

## Course 5 – Interior Services: Electrical (Theory)

Course Type	Credits	Hours	Assessment	T-P-Pr
Core	2	30	100	2-0

### Course Learning Outcomes (CLOs)

<b>CLO 1</b>	Discuss light requirements for an interior space based on location and use.
<b>CLO 2</b>	Explain sources of light in an interior.
<b>CLO 3</b>	Describe fittings and fixtures available for various types of lighting plans along with their control devices.
<b>CLO 4</b>	Choose wiring and safety devices for the electrical system of a building.
<b>CLO 5</b>	Demonstrate a knowledge of electrical plans for various interior spaces.

### Course Content

Module	Course Content	Hours	CLO	Module Learning Outcome	Assignments
5.1	<u>Types of Lighting</u> <ul style="list-style-type: none"> <li>Study lighting requirements for interior spaces based on location: Indoor and Outdoor</li> <li>Study lighting requirements for interior spaces based on use: ambient, accent and task lighting</li> </ul>	10	CLO1	<ol style="list-style-type: none"> <li>Describe the types of lighting requirements for an interior space based on use and location.</li> <li>Calculate illumination levels</li> </ol>	Research and documentation on the various lighting requirements for an interior space based on use and location.
5.2	<u>Light Sources</u> <ul style="list-style-type: none"> <li>Incandescent</li> <li>Fluorescent</li> <li>Light Emitting Diodes (LEDs)</li> <li>Compact Fluorescent Lamps (CFLs)</li> </ul>	5	CLO2	<ol style="list-style-type: none"> <li>Describe the various types of light sources which can be used in an interior space.</li> </ol>	Market survey on the various types of light sources which can be used in an interior space.
5.3	<u>Lighting Fixtures and controls</u> <ul style="list-style-type: none"> <li>Fixture Lights: ceiling mounted, wall mounted and recessed.</li> <li>Light fittings: tracks, lamps</li> <li>Switches</li> <li>Manual Dimmers</li> </ul>	5	CLO3	<ol style="list-style-type: none"> <li>Explain the types of light fixtures and fittings available and their selection based on a specific use.</li> <li>Select switches and light control devices for a lighting plan.</li> </ol>	Market survey and report the types of light fixtures and fittings available and their selection based on a specific use. Presentation on the various types of Light Sources and fixtures which can be used in an interior space to achieve the desired effect
5.4	<u>Electrical wiring systems and safety devices</u> <ul style="list-style-type: none"> <li>Types of wires</li> <li>Types of safety devices</li> </ul>	5	CLO4	<ol style="list-style-type: none"> <li>Explain the various types of wires and safety devices available for the electrical systems.</li> </ol>	Site visit and report on the types of wires used in the electrical system of a residence along with the safety devices used.

5.5	<b>Electrical plans</b> <ul style="list-style-type: none"><li>• Purpose of Electrical Plan</li><li>• Design and draft electrical working plans complete with dimensioning and electrical legends.</li></ul>	5	CLO5	<ol style="list-style-type: none"><li>1. Explain the purpose of an electrical plan.</li><li>2. Learn Symbols for Electrical layout</li></ol>	Draft the electrical working plans for a drawing room, complete with dimensioning and electrical legends.
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