

Parent ID	ID number	Description
	C1	Employ basic mathematical structures and logic to solve computational problems
	C2	employ appropriate data structures for solving problems in optimal way and Analyze, and design computer algorithm
	C3	Apply logical problem solving skills to devise a program and Develop applications using the Object-Oriented programming (O.O) paradigm.
	C4	Employ visual programming environments to develop good quality applications connected with optimum database.
	C5	Demonstrate knowledge, and practice of operating systems (OS), system software and in basic and advanced computer architecture.
	C6	Demonstrate skillset to secure and protect computing assets.
	C7	Demonstrate the skills necessary to secure and protect computing assets
	C8	Understand basic knowledge of communication networks, network architecture and protocols
	C9	Employs knowledge of the layered structure of a computer network and various network protocols.
	K1	Ability to identify different computer science and algorithms
	K2	Ability to identify different programming and database
	K3	Ability to identify different computer components and architecture
	K4	Ability to identify different computer networks and security
	S1	Explain and practice basic proof techniques and Use different mathematical theories such as, sets, number, probability, and graph theories
	S2	Design ,Analyze and use a wide range of data types to solve a problems and explain the concept and the role of data types in software development.
	S3	Apply advanced techniques for performing complexity analysis of algorithms for solving algorithmic problems, including divide-and-conquer, greedy, dynamic programming, graph algorithms, backtracking and enumeration
	S4	Analyze a problem and Determine the steps needed and create a methods to solve a problem.
	S5	Explain and use the basic and advanced O.O concepts and use of Unified Modeling Language (UML) diagrams for analysis and design of object-oriented software
	S6	Describe and use the core concepts and constructs of visual programming. And Transform user interface designs into code
	S7	Categorize and describe different web development technologies. And build Websites using web development tools
	S8	Explain the concept of database and its benefits and Categorize and describe various database models (Relational, object oriented, network, hierarchical models)
	S9	Design, analyze and interpret digital logic schema and identify the fundamental components of computers (CPU, memory, buses, peripherals) and describe their interrelationships
	S10	Explain the role of the OS and its complete functionality. And Identify the interrelationship between the OS and the computer architecture
	S11	Explain the basic and core concepts of computer architecture and identify and evaluate various computer architecture performance criteria. And Describe various techniques used to design high performance CPU.
	S12	Describe the working of layered network architectures (OSI and TCP/IP). Explaining the main network protocols by identifying the functions of different network devices and discussing their integration
	S13	Describe the main types of attacks and their categories It identifies the main security objectives, defines basic security concepts and principles, and explains the concepts and mechanisms related to encryption, authentication, and authorization.
	S14	Explaining the concept and how to organize communication networks, their working mechanisms and functions, applying them to communication networks and protocols, identifying communication interfaces and defining their characteristics. Evaluation of communications solutions based on the desi
	S15	Define the concept of concurrency, parallelism, message passing, remote procedure call and remote object access, object-oriented network communications, mobile codes, and peer-to-peer systems. Regulating wireless communications networks. Apply in-depth knowledge of wireless communications
	S16	Distinguish between connection-oriented applications and non-connection-oriented applications. Distinguish between iterative and concurrent server design process.

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