

PGDCA-1st SEM

PGDCA-101 Fundamentals of Information Technology

CO I. To teach the students about Fundamentals of IT (Information Technology).

CO II. Through this, students will learn about basics of computer, different types of computer memories, computer software's, number system.

CO III. To know about basic internet related concepts, various technologies like 3G, 4G, and LTE.

CO IV. To use of Information Technology in various sectors.

PGDCA-102 Operating Systems

CO I. It will teach students about operating system.

CO II. Through this students will learn about an operating system is a generic term for the multitasking software layer that lets you perform a wide array of lower tasks with your computer.

PGDCA-103 Problem Solving using C

CO I. Expert to understand the fundamental concept of mother of programming language, design of algorithm, data flow chart and analytical ability to solve the problems.

CO II. Usage of operators, array, functions, and user-defined data types etc.

PGDCA-104 Software Lab – I (Office Automation and Productivity Tools)

CO I. To teach to create a document ,worksheet, presentation, database etc.

CO II. Learn some advanced **Office** functions, including Mail Merge (Word) and formulas (Excel).

CO III. Understand how to use Word, Excel, and PowerPoint in a variety of professional, educational, and personal situations.

CO IV. Able to claim **Office** proficiency

PGDCA-105 Software Lab – II (Programming Fundamentals through C Language)

- CO I. Able to write programs using advance concepts of C- language.
- CO II. Understand and apply the pointers, memory allocation techniques.
- CO III. Know to use of files for dealing with variety of problems.

PGDCA-2nd SEM

PGDCA-201 Database Management System

- CO I. It will teach students about DBMS (Database Management System) with MS Access.
- CO II. Through this students will learn about different data models, keys, normalization, concurrency control, recovery of data and creation and management of databases, forms using MS Access.
- CO III. Using MS Access students can create databases in future.

PGDCA-202 Introduction to Computer Network, Internet and E-Commerce

- CO I. It will teach students about computer network.
- CO II. It will teach students gain general knowledge of electric data communication, industry terminology, common equipment and standard hardware and software requirements.

PGDCA-203 Object-oriented Programming using C++

- CO I. Understand key features of the object-oriented programming language such as encapsulation (abstraction), inheritance, and polymorphism.
- CO II. Able to design and implement object-oriented applications and analyse problems.
- CO III. Able to implement simple C++ applications using an object-oriented software engineering approach.

PGDCA-204 Software Lab – III (Web Designing, HTML and RDBMS)

- CO I. Able to design web pages.
- CO II. Learn to work in structure query language.

PGDCA-205 Software Lab – IV(C++ Programming)

CO I. Able to develop solutions for a range of problems using objects and classes.

CO II. Learn to demonstrate the implementation of constructors, destructors and operator overloading.

CO III. Able to apply fundamental algorithmic problems including type casting, inheritance, and polymorphism.