



**MACET**  
**MARTHANDAM COLLEGE OF**  
**ENGINEERING AND TECHNOLOGY**

**DEPARTMENT OF INFORMATION TECHNOLOGY**

# **COURSE OUTCOMES**



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### DEPARTMENT OF INFORMATION TECHNOLOGY

S.No	Sem	Course Code	Course Name
1.	I	HS3152	Professional English I
2	I	MA3151	Matrices and Calculus
3	I	PH3151	Engineering Physics
4	I	CY3151	Engineering Chemistry
5	I	GE3151	Problem Solving and Python Programming
6	I	GE3171	Problem Solving and Python Programming Laboratory
7	I	BS3171	Physics and Chemistry Laboratory (Physics)
8	I	BS3171	Physics and Chemistry Laboratory (Chemistry)
9	I	GE3172	English Laboratory
10	II	HS3252	Professional English II
11	II	MA3251	Statistics and Numerical Methods
12	II	PH3256	Physics for Information Science
13	II	BE3251	Basic Electrical and Electronics Engineering
14	II	GE3251	Engineering Graphics
15	II	CS3251	Programming in C
16	II	GE3271	Engineering Practices Laboratory
17	II	CS3271	Programming in C Laboratory
18	II	GE3272	Communication Laboratory
19	III	MA3354	Discrete Mathematics
20	III	CS3351	Digital Principles and Computer Organization
21	III	CS3352	Foundations of Data Science
22	III	CD3291	DataStructures and Algorithms
23	III	CS3391	Object Oriented Programming
24	III	CD3281	Data Structures and Algorithms Laboratory
25	III	CS3381	Object Oriented Programming Laboratory



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26	III	CS3361	Data Science Laboratory
27	IV	CS3452	Theory of Computation
28	IV	CS3491	Artificial Intelligence and Machine Learning
29	IV	CS3492	Database Management Systems
30	IV	IT3401	Web Essentials
31	IV	CS3451	Introduction to Operating Systems
32	IV	GE3451	Environmental Sciences and Sustainability
33	IV	CS3461	Operating Systems Laboratory
34	IV	CS3481	Database Management Systems Laboratory
35	V	CS3591	Computer Networks
36	V	IT3501	Full Stack Web Development
37	V	CS3551	Distributed Computing
38	V	CS3691	Embedded System and IOT
39	V	CCS366	Software Testing and Automation
40	V	CCS335	Cloud Computing
41	V	MX3084	Disaster Risk Reduction And Management
42	V	IT3511	Full Stack Web Development Laboratory
43	VI	CCS356	Object Oriented Software Engineering
44	VI	OEE351	Renewable Energy System
45	VI	CCS370	UI and UX Design
46	VI	CCS354	Network Security
47	VI	CCS352	Multimedia and Animation
48	VI	MX3089	Industrial Safety
49	VI	IT3681	Mobile Applications Development Laboratory



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**I SEMESTER**



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## MARTHANDAM COLLEGE OF ENGINEERING AND TECHNOLOGY

### DEPARTMENT OF INFORMATION TECHNOLOGY

**Course Code & Course Name: HS3152– Professional English I**

#### COURSE OUTCOMES (COs)

##### List of Course Outcomes

<b>CO1</b>	To use appropriate words in a professional context
<b>CO2</b>	To gain understanding of basic grammatic structures and use them in right context.
<b>CO3</b>	To read and infer the denotative and connotative meanings of technical texts
<b>CO4</b>	To write definitions, descriptions, narrations and essays on various topics
<b>CO5</b>	To interpret non verbal texts

**Course Code & Course Name: MA3151- Matrices and Calculus**

#### COURSE OUTCOMES (COs)

##### List of Course Outcomes

<b>CO1</b>	Use the matrix algebra methods for solving practical problems.
<b>CO2</b>	Apply differential calculus tools in solving various application problems.
<b>CO3</b>	Able to use differential calculus ideas on several variable functions.
<b>CO4</b>	Apply different methods of integration in solving practical problems.
<b>CO5</b>	Apply multiple integral ideas in solving areas, volumes and other practical problems.

