Shanmuganathan Engineering College

(Approved by AICTE, Affiliated by Anna University Chennai)

Department

Of

Computer Science and Engineering

Regulation-2017

Course Outcomes

Semester - 1	
Course code andName	**Course Outcomes(CO)** **After completion of the course, the students will be able to**
GE8151 – Problem Solving and Python Programming	CO1: Develop algorithmic solutions to simple computational problems. CO2: Read, write and execute simple python programs. CO3: Apply control, looping structures and functions to solve problems. CO4: Represent compound data using python lists, tuples, and dictionaries. CO5: Read and Write data from/to files in python programs.

Semester - 2	
Course code andName	**Course Outcomes(CO)** **After completion of the course, the students will be able to**
CS8251 – Programming in C	CO1: Develop simple applications in C using basic constructs CO2: Design and implement applications using arrays and strings CO3: Develop and implement applications in C using functions and pointers. CO4: Develop applications in C using structures. CO5: Design applications using sequential and random access file processing.

Semester - 3	
Course code andName	**Course Outcomes(CO)** **After completion of the course, the students will be able to**
MA8351 – Discrete Mathematics	CO1: Have knowledge of the concepts needed to test the logic of a program. CO2: Be aware of the counting principles CO3: Have an understanding in identifying structures on many levels CO4: Be exposed to concepts and properties of algebraic structures such as groups, rings and fields CO5: Be aware of a class of functions which transform a finite set into another finite set which relates to input and output functions in computer science
CS8392 - Object Oriented Programming	CO1 Explain the Concepts of Object Oriented Programming & the Fundamentals of Java Program. CO2 Explain the Principles of inheritance & interfaces. CO3 Discuss the Concept of Exception handling mechanism & I/O Streams. CO4 Use the Concept of multi/threading & generics classes in java CO5 Apply the AWT & Swing concepts to build GUI application.

Semester - 4	
Course code andName	**Course Outcomes(CO)** **After completion of the course, the students will be able to**
CS8492 Database Management System	CO1: To learn creation of database and classify the user like application Programmer, sophisticated user, naïve user. CO1:To know about data maintenance efficiently & Accurately CO1:To understand the transaction states for successful data transformation CO1:To know about data retrieval process and Searching techniques. CO1:Maintenance of data in different location & single location
CS8451 Design and Analysis of Algorithms	CO1 : Design an algorithm for any problem by their own. CO2 : Solve a problem using various algorithmic design paradigms. CO3 : Design an appropriate data structures for an Algorithm. CO4 : Analyze the time and space complexity of an algorithm. CO5: Identify the limitations of an algorithm.
CS8494 – Software Engineering	CO1: Describe the purpose and facts of different software development process models with an insight into generic process framework. CO2: Identify the functional and non-functional requirements for software development by preparing IEEE Software Requirements Document. CO3: Explain software design activities using data flow diagrams and architectural diagrams. CO4: Develop a testing framework by understanding the purposes and stages of software testing and test-driven development. CO5: Explain the project management activities involved in developing a framework including planning, scheduling, risk assessment/management.
CS8491 - Computer Architecture	CO1:Explain the computer organization components, instructions and addressing modes CO2: Summarize arithmetic operations CO3: Discuss the basic of MIPS implementation and pipelining CO4: Explain the concept of parallelism and multicore processor CO5: Generalize the memory technologies and I/O systems

Semester - 5	
Course code andName	**Course Outcomes(CO)** **After completion of the course, the students will be able to**
CS8501 – Theory of Computation	CO1: Design finite automata and regular expression for any pattern CO2: Design of context free grammar and push down automaton model for the given language CO3: Translate the context free grammar into its various normal forms CO4: Solve simple computational problems by using Turing machine CO5: Explain decidability or undecidability of various problems
CS8591 - Computer Networks	CO1 Explain about the protocol layering and physical level communication. CO2 Manipulate the Data link layer and Media Access Control Protocols CO3 Demonstrate various types of routing techniques CO4 Outline the mechanisms involved in Transport Layer. CO5 Examine with different application layer protocols
OTL553 – Telecommunication Network Management	CO1: Design and analyze of fault management. CO2: Analyze the common management information protocol specifications. CO3: Design and analyze of management information model. CO4: Design the simple network management protocol. CO5: Design the various types of network management tools.

Semester - 6	
Course code andName	**Course Outcomes(CO)** **After completion of the course, the students will be able to**
CS8602 – Compiler Design	CO1: Implement different phases of a compiler and design a lexical analyzer for a sample language. CO2: Apply different parsing algorithms to develop the parsers for a given grammar. CO3: Explain the Intermediate code generation and syntax-directed translation. CO4: Describe the run-time environment and implement a simple code generator. CO5: Implement code optimization techniques.
CS8691- Artificial Intelligence	CO1: Determine and formulate a given A.I. problem that an Intelligent System must solve CO2 Use appropriate search algorithms for any AI problem CO3 Describe the role of heuristics and solve Various types of search problems. CO4 Illustrate the complications of planning and intelligent agents acting in the Real World. CO5 Design application s for NLP that use artificial intelligence
CS8651 - Internet Programming	CO1: Create website using HTML and Cascading Style Sheets. CO2: Build web pages with Client side programming using Java Script CO3: Develop server side programs using Servlets and JSP. CO4: Construct simple web pages in PHP and to representation data into XML format CO5: Develop interactive web applications using AJAX and web services.

Semester - 7	
Course code andName	**Course Outcomes(CO)** **After completion of the course, the students will be able to**
CS6703- Grid and Cloud Computing	CO1 Describe the architecture of Grid and Cloud Computing. CO2 Apply the knowledge to solve the large-scale problem in grid computing. CO3 Explore the concepts of Virtualization. CO4 Develop the web services using the grid and cloud technologies. CO5 Apply security mechanism in grid and cloud computing.
CS6702 Graph Theory and Applications	CO1: Learning mathematical definitions in graph theory. CO2: Identifying and constructing spanning trees and planar graphs. CO3: Develop and assess a mathematical proof in graphs and digraphs. CO4: Applying permutations and combinations Techniques. CO5: Develop and solve generating functions, homogeneous and non- homogeneous recurrence relations.
MG8591 - Principles of Management	CO1: Demonstrate the basics of management and its types, skills, management roles; Differentiate types of business organizations and to examine organization culture and current trends in business CO2: Outline the nature and purpose of planning, Classify the types of planning, develop objectives, policies, planning premises and decision-making process. CO3:Compare the different organization structures – formal vs informal organization, line vs staff authority, centralization vs decentralization; design job attributes such as HR management, HR planning, Recruitment, selection, training, career planning etc. CO4:Criticize individual and group behavior, compare and explain the types and theories of leadership and motivation; Explain the communication process, examine the barriers in communication and propose an effective communication method CO5: Analyze and design various control process like budgetary control, non-budgetary control, use of IT in management control, direct control and preventive control.

Semester - 8	
Course code andName	**Course Outcomes(CO)** **After completion of the course, the students will be able to**
CS8085- Social Network Analysis	CO1 Develop semantic web related Applications. CO2 Represent knowledge using ontology. CO3 To mine the behavior of the users in the Social Network. CO4 Predict human behavior in social web and related communities. CO5 Analyzing the Visualization Social Networks.