

MANNAR THIRUMALAI NAICKER COLLEGE (Autonomous)

(An Autonomous Institution Affiliated to Madurai Kamaraj University) (Accredited with "A" Grade by NAAC) Pasumalai, Madurai -625004

<u>V & VI SEMESTER - COURSE OUTCOMES</u> <u>SCIENCE</u>

B.Sc., INFORMATION AND TECHNOLOGY

18UITC51RELATIONAL DATABASE MANAGEMENT SYSTEMCourse Outcomes:

On the successful completion of the course, the students will be able to

CO1: Explain the structure and model of the relational database system.

CO2: Make a study of SQL and Relational database design.

CO3: Analyze different information about the organization requiring an electronic database and translate them to user requirements.

CO4: Interpret knowledge in transaction processing with relational database design.

CO5: Create and populate a RDBMS for a real life application, with constraints, keys using SQL.

18UITCP5 RELATIONAL DATABASE MANAGEMENT SYSTEMS LAB COURSE OUTCOMES:

On the successful completion of the course, students will be able to:

- **CO1** Use data manipulation language to query, update, and manage a database
- CO2 Describe the fundamental elements of relational database management systems
- CO3 Analyze the database using queries to retrieve records
- CO4 Create views to satisfy the user's changing requirements
- CO5 Apply PL/SQL for processing database

18UITC52

OPERATING SYSTEM

Course Outcomes:

On the successful completion of the course, the learners will be able to:

- **CO1:** Understand the concept of Operating system types and its structures.
- **CO2:** Apply the different process synchronization techniques to avoid Deadlocks.
- **CO3:** Analyze the various process scheduling algorithms to make effective communication between the processes.
- **CO4:** Evaluate the page replacement algorithms for efficient use of memory and File system implementation.

CO5: Build Multiprocessor systems by using process synchronization techniques and memory management Techniques.

18UITE51COMPUTER NETWORKS

Course Outcomes:

On the successful completion of the course, learners should be able to

CO1: Explain about building blocks of Computer Networks, components and transmission media.

CO2: Demonstrate the functionalities and protocols in the layers of ISO/OSI network model.

CO3: Make use of data link layer protocols in Error detection and correction

CO4: Apply suitable routing strategies for a given network and Choose appropriate access control, congestion control and congestion avoidance technique for given traffic

scenario.

CO5: Assess the functions of Application layer paradigms and protocols and Design for the real- time applications.

18UITE52

BIOMETRICS

Course Outcomes:

On Successful Completion of this Course, the Students are able to

CO1: Describe the importance of Authentication System and raise awareness of privacy issues for end users and students.

CO2: Use of different types ofbiometric system.

CO3: Differentiating the different types of biometrics and their uses.

CO4: Importance of Liveness Testing.

CO5: Apply Facial, iris biometric, voice biometric, physiological biometrics etc. for identification.

18UITE53 SYSTEM SOFTWARE

Course Outcomes:

On successful completion of the course, the learners should be able to:

- CO1 Describe the various machine architectures and explain the function of assemblers, loader and linkers, Macroprocessors, Compilers and DBMS
- CO2 Make use of the features of dependent and independent software
- CO3 Focus the algorithm and data structures of assemblers, loader, compilers
- CO4 Interpret the code using analysis and optimization techniques
- CO5 Imagine an editor that use high level source code and parse the data

18UITE54CRYPTOGRAPHY AND NETWORK SECURITYCourse Outcomes:On successful completion of the course, the learners should be able to:

CO1: Explain about Concepts of Security, types of attacks, cryptographic algorithms, various internet security protocols and basics of authentication.

CO2: Determine about various cryptographic techniques, algorithms types and digital signature.

CO3: Classify various attacks, symmetric key and asymmetric cryptographic algorithms, internet

security protocols and various user authentication mechanism.

- **CO4**: Assess the cryptographic techniques, DES and cryptographic algorithms, and different security protocols.
- **CO5**: Interpret the, cryptography techniques, symmetric and asymmetric cryptographic algorithms, security protocols, security mechanism.

18UITE55 SOFTWARE ENGINEERING

COURSE OUTCOMES

On successful completion of the course, the learners should be able to

CO1: Explain about software engineering life cycle and process model in software development.

CO2: Prepare the SRS, Design document, Project plan of a given software system.

- CO3: Apply Project Management and Requirement analysis, Principles to S/W project development.
- **CO4:** Analyze the cost estimate and problem complexity using various estimation techniques
- **CO5:** Assess SQA in software project through various testing strategies with quality management.

18UITE56 OBJECT ORIENTED ANALYSIS AND DESIGN

Course Outcomes:

On successful completion of the course, the learners should be able to

CO1: Describe the modeling concept for object oriented development in the system.

CO2: Apply the concept of domain and application analysis for designing UML Diagrams.

CO3: Classify the different classes based on the classification theory and its approaches.

CO4: Evaluate the UML models for various development stages of System using the appropriate UML notation.

CO5: Develop and explore the conceptual model into various scenarios and applications.

