



21st Century Careers

Edge
with
Edu**ca**tive

INSTITUTES OF NATIONAL IMPORTANCE OF INDIA:

Education plays an important role in shaping up one's life. In India, Institute of National Importance (INI) is a status that may be conferred on a premier public higher education institution, by an act of Parliament of India. Such premier institutions that "serve as a pivotal player in developing highly skilled personnel within the specified region of the country/state". The Government of India is providing special recognition and funding to these institutes of National Importance. The lists of institutes with national importance are mentioned below-

1. SCHOOL OF PLANNING & ARCHITECTURE:

A group of autonomous public institutes known as "The Schools of Planning and Architecture (SPAs)" are under the Ministry of Human Resource Development, Government of India. The objectives of these establishments are to provide quality Architectural and physical planning education. The SPAs primarily concentrate on undergraduate, postgraduate, doctoral and executive education programmes.



Some of the courses offered are:

- Bachelor of Architecture
- Bachelor of Planning
- Master of Urban Design
- Master of Design (Industrial Design)
- Master of Building Engineering and Management
- Master of Landscape Architecture etc

List of School of Planning & Architecture institutes are:

- School of Planning & Architecture Vijaywada, Andhra Pradesh
- School of Planning & Architecture Vijaywada, New Delhi
- School of Planning & Architecture Vijaywada, Bhopal

2. NATIONAL INSTITUTE OF TECHNOLOGY

A group of autonomous public institutes of higher education known as "The National Institutes of Technology (NITs)" are located in India. The National Institutes of Technology Act, 2007, governs "The National Institutes of Technology (NITs)" which declares them as institutions of national importance alongside Indian Institutes of Technology. The Government of India provides special recognition to the institutes of national importance. The supreme governing body of India's National Institutes of Technology (NIT) system is the NIT Council and the Government of India provides funding to all 31 NITs.



Some of the courses offered are:

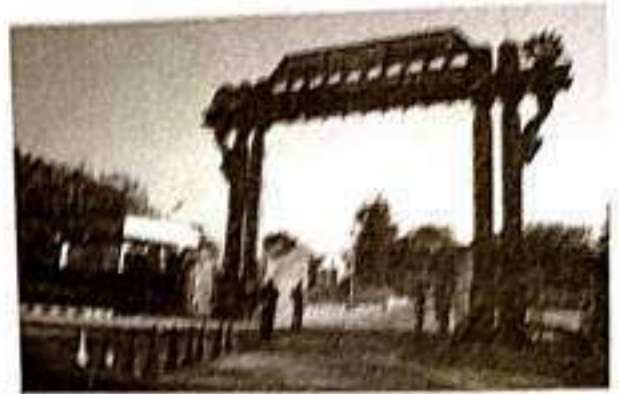
- Master of Technology (MTech),
- Master of Business Administration (MBA),
- Master of Science (MSc) etc
- Master of Computer Applications (MCA).

List of National Institute of Technology are:

- National Institute of Technology, Arunachal Pradesh
- National Institute of Technology, Silchar
- National Institute of Technology, Patna
- National Institute of Technology, Raipur
- National Institute of Technology, Delhi
- National Institute of Technology, Goa
- National Institute of Technology, Surat
- National Institute of Technology, Kurukshetra
- National Institute of Technology, Himachal Pradesh
- National Institute of Technology, Srinagar



- National Institute of Technology, Jamshedpur
- National Institute of Technology, Karnataka
- National Institute of Technology, Calicut
- National Institute of Technology, Bhopal
- National Institute of Technology, Nagpur
- National Institute of Technology, Manipur
- National Institute of Technology, Meghalaya
- National Institute of Technology, Mizoram
- National Institute of Technology, Nagaland
- National Institute of Technology, Rourkela
- National Institute of Technology, Odisha
- National Institute of Technology, Puducherry
- National Institute of Technology, Jalandhar
- National Institute of Technology, Jaipur
- National Institute of Technology, Sikkim
- National Institute of Technology, Tamil Nadu
- National Institute of Technology, Telangana
- National Institute of Technology, Agartala
- National Institute of Technology, Uttarakhand
- National Institute of Technology, West Bengal
- Maulana Azad National Institute of Technology, Bhopal, Madhya Pradesh
- Visvesvaraya National Institute of Technology, Nagpur, Maharashtra
- Malviya National Institute of Technology, Jaipur, Rajasthan



3. ALL INDIA INSTITUTE OF MEDICAL SCIENCES

The All India Institutes of Medical Sciences (AIIMS) are group of autonomous government public medical colleges of higher education. These institutes have been declared by an Act of Parliament as Institutes of National Importance. The All India Institutes of Medical Sciences (AIIMS), New Delhi was established in 1956.



Some of the courses offered are:

- M.B.B.S.
- B.Sc Operation Theatre Technology.
- B.Sc Dental Operating Room Assistant.
- B.Sc Dental Hygiene.
- B.Sc {Hons.} Medical Technology in Radiography.
- B.Sc {Hons.} Nursing.
- P.B.B.Sc Nursing etc



List of All India Institute of Medical Sciences Institutes are:

- All India Institute of Medical Sciences, Patna
- All India Institute of Medical Sciences, Raipur
- All India Institute of Medical Sciences, Delhi
- All India Institute of Medical Sciences, Bhopal
- All India Institute of Medical Sciences, Odisha
- All India Institute of Medical Sciences, Jodhpur
- All India Institute of Medical Sciences, Rishikesh

4. INDIAN INSTITUTE OF TECHNOLOGY



A group of autonomous public institutes of higher education known as "The Indian Institutes of Technology (IITs)" are located in India. The Institutes of Technology Act, 1961 governs

"The Indian Institutes of Technology (IITs)" and has declared them as institutions of national importance. The Institutes of Technology Act has prescribed their powers, duties, and framework for governance. The Institutes of Technology Act, 1961 has listed twenty-three institutes. Each IIT is autonomous and linked to the others through a common council (IIT Council), which looks after their administration.

