

## **M.Sc. Physics**

### **Program Outcomes (POs)**

**PO.1:** Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.

**PO.2:** Effective Communication: Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media, and technology.

**PO.3:** Social Interaction: Elicit views of others, mediate disagreements, and help reach conclusions in group settings.

**PO.4:** Effective Citizenship: Demonstrate empathetic social concern and equity-centered national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.

**PO.5:** Ethics: Recognize different value systems, including your own, and understand the moral dimensions of your decisions, and accept responsibility for them.

**PO.6:** Environment and Sustainability: Understand the issues of environmental contexts and sustainable development.

**PO.7:** Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context of socio-technological changes

### **Program Specific Outcomes (PSOs)**

**PSO1:** Apply theoretical knowledge of principles and concepts of Physics to practical problems of daily life.

**PSO2:** Demonstrate the ability to plan, undertake, and report on a programme of original work; including the planning and execution of experiments, the analysis and interpretation of experimental results.

**PSO3:** Assess the errors involved in an experimental work and make recommendations based on the results in an effective manner.

### **Program Educational Objectives (PEOs)**

**PEO1:** The graduates will recall and apply advanced concepts, theories, and mathematical methods in physics to solve complex problems, demonstrating deep understanding across specialized domains of Physics.

**PEO2:** The graduates will critically analyze physical phenomena, breaking down complex systems and data to evaluate theories and models, and identify innovative solutions to advanced scientific and technological challenges.

**PEO3:** The graduates will design and create new experimental setups, theoretical models, or simulations, leading research projects that contribute original insights to the field of Physics and advance scientific knowledge.