

CHAPTER OVERVIEW

Module 2 - Wave Optics

The *Module 2: Wave Optics* module explores the foundational principles of wave optics, emphasizing the wave nature of light. It covers the postulates of wave optics and explores monochromatic waves through the Helmholtz equation. Students will analyze elementary waveforms such as plane, spherical, and paraboloidal waves, understanding their mathematical representations and physical significance. The module bridges ray and wave optics, providing insights into their interconnected nature. Key topics include the interference of two waves, principles of interferometry, and experimental setups like the Young's double-slit experiment.

This Module contains 4 classes:

[Class 6 - Postulates of Wave Optics, Monochromatic Waves, Helmholtz equation](#)

[Class 7 - Elementary Waves- plane, spherical and paraboloidal waves](#)

[Class 8 - Relation ray-wave optics, interference of two waves, interferometers](#)

[Class 9 - Young experiment](#)

[Module 2 - Summary](#)

[Multi-choice questions](#)

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