Some of the courses offered are:

- Bachelor of Science (BS)
- Dual Degree (BTech-MTech)
- Bachelor of Design (BDes)
- Dual Degree (MSc-PhD)
- Dual Degree (BS & MS)
- Master of Science (MSc)
- Master of Design (MDes)
- Bachelor of Architecture (BArch)
- Master of Business Administration (MBA)
- Master of Philosophy (MPhil)
- Joint MSc-PhD etc



List of Indian institute of technology institutes are

- Indian Institute of Technology, Guwahati
- Indian Institute of Technology, Delhi
- Indian Institute of Technology, Gandhinagar
- Indian Institute of Technology, Mandi
- Indian Institute of Technology, Indore
- Indian Institute of Technology, Mumbai
- Indian Institute of Technology, Bhubaneswar
- Indian Institute of Technology, Raipur
- Indian Institute of Technology, Jodhpur
- Indian Institute of Technology, Chennai
- Indian Institute of Technology, Hyderabad
- Indian Institute of Technology, Varanasi
- Indian Institute of Technology, Kanpur
- Indian Institute of Technology, Roorkee
- Indian Institute of Technology, Kharagpur
- Department of Computer Science and Engineering, IIT, Guwahati
- Sardar Vallabhbhai National Institute of Technology, Surat, Gujarat



5. INDIAN INSTITUTE OF INFORMATION TECHNOLOGY

A group of institutes of higher education in India, known as "The Indian Institutes of Information Technology (IITs)" focus on information technology. The Ministry of Human Resource Development has established, funded and managed five of them whereas the rest are set up on the public-private partnership (PPP) model.

Some of the courses offered are:

- BTech (Bachelors of Technology)
- BDes (Bachelors of Design)
- MDes (Masters of Design)
- BTech + MTech
- MTech (Masters of Technology)
- MBA (Masters of Business Administration)
- PhD (Doctorate of Philosophy) etc



List of Indian institute of information technology institutes are:

- Indian Institute of Information Technology, Design & Manufacturing, Kancheepuram, Tamil Nadu
- Indian Institute of Information Technology, Allahabad, Uttar Pradesh
- Indian Institute of Information Technology, Sri City, Chittoor, Andhra Pradesh
- Indian Institute of Information Technology, Guwahati, Assam
- Indian Institute of Information Technology, Vadodara, Gujarat
- Indian Institute of Information Technology, Sonapat, Haryana
- Indian Institute of Information Technology, Una, Himachal Pradesh
- Indian Institute of Information Technology, Ranchi, Jharkhand
- Indian Institute of Information Technology, Dharwad, Karnataka
- Indian Institute of Information Technology, Kottayam, Kerala
- Indian Institute of Information Technology, Nagpur, Maharashtra
- Indian Institute of Information Technology, Pune, Maharashtra
- Indian Institute of Information Technology, Senapati, Manipur

- Indian Institute of Information Technology, Kota, Rajasthan
- Indian Institute of Information Technology, Tiruchirappalli, Tamil Nadu
- Indian Institute of Information Technology, Lucknow, Uttar Pradesh
- Indian Institute of Information Technology, Kalyani, West Bengal
- Indian Institute of Information Technology, Design & Manufacturing, Kurnool, Andhra Pradesh
- Pandit Dwarka Prasad Mishra Indian Institute of Information Technology & Manufacturing, Jabalpur, Madhya Pradesh
- Atal Bihari Vajpayee Indian Institute of Information Technology and Management, Gwalior, Madhya Pradesh

6. INDIAN INSTITUTE OF SCIENCE EDUCATION & RESEARCH (IISER)

Indian Institutes of Science Education and Research (IISERs) are group of public research institutions in India. To provide quality collegiate education in basic sciences coupled with cutting-edge research at the undergraduate level these institutes were established by the Government of India through the Ministry of Human Resource Development (MHRD)

Some of the courses offered are:

- BS + MS Chemistry.
- BS + MS Physics.
- BS + MS Biology.
- BS + MS Mathematics.
- M.Sc + Ph.D Physics.
- M.Sc + Ph.D Chemistry.
- M.Sc + Ph.D Biology.
- M.Sc + Ph.D Mathematics. etc



List of Indian Institute of Science Education & Research institutes are:

