SRKR ENGINEERING COLLEGE::BHIMAVARAM
Department of Computer Science and Engineering

R17

COURSE OUTCOMES

Program Name: M.Tech (Computer Science and Technology)
Course Name: (ADVANCED DATA STRUCTURES AND ALGORITHM ANALYSIS)

COURSE	COURSE OUTCOMES	
ADVANCED DATA STRUCTURES AND ALGORITHM ANALYSIS M17 CST 1101	CST 1101.1	Could be able to write programs and class libraries given a specification
	CST 1101.2	Implement various data structures.
	CST 1101.3	Implement and analyze various sorting algorithms.
	CST 1101.4	Understand abstract data types
	CST 1101.5	Know how they are implemented in C++ programming language.

Course Name: (MATHEMATICAL FOUNDATIONS OF COMPUTER SCIENCE)

COURSE	COURSE OUTCOMES	
MATHEMATICAL FOUNDATIONS OF COMPUTER SCIENCE M17 CST 1102	CST 1102.1	Critical, logical-mathematical reasoning
	CST 1102.2	Ability to apply mathematical knowledge and logic in solving problems.
	CST 1102.3	Students develops the ability to illustrate basic terminology of functions, relations and demonstrate knowledge of their associated operations.
	CST 1102.4	Able to demonstrate practical applications and use of basic counting principles of permutations and combinations
	CST 1102.5	Able to represent and apply theory in solving computer science applications

Course Name: (COMPUTER ORGANIZATION AND ARCHITECTURE)

COURSE	COURSE OUTCOMES	
COMPUTER ORGANIZATION AND ARCHITECTURE M17 CST 1103	CST 1103.1	Apply the basic knowledge about Different Number Systems, Digital logic to the Functional components of computer.
	CST 1103.2	Students will be able to Describe the major components of a computer.
	CST 1103.3	Students will be able to classify different Computer Instructions.
	CST 1103.4	Students will be able to Describe Instruction set architecture.

CST 1103.5	Recognize the importance of peripheral devices.
CST 1103.6	Students should be able to classify Computer memories

Course Name: (DATABASE MANAGEMENT SYSTEMS)

COURSE	COURSE OUTCOMES	
DATABASE MANAGEMENT SYSTEMS M17 CST 1104	CST 1104.1	To construct SQL commands for creating database objects, populating tables, and retrieve data
	CST 1104.2	To prepare queries in formal query languages
	CST 1104.3	To explore the features of RDBMS
	CST 1104.4	To apply conceptual database design
	CST 1104.5	To apply logical database design
	CST 1104.6	To normalize the tables.
	CST 1104.7	To know different protocols of Concurrency control
	CST 1104.8	To apply Recovery techniques of DBMS
	CST 1104.9	To understand different indexing techniques

Course Name: (ADVANCED OPERATING SYSTEMS)

COURSE	COURSE OUTCOMES	
ADVANCED OPERATING SYSTEMS M17 CST 1105	CST 1105.1	To understands the concept of Distributed systems
	CST 1105.2	To understand the concepts of shared memory and process synchronization
	CST 1105.3	To handle deadlocks in distributed systems
	CST 1105.4	To understand failures and Recovery in distributed systems
	CST 1105.5	To understand File and directory structure in Distributes operating systems

Course Name: (DATA WAREHOUSING AND DATA MINING)

COURSE	COURSE OUTCOMES	
DATA WAREHOUSING AND DATA MINING M17 CST 1106	CST 1106.1	Extract knowledge using data mining techniques
	CST 1106.2	At the closing stage of the course, students will be able to analyse different operations and techniques involved in data mining.
	CST 1106.3	Evaluate Classification algorithms.
	CST 1106.4	Evaluate Clustering algorithms.
	CST 1106.5	Describe Multidimensional data model and data mining primitive.

