

Programme Outcomes, Programme Specific Outcomes For PhD Programmes

Programme Name: *Ph.D. in Physics*
(e.g PhD in Bengali)



Name of the Department
University of North Bengal
West Bengal, INDIA

Programme Outcomes

- Prepare and motivate the students to advance their research careers beyond a doctoral degree, pursue careers in academics and industries.
- Equip the students with such skills as to make them understand the mysteries of nature at different scales of space and time, from subnuclear to cosmological.
- Make the students understand that acquiring knowledge and skills appropriate to their professional activities is a never-ending process.
- Train-up the students in such a way that they can objectively carry out investigations, scientific and/or otherwise, without being biased or without having any preconceived notions.
- Enable the students to analyze problems starting from first principles, evaluate and validate experimental results, and draw logical conclusions thereof.
- As technology exploits the rules of Physics, students properly trained in physics research can be good value addition in the field of technology too.
- Imbibe effective scientific and/or technical communication abilities among the students.
- Inspire them in such a way that they can demonstrate and maintain the highest standard on ethical issues in their professional lives.
- Create an awareness among the students to be persons of integrity, to be responsible and enlightened citizens with a commitment to deliver good to the society within the scope of the bestowed rights and privileges.

Programme Specific Outcomes

- Develop specialization in a particular area of physics research.
- Acquire an overall idea of the ongoing scientific research in and outside the country.
- Inculcate logical reasoning among the students and help them develop such skills as to quantitatively solve a problem.
- Mature as a researcher having reasonably good communication skills - ability to present scientific results and thoughts before an educated audience. Understand the mysteries of nature in terms of the fundamental principles, hypotheses and laws of Physics.
- Train the students over a wide range of analytical and/or experimental and/or computational techniques that can be applied in physics, in other scientific and technological domains.
- Acquire some amount of knowledge regarding the overall scientific progress (chronological) so that the results of a particular problem can be placed under proper perspective.