



SYLLABUS

ITI COPA Course Syllabus

The ITI COPA (Computer Operator and Programming Assistant) course is divided into 2 semesters. Below is the detailed syllabus for each semester:

1st Semester Syllabus

Trade Theory (Professional Knowledge)

Subject 1: Safe Working Practices

- **Unit 1: Introduction to Safety**
 - **Content:**
 - Safety rules and regulations in the workplace
 - Identification and prevention of hazards
 - Use and maintenance of personal protective equipment (PPE)
 - Emergency procedures and first aid
 - Fire safety and handling electrical equipment safely

Subject 2: Introduction of Computer Components

- **Unit 1: Computer Hardware Basics**
 - **Content:**
 - Basic components of a computer (CPU, RAM, ROM, storage devices, input/output devices)
 - Function and purpose of each component
 - Types of computers (desktop, laptop, tablets, servers)

Subject 3: Introduction of Windows Operating System

- **Unit 1: Windows OS Overview**
 - **Content:**
 - Overview of Windows OS interface
 - File management and directory structures
 - System settings and personalization
 - Installation and management of applications
 - Using built-in Windows utilities (Disk Cleanup, Task Manager, etc.)

Subject 4: Computer Basics and Software Installation

- **Unit 1: Software Fundamentals**

- **Content:**

- Basics of computer operations and boot process
 - Installing and uninstalling software applications
 - Software licensing, updates, and patch management
 - Troubleshooting software installation issues

Subject 5: Introduction to DOS Command Line Interface and Linux Operating Systems

- **Unit 1: DOS Basics**

- **Content:**

- Basics of DOS commands and file management
 - Introduction to Linux OS and its distributions
 - Basic Linux commands and shell scripting
 - Comparing Windows and Linux operating systems

Subject 6: Word Processing Software

- **Unit 1: Document Creation**

- **Content:**

- Introduction to word processing software (MS Word, LibreOffice Writer)
 - Creating, editing, and formatting documents
 - Using templates, styles, and themes
 - Inserting tables, images, and charts
 - Reviewing and printing documents

Subject 7: Spreadsheet Application

- **Unit 1: Spreadsheet Basics**

- **Content:**

- Basics of spreadsheet software (MS Excel, Google Sheets)
 - Creating and managing worksheets and workbooks
 - Using formulas, functions, and data validation
 - Creating charts and graphs
 - Data analysis and pivot tables

Subject 8: Image Editing and Presentation

- **Unit 1: Image Editing**

- **Content:**

- Basics of image editing software (Adobe Photoshop, GIMP)
 - Editing and enhancing images
 - Creating and delivering presentations (MS PowerPoint, LibreOffice Impress)
 - Using templates, animations, and transitions

Subject 9: Database Management Systems

- **Unit 1: Database Basics**

- **Content:**
 - Introduction to databases
 - Basics of MS Access
 - Creating and managing databases
 - Performing queries, forms, and reports

Subject 10: Networking Concepts

- **Unit 1: Network Fundamentals**
 - **Content:**
 - Basics of computer networks
 - Types of networks (LAN, WAN, etc.)
 - Network components (routers, switches, hubs, etc.)
 - Network topologies and configurations

Subject 11: Internet Concepts

- **Unit 1: Internet Basics**
 - **Content:**
 - Basics of the internet
 - Using web browsers
 - Email and online communication
 - Internet security and privacy

Subject 12: Web Design Concepts

- **Unit 1: HTML and CSS**
 - **Content:**
 - Basics of web design
 - HTML structure and tags
 - CSS styling and layout
 - Designing static web pages

Trade Practical (Professional Skills)

Subject 1: Safe Working Practices

- **Unit 1: Practical Safety**
 - **Content:**
 - Practicing safety rules
 - Using PPE
 - Emergency procedures and first aid
 - Fire safety drills

Subject 2: Computer Components

- **Unit 1: Hands-on with Hardware**
 - **Content:**

- Identifying computer components
- Assembling and disassembling a computer
- Basic troubleshooting of hardware issues

Subject 3: Using Windows Operating System

- **Unit 1: Windows Navigation**
 - **Content:**
 - Navigating Windows OS
 - File management and organization
 - Configuring system settings

Subject 4: Computer Basics and Software Installation

- **Unit 1: Installing Software**
 - **Content:**
 - Installing and uninstalling software applications
 - Configuring software settings
 - Troubleshooting installation issues

Subject 5: DOS Command Line Interface and Linux Operating Systems

- **Unit 1: Command Line Practice**
 - **Content:**
 - Using DOS commands for file management
 - Navigating Linux OS
 - Writing basic shell scripts

Subject 6: Using Word Processing Software

- **Unit 1: Document Handling**
 - **Content:**
 - Creating and editing documents
 - Formatting text and paragraphs
 - Using tables, images, and charts in documents