**Course Code & Course Name: PH3151-ENGINEERING PHYSICS**

#### COURSE OUTCOMES (COs)

##### List of Course Outcomes

<b>CO1</b>	Understand the importance of mechanics.
<b>CO2</b>	Express their knowledge in electromagnetic waves.
<b>CO3</b>	Demonstrate a strong foundational knowledge in oscillations, optics and lasers.
<b>CO4</b>	Understand the importance of quantum physics.
<b>CO5</b>	Comprehend and apply quantum mechanical principles towards the formation of energy bands.



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**Course Code & Course Name: CY3151 Engineering Chemistry**

#### COURSE OUTCOMES (COs)

##### List of Course Outcomes

<b>CO1</b>	To infer the quality of water from quality parameter data and propose suitable treatment methodologies to treat water.
<b>CO2</b>	To identify and apply basic concepts of nanoscience and nanotechnology in designing the synthesis of nanomaterials for engineering and technology applications.
<b>CO3</b>	To apply the knowledge of phase rule and composites for material selection requirements.
<b>CO4</b>	To recommend suitable fuels for engineering processes and applications.
<b>CO5</b>	To recognize different forms of energy resources and apply them for suitable applications in energy sectors.

**Course Code & Course Name: GE3151 Problem Solving and Python Programming**

#### COURSE OUTCOMES (COs)

##### List of Course Outcomes

<b>CO1</b>	CO1: Develop algorithmic solutions to simple computational problems.
<b>CO2</b>	CO2: Develop and execute simple Python programs.
<b>CO3</b>	CO3: Write simple Python programs using conditionals and loops for solving problems.
<b>CO4</b>	CO4: Decompose a Python program into functions.
<b>CO5</b>	CO5: Represent compound data using Python lists, tuples, dictionaries etc.

**Course Code & Course Name: GE3171 Problem Solving and Python Programming Laboratory**

#### COURSE OUTCOMES (COs)

##### List of Course Outcomes

<b>CO1</b>	Develop algorithmic solutions to simple computational problems
<b>CO2</b>	Develop and execute simple Python programs.
<b>CO3</b>	Implement programs in Python using conditionals and loops for solving problems.



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CO4	Deploy functions to decompose a Python program.
CO5	Process compound data using Python data structures.

**Course Code & Course Name: BS3171&Physics and Chemistry Laboratory (Physics)**

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

CO1	Understand the functioning of various physics laboratory equipment.
CO2	Use graphical models to analyze laboratory data.
CO3	Use mathematical models as a medium for quantitative reasoning and describing physical reality.
CO4	Access, process and analyze scientific information.
CO5	Solve problems individually and collaboratively.

**Course Code & Course Name: BS3171&Physics and Chemistry Laboratory (Chemistry)**

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

CO1	To analyse the quality of water samples with respect to their acidity, alkalinity, hardness and DO
CO2	To determine the amount of metal ions through volumetric and spectroscopic techniques
CO3	To analyse and determine the composition of alloys.
CO4	To learn simple method of synthesis of nanoparticles
CO5	To quantitatively analyse the impurities in solution by electroanalytical techniques

**Course Code & Course Name: GE3172- English Laboratory**

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

CO1	To listen to and comprehend general as well as complex academic information
CO2	To listen to and understand different points of view in a discussion
CO3	To speak fluently and accurately in formal and informal communicative contexts



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CO4	To describe products and processes and explain their uses and purposes clearly and accurately.
CO5	To express their opinions effectively in both formal and informal discussions





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# **II SEMESTER**



**Course Code & Course Name: HS3252 – Professional English II**

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	To compare and contrast products and ideas in technical texts.
<b>CO2</b>	To identify and report cause and effects in events, industrial processes through technical texts
<b>CO3</b>	To analyse problems in order to arrive at feasible solutions and communicate them in the written format.
<b>CO4</b>	To present their ideas and opinions in a planned and logical manner
<b>CO5</b>	To draft effective resumes in the context of job search.

**Course Code & Course Name: MA3251-Statistics and Numerical Methods**

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Apply the concept of testing of hypothesis for small and large samples in real life problems.
<b>CO2</b>	Apply the basic concepts of classifications of design of experiments in the field of agriculture.
<b>CO3</b>	Appreciate the numerical techniques of interpolation in various intervals and apply the numerical techniques of differentiation and integration for engineering problems.
<b>CO4</b>	Understand the knowledge of various techniques and methods for solving first and second order ordinary differential equations.
<b>CO5</b>	Solve the partial and ordinary differential equations with initial and boundary conditions by using certain techniques with engineering applications.