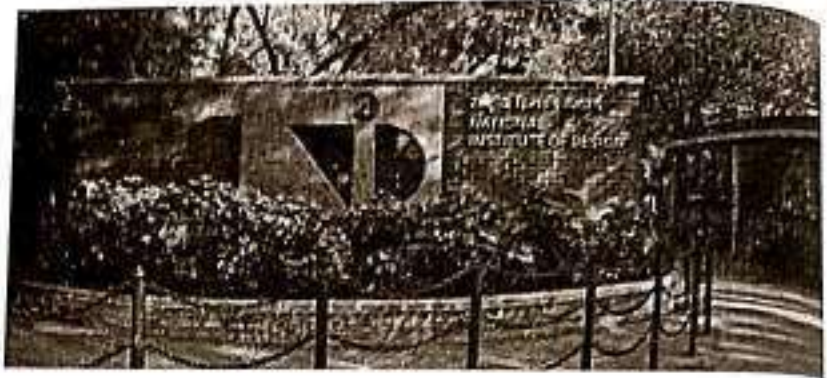
- Indian Institute of Science Education & Research (IISER), Thiruvananthapuram, Kerala
- Indian Institute of Science Education & Research (IISER), Mohali,
- Indian Institute of Science Education & Research (IISER), Bhopal, Madhya Pradesh
- Indian Institute of Science Education & Research (IISER), Pune, Maharashtra
- Indian Institute of Science Education & Research (IISER), Kolkata, West Bengal

7. NATIONAL INSTITUTE OF DESIGN (NID)

The National Institute of Design (NID) is in Ahmedabad, Bengaluru and Gandhinagar India. The other two NIDs are in Kurukshetra (Haryana) and Vijayawada (Hyderabad). The institute works as an autonomous body under the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Government of India.

Some of the courses offered are:

- Bachelor of Design (BDes),
- Graduate Diploma Program in design (GDPD)
- Masters of Design (MDes)
- Doctorate of Philosophy (PhD) in Design etc



List of National Institute of Design (NID) institutes are

- National Institute of Design (NID), Ahmedabad
- National Institute of Design (NID), Gandhinagar
- National Institute of Design (NID), Bengaluru

8. SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES AND TECHNOLOGY, THIRUVANANTHAPURAM, KERALA

The Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST), formerly Sree Chitra Tirunal Medical Center, is an autonomous medical school established in 1976 at Thiruvananthapuram, Kerala. The last Maharajah of Travancore, gifted the building and so the institute is named after Chithira Thirunal Balarama Varma. The institute is under the Administrative Control of the Department of Science and Technology, Government of India.



Some of the courses offered are

- Diploma in Advanced Medical Imaging Technology
- Diploma in Nursing specialities
- PG Diploma in Cardiac Laboratory Technology
- PG Diploma in Clinical Perfusion
- PG Diploma in Medical Records Science
- PG Diploma in Neuro Technology
- Diploma in Operation Theatre Technology
- PG Diploma in Blood Banking Technology etc.

9. JAWAHARLAL INSTITUTE OF POST GRADUATE MEDICAL EDUCATION & RESEARCH, PUDUCHERRY



The Jawaharlal Institute of Postgraduate Medical Education & Research (JIPMER) is a medical school located at Pondicherry, in India. JIPMER is a tertiary care referral hospital that is under the direct administrative control of the Ministry of Health and Family Welfare, Government of India with autonomy.

Some of the courses offered are

- MBBS M.B.B.S.
- B.Sc. Nursing.
- B.Sc Operation Theatre And Anaesthesia Technology.
- B.Sc Nuclear Medicine Technology.
- B.Sc Medical Laboratory Technology.
- B.Sc Perfusion Technology.
- B.Sc Medical Radiological Technology.
- B.Sc Optometry etc.

10. NATIONAL INSTITUTE OF PHARMACEUTICAL, EDUCATIONAL AND RESEARCH, MOHALI, PUNJAB

The National Institute of Pharmaceutical Education and Research (NIPER), located in Mohali is an Indian public Pharmacy research university, and a part of the seven schools, under India's Ministry of Chemicals and Fertilizers. The institute offers Masters and Doctoral degrees in pharmaceutical sciences.



Some of the courses offered are

- Master of Business Administration (MBA)
- M.Pharm + MBA etc

11. ACADEMY OF SCIENTIFIC & INNOVATIVE RESEARCH, GHAZIABAD, UTTAR PRADESH



The Academy of Scientific and Innovative Research (ACSIR) is an Indian institute of national importance, headquartered at the Council of Scientific and Industrial Research-Human Resource Development Centre Campus, Ghaziabad, Uttar Pradesh. The institute was established for the purpose of providing doctoral and post-doctoral degrees.

Some of the courses offered are

- PhD in Engineering
- PhD (Sciences)
- Integrated Dual-Degree PhD (IDDP) Program in Engineering

12. DAKSHINA BHARAT HINDI PRACHAR SABHA, TAMIL NADU

Dakshina Bharat Hindi Prachar Sabha is an organisation whose aim is to improve Hindi literacy among the non-Hindi speaking people of South India. The headquarters are located at Thanikachalam Road, T. Nagar, Chennai.

The organisation was established by Mahatma Gandhi, who became the founder president of the Sabha. The Sabha was inaugurated by Annie Besant on 17 June 1918.

Some of the courses offered are

- M.A. in Hindi
- B.A. in Hindi
- Postgraduate Diploma in Translation



13. RAJIV GANDHI NATIONAL INSTITUTE OF YOUTH DEVELOPMENT, SRIPERUMBUDUR, TAMIL NADU

The Rajiv Gandhi National Institute of Youth Development (RGNIYD), Sriperumbudur, Tamil Nadu, is an Institution of National Importance by the Act of Parliament No. 35/2012 under the Ministry of Youth Affairs & Sports, Government of India.



