



ST. JOSEPH'S DEGREE & PG COLLEGE

(Autonomous), Affiliated to Osmania University
Re-accredited by NAAC (3rd Cycle) with B++ grade
King Koti Road, Hyderabad

Department of Computer Science

Course Outcomes

B.Sc. (MPCs/MECs/MSCs)

I Year / I Semester

(DSC)

Principles of Programming using C & C++
(W.e.f 2024-25)

Course Code: PPCC-1-CS-22T

Course Objectives:

The course is designed for providing knowledge of C & C++. Students will be able to develop logics which will help them to create programs, applications.

Course Outcomes:	Cognitive Level
At the end of the course the student will be able to	
CO 1: “Identify and Apply” levels, emphasizing comprehension and practical application of structured programming concepts, control statements, and looping constructs.	BL4
CO 2: Analysis of concepts related to arrays, pointers, functions, and user-defined data types in C programming.	BL4
CO 3: Acquire knowledge on Object Oriented Programming Concepts and design programs using Constructors, friend functions and templates and File I/O.	BL4
CO 4: Develop Software Applications using the concepts like Polymorphism, Inheritance and Exceptional Handling mechanisms.	BL4

B.Sc. (MPCs/MECs/MSCs)
I Year / II Semester
(DSC)
Data Structures
(W.e.f 2022-23)

Course Code: DS-2-CS-22T

Course Objective:

To impart students with knowledge on linear and non-linear data structures, sorting, searching, and hashing techniques and file processing.

Course Outcomes:	Cognitive Level
At the end of the course the student will be able to	
CO 1: Develop logical ability to design and implement abstract data types for linear data structures like Stacks and Queues.	BL4
CO 2: Construct and implement linked list Graphs and Graph Search Methods	BL4
CO 3: Develop programs on Binary Search tree, Spanning Tree, B Tree and B+ Tree.	BL4
CO 4: Develop programs on various Hashing, Searching and Sorting techniques.	BL4

B.Sc. (MPCs/MECs/MSCs)
II Year/ III Semester
Relational Database Management System
(DSC)
(w.e.f: 2023-24)

Course Code: RDBMS-3-CS-22T

Course Objectives:

To impart the students with the knowledge on the database management systems, design models, Normalization, Transaction management and Oracle in Creation and maintenance of databases.

Course Outcomes:	Cognitive Level
At the end of the course the student will be able to	
CO 1: Identify and evaluate the database environment in an organization.	BL4
CO 2: Construct and Design the ER Model utilized for developing a database and need of Normalization.	BL4
CO 3: Identify the need of Transaction Management, Design and Develop database Queries using SQL.	BL4
CO 4: Special Purpose Databases & Frameworks	BL4

**B.Sc. (MECs/MPCs/MSCs)
II Year / IV Semester
Java Programming
DSC
(W.e.f. 2023-2024)**

Course Code: JP-04-CS-22T

Course Objectives:

To impart the students with the knowledge on Core JAVA and JSP.

<u>Course Outcomes:</u>	Cognitive Level
At the end of the course the student will be able to	
CO1: Identify the features of OOPS in Java.	BL4
CO2: Construct and Implement programs using packages, Exception Handling and multithreading.	BL4
CO 3: Identify the concepts of AWT, Event Handling, Swings and develop programs.	BL4
CO 4: Apply the knowledge for designing, implementation, testing and debugging of web based applications using JSP & JDBC.	BL4

**B.Sc. (MPCs/MECs/MSCs)
III Year / V Semester
Cyber Security Essentials (SEC)
(W.e.f 2024-2025)**

Course Code: CSE-5-CS-22T

Course Objectives:

To understand the Overview of Cyber Security, Detection, Prevention and Cyber Laws.

Course Outcomes: At the end of the course the student will be able to	Cognitive Level
CO 1: Identify the Cyber security issues and challenges and Classify cyber-crime classifications. To analyze case studies, legal remedies and report the crimes through available platforms and procedures	BL4
CO2: Appreciate various privacy and security concerns on online Social media and understand the reporting procedure and Identify the basic security aspects related to Computer and Mobiles. Students will be able to use basic tools and technologies to protect their devices	BL4

B.Sc.(MPCs/MECs/MSCs)
III Year / V Semester
DSE-A
WEB TECHNOLOGIES
(w.e.f: 2024-2025)

Course Code : WT-5-CS-22T

Course Objectives:

To impart knowledge on various Web Technologies used for developing applications and hosting websites through framework.