**Course Code & Course Name: PH3256 – Physics for Information Science**

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Gain knowledge on classical and quantum electron theories, and energy band structures
<b>CO2</b>	acquire knowledge on basics of semiconductor physics and its applications in various devices



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<b>CO3</b>	get knowledge on magnetic properties of materials and their applications in data storage,
<b>CO4</b>	have the necessary understanding on the functioning of optical materials for optoelectronics
<b>CO5</b>	understand the basics of quantum structures and their applications and basics of quantum computing

**Course Code & Course Name: BE3251 – Basic Electrical and Electronics Engineering**

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Compute the electric circuit parameters for simple problems
<b>CO2</b>	Explain the working principle and applications of electrical machines
<b>CO3</b>	Analyze the characteristics of analog electronic devices
<b>CO4</b>	Explain the basic concepts of digital electronics
<b>CO5</b>	Explain the operating principles of measuring instruments

**Course Code & Course Name:GE3251Engineering Graphics**

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Use BIS conventions and specifications for engineering drawing.
<b>CO2</b>	Construct the conic curves, involutes and cycloid.
<b>CO3</b>	Solve practical problems involving projection of lines.
<b>CO4</b>	Draw the orthographic, isometric and perspective projections of simple solids.
<b>CO5</b>	Draw the development of simple solids.

**Course Code & Course Name: CS3251 Programming in C**

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Demonstrate knowledge on C Programming constructs
<b>CO2</b>	Develop simple applications in C using basic constructs



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<b>CO3</b>	Design and implement applications using arrays and strings
<b>CO4</b>	Develop and implement modular applications in C using functions.
<b>CO5</b>	Develop applications in C using structures and pointers.

**Course Code & Course Name: GE3271 Engineering Practices Laboratory**

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Draw pipe line plan; lay and connect various pipe fittings used in common household plumbing work; Saw; plan; make joints in wood materials used in common household wood work.
<b>CO2</b>	Wire various electrical joints in common household electrical wire work.
<b>CO3</b>	Weld various joints in steel plates using arc welding work; Machine various simple processes like turning, drilling, tapping in parts;
<b>CO4</b>	Assemble simple mechanical assembly of common household equipment, Make a tray out of metal sheet using sheet metal work.
<b>CO5</b>	Solder and test simple electronic circuits; Assemble and test simple electronic components on PCB.

**Course Code & Course Name: CS3271 Programming in C Laboratory**

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	CO1: Demonstrate knowledge on C programming constructs.
<b>CO2</b>	CO2: Develop programs in C using basic constructs.
<b>CO3</b>	CO3: Develop programs in C using arrays.
<b>CO4</b>	CO4: Develop applications in C using strings, pointers, functions.
<b>CO5</b>	CO5: Develop applications in C using structures.



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Course Code & Course Name: GE3272- Communication Laboratory

#### COURSE OUTCOMES (COs)

##### List of Course Outcomes

<b>CO1</b>	Speak effectively in group discussions held in a formal/semi formal contexts.
<b>CO2</b>	Discuss, analyse and present concepts and problems from various perspectives to arrive at suitable solutions
<b>CO3</b>	Write emails, letters and effective job applications.
<b>CO4</b>	Write critical reports to convey data and information with clarity and precision
<b>CO5</b>	Give appropriate instructions and recommendations for safe execution of tasks



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# **III SEMESTER**



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**Course Code & Course Name:** MA3354 Discrete Mathematics

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Have knowledge of the concepts needed to test the logic of a program.
<b>CO2</b>	Have an understanding in identifying structures on many levels.
<b>CO3</b>	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.
<b>CO4</b>	Be aware of the counting principles.
<b>CO5</b>	Be exposed to concepts and properties of algebraic structures such as groups, rings and fields

**Course Code & Course Name:** CS3351 Digital Principles and Computer Organization

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Design various combinational digital circuits using logic gates
<b>CO2</b>	Design sequential circuits and analyze the design procedures
<b>CO3</b>	State the fundamentals of computer systems and analyze the execution of an instruction
<b>CO4</b>	Analyze different types of control design and identify hazards
<b>CO5</b>	Identify the characteristics of various memory systems and I/O communication