Subject 7: Using Spreadsheet Application

- **Unit 1: Spreadsheet Manipulation**
 - **Content:**
 - Creating and managing worksheets
 - Using formulas and functions for calculations
 - Creating charts and graphs

Subject 8: Image Editing and Creating Presentations

- **Unit 1: Editing and Presentation**
 - **Content:**
 - Editing and enhancing images
 - Creating presentations with templates

- Using animations and transitions

Subject 9: Database Management with MS Access

- **Unit 1: Database Operations**
 - **Content:**
 - Creating and managing databases
 - Performing queries, forms, and reports

Subject 10: Configuring and Using Network

- **Unit 1: Network Setup**
 - **Content:**
 - Setting up and configuring networks
 - Network troubleshooting
 - Basic network security practices

Subject 11: Using Internet

- **Unit 1: Internet Use**
 - **Content:**
 - Browsing the internet
 - Using email and online communication
 - Understanding internet security and privacy

Subject 12: Designing Static Web Pages

- **Unit 1: Web Design Practice**
 - **Content:**
 - Creating web pages using HTML and CSS
 - Styling web pages with CSS
 - Testing and validating web pages

Employability Skills

Subject 1: English Literacy

- **Unit 1: Basic English**
 - **Content:**
 - Basic English grammar and usage
 - Writing and communication skills

Subject 2: I.T. Literacy

- **Unit 1: Computer Basics**
 - **Content:**
 - Basics of information technology
 - Using computers and software applications

Subject 3: Communication Skills

- **Unit 1: Effective Communication**
 - **Content:**
 - Verbal and non-verbal communication
 - Effective communication techniques
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2nd Semester Syllabus

Trade Theory (Professional Knowledge)

Subject 1: Introduction of JavaScript

- **Unit 1: JavaScript Basics**
 - **Content:**
 - Basics of JavaScript
 - Syntax and data types
 - Functions and events
 - DOM manipulation

Subject 2: Introduction to VBA, Features, and Applications

- **Unit 1: VBA Programming**
 - **Content:**
 - Basics of VBA (Visual Basic for Applications)
 - Using VBA in MS Office applications
 - Writing and debugging VBA code
 - Creating macros to automate tasks

Subject 3: Use of Accounting Software

- **Unit 1: Accounting Software Basics**
 - **Content:**
 - Introduction to accounting software (Tally, QuickBooks)
 - Creating and managing accounts
 - Recording financial transactions
 - Generating financial reports

Subject 4: E-Commerce Concepts

- **Unit 1: E-Commerce Fundamentals**
 - **Content:**
 - Basics of e-commerce
 - Online business models
 - Setting up an online store
 - Payment gateways and security

Subject 5: Cyber Security

- **Unit 1: Cyber Security Basics**
 - **Content:**
 - Basics of cyber security
 - Types of cyber threats (malware, phishing, etc.)
 - Security measures and best practices
 - Introduction to ethical hacking

Trade Practical (Professional Skills)

Subject 1: JavaScript and Creating Web Pages

- **Unit 1: Web Development**
 - **Content:**
 - Writing JavaScript code
 - Creating interactive web pages
 - Using JavaScript libraries and frameworks (jQuery)

Subject 2: Programming with VBA

- **Unit 1: VBA Practical**
 - **Content:**
 - Writing and debugging VBA code
 - Automating tasks with macros
 - Creating custom functions

Subject 3: Using Accounting Software

- **Unit 1: Practical Accounting**
 - **Content:**
 - Setting up and managing accounts
 - Recording financial transactions
 - Generating financial statements

Subject 4: E-Commerce

- **Unit 1: E-Commerce Implementation**
 - **Content:**
 - Setting up an online store
 - Managing online transactions
 - Ensuring payment gateway security

Subject 5: Cyber Security

- **Unit 1: Cyber Security Practices**
 - **Content:**
 - Identifying and mitigating cyber threats
 - Implementing security measures
 - Basic ethical hacking techniques
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Employability Skills

Subject 1: Entrepreneurship Skills

- **Unit 1: Business Basics**
 - **Content:**
 - Basics of entrepreneurship
 - Business planning and management
 - Marketing and sales strategies

Subject 2: Productivity

- **Unit 1: Enhancing Productivity**
 - **Content:**
 - Time management
 - Goal setting
 - Efficiency techniques

Subject 3: Occupational Safety, Health, and Environment Education

- **Unit 1: Safety and Health**
 - **Content:**
 - Workplace safety practices
 - Health and wellness
 - Environmental sustainability

Subject 4: Labour Welfare Legislation

- **Unit 1: Labour Laws**
 - **Content:**
 - Basics of labour laws
 - Employee rights and responsibilities
 - Workplace ethics

Subject 5: Quality Tools

- **Unit 1: Quality Management**
 - **Content:**
 - Basics of quality management
 - Quality control techniques
 - Continuous improvement practices