

Centre for Career Development, Indian Institute of Technology Guwahati

Placement Brochure

Class of 2024

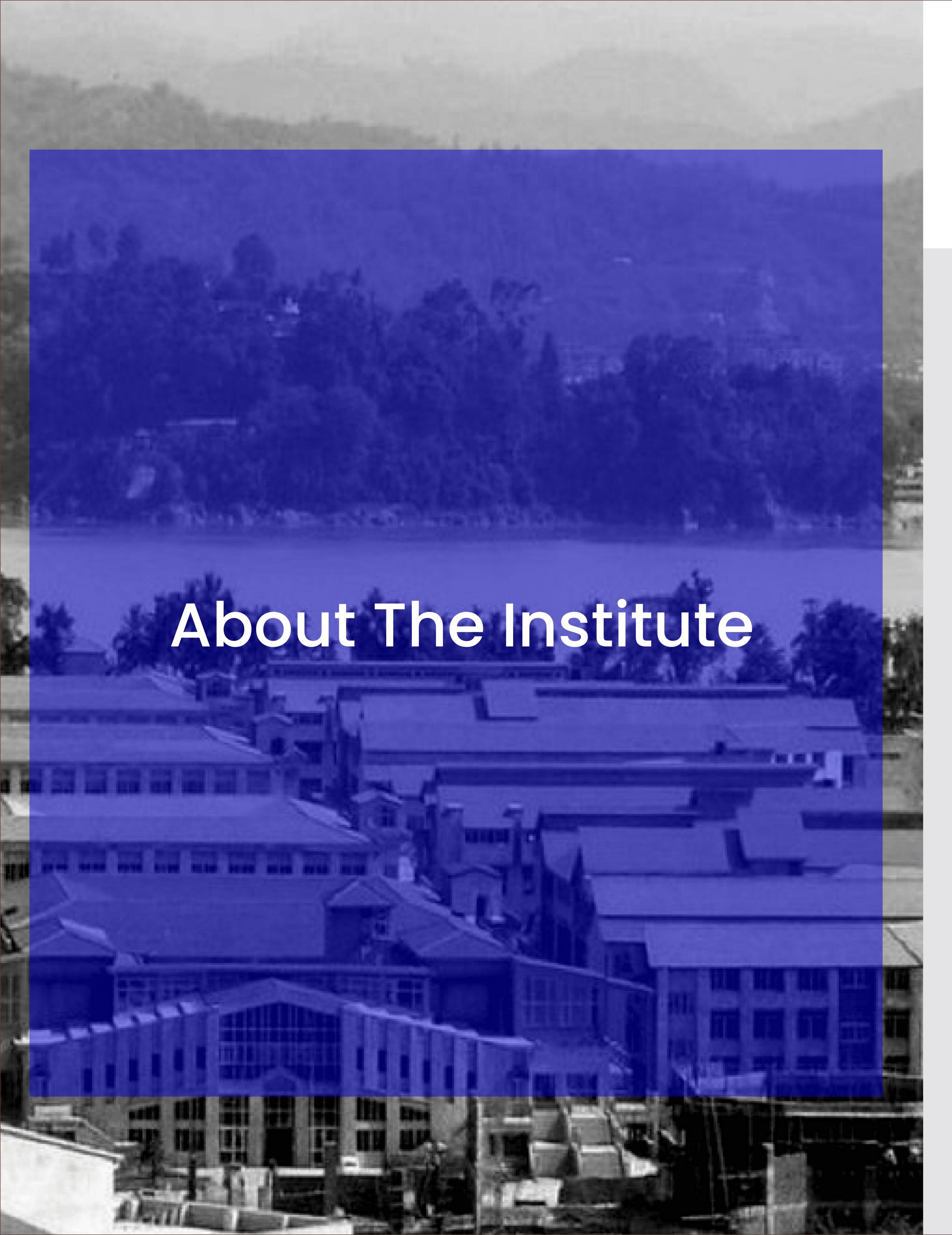
Centre For Disaster Management and Research

Message from Head of the Centre

Dear Recruiters,

For sustainable development and a safer future, Disaster Risk Reduction (DRR) is an integral part of any country's planning exercise for the future. The 2030 Agenda for Sustainable Development recognizes and reaffirms the urgent need to reduce the risk of disasters. For this vision, IIT Guwahati has established this Centre. This Centre, i.e., the Centre for Disaster Management and Research, encloses a sphere of vibrant and talented faculty members and a big chunk of meritorious students pursuing Master of Science by Research (MS(R)) and Doctor of Philosophy (PhD) programs. CDMR students are being trained in various fields and aspects of disaster management and risk reduction. A few of them are climate change, smart design, the role of AI in DRR, wireless communication for postdisaster scenarios, financing in DRR, remote sensing etc. Exposure to an interdisciplinary ecosystem is the core strength of CDMR students along with internships in premier organizations like NESAC and NIDM. As the Head of this Centre, I welcome all potential recruiters for placement of these students equipped with skills and tools on disaster management and research. For new recruiters, the excellence of this ongoing batch will ensure the beginning of a long and flourishing collaboration with this Centre of IIT Guwahati. -Dr. Sudip Mitra



