AMRUTVAHINI COLLEGE OF ENGINEERING, SANGAMNER

Department Of Computer Engineering

Course Outcomes

| Third Year – 2015 Course | | | |
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| Course Code | Course Name | Course Outcomes | |
| Semester - I | | | |
| 310241 | Theory of Computation | CO1 | Able to design DFA and NFA. |
| | | CO2 | Able to design and convert RE to DFA and DFA to RE. |
| | | CO3 | Able to understand the context free grammar. |
| | | CO4 | Able to design deterministic Turing machine for all inputs and all outputs |
| | | CO5 | Able to subdivide problem space based on input subdivision using constraints |
| | | CO6 | Able to apply linguistic theory |
| | Database Management Systems (DBMS) | CO1 | Design E-R Model for given requirements and convert the same into database tables. |
| | | CO2 | Use database techniques such as SQL & PL/SQL |
| | | CO3 | Use modern database techniques such as NOSQL. |
| 310242 | | CO4 | Explain transaction Management in relational database System. |
| | | CO5 | Describe different database architecture and analyses the use of appropriate architecture in real time environment. |
| | | CO6 | Students will be able to use advanced database Programming concepts Big Data – HADOOP |
| 310243 | Software Engineering & Project Management | CO1 | Decide on a process model for a developing a software project |
| | | CO2 | Classify software applications and Identify unique features of various domains |
| | | CO3 | Design test cases of a software system |
| | | CO4 | Understand basics of IT Project management |
| | | CO5 | Plan, schedule and execute a project considering the risk management |
| | | CO6 | Apply quality attributes in software development life cycle |

| 310244 | Information Systems and Engineering Economics | CO1 | To Understand the need, usage, importance and activities of an information system to an Organization. |
|--------|--|-----|--|
| | | CO2 | To Understand the need, usage, importance and activities of a management information system (MIS) to an Organization. |
| | | CO3 | To Understand and Analyze various information system solutions like ERP, CRM, Data Warehouses and issues in successful implementation of these technology solutions for an organization. |
| | | CO4 | To Analyze Economic decisions done in multinational companies |
| | | CO5 | To Apply, Perform, evaluate and compare present worth, future worth and Annual worth for software enterprises of similar domains. |
| | | CO6 | To Perform Accounting and Evaluate Cash flows analysis done in Start -up Companies. |
| | Computer Networks | CO1 | Understanding the requirements for a given organizational structure to select the most appropriate networking architecture, topologies, transmission mediums, and technologies |
| | | CO2 | Illustrate design issues, flow control and error control |
| 310245 | | CO3 | To learn and apply different IEEE standards/protocols as per need of application. |
| | | CO4 | Evaluate different routing and switching algorithms |
| | | CO5 | Analyze data flow between TCP/IP model using Application, Transport and Network Layer Protocols. |
| | | CO6 | Design applications for Computer Network capabilities selection and for real-time applications. |
| | Skills Development Lab | CO1 | Evaluate problems and analyse data using current technologies in a wide variety of business and organizational contexts |
| 310246 | | CO2 | Design and develop application by applying data pre-processing, exploratory analysis and visualization techniques |
| | | CO3 | Apply norms of best practices for building applications |
| | | CO4 | Make use of Integrated Development Environment (IDE) for implementing and testing of software solution |
| | | CO5 | Make use of Machine Learning Techniques to analyze data |
| | | CO6 | Design and develop software solutions for real time problems by demonstrating projects. |

