



SCHOOL OF BASIC SCIENCES



INFORMATION BROCHURE

Chhatrapati Shahu Ji Maharaj University

Kanpur



**ADMISSIONS
OPEN**
FOR
2022-23

**COURSES
OFFERED**



- B.Sc. (Hons.) Physics
- B.Sc. (Hons.) Chemistry
- B.Sc. (Hons.) Mathematics
- B.Sc. (Physics, Chemistry, Mathematics)
- B.Sc. (Physics, Mathematics, Information Technology)
- B.Sc. (Physics, Mathematics, Computer Applications)
- B.Sc. (Physics, Mathematics, Geography)
- One Year Certificate Program in Laboratory techniques (Physics, Chemistry)

- M.Sc. (Physics)
- M.Sc. (Chemistry)
- M.Sc. (Mathematics)
- M.Sc. (Industrial Chemistry)
- M.Sc. (Geography)
- M.Sc. (Information Technology with specialization in Artificial Intelligence)



The school offers Undergraduate, Post Graduate and a Doctoral degree on full time basis. Industrial Visits, Trainings and Projects are an integral part of the courses offered by School of Basic Sciences. The course has been designed to acquaint students with an advanced knowledge of areas of Physics, Chemistry & Mathematics.

School of Basic Sciences is one of the indispensable Schools of the University. It imparts excellent quality education in the area of Physics, Chemistry & Mathematics. Department of Physics Chemistry and Maths has been established in the year 1996 in the university institute of Engineering and technology, UIET, CSJM university. Now, these departments are the part of School of Basic Sciences due to broad vision of our respected **Vice Chancellor Prof. Vinay Kumar Pathak**. Under his supervision, the School of Basic sciences is committed to impart quality education to the students. Today's world needs people who understand science and the contribution it makes to society. Basic Science is the science of applying knowledge from one or more natural scientific fields to practical problems. The study of basic science at our university will provide you with not only a broad understanding of a variety of scientific principles but also the skill to apply your knowledge to solve problems and provide solutions to a variety of situations. School has embarked on continual upgrading of its facilities; all these are in line with our desire to train holistic scientists that make positive contribution not only to our nation but also to the whole of mankind.

Working toward this goal, the school currently has newly appointed **Director Prof. R.K Dwivedi**. Under the valuable guidance of our director, the School of Basic Sciences will be flourish. And there are 19 dedicated faculty members actively involved in teaching and research. Well established laboratories help in fostering the spirit of research and motivate the students to learn beyond the syllabus and understand the symbiotic relationship between science and technology. The present faculty members are actively engaged, besides their teaching program, in pursuing research in frontier areas of Physics, Chemistry, Mathematics and Inter- Disciplinary Sciences. Our faculty members have published many national and international publications. The department has successfully completed more than 10 projects under the sponsorship of CSIR, DST, UGC, ISRO, etc

VISION

To build and lay a sound foundation for excellence and encourage the students for development of the school as a premier Institution by igniting and promoting enthusiasm, interests and passion, in the study of Basic Science



MISSION

- To awaken the young minds and discover their talents both in theory and in practical Basic Science, through dedication to teach, commitment towards students and innovative instructional methods like PPT & Visual Aids.
- To provide a platform to keep abreast with current developments in science.
- To make vital contributions in areas such as faculty, modern labs, and demonstrate a high level of competence in the study of Basic Science.
- To organize and sustain efficient operating systems in the School of Basic Sciences for realization of our objectives as Institution of eminence and international standards.
- To make our students skilled, entrepreneur with ethical values
- To involve in projects leading to a good quality research.



Laboratories & Infrastructure



Both Physics and Chemistry Laboratories are well equipped and organized.

The Physics & Chemistry laboratories are supported by following modern well equipped labs:

- Mechanical Lab
- Optics Lab
- Electricity-Magnetism Lab
- Chemistry Lab's
- Chemistry research Lab

DEPARTMENT OF PHYSICS, SCHOOL OF BASIC SCIENCES
PROF. R. K. DWIVEDI, DIRECTOR, SCHOOL OF BASIC SCIENCES AND CDC

1	Dr. Anju Dixit, Deputy Director	Assistant Professor, Ph. D (University of Puerto Rico, San Juan, USA) Specialization: Electronics Area of Research: Condensed Matter Physics
2	Dr. Saswati Sarkar	Assistant Professor Ph. D. (Visva Bharti University, Calcutta) Specialization: Particle Physics Area of Research: Elementary Particle Physics
3	Dr. Ram Janma	Assistant Professor Ph. D. (CSJM University Kanpur) Specialization: Solid State Physics Area of Research: Fiber Optics Communication & Optical Waveguide
4	Dr. Prabal Pratap Singh	Assistant Professor Ph.D (Integral University, Lucknow) Specialization: Solid State Physics Area of Research: Optical properties of layered media & Photonic Crystals
5	Dr. Shikha Shukla	Assistant Professor Ph. D. (CSJM University, Kanpur) Specialization: Electronics Area of Research: Amorphous Semiconductors
6	Dr. Ritika Solanki, Coordinator	Assistant Professor Ph.D. (IIT,BHU,Varanasi) Specialization: Electronics Area of Research: Solar Astrophysics
7	Dr. Avanish Kumar Bajpeyi, Deputy Coordinator	Assistant Professor Ph.D. (Rajiv Gandhi Institute of Petroleum Technology, Amethi) Specialization: Electronics Area of Research: Nuclear Astrophysics

