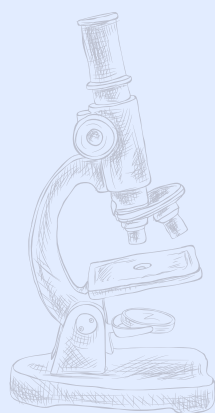
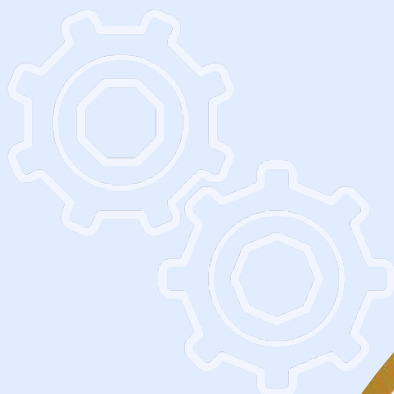


PROSPECTUS

2024-2025



JORHAT INSTITUTE OF SCIENCE AND TECHNOLOGY



GOVT. OF ASSAM

JORHAT INSTITUTE OF SCIENCE AND TECHNOLOGY

(FORMERLY SCIENCE COLLEGE, JORHAT)

(Estd. 1971)

(CELEBRATED GOLDEN JUBILEE IN THE YEAR 2021)



PROSPECTUS 2024-2025

SOTAI, CHENIJAN, JORHAT, 785010

www.jist.ac.in

Contact: 0376-2395369

RAGGING FREE CAMPUS



WARNING
Ragging is a crime

The Supreme Court of India defines ragging as any unruly behavior that causes annoyance, fear, or harm to a fresher or junior student. This includes actions that embarrass, shame, or create a negative impact on the student's mental well-being.

All students admitted to JIST and their guardians must submit an "Anti-Ragging Affidavit" as a commitment to avoid engaging in any form of ragging.

JIST upholds a strict no-ragging policy and any violation will lead to severe consequences, including:

- Immediate expulsion from college and hostel, with the incident reported to the police.
- Disqualification from participating in university examinations.

The campus takes active measures to maintain a ragging-free environment, including:

- Anti-Ragging Committees and Squads composed of faculty members ensure monitoring and enforcement within the campus.
- CCTV cameras strategically placed across the campus.
- Prominent display of anti-ragging messages in key locations around the campus.

NO RAGGING

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THE INSTITUTION: A BRIEF OVERVIEW

JORHAT INSTITUTE OF SCIENCE & TECHNOLOGY, in short **JIST** formerly Science College, Jorhat, was established by the Government of Assam on 1st August 1971. The Institute, since then is imparting B.Sc. (Honours) Courses under Dibrugarh University with a compulsory major in any one of the subjects Physics, Chemistry or Mathematics. The institute introduced 3 year (6-Semester) B.Sc. (I.T.) Course in 2007 with an annual intake capacity of 40 students. Gradually in the year 2009, the Institute introduced Undergraduate Engineering Courses in Power Electronics & Instrumentation Engineering and Electronics and Telecommunication Engineering leading to awarding of B.E. degree under Dibrugarh University from the academic session 2009-10 with AICTE recognition. Another two Engineering Courses Civil Engineering and Mechanical Engineering started from 2016-17.

Post Graduate Degree Courses in Physics and Mathematics were introduced from the academic session 2016-17 in Regular Mode under Dibrugarh University. The annual intake capacity in M.Sc. (Physics) is 15 students and in Mathematics it is 20 students and in Chemistry it is 12.

From the academic session 2023-24 Science Programme were converted from 3- years degree Course to 4 - year Honour/Research Programme as per NEP-20 and from session 2024-2025 the B.Tech. Programme are also brought in the line of NEP-20.

As Science College Jorhat, it has been maintaining uniformly brilliant results in the University Examinations and produced many Best Graduates from the University in due course. The college has a cluster of Alumni who moved on to attain excellence in many fields of Scientific and Industrial Research, Academics and other Sectors and also received recognitions such as Vice-Chancellor of Guahati University, Bhatnagar Award, IIFA award etc.

