

B.Sc. Chemistry Hons: Scope & Opportunities



Chemistry is a highly fascinating field of science. It can be divided into various domains including organic chemistry, inorganic chemistry, physical chemistry, molecular chemistry and many more. This programme offers a wide range of career options for students.

- After B.Sc. Chemistry, one can pursue M.Sc. in specialized fields like Organic, Inorganic, or Analytical Chemistry. Chemistry will serve as the foundation for further study in the discipline at the master's and doctoral levels.
- Jobs such as Chemical Analyst, Research Scientist, or Lab Technician are some of the career options after a BSc in Chemistry.

MSc Courses After B.Sc. Chemistry

MSc in Pure Chemistry

MSc in Biochemistry

MSc in Polymer Chemistry

MSc in Food and Nutrition

MSc in Environmental Science

MSc in Chemical Technology

MSc in Agricultural Chemistry

M.Sc. in Forensic Science

M.Sc. in Environment & Green Chemistry

M.Sc. in Biotechnology

Chemical Engineering:

- B.Tech. in Chemical Engineering / Chemical Engineering / Chemical Technology / Polymer Science & Technology.
- Postgraduate Diploma in Analytical Chemistry
- Postgraduate Diploma in Biotechnology
- Postgraduate Diploma in Nanobiotechnology
- Postgraduate Diploma in Polymer Technology
- Postgraduate Diploma in Printing Technology
- ❖ MBA in Biotechnology
- ❖ MBA in Laboratory Management
- ❖ MBA in Pharmaceutical Management
- ❖ MBA in Biotechnology and Oil & Gas Management

❖ Competitive Examinations for higher studies:

Joint Admission Test for Masters (JAM):

There are around 3000 seats in postgraduate programmes at 21 IITs for the academic year 2024-25. JAM 2024 Score will be used to admit the candidates subject to satisfying the Eligibility Requirements (ERs) and Minimum Educational Qualifications (MEQs) and any other necessary requirements, without any additional interview or written test.

Admitting Institutes	Website	E-mail ID	Phone
IIT Bhilai	https://www.iitbhilai.ac.in	academics@iitbhilai.ac.in	(0771) 2973624 07021210587
IIT Bhubaneswar	https://www.iitbbs.ac.in	chairman.jam@iitbbs.ac.in ar.acad@iitbbs.ac.in	(0674) 7134462 (0674) 7135136
IIT Bombay	https://www.iitb.ac.in	jam@iitb.ac.in	(022) 25767068
IIT Delhi	https://home.iitd.ac.in/	jam@admin.iitd.ac.in	(011) 26591749
IIT (ISM) Dhanbad	http://www.iitism.ac.in	chairman_gatejam@iitism.ac.in	(0326) 2235265 (0326) 2235266 (0326) 2235662
IIT Gandhinagar	https://www.iitgn.ac.in	academics@iitgn.ac.in	(079) 23952051
IIT Guwahati	https://www.iitg.ac.in	jam@iitg.ac.in	(0361) 2582751
IIT Hyderabad	https://www.iith.ac.in	dean_academics@iith.ac.in	(040) 23016082
IIT Indore	https://www.iiti.ac.in	jamchairman@iiti.ac.in gatechairman@iiti.ac.in	(0731) 6603598 (0731) 6603150
IIT Jammu	https://www.iitjammu.ac.in	ar.acad@iitjammu.ac.in	(0191) 2570633
IIT Jodhpur	https://www.iitj.ac.in	chair_admissions@iitj.ac.in	(0291) 2801141
IIT Kanpur	https://iitk.ac.in	jam@iitk.ac.in	(0512) 6797412
IIT Kharagpur	https://www.iitkgp.ac.in	jam@adm.iitkgp.ac.in	(03222) 282091/95
IIT Madras	https://www.iitm.ac.in	jam@iitm.ac.in	(044) 22578200

