

THE GEEK INSTITUTE OF CYBER SECURITY

Building futures from digital knowledge and innovation

Advanced Diploma in Computer Applications (ADCA) 1 Year

1. Computer Fundamentals

- ✓ Introduction to Computers
- ✓ History & Generations of Computers
- ✓ Types of Computers
- ✓ Hardware & Software Concepts
- ✓ Input & Output Devices
- ✓ CPU, Memory & Storage Devices
- ✓ Number System & Data Representation
- ✓ Computer Languages
- ✓ Operating System Basics
- ✓ Booting Process
- ✓ File & Folder Management
- ✓ Computer Maintenance & Troubleshooting
- ✓ Networking Fundamentals
- ✓ Data Backup & Recovery
- ✓ Digital Ethics & Green Computing

2. Microsoft Windows & System Utilities

- ✓ Windows Installation & Configuration
- ✓ Desktop Environment & Personalization
- ✓ File Explorer & File Management
- ✓ Control Panel & Windows Settings
- ✓ User Accounts & Permissions
- ✓ Device Manager & Driver Installation
- ✓ Disk Management & Partitioning
- ✓ Disk Cleanup & Storage Optimization
- ✓ Windows Defender & Firewall
- ✓ Backup & Restore
- ✓ ZIP/UnZIP Files
- ✓ Printer & Peripheral Device Setup
- ✓ Common Troubleshooting Techniques

3. Office Productivity Tools

- ✓ Microsoft Paint
- ✓ Notepad & WordPad
- ✓ Snipping Tool
- ✓ Calculator
- ✓ Sticky Notes
- ✓ Character Map
- ✓ File Compression Utilities
- ✓ PDF Creation & Management
- ✓ OCR & Document Scanning Basics

4. Microsoft Word (Advanced)

- ✓ Document Creation & Formatting
- ✓ Paragraph & Page Formatting
- ✓ Tables & Table Design
- ✓ Images, Shapes, Icons & 3D Models
- ✓ SmartArt, WordArt & Charts

- ✓ Headers, Footers & Watermarks
- ✓ Columns & Sections
- ✓ Mail Merge
- ✓ Labels & Envelopes
- ✓ Templates & Themes
- ✓ References & Table of Contents
- ✓ Comments & Track Changes
- ✓ Document Protection
- ✓ Printing & PDF Export

5. Microsoft Excel (Advanced)

- **Excel Features**
 - ✓ Workbook & Worksheet Management
 - ✓ Cell Referencing (Relative, Absolute & Mixed)
 - ✓ Cell Formatting & Styles
 - ✓ Conditional Formatting
 - ✓ Data Validation
 - ✓ Sorting & Filtering
 - ✓ Tables & Named Ranges
 - ✓ Charts & Graphs
 - ✓ Pivot Tables & Pivot Charts
 - ✓ Dashboards
 - ✓ Slicers & Timelines
 - ✓ Flash Fill
 - ✓ What-If Analysis
 - ✓ Goal Seek & Scenario Manager
 - ✓ Power Query (Introduction)
- **150+ Excel Functions & Formulas**
 - ✓ **Logical:** IF, IFS, AND, OR, NOT, Nested IF
 - ✓ **Lookup:** VLOOKUP, HLOOKUP, XLOOKUP, LOOKUP, INDEX, MATCH, XMATCH, FILTER
 - ✓ **Math & Statistical:** SUM, PRODUCT, SUMPRODUCT, MIN, MAX, AVERAGE, COUNT, COUNTA, SUBTOTAL, AGGREGATE
 - ✓ **Conditional:** SUMIF, SUMIFS, COUNTIF, COUNTIFS, AVERAGEIF, AVERAGEIFS
 - ✓ **Text:** LEFT, RIGHT, MID, LEN, FIND, SEARCH, TEXT, CONCAT, TEXTJOIN, SUBSTITUTE
 - ✓ **Date & Time:** DATE, TIME, TODAY, NOW, YEAR, MONTH, DAY, HOUR, MINUTE, SECOND
 - ✓ **Financial:** PMT, PV, FV, IPMT, PPMT

- ✓ **Engineering & Conversion:** CONVERT, ROMAN, BIN/DEC/HEX Functions
- ✓ **Dynamic Array Functions:** SORT, SORTBY, SEQUENCE, RANDARRAY, BYROW, BYCOL, LAMBDA
- ✓ **Information Functions:** IFERROR, IFNA, ISERROR, ISNUMBER, ISTEXT, HYPERLINK, IMAGE
- ✓ And 150+ Modern Excel Functions with Practical Business Applications

6. Microsoft PowerPoint

- ✓ Professional Presentation Design
- ✓ Themes & Templates
- ✓ Slide Master
- ✓ Tables & Charts
- ✓ SmartArt & Infographics
- ✓ Images, Audio & Video
- ✓ Animations & Transitions
- ✓ Hyperlinks & Action Buttons
- ✓ Presenter View
- ✓ Presentation Printing & Export

7. Microsoft Access

- ✓ Database Fundamentals
- ✓ Tables & Relationships
- ✓ Primary & Foreign Keys
- ✓ Queries
- ✓ Forms
- ✓ Reports
- ✓ Data Validation
- ✓ Import & Export Data
- ✓ Database Security

8. Microsoft Outlook

- ✓ Email Configuration
- ✓ Email Management
- ✓ Contacts
- ✓ Calendar
- ✓ Meeting Scheduling
- ✓ Tasks & Notes
- ✓ Rules & Filters
- ✓ Signatures
- ✓ Email Security