Course Outcomes:	Cognitive Level
At the end of the course the student will be able to	
CO1: Develop skills in HTML and structure web pages by using various HTML Elements.	BL3
CO2: Acquire skills in applying CSS to control the layout, presentation, and visual styling of HTML elements.	BL2
CO 3: Apply the concepts learned in the course to real-world projects, developing practical skills and building a portfolio of responsive websites using Bootstrap.	BL5
CO 4: Apply the Concepts to perform client-side form validation and handle form submissions using JavaScript to enhance user experience and improve data integrity in web forms.	BL3

B.Sc. (MPCs/MECs/MSCs)
III year / V- Semester
DSE-B
Programming in Python
(W.e.f - 2024-2025)

Course Code: PP-1-CS-22T

Course Objectives:

To impart students with the knowledge of Python Programming.

Course Outcomes:	Cognitive Level
CO 1: To design and execute Python scripts using basic data structures	BL4
CO 2: To develop programs using Functions and Files.	BL4
CO 3: To design and execute Python scripts with OOPs concepts, Regular Expressions and Modules	BL4
CO 4: To develop real time applications Using packages GUI Programming.	BL4

B.Sc.(MPCs/MECs/MSCs)
III year/V- Semester
(DSE-C)
Computer Networks and Cloud Computing.
(W.e.f-2024-2025)

Course Code: CNCC-5-CS-22T

Course Objectives:

1. Build an understanding of Network Infrastructure, Network models, Protocols, LAN and WAN Technologies.
2. To implement basics, techniques and tools for Cloud Computing. To understand any kind of heterogeneous resources over a network using open standards.

Course Outcomes	Cognitive Level
CO 1: Identify the various elements of networks and differentiate Network Models	BL1
CO 2: Identify the functions of Network layers. Acquire knowledge on TCP/IP suite and Protocol of Application layer.	BL2
CO 3: Ability to identify core concepts of the cloud computing paradigm ,Service models and Service Providers	BL3
CO 4: Integrate the core issues of cloud computing such as security, privacy, and Implementation of Virtualization	BL4

B.Sc. (MPCs/MECs/MSCs)
III Year / VI –Semester
SEC
Google Data Studio
(w.e.f 2024-2025)

Course Code: GDS-6-CS-22T

Course Objectives:

To understand and be able to create custom reports and dashboards with a wide range of designs, styles, graphs, and formatting by importing from various data sources

. Course Outcomes	Cognitive Level
At the end of the course the student will be able to	
CO 1: Acquiring the knowledge design reports from various data sources	BL1
CO 2: Able to design Interactive Dashboards	BL2

B.Sc. MPCs/MECs/MSCs
III Year / -VI Semester
DSE-A
Full Stack Web Development
(W.e.f. 2024-2025)

Course Code: FSWD-6-CS-22T

Course Objectives:

The course imparts the concepts of JavaScript, XML and ASP.Net to develop Web applications.

Course Outcomes:	Cognitive Level
CO 1: Identify the core concepts of React such as components, JSX, props, state, and the component lifecycle.	BL1
CO 2: Proficiency in building interactive user interfaces using React, including the use of components, props, and state to manage UI elements and their behavior.	BL2
CO3: Ability to integrate databases such as MongoDB, MySQL, or PostgreSQL with Node.js.	BL3
CO 4: Proficiency in using the Postman interface basics of APIs, including HTTP methods (GET, POST, PUT, DELETE), status codes, request and response formats (JSON, XML	BL4

B.Sc. MPCs/MECs/MSCs
III Year / VI Semester
DSE-B
Data Science with Python
(W.e.f. 2024-2025)

Course Code: DSP-6-CS-22T

Course Objectives:

To impart students with the knowledge of Python Programming

Course Outcomes	Cognitive Level
CO 1: To Apply Data Wrangling techniques on the data available in different files.	BL4
CO 2: To Analyze data using Numpy and Pandas	BL4
CO 3: To visualize and Interpret data using matplotlib.	BL4
CO 4: To develop Real-time Applications using Django Framework	BL4

B.Sc.(MPCs/MECs/MSCs)
III year/ VI Semester
DSE-C
Operating System
(w.e.f: 2024-2025)

Course Code: OS-6-CS-22T

Course Objectives:

To impart students with knowledge of concepts of Operating System, Scheduling Algorithms, Memory management, File System and Linux Environment.

<u>Course Outcomes:</u>	Cognitive Level
At the end of the course the student will be able to	
CO1: Understand the structure, basic architectural components and process scheduling concepts in Operating Systems	BL1
CO2: Analyze and Evaluate the various CPU scheduling algorithms and Deadlocks	BL2
CO3: Acquire knowledge on memory management concepts and implement page replacement algorithms.	BL3
CO 4: Understand Linux Environment and Apply Linux commands and shell programs for file handling and process control.	BL4

B.Sc. (MPCs/MECs/MSCs)
III Year / VI Semester
Computer Science Project

Course Code: CSPR-6-CS-22P

Course Objective:

The objective of the project is to help the student develop the ability to apply theoretical and practical tools/techniques to solve real life problems related to industry, academic institutions and research laboratories

Course Outcome:

Students will be able to develop real-time applications to solve real life problems using Java Programming, Python Programming and web technologies concepts