



Department of Physics

Programme Outcome (PO) and Programme Specific Outcome (PSO)

- **Programme Outcome (PO)**
- **PO 1:** Disciplinary knowledge: Capable of demonstrating comprehensive knowledge and understanding of one or more disciplines that form a part of an undergraduate programme of study.
- **PO 2:** Problem solving (Ap): Capacity to extrapolate from what one has learned and apply their competencies to solve different kinds of non-familiar problems, apply one's learning to real life situations.
- **PO 3:** Critical thinking (An): Capability to apply analytic thought to a body of knowledge; analyse and evaluate evidence, arguments, claims.
- **PO 4:** Research-related skills / Scientific reasoning: A sense of inquiry and capability for asking relevant/appropriate questions, problematizing, synthesizing and articulating; Ability to recognize cause-and-effect relationships.
- **PO 5:** Communication Skills (U/A): Ability to express thoughts and ideas effectively in writing and orally.
- **PO 6:** Cooperation/Teamwork: Ability to work effectively and respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a group.
- **PO 7:** Information/digital literacy: Capability to use ICT in a variety of learning situations.
- **PO 8:** Self-directed learning: Ability to work independently, identify appropriate resources required for a project.
- **PO 9:** Multicultural competence: Possess knowledge of the values and beliefs of multiple cultures and a global perspective.
- **PO 10:** Moral and ethical awareness/reasoning: Ability to embrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives.
- **PO 11:** Leadership readiness/qualities: Capability for mapping out the tasks of a team or an organization and setting direction, formulating an inspiring vision, building a team.
- **PO 12:** Lifelong learning: Ability to acquire knowledge and skills, including "learning how to learn", that are necessary for participating in learning activities throughout life.



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- **Programme Specific Outcome (PSO)**
- **PSO 1:** Imparting in students detailed knowledge in diverse premises of physics that includes classical mechanics, thermal physics, acoustics, wave optics, advanced mathematical physics, electricity & magnetism, quantum mechanics, statistical mechanics, electromagnetic theory, electronics, special theory of relativity and atomic physics, modern physics and modern communication electronics.
- **PSO 2:** Developing capabilities of oral and written scientific communication skill and scientific thinking to appreciate advancement of modern physics in diverse areas.
- **PSO 3:** Knowledge gained through theoretical, computational and lab-based experiments will generate technical personnel in various priority areas of research on basic, applied and interdisciplinary science.