

Department of Computer Science & Technology
Course Outcome
Programme Name: Master of Science in Computer Science & Technology

Name of the Course	Course Code	Course Outcome
M.Sc (CSIT)	CSIT	
SEMESTER-I		
Advanced Concepts in OOP	CSIT-1.1	Course outcome of CSIT-1.1 (ACOOB): CO1: Understand the importance of object oriented programming CO2: Understand the difference between structured oriented and object oriented programming features. CO3: Able to make use of objects and classes for developing programs. CO4: Able to use various object oriented concepts like; inheritance, polymorphism, etc., to solve different problems.
Advanced Computer Organization and Architecture	CSIT-1.2	Course outcome of CSIT-1.2 (ACOOA): CO1: Understand the concepts of hardware. CO2: Understand the Input/ Output systems CO3: Understand the architecture of processors. CO4: Understand parallel architectures. CO5: Understand computer arithmetic algorithms. CO6: Understand memory organization and mapping techniques.
Operating Systems	CSIT-1.3	Course outcome of CSIT-1.3 (OS): CO1: Understand fundamental operating system architectures, processes, threads, files, semaphores, Inter Process Communication, shared memory regions, etc. CO2: Analyze algorithms like Process scheduling and memory management algorithms. CO3: Categorize the operating system's resource management techniques, deadlock management techniques. CO4: Able to understand paging of memory, page replacement algorithms, file systems. CO5: Understand the working of secondary

		storage devices.
Advanced Database Management Systems	CSIT-1.4	<p>Course Outcome of CSIT-1.4 (ADBMS):</p> <p>CO1: Understand and evaluate the role of database management systems in information technology applications within organizations.</p> <p>CO2: Will be able to understand entities and their relations.</p> <p>CO3: Explain functional dependency, Functional Decomposition, Normalisation techniques.</p> <p>CO4: Will be able to use Structured Query Language (SQL).</p> <p>CO5: Draw Entity-Relationship diagrams to represent database application scenarios.</p>
Laboratory-1 (Advanced Concepts in OOP & Advanced Database Management Systems)	CSIT-1.5	<p>Course outcome of CSIT-1.5 (LAB-I):</p> <p>CO1: Will be able to write programs for various data structure operations using C++ and Java programming languages.</p> <p>CO2: Will be able to write queries using SQL.</p>
Introduction to Computer Programming in C.	CSIT-G 1.6-1 (OPEN ELECTIVE-1)	<p>Course outcome of CSIT-1.6 (Introduction to Computer Programming in C):</p> <p>CO1: Students will be able to understand basic concepts of computers and its working.</p> <p>CO2: Will be able to learn about the syntax of writing programming languages.</p> <p>CO3: They will be able to write programs in C language.</p> <p>CO4: They will be able to develop basic skills such as problem solving and abstract reasoning through computer programming</p>
SEMESTER-II		
Data Communication and Computer Networks	CSIT-2.1	<p>Course outcome of CSIT-2.1 (DCCN):</p> <p>CO1: Students will be able to understand network communication, Open System Interconnect (OSI) and Internet Model.</p> <p>CO2: Students will be able to understand different types of transmission media, networking devices and working of the media and devices.</p>

		<p>CO3: Students will be able to understand the working principles of LAN and the concepts of logical and physical addressing, subnet and supernet.</p> <p>CO4: Students will be able to understand the details of Transport Layer Protocols (Transmission Control Protocol and User Datagram Protocol).</p>
Data Structures & Complexity Theory	CSIT-2.2	<p>Course Outcome of CSIT-2.2 (Data Structures & Complexity Theory):</p> <p>CO1: Will be able to learn data structures like; array, stacks, queues, linked lists and trees.</p> <p>CO2: Will be able to write program for data structures.</p> <p>CO3: Will be able learn insertion, deletion, searching, sorting and merging of data in a data structure.</p> <p>CO4: Understand the complexity of algorithms.</p> <p>CO5: Understand the traversals in a tree.</p>
Microprocessor 8085 & 8086	CSIT-2.3	<p>Course Outcome of CSIT-2.3 (Microprocessor 8085 & 8086):</p> <p>CO1: Understand the architecture of Intel 8085/8086 with explanation of internal organization of microprocessors and microcontrollers.</p> <p>CO2: Will be able to program in assembly language for algorithms.</p> <p>CO3: Design circuits using microcontrollers.</p> <p>CO4: Understand the function of peripheral ICs</p> <p>CO5: Designing of microprocessors/microcontrollers-based systems.</p>
Mathematical Foundations of	CSIT-2.4	Course Outcome of CSIT-2.4 (Mathematical