| | | CO1 | Ability to handle databases of varying complexities. |
|---------------|------------------------------------|-----|---|
| 310247 | Database Management Systems Lab | CO2 | Ability to design and develop queries for different applications by using SQL. |
| | | CO3 | Ability to write procedures using PL/SQL for advanced database Programming concepts. |
| | | CO4 | Ability to design and develop queries for different applications by using open source database NOSQL. |
| | | CO5 | Ability to understand transaction processing. |
| | | CO6 | Ability to handle different databases using high level programming languages with connectivity concepts. |
| | | CO1 | Understand fundamental underlying principles of computer networking. |
| | | CO2 | Understand details and functionality of layered network architecture. |
| 310248 | Computer Networks Lab | CO3 | Apply mathematical foundations to solve computational problems in computer networking |
| | | CO4 | Analyze performance of various communication protocols |
| | | CO5 | Compare routing algorithms |
| | | CO6 | Practice packet /file transmission between nodes. |
| Semester - II | 7 | | |
| | | CO1 | To Understand evaluation of algorithms and iterative algorithms |
| | | CO2 | To understand and analyze imperative model and greedy strategy |
| 310250 | Design & Analysis of | CO3 | To differentiate between DAC ,branch n bound and evolutionary computing |
| 310230 | Algorithms | CO4 | To understand deterministic and non- deterministic algorithms |
| | | CO5 | To perform amortized analysis and Randomized algorithms |
| | | CO6 | To Understand multithreaded and distributed algorithms |
| | | CO1 | Understand basics of System Programming and Assembler design. |
| | | CO2 | Recognize and illustrate the design and working of Macro processor, linkers and loaders. |
| | | CO3 | Analyze role of lexical analyzer for construction of tokens and comparison between compilers and interpreters. |
| | | CO4 | Differentiate and List different types of Real time OS, Schedulers with deadlocks methods. |
| 240254 | Systems Programming & | CO5 | Understand Intel 80386 and analyze basic concepts of memory management. |
| 310251 | Operating System (SP & OS) | CO6 | Recognize and differentiate various I/O Management, Disk scheduling and file management concept in multi-core OS. |

| 310252 | Embedded Systems & Internet of Things (ES & IoT) | CO1 | Acquire conceptual understanding in embedded systems. |
|--------|--|-----|--|
| | | CO2 | Analyze design methodology for embedded IoT platform. |
| | | CO3 | Solve the given societal challenge using available technologies IoT & devices for stated problem. |
| | | CO4 | Understand IoT protocols & implement secure infrastructure for IoT. |
| | | CO5 | Learn Web of Things |
| | | CO6 | Study IoT physical server & Cloud of Things. |
| | | CO1 | Analyse the problem statement (SRS) and choose proper design technique for designing web based/ desktop application. |
| | | CO2 | Design and analyse an application using UML Static modelling as fundamental tool. |
| 310253 | Software Modeling and | CO3 | Design and analyse an application using UML Dynamic modelling as fundamental tool. |
| | Design | CO4 | Decide and apply appropriate modern tool for designing and modelling |
| | | CO5 | Apply design patterns to understand reusability in OO design |
| | | CO6 | Decide and apply appropriate modern testing tool for testing web-based/desktop application |
| | | CO1 | Discuss web development process and front end tools |
| | Web Technology | CO2 | Apply JavaScript and jQuery to Validate the client side scripting |
| | | CO3 | Construct web based application using servlet and JSP for server side web technology |
| 310254 | | CO4 | Construct web based application using PHP for server side web technology |
| | | CO5 | Solve the complex problem using client and server side framework |
| | | CO6 | Identify web services and content management for solving problem |
| 310255 | Seminar & Technical Communication | 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. |

| | | CO1 | Understand installation & configuration of web |
|---------------------|--------------------|----------|--|
| | | | servers. |
| | | CO2 | Design & Implement static web application |
| | | | using client side technologies. |
| | | CO3 | Develop dynamic web based application using suitable client side and server side web |
| | Web Technology Lab | 003 | technologies |
| 310256 | | CO4 | Understand & Implement Web application |
| 310230 | | | using JavaScript & JQuery. |
| | | <u> </u> | Design web based application using PHP& JSP |
| | | CO5 | for server side web technology |
| | | | Develop solution to complex problems using |
| | | 606 | appropriate method, technologies, |
| | | CO6 | frameworks, web services and content |
| | | | management |
| | | CO1 | Understand and analyze design of two pass |
| | | | assembler. |
| | | CO2 | Understand and implement two pass macro |
| | | | preprocessor. |
| | SP & OS Lab | CO3 | Analyze and apply LEX tool to implement |
| 310257 | | | lexical analysis phase of compiler. |
| | | CO4 | Analyze and apply YACC tool to implement syntax analysis phase of compiler. |
| | | | Differentiate and evaluate various scheduling |
| | | CO5 | algorithms in operating system. |
| | | CO6 | Distinguish and evaluate different memory |
| | | | management algorithms in operating system. |
| 310258 ES & IoT Lab | ES & IoT Lab | CO1 | Understand basics of embedded system |
| | | | Design the minimum system for sensor based |
| | | CO2 | application |
| | | CO3 | Solve the problems related to primitive needs |
| | | | using IoT |
| | | CO4 | Develop full-fledged IoT application for |
| | | | distributed environment |
| | | CO5 | Understand working of IoT cloud |
| | | CO6 | Able to deploy applications on IoT Cloud |