

Ph.D.

Physics

The Doctorate in Physics at MIT-WPU is a highly research-intensive programme that provides students with excellent facilities and expert guidance to support their research endeavors. The programme is designed to help postgraduate students develop research skills and prepare for careers in academia or research. The programme provides specialised training in research components such as hypothesis creation, research questions, literature review, research ethics, and the use of online tools and resources. The programme has a strong focus on interdisciplinary research and encourages students to pursue innovative and entrepreneurial ideas in their chosen areas of study.

Students are guided in selecting relevant research topics and completing a thorough, systematic study to write their thesis which is evaluated at regular intervals. The candidates are encouraged to publish papers in reputable journals and provided with guidance from faculty members with extensive experience in research.

The programme includes common courses in the first six months to help students build scientific aptitude and optimise their research output.

Research at the Department of Physics primarily focuses on interdisciplinary area including Applied Physics, Computational Physics, Theoretical High energy Physics, Quantum gravity, Material Science, Surface Physics, Nanoscience and Nanotechnology, Photonics, Plasmonics, Nonlinear Optics, Radiation physics, Spectroscopy, Nanomaterials, Nanocomposite and nano/micro structured growth and characterization of various applications in, chemical and biosensors, data storage, detector, energy storage, and conversion applications. The faculty members at the Department have strong research backgrounds with publications in reputable high impact factor journals and associations with reputable organizations like

- **Research Publication in Peer Reviewed Journals: 145+ | Book/Book Chapters: 14**
- **International Patents: 04 (Granted) | Funded Research Projects: 03**

For more information, please visit our website. <https://mitwpu.edu.in/>

- Queensland University of Technology-Australia
- Tokushima University-Japan
- Max Planck – Ottawa Centre for Extreme Quantum Photonics-Ottawa, Canada
- Max Planck Institute for the Science of Light-Erlangen, Germany,
- Max Planck Institute for Microstructure Physics, Halle, Germany
- The Institute of Photonic Sciences-Barcelona
- Gachon University-South Korea
- University of Texas, Arlington
- Bhabha Atomic Research Centre-India
- National Chemical Laboratory-India
- Centre for Materials for Electronics Technology (CMET), India
- Defence Institute of Advanced Technology (DIAT), India
- Savitribai Phule Pune University, India
- Delhi University, India
- Banaras Hindu University, India
- IIT Delhi, India
- Homi Bhabha National Institute
- Jawaharlal Nehru University, Delhi, India
- Physical Research Laboratory-Ahmedabad
- IIT Gandhinagar, India

