



Department of Physics

Bhaskaracharya College of Applied Sciences
(University of Delhi)
Sec -2, Phase - 1, Dwarka, New Delhi -110075

About the Department

Physics is one of the most fundamental scientific disciplines. Needless to say, that the understanding of the physical phenomena has led to development of new technologies and new ideas.

B.Sc. (Honors) Physics is a three year undergraduate program. It intends to provide a broad-based education at undergraduate level to facilitate an early induction to global research scenario. The course is interdisciplinary with necessary flexibility to provide an overview of the entire gamut of important and recent scientific developments. The curriculum encompasses theoretical, experimental, and computational aspects of Physics education. Sufficient exposure is provided on Mathematics, Chemistry and Electronics. The curriculum provides a thorough understanding of fundamental subjects in order to enable students to cope with the challenges of modern research. There are lots of options for Physics graduate students. They can pursue higher education from Institutes like IISERS, Delhi University, IITs and other premier institutes of India and abroad. Our graduate students are doing exceedingly well in higher education and professional areas.

The laboratories of our department are well equipped with latest and sophisticated equipments required to give an experimental exposure. Some of the key equipments include Digital Storage Oscilloscopes, Spectrometers (10 sec least count), Laser Kits, Universal Interferometer, Ultrasonic Grating Experimental Kit with CCD Camera, Four- Probe set up with USB interface, P-E Hysteresis Kit etc. We have introduced both quantitative (problem-oriented) and qualitative (motivational in nature) approach to experiments in our laboratories.



Students working in Physics Lab

Department of Physics, BCAS, Dwarka

Admission Eligibility Criteria

The overall percentage in the qualifying class 12 examination should be:

- (a) 60% or more in Physics, Chemistry and Mathematics (PCM)
- (b) and 50% or more in One compulsory language i.e. English

Faculty Details

S. No.	Name of Faculty	Qualifications	Specialization
1)	Prof. Anand Bharadvaja	Ph.D. (D.U.)	Atomic and Molecular Physics
2)	Dr. Vandana Batra	Ph.D. (D.U.)	Astrophysics
3)	Dr. Meetu Luthra	Ph.D. (D.U.)	Cosmology
4)	Dr. Partha S. Pal	Ph.D. (D.U.)	Computational Physics
5)	Dr. Ramesh Kumar (<i>Teacher-In-Charge</i>)	Ph.D. (IIT Delhi), M. Tech. (IIT Delhi),	Quantum Optics, Applied Optics, Non-linear Optics, Optoelectronics.
6)	Dr. Sandeep Kumar	Ph.D. (IIT Delhi), M. Tech. (IIT Roorkee)	Solid State Materials
7)	Dr. Herendra Kumar	Ph.D. (D.U.)	Atomic and Molecular Physics

Semester-wise distribution of Courses under CBCS (Revised)

SEMESTER I		SEMESTER II	
CC-I	Mathematical Physics-I	CC-III	Electricity and Magnetism
CC-II	Mechanics	CC-IV	Waves and optics
AECC1	English/MIL Communication or EVS	AECC2	EVS or English/MIL Communication
GE1	Generic Elective	GE2	Generic Elective
SEMESTER III		SEMESTER IV	
CC-V	Mathematical Physics-II	CC-VIII	Mathematical Physics-III
CC-VI	Thermal Physics	CC-IX	Elements of Modern Physics
CC-VII	Digital Systems and Applications	CC-X	Analog Systems and Applications
SEC1	Skill-Enhancement Elective Course	SEC2	Skill-Enhancement Elective Course
GE3	Generic Elective	GE4	Generic Elective
SEMESTER V		SEMESTER VI	
CC-XI	Quantum Mechanics and Applications	CC-XIII	Electromagnetic Theory
CC-XII	Solid State Physics	CC-XIV	Statistical Mechanics

Information about Department of Physics, BCAS, Dwarka, New Delhi 75. Any information given here is subjected to change as per the guidelines of DU as and when received

Department of Physics, BCAS, Dwarka

DSE1	Discipline Specific Elective	DSE3	Discipline Specific Elective		
DSE2	Discipline Specific Elective	DSE4	Discipline Specific Elective		
Abbreviations used for Course					
CC	Core Course				
AECC	Ability Enhancement compulsory Course				
GE	Generic Elective course				
SEC	Skill Enhancement Elective Course				
DSE	Discipline Specific Elective course				
SEC: Skill-Enhancement Elective Courses <i>(Any one paper per semester in semesters 3rd and 4th)</i>		SEC 1: Computational Physics Skills SEC2: Applied Optics			
DSE: Discipline Specific Elective <i>(Any two paper per semester in semesters 5th and 6th.)</i>		DSE 1: Advanced Mathematical Physics-I DSE 2: Nuclear and Particle Physics DSE 3: Advanced Mathematical Physics-II DSE 4: Nano Materials and Applications			
GE: Generic Electives <i>(Any one paper per semester in semesters 1st to 4th.)</i>		GE1: Electricity and Magnetism GE2: Elements of modern Physics GE3: Waves and optics GE4: Thermal Physics			
Category wise seat distribution					
Total Seats	UR	SC	ST	OBC	EWS
40	16	6	3	11	4