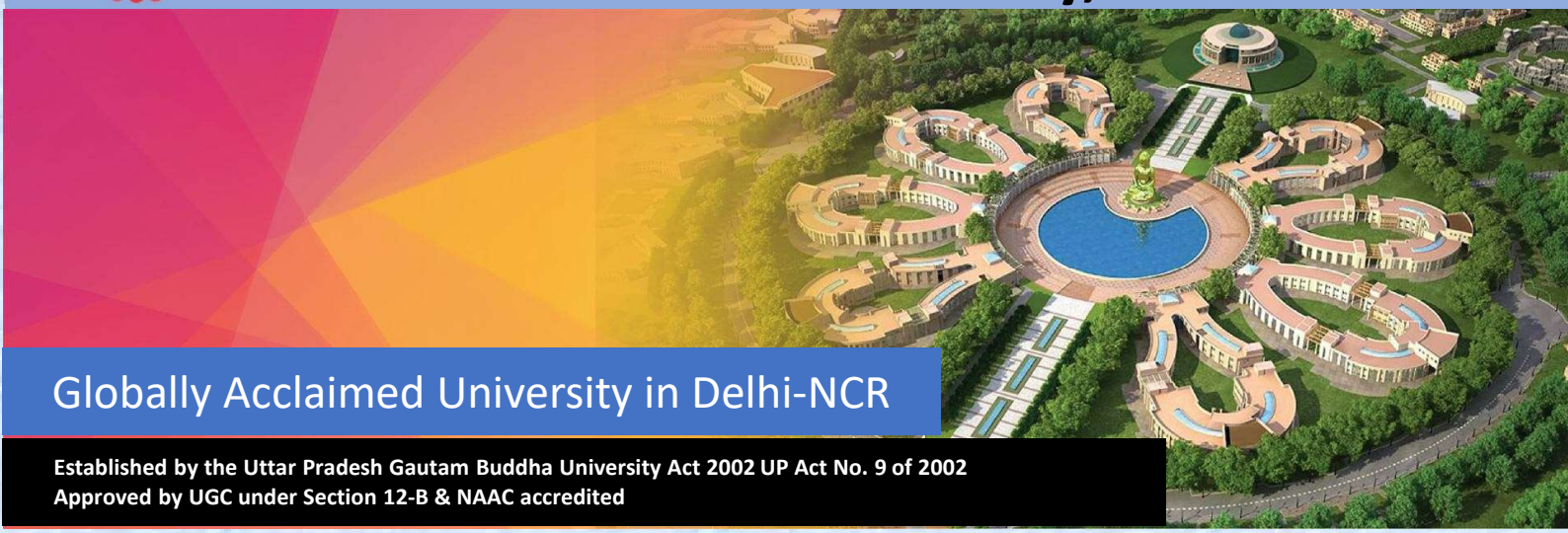
Department of Applied Physics

School of Vocational Studies and Applied Sciences

Gautam Buddha University, Greater Noida



Globally Acclaimed University in Delhi-NCR

Established by the Uttar Pradesh Gautam Buddha University Act 2002 UP Act No. 9 of 2002
Approved by UGC under Section 12-B & NAAC accredited

ADMISSIONS OPEN (2023-24)

APPLY NOW !!!

- B.Sc. (Hons.) Physics
- M.Sc. Physics
- PGDRET
- Ph.D. Physics

- **Multidisciplinary curriculum & research focus**
- **Centralized airconditioned and smart class room**
- **Well-equipped laboratories**
- **Sports and Gym facility of international standard**
- **Merit Scholarship to Topper's students.**
- **Research exposures to students**
- **Teaching assistantship to Ph.D. students**
- **Centralized air-conditioned Library**
- **511-acres fully residential eco-friendly campus**
- **50% scholarship in Tuition fees for SC/ST candidates of UP domicile as per GBU norms. Scholarship for remaining Tuition fees as per UP Govt. rule**
- **10% reservation in admission for EWS candidates of U.P.**
- **Medical/Health insurance cover for students**

Contact Us:
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HoD Email ID: ashishk@gbu.ac.in
Gautam Buddha University, Greater Noida
Uttar Pradesh (INDIA) - 201312

About the Department

Department of Applied Physics was established in 2011 as a part of the University School of Vocational Studies & Applied Sciences. Aim of the department is to impart in-depth knowledge of various disciplines of Physics and their applications by faculty members well-established in research and academics. The identified research area of the department includes Nanotechnology, Energy devices, Computational physics and Nanophotonics. The department considers the students to be the greatest asset and strives to enhance their overall development including theoretical and experimental abilities.

