	Programming Lab-II	CO1	The Students must be able perform programming for Data communication
		CO2	The Students must be able perform programming using Wireless Sensor Networks using multicore programming features.
		CO3	The Students must be able perform programming for Computer Forensics Cyber Applications
		CO4	Design some tools to investigate cyber-attacks.
		CO5	Design & Implement security applications.
		CO6	Understand concept of Network simulator 3 & implement some access protocols simulation using NS3.
310248	Employability Skills Development Lab	CO1	Ability to understand need of technical competence required for problem solving
		CO2	Ability to understand employers requirements
		CO3	Ability to understand professional and group behavioral ethics
		CO4	Ability to understand group communication and information sharing technologies
		CO5	Ability to understand administrative skills and responsibilities in teamwork
		CO6	Ability to understand quantitative skills

Semester - II			
310249	Principles of Concurrent and Distributed Programming	CO1	Explain the concept and design programs in Basic programming environment.
		CO2	Implement concurrent programming
		CO3	Operate parallel programming tools to perform parallel programming
		CO4	Explain distributed system concepts to perform distributed programming
		CO5	Discuss xen as Virtualization Technology & configure it for further usage
		CO6	Analyze cloud and mobile computing principles for Multi-CPU and Multi-GPU Solutions.
310250	Embedded Operating Systems	CO1	Understand real time embedded system
		CO2	Learn architecture of ARM & basics of processor
		CO3	Demonstrate the open source RTOS and solve the design issues for the same.
		CO4	Understand device driver basics & embedded application development environment
		CO5	Write code for embedded applications & debug it
		CO6	Describe embedded android & write application
310251	Computer Networks	CO1	Ability to understand the network architecture, layers of the OSI model and application layer protocol.
		CO2	Ability to understand the transport layer protocol and how TCP and UDP implement these concepts.
		CO3	Ability to understand the purpose of network layered models and network programming.
		CO4	Ability to use Wireless technologies and wireless application protocol.
		CO5	Ability to Learn advance wireless technologies and its applications.
		CO6	Demonstrate the advance network technologies like Software defined network, ATM and understand optical networks.
310252	Software Engineering	CO1	Compare and choose a process model for a software project development.
		CO2	Analyse and model software requirements of a software system.
		CO3	Design and modelling of a software system with tools
		CO4	Design test cases of a software system.
		CO5	Prepare the SRS, design document, project plan of a given software system.
		CO6	To apply and analyse different quality factors for software quality measurement.

310253	Digital Signal Processing Applications	CO1	Students will understand the mathematical concepts of signal representation and transformations with their analysis.
		CO2	Students will understand Fourier Transform.
		CO3	Students will able to understand the Z-Transform and Filter.
		CO4	Development of ability for generating proper solution to signal processing problems.
		CO5	Students will understand the DSP processor.
		CO6	Students will be capable of understanding Digital Signal Processing Applications and implementation of signal processing to various applications.
310254	Programming Lab-III	CO1	To design mathematical model using set theory, algebraic system, relations & functions.
		CO2	To design and implement object oriented models using UML appropriate notations
		CO3	To write multi-core, concurrent and distributed programs.
		CO4	To write embedded programs using sensors & required hardware.
		CO5	To write Software Engineering design document.
		CO6	To understand concept of CUDA & implement parallel program using GPU.
310255	Programming Lab-IV	CO1	Ability to set-up, install and configure network, WSN
		CO2	Ability to perform Concurrent programming for Networking and WSN
		CO3	Ability to use different networking protocols and tools
		CO4	Able to implement digital signal processing applications.
		CO5	Develop embedded applications using BBB/ARM cortex processor
		CO6	Students will become familiar with network simulator tools.
310256	Seminar and Technical Communication Laboratory	CO1	Able to be familiar with basic technical writing concepts and terms, such as audience analysis, jargon, format, visuals, and presentation.
		CO2	Able to improve skills to read, understand, and interpret material on technology.
		CO3	Improve communication and writing skills
		CO4	Ability to evaluate information and use and apply relevant theories.
		CO5	Demonstrate problem-solving skills and apply theoretical knowledge.
		CO6	To identify promising new directions of various cutting edge technologies.