PGDCA: Syllabus

The one-year PGDCA course is a post-graduate course structured to enable students to perform computer-related tasks. The course deals with theoretical and application-based computer applications. As a part of the PGDCA course syllabus, students learn topics like Fundamentals of Information Technology, C, C++, Oracle, and Java. Given below is the semester-wise syllabus of the PGDCA course:

PGDCA Syllabus 1st Sem	PGDCA Syllabus 2nd Sem
• Fundamentals of Information Technology • 'C' Programming • Soft Skills • Data Structure and Algorithms • Principles and Practices of Management and Organizational Behavior • Practical	• Visual Basics • Basic Java • Database management system • Software engineering and business process • Oracle • Web Designing • Practical

Students must note that the PGDCA course syllabus may vary from one college to another.

See Also: **BCA+MCA Integrated Course**

PGDCA Subjects

This section provides a detailed view of the PGDCA subjects covered throughout the entire duration of the PGDCA course syllabus. The PGDCA course subjects impart in-depth education on computer programming and computer application skills. It focuses on both the theoretical aspects of computer science as well as the practical pedagogy of exposing students to computer programming languages.

The table below mentions the detailed PGDCA course subjects covered in the first semester:

Semester 1	PGDCA Subjects Covered
Fundamentals Of Information Technology	• Computer • Representation Of Data • Boolean Algebra • Software • Operating System • Microsoft Tools • Introduction To Viruses.
'C' Programming	• C Fundamentals • Decision And Case-Control Structure • Loop Control Structure • Storage Classes • Arrays, Functions, Pointers, And Unions
Soft Skills	• Effective Communication In Business • Writing Skills • Presentation Skills • Listening Skills • Communication Skills
Data Structure and Algorithms	• Data Structure Concepts • Algorithm Concepts • Arrays, Stacks, Trees, Linked Lists, Graphs, Sorting and Searching Algorithms

Principles And Practices of Management and Organizational Behavior	• The Essence of Management • The Evolution of Management Thought • Managerial Decision-Making • Organizational Behavior • Team Building • Leadership And Conflict Management.
Practical	**Complete 20 Programs**

The table below mentions the detailed PGDCA course subjects covered in the second semester:

Semester 2	PGDCA Subjects Covered
Visual Basics	• Introduction • Validating And Processing User Inputs • Using Debugging Tools and Database Connectivity
Basic Java	• Introduction to Java • Programming Concepts of Basic Java • Objects And Classes • Language Features • Exception Handling and Multithreading
Database Management System	• Introduction • Modeling Techniques • Hierarchical Database • Relational Algebra • Normalization • Integrity Constraints • Recovery Mechanisms • Distributed Database
Software Engineering And Business Process	• System Concept • Various Phases of Software Development And Roles Involved • Different Approaches to Software Development • Application System Modelling • Database Design Methods and Logic Representation Techniques
Oracle	• Introduction • SQL Operators • Query Expression Operators • SQL Functions, Joins, Views and Synonyms, Cursor, Exception Handling, Composite Data Types And Packages
Web Designing	• Introduction • Hypertext Markup Language • Javascript And VB Script
Practical	**Complete 20 programs**

PGDCA Syllabus: Books

Books are the main source of resource material while studying for any particular course. The tabular form below mentions all the important books that students can pick to study for the PGDCA syllabus and subjects.

Name of the Book	Author Name
Beginning JavaScript	**Paul Wilton**
Database Management Systems	**Bipin Desai**
Software Engineering Practitioner's Approach	**Roger Pressman**
Computer Database Organization	**James Martin**
C Programming	**Balgurusamy**
Object-oriented programming in C++	**Nabajyoti Barkakati**
Born to code in C	**H. Schildt**
IT tools and applications	**A Mansoor**
Computers Today	**Sanders**
Know your PC	**Peter Norton**
Elements of Digital Computer	**Thomas Bartee**