The college has a distinction of being the first College of N.E. region to have been accredited by NAAC in 1999. During its Visit the Peer Team of NAAC had praised highly about the Institute and the Faculties for their dedication and devotion for the Student welfare. The team had reported as 'No teacher indulges in private tuition and no student feels the necessity of any such assistance after what they learn from the teachers in classroom teaching by seminars, group discussions, unit tests and active workshops'.

The college also houses a Distance Education Cell under IGNOU and is running B.Sc. courses under this University to support the student's community.



JORHAT INSTITUTE OF SCIENCE AND TECHNOLOGY

VISION

At Jorhat Institute of Science and Technology, Jorhat, Assam, we aim to inculcate Scientific and Technological acumen in aspiring generation of scholars, engineers, researchers and technocrats by providing quality education in Science and Technology and also envisage socio-cultural upliftment. JIST thrive for academic excellence, community mobilization, empowerment of under-privileged sections of the society, upholding local culture and heritage and to nurture the democratic and national ideals in the youngsters in order to meet the growing competencies and challenges in their future endeavours.

MISSION

The institute equipped with a vibrant cluster of elite, committed and competent faculty members and well equipped practical labs, starve relentlessly to provide state-of-art quality education by bridging the theory-practice gap in Science & Technology. We aim to contribute to produce a pool of future- ready, well-groomed, value-centric and industry-ready scientific and technological talents who would thrive to outshine across a wide array of their future functions.

VALUES

- Academic integrity and accountability.
- Respect and tolerance for the views of every individual.
- Attention to issues of national relevance as well as of global concern. Breadth of understanding, including knowledge of the human sciences.
- Appreciation of intellectual excellence and creativity.
- An unfettered spirit of exploration, rationality and enterprise.



FROM PRINCIPAL'S DESK

Greetings from the desk of the Principal. The Jorhat Institute of Science and Technology, emerged out of rich tradition of the Science College, Jorhat. The Science College, established in 1971 with undergraduate courses in Physics, Chemistry and Mathematics was first college in the whole of the NE India to be accredited by NAAC. It kept its flag flying high, producing first rate Scientists, Educationists, Administrators, prominent among them are Shanti Swaroop Bhatnagar awardee, VC of Gauhati University, faculty members in leading universities such as NYC, IITs and IISERs, IIFA awardee. It has been consistently producing best graduates and toppers in different subjects of the University. Many of them went on to get prestigious fellowships across the globe such as the NASA Hubble fellowship among others. It has done a trailblazing effort to contribute to the pool of human resources of the state and the country.

It had adopted the ethos of NEP 2020 way back in 2007, by first introducing B. Sc. IT, then in 2009 by incorporating two engineering courses, namely Power Electronics and Instrumentation and Electronics and Telecommunications, with its new identity as the Jorhat Institute of Science and Technology in 2008. Since then, two more courses in Engineering, namely Mechanical and Civil Engineering has been added to the curriculum. Post Graduate Degree Courses in Physics and Mathematics were introduced in 2016-17. M.Sc. in Chemistry was introduced from the academic session 2017-18. Ph.D. programme for Science was started in 2018. It is the only Government College in Assam offering both Science and Engineering courses, thereby presenting itself as a strong candidate for autonomy under NEP 2020. The institute has been

giving consultancy services, mostly in Civil Engineering domain, to leading Govt organizations and industries of this region such as to ONGC, OIL, Indian Railways, APWD, Airport authority of India, MES etc. It is presently affiliated to the Assam Science and Technology University. JIST boasts of dedicated and accomplished faculty members of strength 60, more than 1600 students and around 40 other employees.

The institute inculcates the culture of learning by doing through its state of the art laboratories in all the disciplines. The institute has Atal Tinkering laboratory to foster innovation among students and a Language Laboratory in which the students can hone their communication skill. All the classrooms are equipped with overhead-projectors. In addition to this, the institute has a smart class/conference room.

Although primary objective of this institute is academic excellence, opportunities are available for students for all-round development and for acquiring soft skill. The campus is abuzz with activities such as Seminars, Debate, Quiz, Cultural events, Sports, Tech-fests. We observe important national and international days in which teachers, students and employees take active part. The institute has an active Training and Placement Cell. Our prominent recruiters are: Power Grid Corporation of India Ltd., TCS, Capegemini, Wipro, Cognizant, Infosys, Vodafone, Tata Cummins Pvt. Ltd., Byjus. We also have a Career Counselling Cell in our Institute, besides other groups/cell, such as NSS, Entrepreneurship cell, Students Hobby club etc. We have introduced a Social Welfare

Fund and a Book-TBank to help and extend support to needy and meritorious students.