DEPARTMENT OF CHEMISTRY, SCHOOL OF BASIC SCIENCES

8	Dr. B.P. Singh	Assistant Professor Ph.D.(Banaras Hindu University, Varanasi) Specialization: Organic Chemistry Area of Research: Organic Chemistry/ Materials Chemistry/ Natural Products
9	Dr. Rashmi Dubey, Coordinator	Assistant Professor Ph.D.(CSJM University, Kanpur) Specialization: Organic Chemistry Area of Research: Polymer
10	Dr. Ratna Shukla	Assistant Professor Ph.D. (HBTU, Kanpur) Specialization: Physical Chemistry Area of Research: Chemical Kinetics
11	Dr. Meraj Jafri, Deputy Coordinator	Assistant Professor Ph.D.(AKTU) Specialization: Interpenetrating polymer network Area of Research: Polymer
12	Dr. Dhananjay Dey	Assistant Professor Ph.D.(NIT Durgapur) Specialization: Chemistry (Hons.) Area of Research : Inorganic chemistry and Organometallic Chemistry
13	Dr. P.S. Niranjana	Assistant Professor Ph.D.(AKTU) Specialization: Interpenetrating polymer network Area of Research: Polymer-Surfactant interaction

DEPARTMENT OF MATHEMATICS, SCHOOL OF BASIC SCIENCES

14	Dr. Varsha Gupta	Associate Professor Ph. D. (IIT Kanpur) Area of Research: Numerical Analysis
15	Dr. D. K. Singh, Coordinator	Assistant Professor Ph. D. (Dr. R. M. L. Avadh University, Faizabad) Area of Research: Fractional Calculus, Special Function, Partial Fractional differential equations
16	Dr. Poonam Dixit	Assistant Professor Ph. D (CSJM University, Kanpur) Area of Research: Complex Variables.
17	Dr. P. N. Pathak, Deputy Coordinator	Assistant Professor Ph. D. (CSJM University, Kanpur) Area of Research: Distribution Theory
18	Dr. Sandeep Porwal	Assistant Professor Ph. D.(IIT BHU) Area of Research: Operation Research
19	Dr. Namita Tewari	Assistant Professor Ph. D.(MNIT, Prayagraj) Area of Research: Cryptography

Alumni Students Placement

Name	Department	Placed
Yash Varshney	Chemistry	Patanjali Research Institute, Haridwar
Mansi Kaserey	Chemistry	Patanjali Food and Herbal Park, Haridwar
Vani Sharma	Chemistry	Novozyme Pvt Ltd, Bengaluru
Aman Rajput	Chemistry	Sun Pharma, Bengaluru
Anchal Tyagi	Chemistry	Novozyme Pvt. Ltd. Bengaluru
Rohit Maurya	Chemistry	Nestle, Punjab
Nitin Kumar	Chemistry	Mankind, Kanpur
Akhtar Khan	Chemistry	Unimark Healthcare Ltd. Haridwar
Vikash Mishra	Chemistry	Sugar Industry, Dhampur
Saurabh Kumar	Chemistry	Akums Pharmaceuticals, Haridwar
Himanshu Chauhan	Chemistry	Tikuala Sugarmill Ltd., MuzaffarNagar
Dr. Jitendra Singh	Mathematics	Assistant Professor, Department of Mathematics, BHU
Dr. Sunil Kumar Kamal	Mathematics	Associate Professor and Head, Department of Mathematics, NIT, Jamshedpur
Dr. Mahendra Pratap Singh	Physics	Assistant Professor, Department of Physics, DBS College Kanpur
Dr. Sonu Vishwkarma	Physics	Research Associate, Rajasthan Central University

***Our alumni students are well placed in Industries, Government Intermediate and Degree colleges, IITS and NITS.**

School of Basic Sciences proposes following courses in different streams of Basic Sciences from the academic session 2022 – 2023

S.No.	Name of the Course	Duration	Eligibility Criteria	Seats	Fees (Rs.)
1.	Certificate Program in Laboratory Techniques	One year	Passed 12 th class examination with Science Stream	30	12,000/-
2.	B.Sc. (Hons.) Physics B.Sc. (Hons.) Chemistry B.Sc. (Hons.) Mathematics	Three Year	Passed 12 th class examination with Physics, Chemistry, Maths	30 each	34,200/-
3.	B.Sc. in four Combinations 1. Physics, Chemistry, Mathematics 2. Physics, Mathematics, Information Technology 3. Physics, Mathematics, Computer Applications 4. Physics, Mathematics, Geography	Three Year	Passed 12 th class examination with Physics, Chemistry, Maths	60 each	25,000/-
4.	M.Sc. (Physics)	Two Year	Passed B.Sc. examination with Physics,	30	29,100/-
5.	M.Sc. (Industrial Chemistry) M.Sc. (Chemistry)	Two Year	Passed B.Sc. examination with Chemistry		29,100/-
5	M.Sc. (Mathematics)	Two Year	Passed B.Sc. examination with, Math's	30	29,100/-
6.	M.Sc. (Geography)	Two Year	Passed B.Sc. examination with Geography	30	29,100/-
7	M.Sc. (Information Technology with specialization in Artificial Intelligence)	Two Year	Passed B.Sc. examination with Information Technology or BCA	30	29,100/-

Contact Details

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