

# Building Services Systems and Their Maintenance





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# Introduction:

This training program is designed to provide participants with the essential skills and knowledge needed for effective management and maintenance of building services systems. It empowers them to ensure optimal performance, energy efficiency, and longevity of building services systems.

# **Program Objectives:**

#### By the end of this program, participants will be able to:

- Understand the fundamentals of building services systems.
- Learn techniques for maintaining HVAC, electrical, and plumbing systems.
- Gain proficiency in preventive and corrective maintenance.
- Develop skills for diagnosing and troubleshooting system issues.
- Implement best practices for energy efficiency and sustainability.

# **Target Audience:**

- Facility managers and maintenance personnel.
- Building services engineers and technicians.
- Operations managers and supervisors.
- Maintenance planners and coordinators.
- Professionals responsible for building services maintenance.

## **Program Outline:**

#### Unit 1:

#### Fundamentals of Building Services Systems:

- Overview of Building Services Systems.
- Importance of Proper Maintenance.
- Key Components and Functions of HVAC, Electrical, and Plumbing Systems.



- Regulatory and Compliance Considerations.
- Role of Maintenance in Building Performance and Sustainability.

#### Unit 2:

### HVAC Systems Maintenance:

- Fundamentals of HVAC Systems.
- Routine Inspection and Maintenance Tasks.
- Troubleshooting Common HVAC Issues.
- Energy Efficiency in HVAC Operations.
- Implementing Preventive Maintenance Plans.

#### Unit 3:

#### **Electrical Systems Maintenance:**

- Basics of Building Electrical Systems.
- Electrical Safety and Standards.
- Regular Inspection and Maintenance Practices.
- Diagnosing Electrical Problems.
- Upgrading and Retrofitting Electrical Systems.

#### Unit 4:

#### **Plumbing Systems Maintenance:**

- Understanding Building Plumbing Systems.
- Common Plumbing Issues and Solutions.
- Preventive Maintenance for Plumbing.
- Water Conservation Techniques.
- Emergency Repairs and Response.

## Unit 5:



### Integrated Building Systems Management:

- Coordinating Maintenance of Multiple Systems.
- Use of Building Management Systems BMS.
- Implementing Energy Management Strategies.
- Case Studies on Integrated Maintenance Approaches.
- Future Trends in Building Services Maintenance.