

INTEGRAL UNIVERSITY, LUCKNOW DEPARTMENT OF PHYSICS

M. Sc. (Physics)

	M. Sc. (Frysles)
Program	1. To demonstrate broad knowledge of science.
Educational	2. To develop skills in quantitative modeling of scientific systems.
Objectives	3. To provide the basic analytical and technical skills to work effectively in the various fields
(PEOs)	of sciences.
	4. To promote analytical skills to solve complex scientific problems.
Program Specific Outcomes (PSOs)	1. To provide an opportunity for the students to explore the contemporary science and its
	applications in modern technology.
	2. The students will realize and develop an understanding of the impact of physics and
	science on society as well as real-life applications.
	3. To introduce advanced techniques and ideas required in developing area of Physics.
	4. To enhance student's ability to develop advance mathematical models for physical
	systems.
	5. To prepare the students to take-up career in different industries or to pursue higher
	studies and multidisciplinary research.
	6. The students will attain successful professional careers in industry and academia to
	become entrepreneurs.
Program Outcomes (POs)	1. Critical thinking: In-depth knowledge of the basic and applied areas of sciences.
	Capability to demonstrate knowledge and understanding of major physics concepts,
	theoretical principles and experimental findings.
	2. Effective Communication: Communicate effectively on complex scientific activities with
	the concerned community in particular and with society in general, such as being able to
	comprehend and write effective reports and design documentation, make effective
	presentations and give and receive clear instructions.
	3. Social Interaction: Comprehend to apply contextual multi-disciplinary knowledge to
	assess societal, health, safety, and cultural issues relevant to the science practices.
	4. Effective Citizenship: Imbibed moral and social values in personal and social life
	leading to highly cultured and civilized personality.
	5. Ethics: Students will be able to recognize the ethical component of complex situations.
	Acquired with an awareness of work ethics and ethical issues in scientific research as well as
	plagiarism policies.
	6. Environment and Sustainability: Understand the impact of the professional solutions
	in societal and environmental contexts, and demonstrate the knowledge of science and need
	for sustainable development.
	7. Self-directed and Lifelong learning: Recognize the need for and have the preparation
	and ability to engage in independent and life-long learning in the broadest context of
	scientific changes.
L	