

Computer Assembly and Maintenance

Module 1: Introduction to Computer Hardware

- Overview of Computer Components (CPU, Motherboard, RAM)
- Types of Computer Systems (Desktops, Laptops, Workstations)
- Basic Assembly Tools and Techniques

Module 2: Computer Assembly Process

- Identifying and Installing Motherboards
- Installing CPUs, RAM, Storage Devices (HDD, SSD)
- Power Supply Unit (PSU) and Cooling Systems Installation
- Assembling Peripheral Devices (Monitors, Keyboards, Mice)

Module 3: Installing Operating Systems

- Installing Windows, Linux, and macOS
- Dual-Boot Configurations
- Drivers and Software Installation
- BIOS and UEFI Configuration

Module 4: Preventive Maintenance and Troubleshooting

- Cleaning and Maintaining Hardware Components
- Diagnosing Common Hardware Issues (Overheating, Power Failure)
- Using Diagnostic Tools (Multimeters, POST Cards)
- Replacing Faulty Components (RAM, PSU, Hard Drives)

Module 5: Advanced Computer Maintenance

- Troubleshooting Boot Issues
- Data Recovery Techniques
- Upgrading Hardware Components (GPU, RAM, Storage)
- Backup Solutions and Data Migration