



Lesson Plan No. 1.1	Course Name: Building Services & Maintenance Topic: Introduction to Building Services	Course No.: CE-201
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Objectives	<i>At the end of the lesson the student shall be able to:</i> <ol style="list-style-type: none"><i>Define building services and explain their importance in a building.</i><i>Identify different types of building services and their uses.</i><i>Understand the role of building services in maintaining a comfortable and functional building environment.</i>
Teaching Aids (if any)	<ol style="list-style-type: none"><i>Chalk & Talk</i><i>PPT</i>
Teaching Development	<ol style="list-style-type: none">1. Introduction (5 minutes)<ul style="list-style-type: none"><i>Begin by asking students what comes to mind when they think of "building services."</i><i>Discuss the importance of building services in a structure: "Building services are systems installed in a building to ensure its functionality, safety, and comfort."</i><i>Provide examples such as heating, ventilation, air conditioning (HVAC), plumbing, electrical, fire protection, and security systems.</i><i>Explain that without these services, a building would not be habitable or functional.</i><i>Show images or diagrams of buildings with various building services installed.</i>2. Development (30 minutes)<ol style="list-style-type: none"><i>Introduce and explain different types of building services:</i><ul style="list-style-type: none"><i>-Heating, Ventilation, and Air Conditioning (HVAC): Regulates temperature and air quality.</i><i>-Plumbing: Provides water supply, drainage, and sewage disposal.</i><i>-Electrical: Provides power for lighting, appliances, and equipment.</i><i>-Fire Protection: Includes fire alarms, sprinkler systems, and fire extinguishers.</i><i>-Security Systems: Cameras, access control, and alarms for safety.</i><i>Discuss the specific uses and importance of each service:</i><ul style="list-style-type: none"><i>-HVAC: Maintains a comfortable temperature and air quality for occupants.</i><i>-Plumbing: Provides clean water for drinking, sanitation, and wastewater removal.</i><i>-Electrical: Powers lighting, appliances, and equipment for daily activities.</i><i>-Fire Protection: Ensures early detection and suppression of fires for safety.</i>



	<p><i>-Security Systems: Monitors and protects the building and its occupants from intruders or emergencies.</i></p> <p>3. Exercise</p> <ul style="list-style-type: none"><i>- Divide the class into small groups.</i><i>- Assign each group a specific building service.</i>
Closure	<ol style="list-style-type: none"><i>1. Summarize the Lesson Learning Outcomes and get affirmation from students on these.</i><i>2. Suggested Reading</i><ul style="list-style-type: none"><i>- "Introduction to Building Services" by Christopher Hall, Paul Greening</i><i>3. Suggested reading</i> https://www.designingbuildings.co.uk/wiki/Building_services<i>4. Homework</i><ul style="list-style-type: none"><i>- Explain the primary functions of HVAC systems in buildings.</i> <p><i>Spend 5 minutes to wrap up and consolidate the learnings</i></p>
Evaluation	<ol style="list-style-type: none"><i>1. Reflective Questions (What, Why, Who?). Allow students to answer and discuss.</i> <p><i>Spend 5 minutes to evaluate student assimilation of the lesson contents</i></p>