

GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY

(Estd. by Government of NCT of Delhi in 1998)



GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY



UNIVERSITY SCHOOL OF BASIC AND APPLIED SCIENCES (USBAS)

About USBAS:

- Established in 1998, USBAS was one of the foundation schools of GGSIPU (Established in 1998 by Government of NCT of Delhi).
- Teaching cum research designed curriculum in various disciplines viz. Physics, Chemistry, Maths, Nanoscience and Engineering Physics.
- Ph.D. programmes in Physics, Chemistry and Mathematics.
- Highly qualified and experienced faculty. Great alumni network and industrial tie-ups.
- Well equipped laboratories with advanced research facilities.



ACADEMIC PROGRAMMES OFFERED BY USBAS

Programme Name	Programme Coordinator	Duration (in years)	Intake
Ph.D.	Dr. Abha Aggarwal	As per university norms	As per vacant slots
M.Tech. (Engineering Physics)	Dr. S. Neeleshwar	2	18
M.Tech. (Nano Science and Technology)	Prof. Vaishali Singh	2	1 <i>5</i>

FACULTY PROFILE (ENGINEERING PHYSICS)



Dr. Avinash C Sharma

Area of Specialization:
Theoretical Particle Physics

Research Publications:
http://www.ipu.ac.in/usbas/
mtechep/acs publ.php



Dr. Shruti Aggarwal

Area of Specialization:
Solar Photovoltaics,
Crystal Growth,
Thermoluminescence
Research Publications:
http://www.ipu.ac.in/usbas/mtechep/sa-publ.php



Dr. Anu Venugopalan

Area of Specialization:
Quantum information,
Confined quantum systems
(Theory)
Research Publications:

http://www.ipu.ac.in/usbas/ mtechep/av_publ.php



Dr. Rajesh Kumar

Area of Specialization:

Materials Science,

Nanotechnology, Energy

Storage Devices

Research Publications:

http://www.ipu.ac.in/usbas/

mtechep/rk publ.php

FACULTY PROFILE (ENGINEERING PHYSICS)



Dr. S Neeleshwar

Area of Specialization:
Nanomaterials,
Thermoelectric materials,
Magnetic Materials
Research Publications:

http://www.ipu.ac.in/usbas/ mtechep/sn_publ.php



Dr. Kriti Batra

Area of Specialization:
Theoretical Atomic and
Molecular Physics, Quantum
Heterostructures
Research Publications:
http://www.ipu.ac.in/usbas/mtechep/kb publ.php



Dr. Anjana Bagga

Area of Specialization:

Optical and Transport properties of semiconductor nanostructures, nanostructured thermoelectric materials, solar cells

Research Publications:
http://www.ipu.ac.in/usbas/mt
echep/ab publ.php



Mr. Mukesh Kumar

Area of Specialization:

Lasers and Photonics

Why M.Tech (Engineering Physics)

- •This is the first ever course(Approved by AICTE) at post-graduate level in India.
- •The programme is planned in such a manner so as to bridge the gap between Engineering and Science streams.
- •It meets the demands of the technical manpower required in several new emerging areas.
- •It is interdisciplinary and has courses from various fields of applied sciences and Computational Science. In Applied Sciences, some of the focus areas are Photovoltaics, Embedded systems, Computational Physics, Nanoscience and Technology, Nuclear Technology, Ion Beam Technology, Photonics.
- •In Computational Sciences, courses on programming (C++, Java, Oracle etc.), networking, data base management systems, computer architecture, multimedia and visualization technology etc. are covered.

About M.Tech (Engineering Physics)

This course prepares students to work in Industries/Institutes in following fields:

Solar Photovoltaics

Embedded Systems

Nanoscience and Technology

Nuclear Technology

Computational Simulations

Visualization Technology

Networking

M.Tech (EP)
is the first
ever course
at postgraduate
level in
india

Highlights of the Programme

- The programme is approved by AICTE.
- Regular interactive sessions with eminent physicists and physicist turned entrepreneur/manager/administrator as part of the curriculum.
- Presentations cum Comprehensive Viva-Voce in each semester.
- Project work by actual participation in Industry/ national research laboratories like DAE, SSPL, LASTEK, NPL, IUAC, VECC, CDAC etc.
- Working in the ongoing research projects at USS.
- Visit to Industry/Research labs.
- Students attend the national and international level conferences organized by FICCI, ASSOCHAM, SESI, El group and various universities/institutes/ organizations.

THRUST AREAS

Solar Photovoltaics

Energy

Nano Science and Technology

Nuclear Technology

Embedded Systems

Computational Physics

IT based courses- Artificial Intelligence, Internet of Things, Quantum Computing etc.

OUR STUDENTS ARE PLACED AT:





ELIGIBILITY

CET Code: 150

CET Exam is mandatory for all Non-GATE

Candidates.

B.E/B.Tech (Electronics/Computer Science/Electrical/Engineering Physics/IT/IC) or equivalent

OR

Post Graduation in Physics/Applied Physics/Electronics/Mathematics or equivalent with minimum 55% marks in aggregate in the qualifying degree. The applicant MUST have studied Physics at the undergraduate level.

GATE qualified candidates will be given first preference.

Non-GATE students will be selected based on merit list of CET rank.

FELLOWSHIPS

- GATE Fellowships
- Some Industrial Fellowships may be available as per Industrial requirement.

Note: For Economically Weaker Sections (EWS), University may provide financial assistance.

Interested students may visit
International Research Institutes for their
Minor and Major Projects. Probable
Countries: Germany, Taiwan, USA etc.

Last Date to Apply- 11th Aug, 2020

HOW TO APPLY?





Admission brochure carrying all the details and the application form can be submitted online through the university website.



For latest update and details keep visiting university website. (Please visit <u>ipu.ac.in</u> for latest updates and details).



Kindly refer Admission Brochure for more details

Last Date of Submission: 11th Aug, 2020



Application form link: http://www.ipu.ac.in/usbas/mtechepmain.p



For more information, visit

http://www.ipu.ac.in/usbas/mtechep/index.php

CONTACT US

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