JIST has always encouraged new ideas and innovations. It aims at qualitative promotion of every individual so as to transform them to be responsible social beings, committed to sustainable and environment- friendly solution of social problems.

JIST is a ragging free and tobacco free Institute.

The institute has signed MoUs with local industry and research institutes for exchange of ideas and for fostering a collaborative relationship.

The institute welcomes new ideas and opinions to make itself a leader in education. I invite you all to become a part of this great institute. I feel happy and proud to be part of it.

Dr. Atanu Kumar Dutta
Principal

Jorhat Institute of Science and Technology

ACADEMIC PROGRAMME OFFERED

A. Undergraduate Programs:

SI No	Program	Intake Capacity
1	B.Sc. Honours in Physics	60
2	B.Sc. Honours in Chemistry	60
3	B.Sc. Honours in Mathematics	60
4	B.Sc. Honours in Information Technology (IT)	60
5	B. Tech. in Civil Engineering	66
6	B. Tech. in Mechanical Engineering	66
7	B. Tech. in Electronics and Technology Communication Engineering	66
8	(B. Tech.) in Power Electronics and Instrumentation Engineering	66

ACADEMIC PROGRAMME OFFERED

B. Post Graduate Programs:

Sl. No.	Program	Intake Capacity
1	M.Sc. in Physics	25
2	M.Sc. in Chemistry	22
3	M.Sc. in Mathematics	30

C. Doctor of Philosophy (PhD) in Physics, Chemistry and Mathematics

DURATION OF DIFFERENT PROGRAMMES

PROGRAMME	DURATION
Four Year Undergraduate Program (B.Sc. Honours) in Physics, Chemistry Mathematics and Information Technology (IT)	4 Years (8 semesters)
Four Year Undergraduate program (B. Tech.) in Civil, Mechanical, Electronics and Technology Communication and Power Electronics and Instrumentation Engineering	4 Years (8 semesters)
Post Graduate Programmes in Physics, Chemistry and Mathematics	2 Years (4 semesters)

FOUR YEAR UNDERGRADUATE PROGRAMME (FYUGP)

The National Education Policy 2020 is the first education policy of the 21st century and it aims to address the many growing developmental imperatives of our country. The Policy lays particular emphasis on the development of the creative potential of each individual. The course of study according to the NEP, 2020 leads to a UG Certificate, UG Diploma, Three Year UG Degree, Four Year UG Degree (Honours) and Four Year UG Degree (Research). A UG certificate after completing 1 year (two semesters), a UG Diploma after completing 2 years (4 semesters), a bachelor's degree (B. Sc.) after 3 years (6 semesters), and a 4-year bachelor's degree (honours) (B. Sc.) after 8 semesters programme of study.

• **Undergraduate Programmes:** Undergraduate programmes will include the following:

a. UG Certificate Programme: UG Certificate Programme leads to a UG certificate after completing 1 year (2 semesters) of study in the chosen fields of study. Students on exit shall be awarded a UG certificate (in the Field of Study/Discipline) after securing the requisite 44 Credits and 8 week & 4-Credit summer internship programme on completion of Semester II. These students are allowed to re-enter the degree programme within a period of three years and complete the degree within the stipulated maximum period of seven years.

b. UG Diploma Programme: UG Diploma Programme leads to a UG diploma after 2 years (4 semesters) of study in the chosen fields of study. Students on exit shall be awarded a UG Diploma (in the Field of Study/Discipline) after securing the requisite 88 Credits and 8 week & 4-Credit summer internship programme on completion of Semester IV. These students are allowed to re-enter the degree programme within a period of three years and complete the degree within the maximum period of seven years.

c. Three-Year UG Degree Programme (B. Sc.): Students who wish to undergo a 3-year (6 semesters) UG programme shall be awarded a UG degree in the major discipline after the successful completion of three years, securing 132 credits.

d. Four Year UG Programme (FYUGP) with honours (B.Sc.): Students who wish to undergo a 4-year (8-semester) UG programme shall be awarded a UG Honours degree in the major discipline after successful completion of four years, securing a minimum of 176 credits.