Programme Details

❑ B.Sc. (Hons. with Research) Physics

- **No. of Seats:** 30 (Duration and exit option as per NEP 2020*)
- **Eligibility Criteria:** 10+2 with Physics, Chemistry and Mathematics securing aggregate minimum 50% marks (45% for SC/ST), and minimum 55% marks in Physics (50% for SC/ST). Must have passed theory and practical separately.
- **Admission Process:** Direct admission based on merit in qualifying examination

***Duration and Exit Policy:** Undergraduate degree programmes of either 3 or 4-year duration, with multiple entry and exit points and re-entry options, with appropriate certifications:

i) a UG certificate after completing 1 year (2 semesters) of study in the chosen fields of study,

ii) a UG diploma after 2 years (4 semesters) of study

iii) a bachelor's degree after a 3-year (6 semesters) programme of study,

iv) a 4-year bachelor's degree (honours) after eight semesters programme of study. If the student completes a rigorous research project in their major area(s) of study in the 4^{th} year of a bachelor's degree (honours with research).

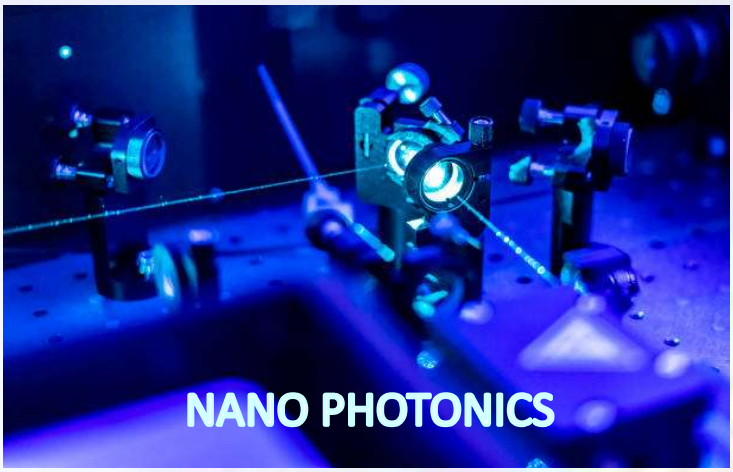
❑ M. Sc. Physics

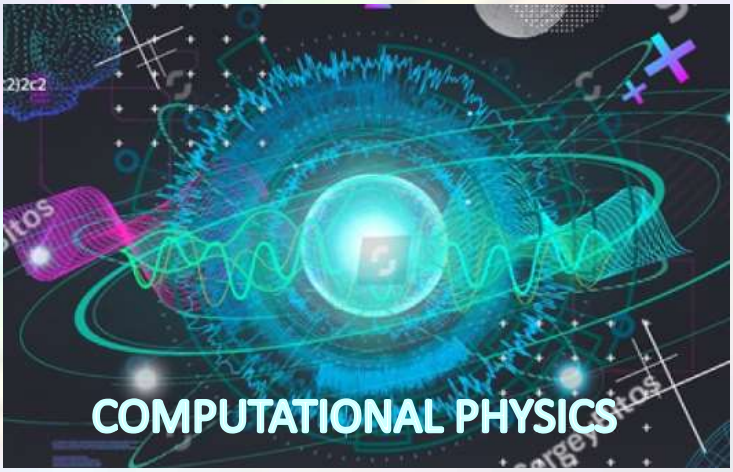
- **No. of Seats: 15** (Duration: 2 years, 4-semesters)
- **Eligibility Criteria:** Bachelor's degree (including B.Sc.(Hons.) in Electronics/ Instrumentation/Computer Science) with physics as one of the major subject for three years/ six semesters from a recognized University/College with securing minimum 50% marks (45% for SC/ST) or equivalent grade
- **Admission Process:** Direct admission based on merit in qualifying examination
- **CSIR NET/ GATE based CBCS curriculum and final year specialization in research**