Course Name: (CST LAB-1)

COURSE	COURSE OUTCOMES	
CST LAB-1 M17 CST 1107	CST 1107.1	Implement Linear data structures
	CST 1107.2	Non-linear data structures
	CST 1107.3	Sorting techniques Design of various projections
	CST 1107.4	Use of an operating system to develop software
	CST 1107.5	Write software systems based on multiple cooperating processes or threads
	CST 1107.6	Implement file organization techniques
	CST 1107.7	Implement file allocation strategies
	CST 1107.8	Implement process scheduling & synchronization algorithms
	CST 1107.9	Implement memory management scheme like best fit, worse fit etc

Course Name: (CST LAB-2)

COURSE	COURSE OUTCOMES	
CST LAB-2 M17 CST 1108	CST 1108.1	To create tables and views.
	CST 1108.2	To execute SQL queries.
	CST 1108.3	To modify the data and structure of tables and views.
	CST 1108.4	To apply triggers for data modification events
	CST 1108.5	To create procedures and functions using PL/SQL.
	CST 1108.6	To design a database mini-project.
	CST 1108.7	To implement a min-project

Course Name: (CYBER SECURITY)

COURSE	COURSE OUTCOMES	
CYBER SECURITY M17 CST 1201	CST 1201.1	Able to understand the basic concepts and goals of Information security.
	CST 1201.2	Able to examine different classical cryptosystems.
	CST 1201.3	Able to understand the ideas of public key cryptosystems and digital signature schemes.
	CST 1201.4	Able to examine different network security protocols.
	CST 1201.5	Able to understand access control and authentication mechanisms.
	CST 1201.6	Able to understand appropriate procedures required to secure networks.

Course Name: (COMPUTER NETWORKS)

COURSE	COURSE OUTCOMES	
COMPUTER NETWORKS M17 CST 1202	CST 1202.1	Independently understand basic computer network technology.
	CST 1202.2	Identify the different types of network topologies and protocols.
	CST 1202.3	Explain various transmission media and implement various multiplexing techniques.
	CST 1202.4	Implement various Link layer protocols like flow control and error control.
	CST 1202.5	Implement various medium access control mechanisms and protocols.
	CST 1202.6	Understand Wireless LAN protocols and architectures.
	CST 1202.7	Implement Network layer design issues like switching mechanisms, routing and traffic management.

Course Name: (BIGDATA ANALYTICS)

COURSE		COURSE OUTCOMES
BIGDATA ANALYTICS M17 CST 1203	CST 1203.1	Implement data structures and map reduce paradigm using java
	CST 1203.2	Configure Hadoop distributed file system
	CST 1203.3	Understand Hadoop I/O
	CST 1203.4	Write scripts using PIG and run them in local and distributed modes
	CST 1203.5	Apply structure to Hadoop data with HIVE

Course Name: (MACHINE LEARNING)

COURSE		COURSE OUTCOMES
MACHINE LEARNING M17 CST 1204	CST 1204.1	The student will be able understand the two main areas of Machine Learning i.e. Supervised and unsupervised learning
	CST 1204.2	To understand main models and algorithms for Regression, Classification particularly beyond binary classification.
	CST 1204.3	To understand variety of learning algorithms
	CST 1204.4	To evaluate and compare the performance of learning algorithms
	CST 1204.5	To understand support vector machine

Course Name: (SOFTWARE ENGINEERING)

COURSE		COURSE OUTCOMES
SOFTWARE ENGINEERING M17 CST 1205	CST 1205.1	Understand the nature of software and various software process models.
	CST 1205.2	Gather, analyse and Specify Software Requirements for any system.
	CST 1205.3	Design various aspects of the system like System design, Database design, User Interface design etc., by following Structural Design of Object Oriented Design
	CST 1205.4	Apply various Software testing techniques to increase the reliability of the system
	CST 1205.5	Understand various Software Quality Management Techniques
	CST 1205.6	Use various Computer Aided Software Engineering (CASE) Tools.

Course Name: (ARTIFICIAL INTELLIGENCE)

COURSE	COURSE OUTCOMES	
ARTIFICIAL INTELLIGENCE M17 CST 1206	CST 1206.1	Able to learn artificial intelligence techniques
	CST 1206.2	Understand the concept of knowledge representation
	CST 1206.3	Able to apply logic concepts to ascertain facts
	CST 1206.4	Able to apply heuristic search methods in reaching the goal
	CST 1206.5	Able to solve problems using advanced knowledge representation methods.
	CST 1206.6	Able to understand expert systems

Course Name: (COMPILER DESIGN)

COURSE	COURSE OUTCOMES	
COMPILER DESIGN M17 CST 1207	CST 1207.1	To acquire the knowledge of modern compiler & its features
	CST 1207.2	To use the knowledge of patterns, tokens & regular expressions
	CST 1207.3	To learn the new code optimization techniques to improve the performance of a program in terms of speed & space
	CST 1207.4	Able to design and implement parsers
	CST 1207.5	Able to compile simple C programs using their own designed compiler

Course Name: (EMBEDDED SYSTEMS)

COURSE	COURSE OUTCOMES	
EMBEDDED SYSTEMS M17 CST 1208	CST 1208.1	To describe the differences between general computing system and Embedded System.
	CST 1208.2	To recognize the classification of Embedded System.
	CST 1208.3	To understand various architectures of Embedded System.
	CST 1208.4	To design Real Time Embedded System using the concepts of RTOS.
	CST 1208.5	To load embedded software on Host machine.
	CST 1208.6	To test Host machine.