**Course Code & Course Name:** CS3352 Foundations of Data Science

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Define the data science process
<b>CO2</b>	Understand different types of data description for data science process
<b>CO3</b>	Gain knowledge on relationships between data
<b>CO4</b>	Use the Python Libraries for Data Wrangling
<b>CO5</b>	Apply visualization Libraries in Python to interpret and explore data



**Course Code & Course Name:** CD3291 DataStructures and Algorithms

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	:Explain abstract data types
<b>CO2</b>	Design, implement, and analyze linear data structures, such as lists, queues, and stacks, according to the needs of different applications
<b>CO3</b>	Design an efficient tree structures to meet requirements such as searching, indexing, and sorting
<b>CO4</b>	Implement, and analyze efficient tree structures to meet requirements such as searching, indexing, and sorting
<b>CO5</b>	Model problems as graph problems and implement efficient graph algorithms to solve them

**Course Code & Course Name:** CS3391 Object Oriented Programming

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Apply the concepts of classes and objects to solve simple problems
<b>CO2</b>	Develop programs using inheritance, packages and interfaces
<b>CO3</b>	Make use of exception handling mechanisms and multithreaded model to solve real worldproblems
<b>CO4</b>	Build Java applications with I/O packages, string classes, Collections and generics concepts
<b>CO5</b>	Integrate the concepts of event handling and JavaFX components and controls for developingGUI based applications

**Course Code & Course Name:** CD3281 Data Structures and Algorithms Laboratory

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	:Implement ADTs as Python classes
<b>CO2</b>	Design, implement, and analyze linear data structures, such as lists, queues, and stacks,





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	according to the needs of different applications
<b>CO3</b>	Design an efficient tree structures to meet requirements such as searching, indexing, and sorting
<b>CO4</b>	Implement, and analyze efficient tree structures to meet requirements such as searching, indexing, and sorting
<b>CO5</b>	Model problems as graph problems and implement efficient graph algorithms to solve them

**Course Code & Course Name:** CS3381 Object Oriented Programming Laboratory

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Design and develop java programs using object oriented programming concepts
<b>CO2</b>	Develop simple applications using object oriented concepts such as package, exceptions
<b>CO3</b>	Implement multithreading, and generics concepts
<b>CO4</b>	Create GUIs and event driven programming applications for real world problems
<b>CO5</b>	Implement and deploy web applications using Java

**Course Code & Course Name:** CS3361 Data Science Laboratory

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Make use of the python libraries for data science
<b>CO2</b>	Make use of the basic Statistical and Probability measures for data science.
<b>CO3</b>	Perform descriptive analytics on the benchmark data sets.
<b>CO4</b>	Perform correlation and regression analytics on standard data sets
<b>CO5</b>	Present and interpret data using visualization packages in Python.



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# **IV SEMESTER**



Course Code & Course Name : CS3452 Theory of Computation

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Construct automata theory using Finite Automata
<b>CO2</b>	Write regular expressions for any pattern
<b>CO3</b>	Design context free grammar and Pushdown Automata
<b>CO4</b>	Design Turing machine for computational functions
<b>CO5</b>	Differentiate between decidable and undecidable problems

Course Code & Course Name : CS3491 Artificial Intelligence and Machine Learning

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Use appropriate search algorithms for problem solving
<b>CO2</b>	Apply reasoning under uncertainty
<b>CO3</b>	Build supervised learning models
<b>CO4</b>	Build ensembling and unsupervised models
<b>CO5</b>	Build deep learning neural network models

Course Code & Course Name : CS3492 Database Management Systems

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Construct SQL Queries using relational algebra
<b>CO2</b>	Design database using ER model and normalize the database
<b>CO3</b>	Construct queries to handle transaction processing and maintain consistency of the database



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<b>CO4</b>	Compare and contrast various indexing strategies and apply the knowledge to tune the performance of the database
<b>CO5</b>	Appraise how advanced databases differ from Relational Databases and find a suitable database for the given requirement.