Course: The entire programme is divided into a number of courses. A course may be considered as a paper in the conventional education system.

Academic Year: An academic year means a period of twelve months consisting of two Semesters.

Semester: The word “semester” is used to mean a half-yearly programme or term of studies consisting of 15 weeks.

In-semester: The word “in-semester” is used to refer to the continuous studies and evaluations within the semester programme.

End-semester: The word “end-semester” is used to refer to the terminal processes of examinations and evaluations at the end of but within the semester programme.

· **The minimum qualification for admission into the FYUGP shall be as below:**

a. Senior Secondary School Leaving Certificate or Higher Secondary (Class 12) Certificate obtained after successful completion of Grade 12 or equivalent stage of education.

b. Admission test conducted by the college where applicable.

c. Admission into the FOUR YEAR UNDER GRADUATE PROGRAMME (FYUGP) will be conducted through SAMARTH PORTAL. Interested students to get admission in JIST are advised to get the information and follow the procedure as laid by SAMARTH PORTAL from time to time as per notification of Govt. of Assam.

· **Multiple entry points with qualifications in FYUGP:**

c. 1st year: The entry requirement for 1st year FYUGP is successful completion of Grade 12 or equivalent stage of education.

d. 2nd year: The minimum entry requirement for the 2nd year FYUGP is a certificate obtained after successful completion of 1 year (2 semesters) of the undergraduate programme. These students are to take admission in the 2nd year within a period of three years from obtaining the UG certificate from ASTU or any other University/institution recognized by ASTU.

e. 3rd year: The minimum entry requirement for the 3rd year FYUGP is a diploma obtained after successful completion of 2 years (4 semesters) of the undergraduate programme. These students are to take admission to the 3rd year UG programme within a period of three years from obtaining the UG diploma certificate from ASTU or any other University/institution recognized by ASTU.

f. 4th Year: The minimum entry requirement for the 4th year (Honours) FYUGP is a three-year Bachelor’s Degree. The minimum entry requirement for the 4th year (Honours) UG programme within a period of three years from obtaining a 3-year Bachelor’s Degree certificate from ASTU or any other University/institution recognized by ASTU.

Sl No.	Course	Description
1	Major (MJ)	The core component of the four-year undergraduate programme
2	Minor (MI)	Students will be able to select a course from a pool of subjects
3	Multidisciplinary (MU)	Students will be able to select a course from a pool of subjects
4	Ability Enhancement Course (AEC)	English, MIL
5	Skill Enhancement Course (SEC)	Students will be able to select a course from a pool of subjects
6	Value Added Course (VAC)	Understanding India and its Constitution, Environmental Education, Health and wellness, Digital technological and numerical literacy
7	Internship (IN)	Community engagement , Field-based learning
8	Thesis or Dissertation	Research Methodology Dissertation

FACILITIES



Library

Library is the heart of the Institution. It aims to provide quality knowledge and the useful resources to the users. The college has a well-stocked library, named as, Central Library, JIST with a good variety and range of collections. It has a total 13,441 volumes of books on Physics, Chemistry, Mathematics, Computer Science, Electrical Engineering, Instrumentation Engineering, English Literature, Assamese, Sociology & Humanities to cater to the subject wise demand of the students and the faculties. Other important books such as Dictionary, Encyclopedias, Scientific Journals and Volumes and a host of Monthly News Magazines are available in the library. The Library subscribes to monthly news magazines such as -India Today, Outlook, Prantik, Gariyoshi, Poyobhara etc. Periodicals like Science Reporter, Electronics For You, Kurukshetra, SainikSamasar. Besides printed Magazines the Library has subscribed to e Journal such as J Gate e-Journal which is made available for faculties and students through online mainly meant for research in engineering and technology and science. Newspaper issues like - Amar Asom, DanikJanambhumi, The Assam Tribune, The Telegraph and Employment News for the students and the Faculties alike. Moreover there are also the Departmental Libraries in each branch to compliment the needs of the students and the teacher alike. These Departmental libraries of each branch, housing a small collection of books are specific to the subjects and serves as ready reference. Besides, the library is equipped with internet and printing facilities for both the students and the teachers to serve as an additional advantage to supplement the Library facility in the institute.

