



SARDAR PATEL UNIVERSITY

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

Vallabh Vidyanagar

Gujarat

Academic Program Structure

&

Curriculum

(Aligned with NEP-2020)

Post Graduate Diploma in Computer Applications (PGDCA)

NHEQF Level: 6

Entry NHEQF Level	:	5.5
Duration	:	One Year (Two Semesters)
Total Courses	:	13
Total Learning Hours	:	1320
Total Credits	:	44
Total Marks	:	1100

Graduate Attributes (GAs)

Upon successful completion of the PGDCA programme, graduates are expected to attain the following Graduate Attributes:

GA-1. Fundamental Computing Knowledge

Demonstrate foundational knowledge of programming, databases, computer organization, networking, and web technologies.

GA-2. Problem Solving Skills

Apply computational thinking and basic algorithmic approaches to solve real-world problems.

GA-3. Programming & Software Development

Develop simple to moderately complex software applications using modern programming languages and tools.

GA-4. Data Management Skills

Manage and organize data using database systems and basic data analysis techniques.

GA-5. Digital Proficiency

Use modern digital tools, office automation software, and computing platforms effectively.

GA-6. Networking & Internet Awareness

Understand computer networks, internet technologies, and their applications.

GA-7. Cybersecurity Awareness & Ethics

Apply basic cybersecurity principles and ethical practices in computing.

GA-8. Communication & Documentation

Communicate technical concepts effectively through documentation, presentations, and reports.

GA-9. Teamwork & Collaboration

Work effectively as an individual and as a member of a team in technical environments.

GA-10. Lifelong Learning

Engage in updating oneself to emerging technologies through continuous learning and skill enhancement.

GA-11. Employability & Industry Readiness

Demonstrate readiness for entry-level IT roles and professional environments.

GA-12. Social Responsibility & IKS Awareness

Apply computing knowledge responsibly with awareness of societal needs and basic concepts of Indian Knowledge Systems (IKS).

Programme Educational Objectives (PEOs):

Within 3-5 years of completing the programme, graduates will be able to:

PEO1: Apply fundamental computing knowledge and programming skills to develop solutions for real-world problems in professional environments.

PEO2: Demonstrate competence in software development, database management, and web technologies using modern tools.

PEO3: Exhibit professional ethics, teamwork, and effective communication skills in IT-related roles.

PEO4: Engage in updating oneself to evolving technologies and pursue continuous learning for career growth or higher studies.

PEO5: Contribute to society through responsible use of technology, considering security, sustainability, and IKS perspectives.

Program Learning Outcomes (PLOs):

Upon successful completion of the PGDCA programme, learners will be able to:

PLO1: Understand and apply fundamental concepts of programming, databases, networking, and computer systems.

PLO2: Analyse simple computing problems and design appropriate algorithmic solutions.

PLO3: Design, develop and use basic software applications.

PLO4: Develop and deploy basic web-based applications using modern technologies.

PLO5: Use database systems to store, retrieve, and manage data efficiently.

PLO6: Utilize development tools, office automation tools, and computing platforms effectively.

PLO7: Communicate technical information clearly through documentation, presentations, and collaboration.

PLO8: Work collaboratively and apply basic project management practices.

PLO9: Apply ethical principles and basic cybersecurity practices in computing.

PLO10: Demonstrate readiness for employment and continuous learning in IT domains.



SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

Post Graduate Diploma in Computer Applications (PGDCA)

Semester-I

Course Type	Course Code	Course Title	Teaching-Learning Scheme		Credits	Assessment Scheme & Marks				
			L-P-T	Total Notional Hours		Internal Assessment			External Assessment	Total Marks
						FA	SA	Total		
DSC	P1S01CDCA01	Python Programming	4-0-0	120	04	20	30	50	50	100
DSC	P1S01CDCA02	Database Management Systems	4-0-0	120	04	20	30	50	50	100
DSC	P1S01CDCA03	Computer Fundamentals	4-0-0	120	04	20	30	50	50	100
DSC	P1S01CDCA04	Modern Office Automation	4-0-0	120	04	20	30	50	50	100
DSC	P1S01CDCA05	Computer Organization	2-0-0	60	02	10	15	25	25	50
DSC	P1S01CDCA06	Practicals - I	0-8-0	120	04	20	30	50	50	100
				660	22					550

DSC: Discipline Specific Core

L: Lecture

P: Practical

T: Tutorial

FA: Formative Assessment

SA: Summative Assessment



SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

Post Graduate Diploma in Computer Applications (PGDCA)

Semester-II

Course Type	Course Code	Course Title	Teaching-Learning Scheme		Credits	Assessment Scheme & Marks				
			L-P-T	Total Notional Hours		Internal Assessment			External Assessment	Total Marks
						FA	SA	Total		
DSC	P1S02CDCA01	Object-Oriented Programming with Java	4-0-0	120	04	20	30	50	50	100
DSC	P1S02CDCA02	Web Application Development	4-0-0	120	04	20	30	50	50	100
DSC	P1S02CDCA03	Computer Networks	4-0-0	120	04	20	30	50	50	100
DSE (Any one)	P1S02EDCA01	Artificial Intelligence & Machine Learning	4-0-0	120	04	20	30	50	50	100
	P1S02EDCA02	E-Commerce								
DSC	P1S02CDCA04	Cyber Security	2-0-0	60	02	10	15	25	25	50
DSC	P1S02CDCA05	Practicals - II	0-8-0	120	04	20	30	50	50	100
				660	22					550

DSC: Discipline Specific Core **L:** Lecture **P:** Practical **T:** Tutorial **FA:** Formative Assessment **SA:** Summative Assessment