MANNAR THIRUMALAI NAICKER COLLEGE (Autonomous)

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

(Accredited with "A" Grade by NAAC)

Pasumalai, Madurai -625004

I & II SEMESTER - COURSE OUTCOMES

SCIENCE

M.Sc COMPUTER SCIENCE

18PCSC11 **COMPUTER SYSTEM ARCHITECTURE**

Course Outcomes:

CO1: To understand the basic structure and operation of digital computer and the hardware-software interface.

CO2: To familiarize with arithmetic and logic unit and implementation of fixed point and floating-point arithmetic operations and hierarchical memory system including cache memories and virtual memory.

CO3: To expose with different ways of communicating with I/O devices and standard I/O interfaces and the concept of pipelining.

CO4: To provide the skill about the basic architecture of the computer

18PCSC12 **WIRELESS COMMUNICATIONS AND NETWORKS**

Course Outcomes:

CO1: To be familiar with the transmission media and tools.

CO2: To study the functions of OSI layers.

CO3: To learn about IEEE standards in computer networking and also familiarized with different protocols and network components.

CO4: To provide the skill on wireless communications and networks and support for employability.

18PCSC13 **ADVANCED DATA STRUCTURES**

Course Outcomes:

CO1: To study various data structure concepts like Stacks, Queues, Linked List, Trees and Graphs.

CO2: To be familiar with utilization of data structure techniques in problem solving.

CO3: To have a comprehensive knowledge of data structures.

CO4: To provide the skill in advanced data structures.

18PCSC14 **RELATIONAL DATABASE MANAGEMENT SYSTEM**

Course Outcomes:

CO1: To study the basic concepts of database and its preliminary features.

CO2: To make the students understand the security issues in databases.

CO3: To expose the students to SQL.

CO4: To provide the skill in relational database management and supports for employability.

18PCSCP1 **ADVANCED DATA STRUCTURES – Lab**

Course Outcomes:

CO1: To develop and practice problem solving abilities.

CO2: To understand the data structure concepts practically.

CO3: To implement data structures like Stacks Queues, Linked Lists, Trees and Graphs practically.

CO4: To provide skill about data structures.

18PCSCP2 **VISUAL PROGRAMMING AND RDBMS – Lab**

Course Outcomes:

CO1: To learn write and debug programs using an IDE

CO2: To develop Application oriented projects and practice problem solving abilities using VB.

CO3: To develop and practice Database concepts and to practice the database connectivity

CO4: To provide the skill about visual programming and RDBMS, supports employability in IT industry and provides entrepreneur skill

18PCSC21 **RESOURCE MANAGEMENT TECHNIQUES**

Course Outcomes:

CO1: To learn to solve problems in linear programming and Integer programming.

CO2: To understand Network problems and queuing theory.

CO3: To be exposed to CPM and PERT.

CO4: To understand the Dulaity in linear programming.

18PCSC22 **DISTRIBUTED OPERATING SYSTEM**

Course Outcomes:

CO1: To understand the structure and functions of OS.

CO2: To study I/O management, Memory Management and File System and Distributed Systems.

CO3: To understand the system level and support required for Distributed System.

CO4: To provide the skill in distributed operating system concept and supports for employability

18PCSC23 **ADVANCED JAVA PROGRAMMING**

Course Outcomes:

CO1: To know about the basics of Java.

CO2: To learn Java Applets and AWT Components.

CO3: To work with Swings and to understand Servlet, session and cookies.

CO4: To provide the skill in Java programming and supports for employability in IT industry.

18PCSCP3 **LINUX AND SHELL PROGRAMMING –Lab**

Course Outcomes:

CO1: To Familiarize with the Linux environment.

CO2: To learn the fundamentals of shell scripting/programming.

CO3: To Familiarize with basic Linux Administration.

CO4: To provide the skill in Linux environment and supports for employability.

18PCSCP4 **ADVANCED JAVA PROGRAMMING – Lab**

Course Outcomes:

CO1: Design, write, and debug applets/programs in Java that include graphics components.

CO2: Design, write, and debug applets/programs in Java that include graphical user interfaces (GUIs) and components.

CO3: Design, write, and debug applets/programs in Java that use files and streams.

CO4: To provide the skill on development of Java programming and supports for employability in IT industry.

18PCSE21

CLOUD INFRASTRUCTURE AND SERVICES

Course Outcomes:

CO1: To analyze the components of cloud computing and its business perspective.

CO2: To evaluate the various cloud development tools.

CO3: To collaborate with real time cloud services.

CO4: To provide the skill about the cloud infrastructure and supports for employability.

18PCSE22

SOFTWARE TESTING AND QUALITY ASSURANCE

Course Outcomes:

CO1: To create awareness about the significance of software testing.

CO2: To study the basic concepts involving software testing.

CO3: To understand the quality control, quality assurance and testing issues.

CO4: To provide the skill about the software testing and supports for employability.

18PCSE23

DIGITAL IMAGE PROCESSING

Course Outcomes:

CO1: Understand basic analytical methods which are widely used in image processing.