Library Services:

1. Reference Service
2. Lending of books
3. Extra reading room
4. Internet facility

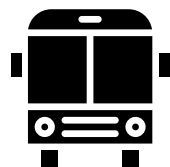
FACILITIES



Hostel

Hostel facilities are available within the campus for both boys and girls students. There are two Girls' Hostel and two Boy's Hostels. Different types of room sharing modes are available in the college hostel such as room can accommodate either one-two or three students. A bed, a table, a chair and a plug point is provided to each student. Round the clock running water supply in the bathrooms, toilets and electricity is provided to the students at the hostel. The mess facility is arranged and maintained by the students themselves with each hostels having their own cooking utensils, kitchen and dining space. Cleanliness and hygiene is maintained by the adequate number of supporting hostel staff. Both in-door games and out-door games are available for the students in the hostel for recreation of the students.

All the hostels are connected with WI-FI wireless network with 24 x 7 internet facility.



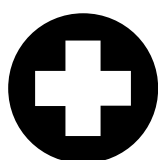
Bus

As the College is situated on the outskirts of Jorhat Town (approximately 10km.), there are two college buses for students and staff for transportation.



Internet

The Campus and all the hostels and faculty quarters are connected with Lan and Wireless Internet facilities provided by NKN, India.



Health Center

The college has a Dispensary with a Doctor (presently vacant), a nurse and a pharmacist within the campus for First-Aid and emergency treatment.

STUDENT ACTIVITIES AND OTHER PROGRAMMES:



Students' Union

The College students Union is the general body of the students of JIST. The membership is compulsory for every student. The Office bearers of the union are elected annually.

In addition of the activities like games, sports, debating, quiz, drama etc., the students' union organize the Fresher's Social, Parting Social, Saraswati Puja, Biswakarma Puja and Annual College week.



Students' Grievance Cell

All the students as well as employee of the college are allowed to place their grievances against any matter in the grievance cell which is periodically opened by the chairman of the cell and necessary measures are taken to do away with such grievance.



Student Activity Centre

JIST focuses on integrating knowledge, skills, and attitudes in students, preparing them to excel in the diverse environments of India and beyond while keeping societal and environmental considerations in mind. The Student Activity Centre (SAC) at JIST offers a space for students to express their innovative ideas, talents, and cultural interests, enabling them to reach their full potential. Various clubs within the SAC allow students to venture into new territories and perform at their best.

- TINKERING LAB
- ROBOTIC CLUB
- ELECTRONIC HOBBY CLUB

SOCIAL OUTREACH



NCC

The National Cadet Corps (NCC) in India is a voluntary organization focused on instilling discipline, character, camaraderie, adventure, and a commitment to selfless service among young people. Additionally, it seeks to cultivate leadership skills in the youth. The college has a NCC wing which gives opportunity to the students to take NCC in Air Force Wing. The name of the unit is 51 Assam Air (T) Sgn NCC. Students having NCC are getting advantage in employment in different sectors.



NSS

The National Service Scheme (NSS) equips students with a broader perspective on societal issues and offers them opportunities to contribute positively to the community and safeguard the environment. The NSS chapter at JIST conducts various activities to address social needs, such as hosting Health and Safety Awareness Camps. Additionally, the chapter organizes popular initiatives like plantation drives and cleanliness drives, promoting environmental sustainability and community welfare.



TRAINING AND PLACEMENT CELL

The training and placement cell of JIST is an elite association of faculty/student initiative interested in producing successful engineers, educational experts. After the establishment of this cell way back in 2011, it has been constantly trying to bridge the gap between industry and academia. The main objective of the cell is to develop and serve practicing engineers, industry, educational and technical societies through consultancy work by providing professional expertise. The cell highly values students' industrial training opportunities and always tries to get the students recruited by finding the best match between their needs and capabilities. The cell also put serious efforts to improve the quality of students by organizing motivational talks, seminars, workshops etc through best / available experts.

