

Physics Lab

The Physics Lab at our institution plays a crucial role in understanding the fundamental laws that govern matter, energy, space, time, and their interconnected relationships. Physics not only forms the basis for technological advancements but also contributes to enhancing human comfort. Experimental physics, a vital aspect of this field, involves measuring physical quantities and validating the laws that govern them, moving beyond theoretical concepts to practical applications.



The Physics Lab serves several key purposes:

1. **Mechanics:** *It delves into the safety, strength, rigidity, reliability, and behaviour of mechanical structures, providing students with hands-on experience in these principles.*
2. **Thermodynamics:** *Students explore the realms of heat, temperature, and their connections to energy, work, radiation, and the properties of matter, fostering a deep comprehension of thermodynamic concepts.*
3. **Optics:** *Through optical experiments, students gain insights into the properties of light, its interactions with matter, and the construction of instruments that employ or detect light, enriching their understanding of optics.*
4. **Electronics:** *This segment covers information processing, telecommunications, and signal processing, imparting practical knowledge about electronic systems. Additionally, solid-state physics experiments guide students in designing circuits for studying solid matter or solids, employing techniques*

such as crystallography, electromagnetism, and metallurgy.