❑ Ph.D. Physics

- **No. of Seats:** For Discipline specific available seats, refer to the GBU website
- **Eligibility Criteria:** Master's Degree in Physics / Applied Physics/ Electronics with minimum 55% aggregate marks (50% in case of SC/ST/ OBC (non-creamy layer)/ Differently-abled) or its equivalent grade
- **Admission process:** GBU-ET 2023

Major Areas of Research





❑ PGDRET (P.G. Diploma in Renewable Energy Technologies)

- **No. of seats:** 10 (Duration: 1 year, 2-semesters)
- **Eligibility Criteria:** Bachelor degree in Science or Engineering from a recognized University/College
- **Admission process:** Direct admission based on merit in qualifying examination

Students' Achievements from our Department

- **Jobs:** Delhi Metro Rail Corporation; PAYPAL, Bengaluru; St. Lawrence convent school; DPS Ahmedabad; Khaitan World School, Ghaziabad; Headword Publication Private Limited, Noida, etc.
- **Higher Education:** University of Cambridge; University North Texas, USA; National Tsing Hua University, Taiwan; Kyoto University, Japan; Lodz University of Technology, Poland; IIT Delhi; Jamia Milia Islamia, New Delhi; Technical University of Kaiserslautern, Germany; IIT Bombay; IIT Hyderabad; IIT Mandi; NIT Jalandhar, etc.
- **National & International level exams qualified:** National Eligibility Test (NET) and JRF, GATE , JAM, GRE, TOEFL, etc.

Career Options

- Academic institutions and Research & Development labs
- Defence and Civil Services
- Industry Jobs: PSUs and Corporate (Research & Development)
- Higher Education

Know your Faculty

Dr. Ashish Kumar Keshari (HOD)
M.Sc., M.Tech. (IT-BHU),Ph.D. (University of Allahabad) Experimental Condensed Matter Physics, Nanoscience, Sodium-ion Batteries

Dr. Bhawna Joshi
M.Sc., Ph.D. (IIT Delhi) Experimental Material Science, Thin films, Supercapacitors

Dr. Manmohan Singh Shishodia
M.Sc., M.Phil, M.Tech., Ph.D. (IIT Delhi) Photonics and Solid State Physics

Dr. Mausumi Pohit
M.Sc. Tech., Ph.D. (University of Calcutta) Photonics and Image Processing

Dr. Vivek Kumar Shukla
M.Sc., Ph.D. (IIT Kanpur) Solar cells, Supercapacitors, Experimental Condensed Matter Physics

Dr. Sudhisht Kumar Srivastava
M.Sc., Ph.D. (University of Delhi) Thin film deposition technique , Swift heavy Ion Beam Radiation, Thin film based Sensor

Dr. Mayora Varshney
M.Sc., Ph.D. (Dr. B. R. Ambedker University), Post doctoral fellow (KIST, South Korea) Hybrid Semiconductor nanoparticles, Swift heavy Ion Beam Radiation, Thin film, Photocatalyst

Dr. Jyoti Singh
M.Sc., Ph.D. (IIT ISM Dhanbad) Ceramics Material for LEDs & FED, Optoelectronics, Optical Sensors

Dr. Kanishka Sharma
M.Sc., Ph.D. (Thapar University) Nuclear reaction, Radioactive decays, Compound Nuclear decay

Dr. Alesh Kumar
M.Sc., Ph.D. (NIT Kurukshetra) Biomaterial , Bioglass and Bioceramics, Tissue Engineering

Dr. Rachna Sharma
M.Sc., Ph.D. (Delhi Technological University) Nanostructured materials, Electrochemical and Optical Biosensors

Dr. Mahesh Kumar
M.Sc., M. Phil, Ph.D. Experimental (Dr. B. R. Ambedker University) Nuclear Physics, Low energy nuclear reactions