The RGNIYD provides academic programmes at postgraduate level in youth development, engages in research in youth development, and coordinates training programmes for state agencies and the officials of youth organisations.

Some of the courses offered are

- M.A. Development Policy and Practice.
- M.A. Gender Studies.
- M.A. Local Governance and Development.
- M.A. Social Innovations and Entrepreneurship.
- M.A. Social Work (Youth and Community Development)

14. RAJIV GANDHI INSTITUTE OF PETROLEUM TECHNOLOGY, RAE BARELLI, UTTAR PRADESH



Rajiv Gandhi Institute of Petroleum Technology (RGPT), in Amethi, Uttar Pradesh, India, was formally opened in July 2008. It is a training and educational institute that gives both technical and management training to the petroleum industry.

RGPT is co-promoted as an energy domain specific institute by six leading Oil Public Sector Units (ONGC, IOCL, OIL, GAIL, BPCL and HPCL) in association with the Oil Industry Development Board (OIDB) and with an academic mentorship from IIT Kanpur.

Some of the courses offered are

- (B.Tech) Chemical Engineering and Petroleum Engineering,
- (M.Tech) Chemical Engineering, Petroleum Engineering
- (M.Tech) Renewable Engineering, Power and Energy Systems Engineering and Energy Science and Technology
- Master of Business Administration

15. INDIAN STATISTICAL INSTITUTE, KOLKATA, WEST BENGAL

Indian Statistical Institute (ISI) is an academic institute of national importance and is recognised by a 1959 act of the Indian parliament. Established in 1931, this public university is one of the oldest and most prestigious institutions focused on statistics. Primary activities of ISI include research and training of Statistics, development of theoretical Statistics and its applications in various natural and social sciences.

Some of the courses offered are

- Bachelor of Statistics (Honours) (B.Stat)
- Bachelor of Mathematics (Honours) (B. Math)
- Master of Statistics (M. Stat)

- Master of Mathematics (M. Math)
- Master of Science in Quantitative Economics (MSQE)
- Master of Science in Library and Information Science (MSLIS)
- Master of Science in Quality Management Science (MSQMS)
- Master of Technology in Computer Science (MTech-CS)



16. FOOTWEAR DESIGN & DEVELOPMENT INSTITUTE, NOIDA, UTTAR PRADESH

FDDI was set up by the government of India in 1986 with an objective to provide human resource and technical services to the industry. FDDI conducts a range of professional courses in the area of Retail Management, Footwear Design, Technology, Management etc.

FDDI also has the status of an Institute of National Importance in Year 2017 by The Government of India.

Some of the courses offered are

- Retail Management,
- Footwear Design, Technology,
- Management,
- Fashion Merchandising,
- Business Management,
- Visual Merchandizing,
- Marketing,
- Creative Designing & CAD/CAM
- Leather Goods & Accessories Design etc



17. INDIAN INSTITUTE OF PETROLEUM AND ENERGY (IIPE), ANDHRA PRADESH

Indian Institute of Petroleum and Energy (IIPE), is a Petroleum University established in 2016 at Visakhapatnam, Andhra Pradesh. IIPE offers undergraduate courses in Petroleum and Chemical Engineering. Recently the Parliament has passed Indian Institute of Petroleum and Energy Bill, 2017 which has declared the institute as an institution of National Importance.

- **Some of the courses offered are**
- B.Tech (Petroleum Engineering)
- B.Tech (Chemical Engineering)

CAREER IN SCIENCE AFTER 12TH WITH PHYSICS, CHEMISTRY AND MATHEMATICS:

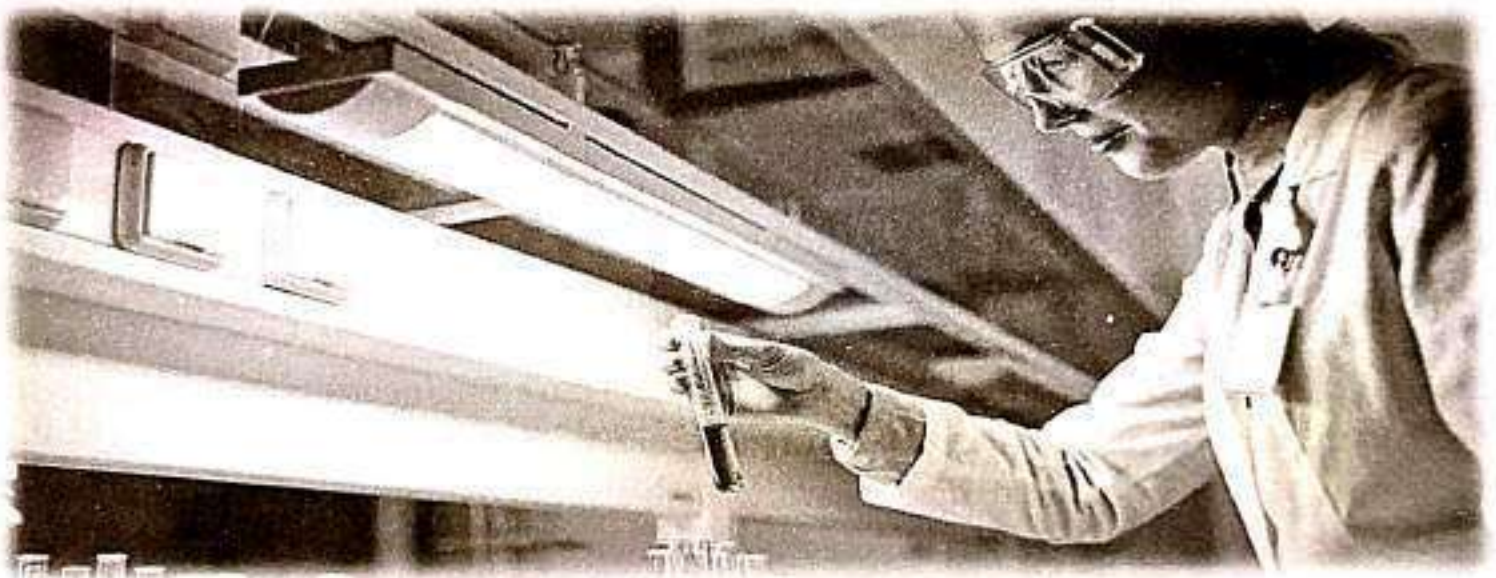
"Science investigates; religion interprets. Science gives man knowledge which is power; religion gives man wisdom which is control"

