



# S.I.W.S.

**N. R. SWAMY COLLEGE OF COMMERCE & ECONOMICS &  
SMT. THIRUMALAI COLLEGE OF SCIENCE**

Plot No. 337, Sewree - Wadala Estate,  
Major R. Parameshwaran Marg, Wadala, Mumbai - 400 031

## Department of Physics

### **B.Sc. (Physics) - Program Outcome**

#### **Students will be able to:**

- Acquire the rudimentary concepts from different topics in physics such as Classical Mechanics, Ray Optics, Thermodynamics, Electricity and Magnetism and Electronics along with computations (Microprocessors and C++ programming)
- Develop and apply the necessary mathematical tools such as vector algebra, differential equations and integration which are indispensable for understanding the relevant ideas in physics
- Get an insight to fundamentals of advance topics in physics such as Lagrangian mechanics, Quantum Mechanics, Special theory of Relativity, Nuclear Physics, Solid State Physics, Atomic and Molecular Physics, Analog and Digital Electronics
- Develop the problem solving capabilities and hence improve analytical skills
- Write and execute simple programs in microprocessor and C++
- Acquire elementary skills to handle instruments in the physics laboratory in order to carry out experiments during the laboratory sessions
- Improve experimental skills by undergoing practical sessions for demonstration experiments as well as core experiments
- Recognize different fields of applications in which the physical concepts are potentially viable
- Correlate the theoretical and experimental aspects of the subject and appreciate the corresponding significance in the real world
- Prepare themselves to face real world challenges on successfully completing the programme
- Pursue higher studies in physics as well as other fields of potential importance