

Faculty of Sciences
DEPARTMENT OF PHYSICS

STAFF

Professor

Surinder Singh Parmar, Ph.D.

Ratish Kumar Bedi, Ph.D.

Tarsem Singh Gill, Ph.D.

R. Thangaraj, Ph.D.

S.S. Sekhon, Ph.D.

Mahmood Mian, Ph.D.

Bikramjit Singh Bajwa, Ph.D. **(Head)**

Lakhwant Singh, Ph.D.

Reader

Sham Sunder Malik, Ph.D.

Nareshpal Singh Saini, Ph.D.

Kuldip Singh, Ph.D.

Jaspal Singh, Ph.D.

Ravi Chand Singh, Ph.D.

Davinder Paul Singh, Ph.D.

Kanwarjeet Singh, Ph.D.

Atul Khanna, Ph.D.

Lecturer

Amarjit Singh, Ph.D.

Samarjit S. Sihotra, Ph.D.

Manu Pariya, Ph.D. (on leave)

Kanwal Preet Bhatti, Ph.D.

Aman Mahajan, Ph.D.

Courses offered/Distribution of seats

Course	Duration	System	Total	Reserved Categories			
	(Year)		Seats	SC/ST	BC	RA	Others
B.Sc. (Hons. School)	3	Semester	50	12	3	4	6
M.Sc.(Hons. School)	2	Semester	28	7	1	2	4

M.Sc. (Hons.)	2	Semester	30	7	2	2	4
M.Sc. Applied Physics (Electronics)	2	Semester	30	7	2	2	4
M.Sc. Nano Science & Technology	2	Semester	30*	4	1	1	1
M.Phil.	1	Semester	16	4	1	1	2

Eligibility

1. B.Sc. (Hons. School): 10+2 examination of Punjab School of Education Board or any other examination recognised by the Guru Nanak Dev University as equivalent thereto with Physics, Chemistry and Mathematics/Biology with at least 50% marks in aggregate.

Admission will be based on merit of the candidate in qualifying examination. The Coordinator of admission shall be Prof. B.S. Bajwa, Head, Department of Physics.

2. M.Sc. (Hons. School): B.Sc. (Hons. School) in Physics from the Guru Nanak Dev University with at least 50% marks in aggregate.

Admission to M.Sc. (Hons. School) will be from amongst the students of B.Sc.(Hons.School) of the department who have secured 50% marks and above.

3. M.Sc. (Hons.) : B.Sc., Degree in Physics, Mathematics and Chemistry/Electronics/ Computer Science or any other examination recognized as equivalent thereto by Guru Nanak Dev University with at least 50% marks in aggregate.

4. M.Sc. Applied Physics (Electronics) : B.Sc.(Non-Medical) with at least 50% marks in aggregate or any other examination recognized as equivalent thereto with Physics and Mathematics as compulsory subjects.

The admission in 3 and 4 courses will be based on merit of the candidate in qualifying examination

5. M.Sc. Nano Science and Technology : B.Sc. (Non-Medical) with at least 50% marks in aggregate or any other examination recognized as equivalent thereto with Physics and Mathematics as compulsory subject.

***The admission for 15 seats will be based on merit of the candidate in the qualifying examination**

Admission on all India basis to the remaining 15 seats in M.Sc. Nano Science and Technology will be based on the merit of the candidate in the Entrance Test to be conducted by the Department. Two and one seats are reserved for SC and ST categories respectively. Students admitted through the Entrance Test are eligible for a scholarship @ Rs. 3000/-pm and contingency @ Rs. 10,000/- per annum.

6. M.Phil (a) M.Sc. (Hons. School)/M.Sc.(Hons.)/M.Sc. Physics of Guru Nanak Dev University with at least 55% marks or equivalent Overall Grade Point Average.

(b) Any other examination recognized by the Guru Nanak Dev University as equivalent to (a) above.

Admission will be based on merit of the candidate in the Entrance Test to be conducted by the Department

Special Features

Experimental research facilities leading to Ph.D. degree have been established in the areas of Nuclear Geo-Physics based Seismotectonic studies, Radiation Physics, Environmental Radioactivity, Thin Films, oxide and chalcogenide glasses, amorphous materials, solid state ionics (ion conducting polymers, polymer gel electrolytes and proton conducting membranes), bioglasses and bio ceramics, radiation effects in glasses, gas sensors, ferromagnetic semiconductors, spintronics. In theoretical Physics, the Department undertakes research work in the areas of Nuclear Theory, Plasma Physics, Laser Plasma interactions, Transport Phenomenon in Gases, Digital Signal Processing and Communication. The Department has received financial assistance from the DST under the Nano Mission and FIST-programmes, UGC under the SAP (DRS-I) Programme and is also running research projects in different fields sanctioned by various scientific organizations viz. DST, CSIR, IUAC, UGC and BRNS etc. of around Rs. 3.0 crore. Research equipment such as precision LCR meter, impedance analyzer, autoranging digital picoammeter, source meter, rotating viscometer, ultrasonic velocity and attenuation set-up, thermal and e-beam coating unit, spin coating unit, gas sensors test facility, powder X-ray diffraction with thin film attachment, UV-visible absorption, fluorescence spectrophotometers and AFM etc. are available.

After completion of graduation courses, the students are generally placed in different Educational Institutes, Research establishments (such as BARC, TIFR, DRDO, PRL, IPR etc.), Defence and IT Companies.

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