1. B.Sc. in Biotechnology:

"Our world is built on biology and once we begin to understand it, it then becomes a technology"

— Ryan Bethencourt

B.Sc. in Biotechnology is a 3- year undergraduate course where the course is divided across 6 semesters for six months and the basic eligibility for applying to the course is 10+2 qualification in the science stream. B.Sc. in Biotechnology involves an advanced study of the cellular and biomolecular processes for development of a variety of technologies and products that contribute to improving people's lives and health.



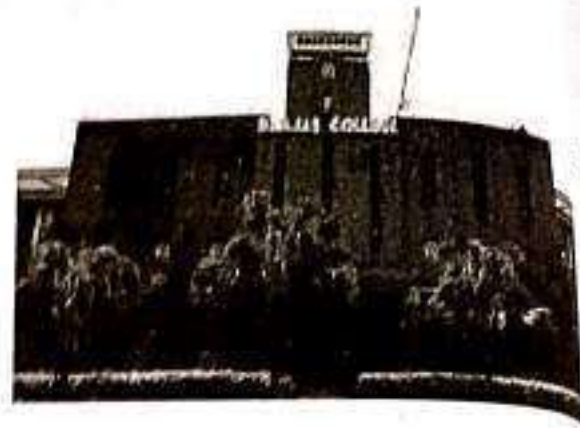
Some of the major entrance tests for admission to the course are listed below:

- AIIMS Biotechnology Entrance Test
- JNU (Jawaharlal Nehru University) Combined Biotechnology Entrance Examination
- CBEEE (Combined Biotechnology Entrance Examination)

- DU (University of Delhi) Biotechnology Entrance Examination

Institutes that provides courses in Bachelor of Science [B.Sc.] (Biotechnology)

- Loyola College, Chennai
- Ramjas College, University of Delhi
- St Xavier's College, Ahmedabad
- Christ University, Bangalore
- Fergusson College, Pune



2. B.Sc. in Electronics:

"Imagination is more important than knowledge. For knowledge is limited, whereas imagination embraces the entire world, stimulating progress, giving birth to evolution."

— Albert Einstein

Bachelor of Science or B.Sc. in Electronics is a 3-year course and is divided in 6 semesters. The basic eligibility for admission to the course is a 10+2 with science subjects including physics, chemistry, and biology.

B.Sc. Electronics is a specialized course for students who wish to learn the fundamentals of electronics. This course introduces students to the fundamentals of electrical circuits such as transistors, vacuum tubes, integrated circuits and diodes.

The subjects studied under B.Sc. Electronics Syllabus are Engineering materials, Digital electronics, Analog electronics, Data structure, Programming languages, Quantum mechanics, Mathematics, Statistics, Network analysis, Fundamentals of electronics, and electromagnetic.

Institutes that provides courses in [B.Sc.] (Electronics)

- St. Xavier's College Kolkata
- Vidyasagar College Kolkata
- Kota University

- IISER Mohali
- Morph Academy, Chandigarh

3. B.Sc. in IT:

**"It has become appallingly obvious that our technology has exceeded our humanity."
— Albert Einstein**



B.Sc. IT is a 3-year undergraduate course, the minimum eligibility for which is a 10+2/ intermediate qualification.

B.Sc. IT program revolves around the field of Information Technology, which is essentially about storing, processing,

securing, and managing information. The course can be pursued in any of full-time and part-time basis.

Institutes that provides courses in [B.Sc.] (IT):

- St. Xavier College, Mumbai
- Elphinstone College, Mumbai
- Jai Hind College, Mumbai
- VELS University, Chennai

4. B.Sc. in Industrial Chemistry:

"Every man who receives a liberal education now counts chemistry among the most indispensable objects of his studies"

B.Sc. in Industrial Chemistry is a 3-year full time undergraduate course divided into 6 semesters. Industrial chemistry is the study of the chemical processes that drive biological systems. The discipline explores the basic principles of biochemistry, and enrolled

candidates are taught the application of biochemistry to biotechnology, as also ~~some~~ engineering.

The curriculum addresses topics such as DNA cloning and modification, an examination of the agricultural, medical, and industrial applications of biotechnological research.