18UITSP5 ANDROID PROGRAMMING LAB

Course Outcomes: On successful completion of the course, the learners should be able to CO1: Understand different mobile application models/architectures and patterns.

CO2: Design and develop User Interfaces for the Android platform.

CO3: Apply layout design for list view and text view.

CO4: Create Android application for user application.

CO5: Implement a mobile development framework to the development of a mobile application.

18UITC61 .NET PROGRAMMING

Course Outcomes:

On the successful completion of the course, learners should be able to:

CO1: Represent the insights of the Internet programming

CO2: Demonstrate design and implement complete application over the web

CO3: Connect MS.NET framework developed by Microsoft.

CO4: Evaluate the usage of recent platforms like C#, XML, and ASP.Net which is used in the development of web applications

CO5: Defend the deployment and the security in the .NET framework.

18UITCP7 .NET PROGRAMMING LAB

Course Outcomes:

On the successful completion of the course, students will be able to:

CO1: How to use C# and Visual Studio 2010 to build .NET Framework applications

CO2: Explain the purpose of the .NET Framework.

CO3: Apply the syntax of basic C# programming constructs.

CO4: Modify the given type of value to another type using boxing and unboxing techniques.

CO5: Conclude and call methods in a C# application using catch, handle and throw exceptions.

18UITPR1 PROJECT AND VIVA – VOCE

Course Outcomes

CO1: The Project Lab is one that involves practical work for understanding and solving problems in the field of computing.

CO2: Students will select individually commercial or Technical Project based onApplication Development Technologies.

CO3: With the known technologies they can develop the software

18UITE61E- COMMERCECourse Outcomes:

On the successful completion of the course, learners should be able to:

CO1: Understand the basic concepts of E-Commerce and its uses.

CO2: Analyzing network infrastructure and security systems.

CO3: Analyze the impact of E-Commerce on business models and strategy.

CO4: Assess electronic payment systems,

CO5: Distinguish various E-Commerce trading relationships.

MOBILE COMPUTING

Course Outcomes:

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On Successful Completion of this Course, the learners should be able to:

- CO1 Explain the principles and theories of mobile computing technologies.
- CO2 Describe infrastructures and technologies of mobile computing.
- CO3 Use of Wireless application Protocol (WAP) in mobile computing .
- CO4 Importance of GSM Architecture and GPRS in mobile computing.
- CO5 Apply CDMA and 3Generation networks.

ARTIFICIAL INTELLIGENCE

Course Outcomes:

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On Successful Completion of this Course, the learners are able to

- CO1 Describe the concept of Artificial Intelligence.
- CO2 Analyze the search techniques and knowledge representation.
- **CO3** Demonstrate knowledge of the building blocks of AI as presented in terms of intelligent agents.
- **CO4** Acquire knowledge to solve problems in areas ranging from optimization Problems to text analytics.
- CO5 Learn the purpose of heuristic search techniques.
- **CO6** Use different machine learning techniques to design AI machine and enveloping applications for real world problems.

18UITE64

DATA MINING AND WAREHOUSING

Course Outcomes:

On successful completion of this course, the learners should be able to:

- CO1: Visualize data mining principles and techniques
- **CO2:** Discover the knowledge imbibed in the high dimensional system.
- CO3: Illustrate algorithms for finding the hidden interesting patterns in data.

CO4: Determine the overview of developing areas – Web mining, Text mining and Big Data

Mining Tools

CO5: Analyze the concepts of Data warehousing Architecture and implementation.

CO6 Develop research interest towards advances in data mining.

18UITE65

CLOUD COMPUTING

Course Outcomes:

On successful completion of this course, the learners should be able to:

CO1: Define Cloud Computing model and classify its types.

CO2: Apply virtualization techniques in cloud environment to construct porting applications.

CO3: Analyze the various services in the cloud computing to connect the user into network.

CO4: Evaluate the various security attacks to provide the secure data in the cloud environment.

CO5: Build the customize applications in the clouds by using cloud APIs.

18UITE66

INTERNET OF THINGS

Course Outcomes

On successful completion of this course, the learners should be able to:

CO1: Describe and explain about IoT, Physical and Logical design of IoT, IoT levels, domain Specific IoTs

CO2: Determine physical and logical design of IoT

CO3: Compare Physical and Logical IoT, different levels and domain specific IoTs

CO4: Conclude the importance of IoT, Physical and Logical IoT, IoT levels, domain specific IoTs

CO5: Design and develop Physical and Logical IoT, IoT deployment templates

18UITS61

NUMERICAL APTITUDE

Course Outcomes

On successful completion of this course, the learners should be able to:

CO1: Understanding the numbersystem, logarithms, linear equations, Permutations and Combinations.

CO2: Practicing the number system, techniques for fractions and to be familiar with arithmetic ability

CO3: Manipulation on modern Mathematics and reasoning.

CO4: Interpretation of arithmetic and algebraic functions.

CO5: Application and Evaluation of numerical ability.