Our Recruiters>



B.TECH. ADMISSION CRITERIA AND PROCESS

Eligibility for Admission Post 10+2 Standard

1. **Citizenship and Residency:** Must be an Indian citizen and a permanent resident of Assam.
2. **Educational Background:** Passed the Higher Secondary Examination of the Assam Higher Secondary Education Council, or equivalent, with subjects English, Physics, Chemistry, and Mathematics in one sitting.
3. **Minimum Score:** Achieved at least 50% in the aggregate of Physics, Chemistry, and Mathematics (45% for Scheduled Castes and 40% for Scheduled Tribes).
4. **Entrance Exam:** Participated in the Common Entrance Examination (CEE) organized by the Directorate of Technical Education, Assam, and was selected for admission.
5. **Age Restrictions:** Must be between 17 and 21 years old as of August 1 of the admission year. Age relaxation applies for B.Sc. graduates and candidates from Scheduled Castes and Scheduled Tribes.
6. **Character:** Maintains good moral conduct.
7. **Health:** Must be physically and mentally healthy.

Lateral Entry Post 3-Year Polytechnic Diploma

1. **Citizenship and Residency:** Must be an Indian citizen and a permanent resident of Assam.
2. **Educational Background:** Completed a 3-year Polytechnic Diploma from Assam in the relevant branch.
3. **Minimum Score:** Achieved at least 50% in aggregate (45% for Scheduled Castes and 40% for Scheduled Tribes) in Physics, Chemistry, and Mathematics.
4. **Character:** Maintains good moral conduct.
5. **Health:** Must be physically and mentally healthy.

B.TECH. ADMISSION CRITERIA AND PROCESS

Selection Procedure

Candidates are chosen based on merit from the Common Entrance Examination (CEE) conducted by the Directorate of Technical Education, Assam, held annually in May. The examination comprises 120 Multiple Choice Questions over 3 hours, with 40 questions each in Mathematics, Physics, and Chemistry.

A merit list based on CEE results is published, and candidates are selected according to merit. Candidates belonging to Scheduled Castes/Scheduled Tribes or other reserved categories must also take the CEE, though they will be selected according to their quota and merit.

Course Preferences

Candidates specify their preferred engineering branch (e.g., Civil, Mechanical) in the application. Their branch assignment depends on their performance in the CEE and their stated preferences.

Reservation

Seats are allocated according to the Government of Assam Rules for various categories.

For the latest updates on admission rules, procedures, and reservations, check the DTE Website <http://dte.assam.gov.in>.

CAMPUS OVERVIEW



The Campus of JIST expands over 65 acres of land enriched in flora and fauna.



CAMPUS OVERVIEW

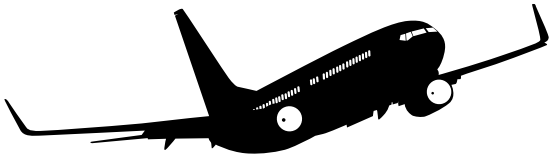


LIBRARY



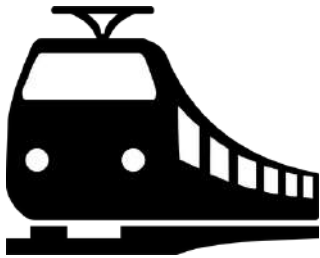
LOCATING AND REACHING

BY AIR



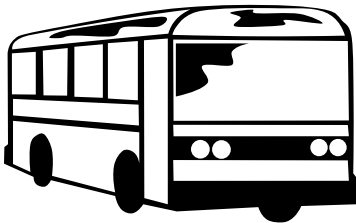
Jorhat Institute of Science and Technology is well connected by air to major cities like New Delhi, Kolkata, Bengaluru, etc. with the nearest airport being Rowroiah Airport which is a 45 minutes drive away from the campus. Jet Airways, Indigo Airlines, SpiceJet, etc. operates flights regularly to and from Jorhat.

BY RAIL



Jorhat Institute of Science and Technology is also well connected by rail with the nearest railway station being Jorhat Railway Station which is only 30 minutes away and Mariani Railway Junction which is only 1 hour away.

BY ROAD



Jorhat Institute of Science and Technology is located near NH-37. This makes the well connection of the college with nearby towns. College authority also runs the college buses for the ease of travel of the students and staff connecting them to the heart of the city.

LOCATING AND REACHING

Communication Address

Jorhat Institute Of Science & Technology

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This publication is available at the JIST official website:

<https://www.jist.ac.in>

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May, 2024

