



**THE**  
**GEEK INSTITUTE**  
**OF CYBER SECURITY**

**Advanced Diploma in Computer  
Applications (ADCA)**

[www.geekinstitute.org](http://www.geekinstitute.org)



Dear Esteemed Learner,

At The Geek Institute of Cyber Security, we recognize the profound impact we have on shaping your future, and we approach this responsibility with utmost dedication.

As the founder of The Geek Institute of Cyber Security, I am committed to providing you with unparalleled training enriched by hands-on projects and promising opportunities.

With us, your journey towards a successful and prosperous career begins.

Wishing you every success!

Warm regards,



**Mani Kumar**

Founder, The Geek Institute of Cyber Security

# Course Description

## Duration : 12 Months

The Advanced Diploma in Computer Application (ADCA) is an intensive program crafted to provide a strong foundation in modern computing skills.

This comprehensive course covers programming languages, software applications, database management, and digital literacy.

Participants will gain hands-on experience in coding, application usage, and data handling, fostering their ability to excel in various tech-driven roles.

Through a blend of theoretical knowledge and practical training, students will develop the expertise needed to navigate the digital landscape with confidence.

Upon completion, graduates will be well-prepared to pursue diverse career paths in the ever-evolving realm of computer applications.

# Course Objectives

**Advanced Technical Skills:** To provide students with advanced technical skills in areas such as programming, database management, network administration, and cybersecurity.

**System Administration:** To train students in the management and maintenance of computer systems, including operating systems, hardware, and software configurations.

**Database Management:** To teach students database design, implementation, and management, enabling them to work with large datasets efficiently.

**Cyber Security:** To provide an understanding of cybersecurity threats and best practices for securing computer systems and networks.

**Web Development:** To teach web development skills, including HTML, CSS, JavaScript, and web frameworks, allowing students to create interactive and responsive websites.

**Project Management:** To introduce project management principles, helping students plan and execute computer-related projects effectively.

**Problem-Solving:** To develop problem-solving skills that are crucial in the field of computer science and information technology.

# Job Profiles

After completing an Advanced Diploma in Computer Applications, students will have a range of job opportunities in the field of information technology and computer science.

**Data Analyst:** Data analysts collect, analyze, and interpret data to help organizations make informed decisions. They use tools like Excel, SQL, and data visualization software.

**Database Administrator:** Database administrators manage and maintain databases, ensuring data integrity, security, and optimal performance. They also create and modify database structures.

**System Administrator:** System administrators oversee the operation and maintenance of computer systems, including servers and workstations. They handle tasks such as system configuration, software installation, and troubleshooting.

**IT Support Specialist:** IT support specialists provide technical assistance to end-users and organizations. They diagnose and resolve hardware and software issues and may work in-house or as part of an IT support team.

**Web Developer:** Web developers specialize in creating and maintaining websites. They work with technologies like HTML, CSS, JavaScript, and various web development frameworks.

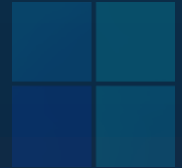
**Business Analyst:** Business analysts bridge the gap between IT and business by identifying business needs, defining requirements, and helping organizations implement technology solutions.



# Course Syllabus

## 1. Introduction to Computers

- Fundamentals of Computer
- Computer hardware and software
- Computer networks and the Internet
- Operating systems and their functions
- Basics of computer security and data privacy



## 2. Office Productivity Tools

- Microsoft **Paint**
- Microsoft **Notepad**
- Microsoft **WordPad**
- Microsoft Office **Word**
- Microsoft Office **Excel**
- Microsoft Office **PowerPoint**
- Microsoft Office **Access**
- Microsoft Office **Outlook**
- Microsoft **Copilot & ChatGPT**



## 3. Advanced Programming Concepts

- Introduction to **Python** programming language
- Variables, data types, and operators
- Control structures: loops and conditional statements
- Object-oriented programming principles
- Debugging and error handling techniques
- Introduction to **C/C++** programming languages



## 4. Web Development Front-end

- Complete HTML and CSS for creating web pages
- Creating interactive web forms and validating user input
- Introduction to web hosting and domain management

## 5. Database Management System

- Relational database concepts and design
- Advanced SQL queries and optimization
- Database normalization and denormalization
- Introduction to NoSQL databases

## 6. Web Application Development

- Server-side scripting using PHP
- Interaction with databases in web applications
- Front-end frameworks (Bootstrap) for dynamic interfaces
- Web security best practices and vulnerabilities

## 7. Cyber Security and Data Privacy

- Fundamentals of cybersecurity and cryptography
- Secure coding practices
- Threats, vulnerabilities, and risk management
- Privacy laws and regulations

## 8. Introduction to Artificial Intelligence (AI)

- What is AI? Overview and real-world applications
- Types of AI: Narrow AI, General AI, and Super AI
- Machine learning vs. traditional programming
- Overview of popular AI tools and frameworks
- Using AI in daily productivity (ChatGPT, Copilot, DeepSeek, etc.)
- Ethical considerations and future of AI

## 9. Accounting in Tally Prime

### ○ **Introduction to Tally Prime**

- Understanding the basics of Tally Prime software.
- Navigating the Tally Prime interface.
- Creating a company in Tally Prime.
- Configuring company settings and preferences.

### ○ **Fundamentals of Accounting in Tally Prime**

- Understanding accounting principles and concepts.
- Creating and maintaining ledgers.
- Recording journal entries in Tally Prime.
- Entering sales and purchase transactions.
- Bank reconciliation in Tally Prime.

### ○ **Inventory Management in Tally Prime**

- Creating and maintaining stock items and groups.
- Recording inventory transactions (stock in, stock out, transfers, etc.).
- Managing units of measurement and their conversions.
- Generating inventory reports.

### ○ **GST (Goods and Services Tax) in Tally Prime**

- Understanding GST concepts and rules.
- Configuring GST settings in Tally Prime.
- Recording GST transactions (sales, purchases, reverse charges, etc.).



# Our Popular Courses



**Geek Certified  
Cyber Security  
Professional  
(GCCSP)**



**Web Design  
and  
Development**



**Full Stack Web  
Development  
(MERN)**



**Diploma in  
Computer  
Applications  
(DCA)**

# Contact Information

Ready to unlock a secure future? Reach out to us and let's code the path to success together!

**Call Now To Get Fee Details**

**Call Now to Book 3-Days of FREE Demo Classes**



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