Admitting Institutes	Website	E-mail ID	Phone
IIT Mandi	https://www.iitmandi.ac.in	jamchair@iitmandi.ac.in aracad@iitmandi.ac.in	(01905) 267828 (01905) 267058
IIT Palakkad	https://iitpkd.ac.in	deanadmn@iitpkd.ac.in	(04923) 226567
IIT Patna	https://www.iitp.ac.in	pic_jam@iitp.ac.in	(06115) 233028 (06115) 233697 (06115) 233773
IIT Roorkee	https://www.iitr.ac.in	jam@iitr.ac.in	(01332) 284531
IIT Ropar	https://www.iitrpr.ac.in	jamchair@iitrpr.ac.in	(01881) 231111 (01881) 231114 (01881) 231110
IIT Tirupati	https://iittp.ac.in	academics@iittp.ac.in	(0877) 2503531
IIT (BHU) Varanasi	https://www.iitbhu.ac.in	office.academics@iitbhu.ac.in	09454820126

Common University Entrance Test_ CUET (PG): <https://pgcuet.samarth.ac.in/>

Participating Universities: <https://pgcuet.samarth.ac.in/index.php/app/info/universities#CU>

- Central University/ Institution
- State University
- Deemed University
- Private University

Examinations for the scientific assistants in the -

- Bhabha Atomic Research Center (BARC)
- Council for Scientific and Industrial Research (CSIR)
- Defense Research Development and Organization (DRDO),
- Oil and Natural Gas Corporation (ONGC),
- Indian Space Research Organization (ISRO),
- Tata Institute of Fundamental Research (TIFR),
- National Fertilizer Limited (NFL).
- UPSC's Common Defense Examination.

Jobs after B.Sc. Chemistry

1. Government Sector: Teacher– School, Professor – Universities & Colleges (after M.Sc.), Scientific Assistant – DRDO and CSIR, Laboratory Technician – BARC, Chemist – Pharmaceutical Sectors and Food Industry
2. Private sector: Chemical Industries, Oil Industry, Paint Industry, Food Industry

If further studies aren't your preference after B.Sc. Chemistry, consider aiming for these job opportunities instead.

Chemist

Chemists work in academic institutions, pharmaceutical industries, chemical industries, government laboratories, etc.

Job Description

- Chemists analyse compounds, refine substances, and test chemical products.
- Their work includes improving the quality of products and methods while ensuring safety.
- They perform laboratory work developing and improving both new and existing products.

Pharmacy Assistant

Pharmacy assistants work under the direction of licensed pharmacists in hospitals, pathology labs, pharmacies, health care services, etc.

Job Description

- Their work includes giving prescriptions and other medical products to patients.
- Listen to the problems of the patients and provide them with the necessary help.
- Check Pharmacy Stocks
- Helps in ordering, loading and checking the delivery of pharmaceutical goods.

Lab Assistant

They are experts skilled in basic lab techniques and equipment. They may work in the medical laboratory. Some of the recruiters are the Indian Coastal Guard, SR Group of Institutions, and IIIT Pune.

Job Description

- Their duties include processing samples, classifying results, and noting findings.
- They help technologists and scientists during laboratory tests and research.
- Their work includes conducting quality control checks and creating duplications with data.
- They use the latest practices to interpret the results of their findings.

Toxicologist

Toxicologists work in forensic departments. They can also find work in crime laboratories, medical laboratories, military services, government sectors, universities, hospitals, etc.

Job Description

- They study the safety and biological effects of drugs, chemicals, and other substances on living organisms.
- Conducting research that investigates the properties of chemical agents.
- Analyzing cellular and biochemical reactions to identify harmful compounds.
- They are involved in finding treatments for biochemical reactions.

Biochemists

Biochemists work as laboratory administrators, research scientists, clinical research assistants, and more. They can prefer jobs in both government and private firms such as the pharmaceutical industry, educational institutes, healthcare industry etc.

Job Description

- They analyze enzymes, DNA, and other molecules to research the effects of drugs and food on biological processes.
- Biochemists work in basic and applied research to plan and conduct complex projects.
- They manage laboratory teams and oversee the quality of their work.
- They are also involved in separating, analyzing and synthesizing proteins, fats, DNA and other molecules.