Course Code & Course Name : IT3401 Web Essentials

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Apply JavaScript, HTML and CSS effectively to create interactive and dynamic websites.
<b>CO2</b>	Create simple PHP scripts
<b>CO3</b>	Design and deploy simple web-applications.
<b>CO4</b>	Create simple database applications.
<b>CO5</b>	Handle multimedia components

Course Code & Course Name : CS3451 Introduction to Operating Systems

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Analyze various scheduling algorithms and process synchronization.
<b>CO2</b>	Explain deadlock prevention and avoidance algorithms.
<b>CO3</b>	Compare and contrast various memory management schemes.
<b>CO4</b>	Explain the functionality of file systems, I/O systems, and Virtualization
<b>CO5</b>	Compare iOS and Android Operating Systems.

Course Code & Course Name : GE3451 Environmental Sciences and Sustainability

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	To recognize and understand the functions of environment, ecosystems and
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	biodiversity and their conservation.
<b>CO2</b>	To identify the causes, effects of environmental pollution and natural disasters and contribute to the preventive measures in the society.
<b>CO3</b>	To identify and apply the understanding of renewable and non-renewable resources and contribute to the sustainable measures to preserve them for future generations.
<b>CO4</b>	To recognize the different goals of sustainable development and apply them for suitable technological advancement and societal development.
<b>CO5</b>	To demonstrate the knowledge of sustainability practices and identify green materials, energy cycles and the role of sustainable urbanization.

Course Code & Course Name : CS3461 Operating Systems Laboratory

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Define and implement UNIX Commands.
<b>CO2</b>	Compare the performance of various CPU Scheduling Algorithms.
<b>CO3</b>	Compare and contrast various Memory Allocation Methods.
<b>CO4</b>	Define File Organization and File Allocation Strategies.
<b>CO5</b>	Implement various Disk Scheduling Algorithms.

Course Code & Course Name : CS3481 Database Management Systems Laboratory

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Create databases with different types of key constraints.
<b>CO2</b>	Construct simple and complex SQL queries using DML and DCL commands.
<b>CO3</b>	Use advanced features such as stored procedures and triggers and incorporate in GUI based application development.
<b>CO4</b>	Create an XML database and validate with meta-data (XML schema).



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CO5	Create and manipulate data using NOSQL database.
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**V SEMESTER**



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Course Code & Course Name : CS3591 Computer Networks

#### COURSE OUTCOMES (COs)

##### List of Course Outcomes

CO1	Explain the basic layers and its functions in computer networks
CO2	Understand the basics of how data flows from one node to another
CO3	Analyze routing algorithms
CO4	Describe protocols for various functions in the network
CO5	Analyze the working of various application layer protocols.

Course Code & Course Name : IT3501 Full Stack Web Development

#### COURSE OUTCOMES (COs)

##### List of Course Outcomes

CO1	Understand the various stacks available for web application development
CO2	Use Node.js for application development
CO3	Develop applications with MongoDB
CO4	Use the features of Angular and Express
CO5	Develop React applications

Course Code & Course Name : CS3551 Distributed Computing

#### COURSE OUTCOMES (COs)

##### List of Course Outcomes

CO1	Explain the foundations of distributed systems
CO2	Solve synchronization and state consistency problems
CO3	Use resource sharing techniques in distributed systems
CO4	Apply working model of consensus and reliability of distributed systems
CO5	Explain the fundamentals of cloud computing





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Course Code & Course Name : CS3691 Embedded System and IOT

#### COURSE OUTCOMES (COs)

##### List of Course Outcomes

CO1	Explain the architecture of embedded processors.
CO2	Write embedded C programs.
CO3	Design simple embedded applications
CO4	Compare the communication models in IOT
CO5	Design IoT applications using Arduino/Raspberry Pi /open platform.

Course Code & Course Name : CCS366 Software Testing and Automation

#### COURSE OUTCOMES (COs)

##### List of Course Outcomes

CO1	Understand the basic concepts of software testing and the need for software testing
CO2	Design Test planning and different activities involved in test planning
CO3	Design effective test cases that can uncover critical defects in the application
CO4	Carry out advanced types of testing
CO5	Automate the software testing using Selenium and TestNG

Course Code & Course Name : CCS335 Cloud Computing

#### COURSE OUTCOMES (COs)

##### List of Course Outcomes

CO1	Understand the design challenges in the cloud.
CO2	Apply the concept of virtualization and its types.
CO3	Experiment with virtualization of hardware resources and Docker
CO4	Develop and deploy services on the cloud and set up a cloud environment
CO5	Explain security challenges in the cloud environment.