CO2: Understand the topics such as deterministic and stochastic modeling of images; linear and nonlinear filtering; and image transformations for coding and restoration.

CO3: Understand issues and technologies which are specific to images and image process systems

CO4: To provide skill about the digital image processing and supports for employability

18PCSE24 **MOBILE COMPUTING**

Course Outcomes:

CO1: To study the concepts of mobile computing including access control.

CO2: To understand Digital mobile phone systems and wireless LAN.

CO3: To learn the wireless application protocols.

CO4: To provide the skill about the mobile computing and supports for employability

SCIENCE

III & IV SEMESTER - COURSE OUTCOMES

M.Sc., COMPUTER SCIENCE

18PCSC31 **SOFT COMPUTING**

Course Outcomes

CO1: Familiarize with soft computing concepts

CO2: Knowing the concepts of Genetic algorithm and its applications to soft computing

CO3: Getting the ideas of Fuzzy logic and neural networks

CO4: Provides the skill about soft computing concepts

18PCSC32 **ANALYSIS OF ALGORITHM**

Course Outcomes

CO1: Know the techniques for effective problem solving in computing

CO2: Using different paradigms of problem solving

CO3: Using the analysis of algorithm to show the efficiency of the algorithm

CO4: Provides the skill about analysis of algorithm

18PCSCP5 **DESIGN AND ANALYSIS OF ALGORITHMS - LAB**

Course Outcomes

CO1: Develop working knowledge of algorithms.

CO2: To implement various problems using algorithms.

CO3: Ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.

CO4: Provides the skill about analysis of algorithms

18PCSCP6 **WEB PROGRAMMING LAB**

Course Outcomes

CO1: Design and develop a Web site using text, images, links, lists, and tables for navigation and layout.

CO2: Learn how to use graphics in Web design.

CO3: Style your page using CSS, internal style sheets, and external style sheets.

CO4: To provide the skill about designing web sites and develop the employability in IT industry and provide entrepreneur skill

CO5: Provides the skill about web programming and provides employability skill

18PCSE31 **BIG DATA ANALYTICS**

Course Outcomes

CO1: Knowing the big data technologies used for storage, analysis and manipulation of data.

CO2: Recognize the key concepts of Hadoop framework, Map Reduce, Pig, Hive, and No-SQL.

CO3: Ability to understand and apply scaling up machine learning techniques and associated computing techniques and technologies.

CO4: Provides the skill about big data analytics and provides employability skill

18PCSE32 **INFORMATION SECURITY**

Course Outcomes

CO1: Know the fundamentals of information security.

CO2: Learn the basic principles of web application security.

CO3: Understand the authentication and encryption needs of an information system.

CO4: Evaluate a company's security policies and procedures and provides the skill about information security.

18PCSE33

COMPUTATIONAL INTELLIGENCE

Course Outcomes

CO1: Understand the fundamental concepts of computational intelligence.

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CO2: Demonstrate awareness of the major challenges and risks facing computational intelligence and the complexity of typical problems within the field.

13, 14, 15

CO3: Able to implement solutions to various problems in computational intelligence.

CO4: Provides the skill about computational intelligence.

18PCSE34 **DATA MINING AND WAREHOUSING**

Course Outcomes

CO1: Demonstrate an understanding of the importance of data mining and the principles of business intelligence

CO2: Organize and prepare the data needed for data mining using pre preprocessing techniques

CO3: Perform exploratory analysis of the data to be used for mining.

CO4: Implement the appropriate data mining methods like classification, clustering or Frequent Pattern mining on large data sets, Define and apply metrics to measure the performance of various data mining algorithms.

18PCSN31 **MULTIMEDIA LAB**

Course Outcomes

CO1: To familiarize with Photoshop tools.

CO2: To understand the animation techniques using Adobe Flash.

CO3: To understand the concept of text for heading or slide presentation using CorelDraw

CO4: Provides employability skill in the designing field.

18PCSC41 **INTERNET OF THINGS**

Course Outcomes

CO1: To assess the vision and Introduction of IoT.

CO2: To Understand IoT Market perspective.

CO3: To Implement Data and Knowledge Management and use of Devices in IoT Technology.

CO4: To Understand State of the Art - IoT Architecture.

CO5: To classify Real World IoT Design Constraints, Industrial Automation in IoT.

CO6: provides the skill about internet of things and provides employability skill

18PCSCP7 **PYTHON PROGRAMMING - LAB**

Course Outcomes

CO1: Write- test- and debug simple Python programs.

CO2: Implement Python programs with conditionals and loops.

CO3: Develop Python programs step-wise by defining functions and calling them.

CO4: Use Python lists- tuples- dictionaries for representing compound data.

CO5: Develop python applications using Database.

CO5: Provides the employability skill

18PCSPR1 **PROJECT WORK AND VIVA-VOCE**

Course Outcomes:

CO1: This course is to train the student in executing a project and preparing the report of work done.

CO2: The project work is to be carried for the entire semester and the report of work done is to be submitted to the college.