Course Outcomes:

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DCS-102 Computer Fundamental

- **CO1:**Understand the fundamental components of a computer system, including hardware, software, and the relationship between them, enabling students to make informed decisions regarding computer usage and troubleshooting.
- **CO2:**Develop basic computer skills, including file management, operating system navigation, and common software applications, empowering students to efficiently and effectively utilize computers for various tasks and purposes.
- **CO3:**Introduce students to the concepts of computational thinking and algorithmic problem-solving, fostering their ability to break down complex problems into manageable steps and develop logical solutions, which are applicable across various domains and disciplines.

DCS-101 C Programming

- **CO1:** Gain a strong understanding of the C programming language, including its syntax, data types, and control structures, enabling students to write structured and efficient code.
- **CO2:**Develop problem-solving skills and the ability to break down complex tasks into smaller, manageable steps, allowing students to design and implement functional C programs for real-world applications.
- **CO3:**Acquire knowledge of essential programming concepts such as memory management, pointers, and file handling, empowering students to create robust and versatile programs that interact with system resources effectively.

DCS-201 Data structure

- **CO1:** Gain a comprehensive understanding of various data structures, including arrays, linked lists, stacks, queues, trees, and graphs, enabling students to choose and implement the most suitable data structure for different problem-solving scenarios.
- **CO2:**Develop proficiency in analyzing the time and space complexity of algorithms related to data structures, allowing students to assess the efficiency and performance of their code and make informed decisions for optimization.
- **CO3:**Acquire skills in designing and implementing efficient algorithms for common operations on data structures, such as searching, sorting, inserting, and deleting elements, equipping students with the ability to solve complex computational problems using appropriate data structures and algorithms.

DCS-204 Data Base Management System

- **CO1:** Develop a strong understanding of fundamental concepts in database management systems (DBMS), including data modeling, relational database design, and normalization, enabling students to design efficient and well-structured databases.

- **CO2:** Acquire skills in using Structured Query Language (SQL) for database manipulation, including querying, updating, and retrieving data, allowing students to effectively interact with and manage databases.
- **CO3:**Gain knowledge of advanced topics in DBMS, such as indexing, transaction management, and database security, empowering students to optimize database performance, ensures data integrity, and implement robust security measures in real-world scenarios.

DCS-104 Computer Architecture

- **CO1:** Develop a comprehensive understanding of computer architecture principles, including processor organization, memory systems, and input/output systems, enabling students to comprehend the inner workings of computer systems.
- **CO2:**Acquire skills in designing and evaluating computer architectures, including instruction set architecture (ISA), pipelining, and memory hierarchies, allowing students to optimize performance, power efficiency, and reliability in computer system design.
- **CO3:**Gain knowledge of emerging trends and technologies in computer architecture, such as parallel processing, cloud computing, and specialized accelerators, equipping students to stay abreast of advancements and make informed design choices to meet evolving computational needs.

DCS-203 Object oriented programming with C++

- **CO1:** Understand and apply key principles of object-oriented programming in C++.
- **CO2:** Demonstrate proficiency in writing C++ code using object-oriented concepts and language features.
- **CO3:** Design and implement object-oriented systems using UML and C++ to solve programming problems.

DCS-202 System Analysis and Design

- **CO1:** Acquire knowledge and skills in analyzing business processes and system requirements to identify and propose effective system solutions.