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**Course Code & Course Name : MX3084 DISASTER RISK REDUCTION AND  
MANAGEMENT**

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	To impart knowledge on the concepts of Disaster, Vulnerability and Disaster Risk reduction
<b>CO2</b>	To enhance understanding on Hazards, Vulnerability and Disaster Risk Assessment prevention and risk reduction
<b>CO3</b>	To develop disaster response skills by adopting relevant tools and technology
<b>CO4</b>	Enhance awareness of institutional processes for Disaster response in the country
<b>CO5</b>	Develop rudimentary ability to respond to their surroundings with potential Disaster response in areas where they live, with due sensitivity

**Course Code & Course Name : IT3511 Full Stack Web Development Laboratory**

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Design full stack applications with clear understanding of user interface, business logic and data storage
<b>CO2</b>	Design and develop user interface screens
<b>CO3</b>	Implement the functional requirements using appropriate tool
<b>CO4</b>	Design and develop database based on the requirements
<b>CO5</b>	Integrate all the necessary components of the application



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**VI SEMESTER**



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### DEPARTMENT OF INFORMATION TECHNOLOGY

Course Code & Course Name : CCS356 Object Oriented Software Engineering

#### COURSE OUTCOMES (COs)

##### List of Course Outcomes

CO1	Compare various Software Development Lifecycle Models
CO2	Evaluate project management approaches as well as cost and schedule estimation strategies
CO3	Perform formal analysis on specifications
CO4	Use UML diagrams for analysis and design
CO5	Architect and design using architectural styles and design patterns, and test the system

Course Code & Course Name : OEE351 Renewable Energy System

#### COURSE OUTCOMES (COs)

##### List of Course Outcomes

CO1	Attained knowledge about various renewable energy technologies
CO2	Ability to understand and design a PV system.
CO3	Understand the concept of various wind energy system.
CO4	Gained knowledge about various possible hybrid energy system
CO5	Attained knowledge about various application of renewable energy technologies

Course Code & Course Name CCS370- UI and UX Design

#### COURSE OUTCOMES (COs)

##### List of Course Outcomes

CO1	Build UI for user Applications
CO2	Evaluate UX design of any product or application.
CO3	:Demonstrate UX Skills in product development.
CO4	Implement Sketching principles
CO5	Create Wireframe and Prototype



Course Code & Course Name CCS354- Network Security

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Classify the encryption techniques
<b>CO2</b>	Illustrate the key management technique and authentication
<b>CO3</b>	Evaluate the security techniques applied to network and transport layer
<b>CO4</b>	Discuss the application layer security standards.
<b>CO5</b>	Apply security practices for real time applications.

Course Code & Course Name CCS352- Multimedia and Animation

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Get the bigger picture of the context of Multimedia and its applications
<b>CO2</b>	Use the different types of media elements of different formats on content pages
<b>CO3</b>	Author 2D and 3D creative and interactive presentations for different target multimedia applications
<b>CO4</b>	Use different standard animation techniques for 2D, 2 1/2 D, 3D applications.
<b>CO5</b>	Understand the complexity of multimedia applications in the context of cloud, security, bigdata streaming, social networking, CBIR etc.,

Course Code & Course Name MX3089- Industrial Safety

**COURSE OUTCOMES (COs)**

**List of Course Outcomes**

<b>CO1</b>	Understand the basic concept of safety
<b>CO2</b>	Obtain knowledge of Statutory Regulations and standards.
<b>CO3</b>	Know about the safety Activities of the Working Place
<b>CO4</b>	Analyze on the impact of Occupational Exposures and their Remedies
<b>CO5</b>	Obtain knowledge of Risk Assessment Techniques.



# MACET

## MARTHANDAM COLLEGE OF ENGINEERING AND TECHNOLOGY

### DEPARTMENT OF INFORMATION TECHNOLOGY

Course Code & Course Name IT3681- Mobile Applications Development Laboratory

#### COURSE OUTCOMES (COs)

##### List of Course Outcomes

CO1	Design and build simple mobile applications supporting multiple platforms.
CO2	Apply various programming techniques and patterns to build mobile applications.
CO3	Build real-time mobile applications for society/environment
CO4	Build gaming and multimedia based mobile applications
CO5	Build gaming and multimedia based mobile applications