Computer Science		<p>Foundation of computer Science):</p> <p>CO1: Get ideas about sets and perform operations and algebra on set. Determine different properties of relations, identify equivalence and partial order relations. Identify function and their properties. Get idea about Graph Theory.</p> <p>CO2: Analyze the given propositions and finding results using mathematical logic operators.</p> <p>CO3: Understand and apply the concepts of graphs and trees. Analyze whether given graphs are isomorphic and different algorithms to find the shortest path.</p> <p>CO4: Identify the different types of grammars and able to generate various languages.</p>
Laboratory-2 (Advanced Data Structures & Microprocessor 8085, 8086)	CSIT-2.5	<p>Course Outcome of CSIT-2.5 (LAB-II):</p> <p>CO1: Will be able to write programs for insert, delete, search, sort, and merge in data structures using C++ programming language.</p> <p>CO2: Will be able to write assembly language mnemonics.</p>
Management Information System (MIS)	CSIT-G 2.6-1 (OPEN ELECTIVE-2)	<p>Course Outcome of CSIT-2.6 (MIS):</p> <p>CO1: Will be able to understand how MIS can lead an organization to achieve business competitive advantages through informed decision making.</p> <p>CO2. Analyze and synthesize business information and systems to facilitate evaluation of strategic alternatives.</p> <p>CO3. Effectively communicate strategic alternatives to facilitate decision making.</p>
SEMESTER-III		

Theory of Computations	CS-3.1	<p>Course Outcome of CS 3.1 (Theory of Computations):</p> <p>CO1: Using the fundamental ideas of formal languages and finite automata methods</p> <p>CO2: To create finite automata for many languages and regular expressions</p> <p>CO3: Creating context-free grammar for different languages</p> <p>CO4: Utilizing push-down automata, Turing machines, and normal form approaches to tackle various issues</p>
Web Programming & Technology	IT-3.1	<p>Course Outcome of IT-3.1 (Web Programming & Technology):</p> <p>CO1: Will be able to design and develop web pages.</p> <p>CO2: Will be able to write HTML and JavaScript codes.</p> <p>CO3: Will be able to connect the webpage to a database.</p> <p>CO4: Can learn SQL</p>
Software Engineering	CSIT-3.2	<p>Course Outcome of CSIT-3.2 (Software Engineering):</p> <p>CO1: Demonstrating proficiency in communication, planning, analysis, design, construction, and deployment while putting the software engineering lifecycle into practice.</p> <p>CO2: An ability to work in one or more significant application domains.</p> <p>CO3: Develop and deliver high-quality software by working both independently and as a member of a multidisciplinary team.</p> <p>CO4: Show your knowledge of the ideas, concepts, and methods that the software lifecycle is based on, and use them.</p> <p>CO5: Display proficiency with the methods</p>