Entrance tests conducted for admission to the course in India are:

- NET
- GATE
- ICMR
- GPAT
- SLET



Institutes that provides courses in [B.Sc.] (Industrial Chemistry):

- Deshbandhu College, New Delhi
- Rajdhani College, Delhi
- St. Albert's college, Ernakulum
- Christian eminent college, Indore
- DAV College, Uttar Pradesh.

5. B.Sc. in Polymer Chemistry:

"The organic material, as the laws of chemistry state, can neither be created nor destroyed."

— Dixie Lee Ray

B.Sc. in Polymer chemistry is the scientific discipline that deals with long chemical chains. These long chemical chains are called polymers or macromolecules. Sometimes this area of science is also called macromolecular chemistry. Essentially, careers in this subsector revolve



around chemical synthesis (i.e. making chemicals artificially) and understanding the structure of these chemical chains.

Institutes that provides courses in [B.Sc] (Polymer Chemistry):

- Fatima Mata National College, Kerala
- Kannur University, Kerala
- KKTU Government College, Kerala
- Mar Thoma College of Science and Technology, Kerala
- Marthoma College, Kerala

6. B.Sc. in Operation research:

"If co-operation is a duty, I hold that non-co-operation also under certain conditions is equally a duty."

— Mohandas Gandhi



B.Sc. in Operations or Operational Research is a discipline related to the field of mathematics which aims to optimize production, improve upon services and quality of products. It uses advanced analytical techniques to improve upon the decision-making process

One should be 10+2 pass with Maths, Physics and Chemistry from a recognized board to pursue this course. Duration of this undergraduate program is 3 years.

Institutes that provides courses in [B.Sc.] (Operation research):

- Rama Institute of Business Studies (RIBS), Ghaziabad
- Hansraj College, Delhi - University of Delhi
- Hindu College, New Delhi - University of Delhi
- Ramjas College, New Delhi - University of Delhi
- Yadava College (YC), Madurai

7. B.Sc. in Environmental Science:

"A nation that destroys its soils destroys itself. Forests are the lungs of our land, purifying the air and giving fresh strength to our people."

— Franklin D. Roosevelt

B.Sc. in Environmental Science is an undergraduate 3- year long course, divided into six semesters, with each semester lasting for a period of six months.

The course combines aspects of Biology, Ecology, Geography, Chemistry, Technology, and Social Science. Students are taught to develop scientific knowledge and techniques needed to understand environmental patterns and processes, investigate ecosystems and address local and global environmental issues, besides investigating how environmental science is directly related to the human society.



Institutes that provides courses in [B.Sc] (Environmental Science):

- Fergusson College. Pune, Maharashtra
- Mount Carmel College - [MCC] Bangalore, Karnataka
- NIMS University, Jaipur
- St Xavier's College, New Delhi
- Amity University. Noida, Uttar Pradesh

8. B.Sc. in Nautical Science

"I am not afraid of storms, for I am learning how to sail my ship"

— Louisa May Alcott

B.Sc. in Nautical Science is an undergraduate 3- year long course divided across 6 semesters each lasting 6-month. The course is approved by the Directorate General of Shipping, which falls under the Ministry of Shipping, Government of India. The course is a study of the basi

academic and practical devices required to safely navigate and operate marine vehicles, such as a ship.



Upon completion of the course, candidates are needed to undergo a year-long sea service. Having completed the sea service and qualifying the subsequent viva-based examination, candidates are eligible to obtain the Second

Mate's Foreign-going Certificate of Competency.

Institutes that provides courses in [B.Sc] (Nautical Science):

- IMU - IMU Navi Mumbai Indian Maritime University, Mumbai
- IMU Chennai Indian Maritime University (IMUC), Chennai
- Tolani Maritime Institute- TMI, Pune
- The Neotia University, Kolkata
- B.P. Marine Academy, Panvel, Mumbai

9. General B.Sc Courses in:

- B.Sc. in Physics
- B.Sc. Chemistry
- Geology
- Statistics
- Biochemistry

CAREER IN SCIENCE AFTER 12TH WITH PHYSICS, CHEMISTRY AND BIOLOGY:

1. B.Sc. in Horticulture:

"Artists can no more speak about their work, than plants can speak about horticulture."
— *Jean Cocteau*

B.Sc. in Horticulture is a 3-year full time under graduate course which is divided into 6 semesters. Horticulture is the branch of Agricultural Science that deals with the cultivation of vegetables, plants, flowers, herbs, fruits, shrubs, bushes, gardens, and landscaping for gardens, ornamental trees, maintaining nurseries, green houses, orchards and plantations and also floriculture or cultivation of flowers.



The branch of study has direct and indirect applications in food technology industries as production, cultivation, harvesting and storing of vegetables have all become highly mechanized. These plants are grown under strictly controlled conditions using sophisticated sensors, and biological control of pests and diseases. It is of the utmost importance for all commercial as well as resource-limited farmers to plant deciduous fruit crops, some fruit crops and rootstocks that are adapted to their specific climatic and soil conditions

Institutes that provides courses in [B.Sc] (Horticulture):

- Assam Agricultural University, Assam
- Dr. Y.S.R. Horticultural University, Andhra Pradesh
- Central Agricultural University, Imphal
- Dr. Yashwant Singh Parmar University of Horticulture and Forestry University of Horticultural Sciences, Bagalkot



2. B.Sc. in Marine Biology:

"I need the sea because it teaches me"

— *Pablo Neruda*

B.Sc. in Marine Biology is a scientific discipline that deals with all types of marine bodies of water. It studies various forms of life in the ocean and their behaviour and interactions with each other and the environment. Marine Biology consists of various sub-disciplines. Marine Biologists study core subjects like Physics, Biology, Chemistry, Ecology, Mathematics, Geology, and Anthropology and apply this knowledge for the study of oceans and ocean life forms.