Course Name: (IMAGE PROCESSING)

OURSE		COURSE OUTCOMES
IMAGE PROCESSING M17 CST 1209	CST 1209.1	Demonstrated understanding of the basic concepts of two-dimensional signal acquisition, sampling, and quantization.
	CST 1209.2	Demonstrated understanding of spatial filtering techniques, including linear and nonlinear methods.
	CST 1209.3	Demonstrated understanding of 2D Fourier transform concepts, including the 2D DFT and FFT
	CST 1209.4	Uses of Fourier transform in frequency domain filtering
	CST 1209.5	Demonstrated understanding of the fundamental image enhancement algorithms such as histogram modification, contrast manipulation, and edge detection.

Course Name: (PARALLEL ALGORITHMS)

OURSE		COURSE OUTCOMES
PARALLEL ALGORITHMS M17 CST 1210	CST 1210.1	Recall fundamental concepts of parallelism
	CST 1210.2	Design and analyze the parallel algorithms for real world problems
	CST 1210.3	Implement parallel algorithms on available parallel computer systems.
	CST 1210.4	Ability to analyse parallel algorithms for sorting and searching on different parallel architectures.
	CST 1210.5	Try to utilize Multi core Architectures.

Course Name: (CLOUD COMPUTING)

OURSE		COURSE OUTCOMES
CLOUD COMPUTING M17 CST 1211	CST 1211.1	Understanding the protocols and mechanisms that support cloud computing
	CST 1211.2	Understanding the hardware necessary for cloud computing
	CST 1211.3	Understanding Cloud Resource Virtualization
	CST 1211.4	Understanding Cloud Resource Management and Scheduling
	CST 1211.5	Understand cloud security
	CST 1211.6	Develop a novel cloud application

Course Name: (MOBILE COMPUTING)

OURSE	COURSE OUTCOMES	
MOBILE COMPUTING M17CST 1212	CST 1212.1	A working understanding of the characteristics and limitations of mobile hardware devices including their user-interface modalities
	CST 1212.2	The ability to develop applications that are mobile-device specific and demonstrate current practice in mobile computing contexts.
	CST 1212.3	A comprehension and appreciation of the design and development of context-aware solutions for mobile devices.
	CST 1212.4	A student will be able to understand various protocols for mobile computing
	CST 1212.5	A student will be able to understand various platforms for mobile computing
	CST 1212.6	A student will be able to understand various routing algorithm.

Course Name: (CST LAB-3 OBJECT ORIENTED SOFTWARE ENGINEERING LAB)

OURSE	COURSE OUTCOMES	
CST LAB-3 OBJECT ORIENTED SOFTWARE ENGINEERING LAB M17 CST 1213	CST 1213.1	To familiarize with modern software engineering methods and tools
	CST 1213.2	To design complex software solutions.
	CST 1213.3	To implement complex software solutions
	CST 1213.4	To test software.
	CST 1213.5	To document software
	CST 1213.6	To work as part of a software team
	CST 1213.7	To develop significant projects

Course Name: (CST LAB-4)

OURSE	COURSE OUTCOMES	
CST LAB-4 M17 CST 1214	CST 1214.1	Able to install Virtual Box or any other equivalent software on the host OS
	CST 1214.2	Able to use tool NMAP for information gathering
	CST 1214.3	Conduct-network based attacks on networking infrastructure (Routing, Firewalls) using Wire shark
	CST 1214.4	Conduct attacks on wireless networks.
	CST 1214.5	Install and configure intrusion detection systems.
	CST 1214.6	Able to use R in various applications
	CST 1214.7	Performing data pre-processing using Weka
	CST 1214.8	Performing classification using Weka
	CST 1214.9	Performing Clustering using Weka