9. Internet & Digital Communication

- ✓ Internet Fundamentals
- ✓ Web Browsers
- ✓ Effective Search Techniques
- ✓ Google Workspace Basics
- ✓ Gmail Features
- ✓ Cloud Storage (Google Drive & OneDrive)

- ✓ Online Forms
- ✓ Digital Payments
- ✓ Video Conferencing
- ✓ Digital Collaboration
- ✓ Internet Safety & Privacy

10. Web Designing (HTML5 & CSS3)

- **HTML**
 - ✓ HTML Structure
 - ✓ Text Formatting
 - ✓ Lists
 - ✓ Hyperlinks
 - ✓ Images
 - ✓ Tables
 - ✓ Forms
 - ✓ Multimedia
 - ✓ Semantic HTML
- **CSS**
 - ✓ CSS Syntax & Selectors
 - ✓ Colors & Typography
 - ✓ Box Model
 - ✓ Margin & Padding
 - ✓ Flexbox
 - ✓ CSS Grid
 - ✓ Responsive Web Design
 - ✓ Media Queries
 - ✓ Bootstrap Framework

11. PHP Programming

- ✓ PHP Environment Setup
- ✓ Variables & Data Types
- ✓ Operators
- ✓ Conditional Statements
- ✓ Loops
- ✓ Arrays
- ✓ Functions
- ✓ Form Handling
- ✓ Sessions & Cookies
- ✓ File Upload
- ✓ MySQL Connectivity
- ✓ CRUD Operations
- ✓ Login & Registration System
- ✓ Error Handling

12. MySQL Database

- ✓ Database Concepts
- ✓ Database & Table Creation
- ✓ Data Types
- ✓ Keys & Constraints
- ✓ SQL Commands
- ✓ SELECT Queries
- ✓ WHERE, ORDER BY, GROUP BY
- ✓ Aggregate Functions

- ✓ Joins
- ✓ Views
- ✓ Backup & Restore
- ✓ Import & Export

13. TallyPrime with GST

- ✓ Company Creation
- ✓ Accounting Fundamentals
- ✓ Ledger & Groups
- ✓ Voucher Entry
- ✓ Inventory Management
- ✓ Banking Features
- ✓ Payroll Management
- ✓ Cost Centres
- ✓ GST Configuration
- ✓ GST Transactions
- ✓ GST Reports
- ✓ Financial Statements
- ✓ Backup & Restore

14. Artificial Intelligence (AI)

- ✓ Introduction to AI
- ✓ AI in Everyday Life
- ✓ Generative AI
- ✓ Prompt Engineering
- ✓ ChatGPT
- ✓ Microsoft Copilot
- ✓ Google Gemini
- ✓ DeepSeek AI
- ✓ AI for Office Productivity
- ✓ AI for Content Creation
- ✓ AI for Coding Assistance
- ✓ AI Image Generation
- ✓ AI Ethics & Responsible Usage

15. Typing Skills

- ✓ English Typing Practice
- ✓ Hindi Unicode Typing
- ✓ Touch Typing Techniques
- ✓ Keyboard Shortcuts
- ✓ Speed & Accuracy Improvement

16. Digital Skills & Professional Development

- ✓ Resume & CV Preparation
- ✓ Business Letter Writing
- ✓ Professional Documentation
- ✓ Presentation Skills
- ✓ Interview Preparation
- ✓ Time Management
- ✓ Workplace Ethics
- ✓ Digital Portfolio Creation

17. Cyber Security & Digital Safety

- ✓ Cyber Security Fundamentals
- ✓ Password & Account Security
- ✓ Two-Factor Authentication
- ✓ Malware & Virus Protection
- ✓ Phishing Awareness
- ✓ Antivirus & Firewall
- ✓ Safe Internet Browsing
- ✓ Data Privacy
- ✓ Digital Signatures
- ✓ Cyber Laws & IT Act (Overview)

18. Practical Assignments

- ✓ Microsoft Word Project
- ✓ Advanced Excel Dashboard
- ✓ PowerPoint Presentation
- ✓ Access Database Project
- ✓ Responsive Website Design
- ✓ PHP & MySQL Web Application
- ✓ TallyPrime Accounting Project
- ✓ AI Productivity Assignment

19. Final Project

Students will develop a complete industry-oriented project using the technologies covered in the course.

Sample Projects:

- ✓ Student Management System
- ✓ Library Management System
- ✓ Inventory & Billing Software
- ✓ Responsive Business Website
- ✓ Personal Portfolio Website
- ✓ Accounting Management System
- ✓ AI-Assisted Office Automation System

Course Highlights

- ✓ 1 Year Industry-Oriented Diploma Program
- ✓ 100% Practical & Hands-on Training
- ✓ Microsoft Office (Word, Excel, PowerPoint, Access & Outlook)
- ✓ 150+ Excel Functions & Formulas
- ✓ Professional Dashboards & Reports
- ✓ HTML5, CSS3, Bootstrap
- ✓ PHP & MySQL Web Development
- ✓ TallyPrime with GST
- ✓ AI Tools & Prompt Engineering
- ✓ Internet, Email & Cloud Computing
- ✓ English & Hindi Typing Practice
- ✓ Live Projects & Final Capstone Project
- ✓ Interview Preparation & Employability Skills
- ✓ Certificate on Successful Completion