Institutes that provides courses in [B.Sc] (Marine Biology):

- Cochin University of Science and Technology, Kerala
- Karnatak University, Karnataka
- Andhra Pradesh University, Waltair
- Annamalai University, Tamil Nadu
- Pondicherry University, Tamil Nadu
- College of Science and Technology, Andhra Pradesh
- Veer Narmad South Gujarat University, Surat

3. B.Sc. in Food Technology:

"Civilization depends on our expanding ability to produce food efficiently, which has markedly accelerated thanks to science and technology"

— *Nina Fedoroff*

B.Sc. in Food Technology is a 3-year undergraduate course involving an advanced study of the techniques and activities involved in preserving, processing, and manufacturing of food. Food Technology is the combination of engineering, food science, hotel management, and home science. B.Sc. Food Technology course is an advanced study of the technology and processing methods used to develop, research, manufacture, produce, preserve, process food and related substances.



B.Sc. Food Technology course includes Chemistry, Biology, Nutrition, Biochemistry, Microbiology, and Chemical Engineering. Secondary subjects include Food Microbiology, Sanitation & Hygiene, Preparation & Packaging Materials, Food Analysis Adulteration Testing, Food Toxicology, Biochemistry, Biology, Chemistry, Physics, and Math as a major component of study.

Entrance tests conducted for admission to the course in India are

- CFTRI (Central Food Technological Research Institute Entrance Examination)
- IICPT (Indian Institute of Crop Processing Technology Entrance Examination)
- AIJEE (All India Joint Entrance Examination)
- JEEP (Joint Entrance Examination Preliminary)



Institutes that provides courses in [B.Sc] (Food Technology):

- IFTM University, Moradabad
- NIMS University, Jaipur
- ITM University, Gwalior
- Parul University, Vadodara
- NIIT University, Neemrana

4. B.Sc. in Applied Nutrition:

*Nutrition is the only remedy that can bring full recovery and can be used with any treatment.
Remember, food is our best medicine!
— Bernard Jensen*

B.Sc. in Applied Nutrition is a 3- year long Bachelor's degree program, the minimum requisite eligibility for admission to which is an Intermediate (10+2) qualification in the science stream.



Nutritionist and Dietician are health professionals who create diets for people. To impart patients about healthy eating is the primary duty in the job profile, as is an updated awareness of developments in medicine and nutrition.

There is a difference between Dietetics and Nutrition: Dietetics focuses on food management, whereas the discipline of Applied Nutrition focuses on the promotion of health through healthy food.

Institutes that provides courses in [B.Sc] (Applied Nutrition):

- Isabella Thoburn College (ITC), Lucknow
- St Ann's College for Women. Hyderabad, Telangana
- Shadan Degree College for Women. Khairatabad, Telangana
- Madina Degree College. Hyderabad, Telangana.
- Welcome group Graduate School of Hotel Administration (WGSHA), Manipal



5. B.Sc. in Health Information Administration:

The only way to keep your health is to eat what you don't want, drink what you don't like, and do what you'd rather not.

— Mark Twain

B.Sc. Health Information Administration or Bachelor of Science in Health Information Administration is an undergraduate Hospital and Health Care Management programme. The duration of the course is three years and after completion of the course, they have immense career scopes.

The course imparts about the management of health information systems consistent with the medical, administrative, ethical and legal requirements of the health care delivery system. The profession combines knowledge of health care systems and business administration.



Institutes that provides courses in [B.Sc] (Health Information Administration)

- Faculty of Management Studies, University of Delhi, Delhi.
- KJ Somaiya Institute of Management Studies and Research, Mumbai.
- Prin LN Welingkar Institute of Management Development and Research, Mumbai.

- School of Management Studies, University of Hyderabad, Hyderabad
- Jamia Hamdard, New Delhi

6. B.Sc. in Genetics

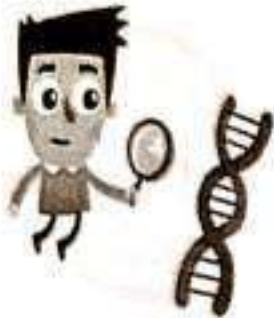
B.Sc. in Genetics is a 3- year long graduate course, minimum eligibility for which is an intermediate (10+2) qualification in the science stream. Genetics is a branch of biology that scientifically studies genes, heredity and variations in living organisms.

The subjects usually involve in the course's curriculum are Cell Biology, Microbial Genetics & Technology, Biostatistics, Population Genetics, Genome Organization, Biochemistry, Gene Development, DNA Technology, etc.

The discipline also involves sub- sections such as Microbiology, Cell Biology, Biochemistry, Model Organisms, Microscopy, Cytogenetics, Mendelian Genetics & Biometry, Genetic Engineering, Molecular Genetics, Cloning and Biotechnology, among others.