		<p>and equipment required for engineering work.</p> <p>CO6: Plan a software engineering process life cycle , including the specification, design, implementation, and testing of software systems that meet specification, performance, maintenance and quality requirements</p> <p>CO7: Able to elicit, analyze and specify software requirements through a productive working relationship with various stakeholders of the project</p> <p>CO8: Analyze and translate a specification into a design, and then realize that design practically, using an appropriate software engineering methodology.</p> <p>CO9: Know how to develop the code from the design and effectively apply relevant standards and perform testing, and quality management and practice</p> <p>CO10: Able to use modern engineering tools necessary for software project management, time management and software reuse.</p>
Data Mining and Warehousing	CSIT-3.3	<p>Course Outcome of CSIT-3.3 (Data mining and warehousing):</p> <p>CO1: Define the scope and necessity of data mining and warehousing for the society.</p> <p>CO2: Comparing the design of data warehousing techniques so that it can be able to solve the root problem.</p> <p>CO3: Apply various tools of data mining and their techniques to solve the real time problems</p> <p>CO4: To analyze and design various algorithms based on data mining tools.</p> <p>CO5: To evaluate research and design of new data mining techniques.</p> <p>CO6: To prepare the students for building</p>

		career in data warehousing and data mining areas.
Computer Graphics	CSIT-3.4	<p>Course Outcome of CSIT-3.4 (Computer Graphics):</p> <p>CO1: Understand the basics of computer graphics, different graphics systems, applications of computer graphics, several input and output devices, display devices and their working.</p> <p>CO2: Understand how images and pictures are generated on the screen.</p> <p>CO3: Discuss various algorithms for scan conversion and filling colour to objects.</p> <p>CO4: Use of geometric transformations on graphics objects and their application in composite form.</p> <p>CO5: Understand different clipping methods and its transformation to graphics display device.</p> <p>CO6: Explore projections and visible surface detection techniques for display of 3D scene on 2D screen.</p>
Laboratory-3 (Java Programming, HTML, JSP, PHP, XML)	CSIT-3.5	<p>Course Outcome of CSIT-3.5 (LAB-III):</p> <p>CO1: Will be able to write programs using Java.</p> <p>CO2: Will be able to design and develop webpage using HTML, PHP and JSP.</p>
Discipline Centric Elective 1 (Programming Languages)	CSIT-3.6	<p>Course Outcome of CSIT-3.6 (Programming Languages):</p> <p>CO1: Will be able to use various features of languages used for current programming languages.</p> <p>CO2: Able to program in different language paradigms and evaluate their relevant benefits.</p>

		CO3: Understand the basic concepts in the implementation of common features of programming languages.
SEMESTER-IV		
Distributed System	CSIT-4.1	<p>Course Outcome of CSIT-4.1: (Distributed System):</p> <p>CO1: Students will be able to recognize the concepts of distributed systems.</p> <p>CO2: Learn about file systems.</p> <p>CO3: Understand operating system architecture.</p> <p>CO4: Learn about Process concepts, states, synchronization.</p> <p>CO5: Understand about security techniques, cryptographic algorithms, digital signatures.</p>
Compiler Design	CSIT-4.2	<p>Course Outcome of CSIT 4.2 (Compiler Design):</p> <p>CO1: Describe and analyze the lexical, syntactic, and semantic structures of sophisticated language aspects.</p> <p>CO2: For a compiler to perform language translation, separate the lexical, syntactic, and semantic analyses into useful steps.</p> <p>CO3: Without using automatic generators, create a scanner, parser, and semantic analyzer.</p> <p>CO4: Create machine code for a novel computer from the completely processed source code of a novel language.</p> <p>CO5: Describe methods for optimizing intermediate and machine code.</p> <p>CO6: Create the frameworks and infrastructure needed to compile sophisticated</p>

		language features.
Seminar	CSIT-4.3	Course Outcome of CSIT 4.3 (Seminar): CO1: Will be able to develop presentation skills.
Discipline Centric Elective 2: Image Processing	CSIT-4.4	Course Outcome of CSIT-4.4 (Image Processing): CO1: Will be able to learn about various image transformations along with their properties. CO2: Will be able to develop image processing applications. CO3: Will be able to understand the technology of computer vision. CO4: Learn different image enhancement techniques.
Project Work	CSIT-4.5	Course Outcome of CSIT-4.5 (Project Work): CO1: Students will learn to develop software practically for real time application.