Institutes that provides courses in [B.Sc] (Genetics)

- The Oxford College of Science, Bangalore
- The University of Calicut, Kerala
- Kristu Jayanti College (KJC), Bengaluru
- JyotiNivas College (JNC), Bangalore



7. General B.sc Courses in:

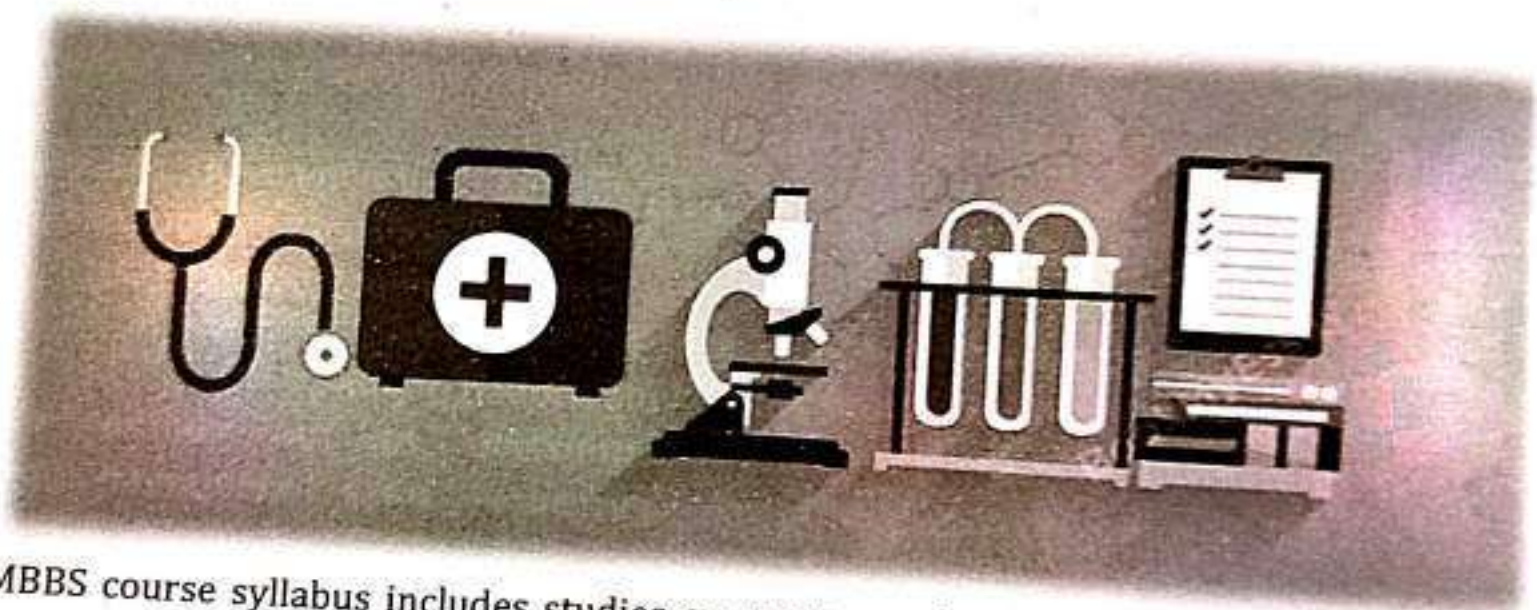
- | | |
|---|---|
| <ul style="list-style-type: none"> • Zoology • Botany • Microbiology | <ul style="list-style-type: none"> • Biochemistry • Agriculture |
|---|---|

Medical and Paramedical Science Courses

1. MBBS (Bachelor of Medicine and Bachelor of Surgery)

*A physician is judged by the three A's, Ability, Availability and Affability.
— Paul Reznikoff*

Bachelor of Medicine and Bachelor of Surgery (MBBS) is a professional degree in medical science where the course duration is five years and six months including one year rotational internship at hospitals, health centres, and health camps organised by non-profit organisations (NGOs). A person holding the MBBS degree becomes a certified medical practitioner.



MBBS course syllabus includes studies on anatomy, pharmacology, pathology as well as community health & medicine, paediatrics, and surgery. The career specialisations for MBBS students are Nephrology, Cardiology, Gynaecology, Anaesthesiology, Organ Transplantation, Endocrine, and General Surgery, etc.

2. BHMS (Bachelor of Homeopathic Medicine and Surgery)

Homeopathy cures a greater percentage of cases than any other method of treatment. Homeopathy is the latest and refined method of treating patients economically and non-violently.

— Mahatma Gandhi

BHMS (Bachelor of Homeopathic Medicine and Surgery) is an undergraduate degree in homeopathic system awarded after the completion of 5.5 years academic programme containing the 4 and 1/2-year academic session and one-year internship programme with live practical.

After completing this degree one is eligible to become a doctor in the homeopathic medical field. The degree holder is eligible to have the prefix as a doctor, the abbreviation is Dr. Bachelor of Homeopathic Medicine & Surgery (BHMS) is an undergraduate degree course in homeopathic system. The undergraduate programme in homeopathic system can also be pursued through the distance education system.



3. BAMS (Bachelor of Ayurvedic Medicine and Surgery)

*Life (ayu) is the combination (samyoga) of body, senses, mind and reincarnating soul. Ayurveda is the most sacred science of life, beneficial to humans both in this world and the world beyond.**

—Charaka

Bachelor of Ayurvedic Medicine & Surgery (BAMS) is a graduate degree course in Ayurvedic system awarded after the completion of 5 years and 6-month degree programme containing the 4 and 1/2-year academic session and one-year internship programme with live practical.