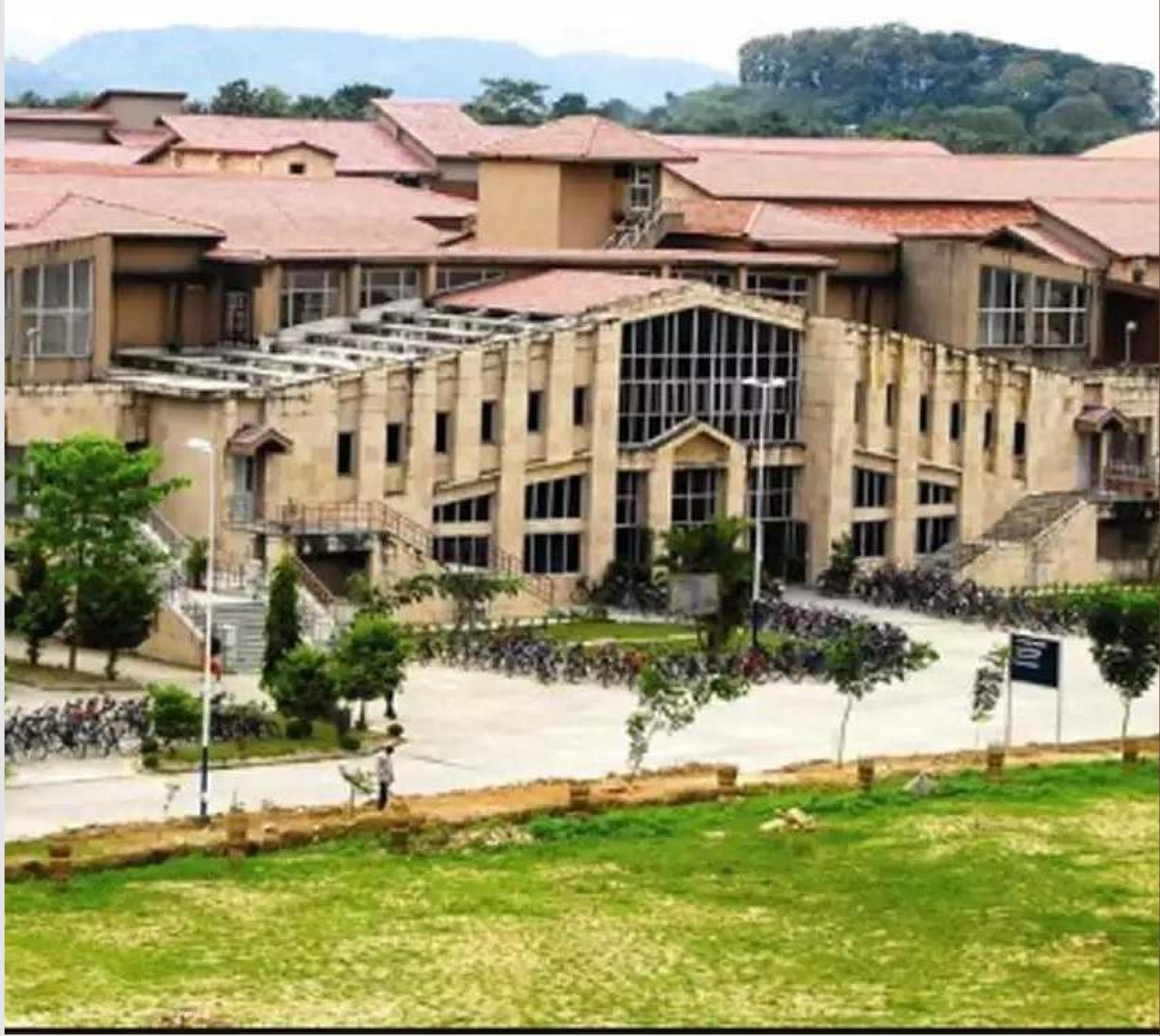


Indian Institute of Technology, Guwahati

Established in 1994, as an 'Institute of National Importance', IIT Guwahati has grown into being a preferred destination for people passionate about learning and innovation. IIT Guwahati has been ranked among the Top 100 Young Universities in the world by the Times Higher Education, one of the two Universities from BRICS nations. IIT Guwahati has several factors contributing to how in a short span of time it has established itself as one of the best institutes of its kind in the country. The programmes and courses that are offered at IIT Guwahati are perpetually evolving to adapt to the ever changing global requirements and along with the diversity of the fields of study, this has helped the institute become one of the nation's nerve centres for research and development, and technical education. The faculty ensure that the students of the campus are ready to face the challenges of the professional world by providing them with a sound conceptual understanding of their respective disciplines. The institute also offers a plethora of opportunities to students for their holistic development, through the excellent facilities that it has for sports and general extracurricular activities.

About The Centre

Centre for Disaster Management and Research (CDMR) was established in November 2020. A team of experienced and energetic faculty members working in various fields related to disaster management contribute to this multidisciplinary centre through research, innovation, consultancy, capacity building and advocacy. The Centre aspires to be a leader in research and innovation and meaningfully contribute to the development of the North-East India and elsewhere. It attempts to assimilate recent developments in a diverse range of disciplines, including emergency communication networks, machinery design, structural health monitoring, disaster management leveraging artificial intelligence and climate change mitigation strategies. Students actively organise "Disaster Risk Reduction" lectures where eminent personalities from renowned institutions are invited for making it a full-fledged interactive and informative session. CDMR has signed MoUs with several organisations such as ASDMA (Assam State Disaster Management Authority), NIDM (National Institute of Disaster Management), NESAC (North Eastern Space Applications Centre) and IJL (India Japan Lab) at Keio University (Japan). Such collaborations provide the multi-faceted practical exposure of disaster management to the students. The MS(R) program of CDMR provides the students to explore these opportunities and is also ideal for individuals from industrial and Government institutions willing to undertake research and innovate in the areas of disaster risk reduction and management.



PROGRAMMES OFFERED

Postgraduate

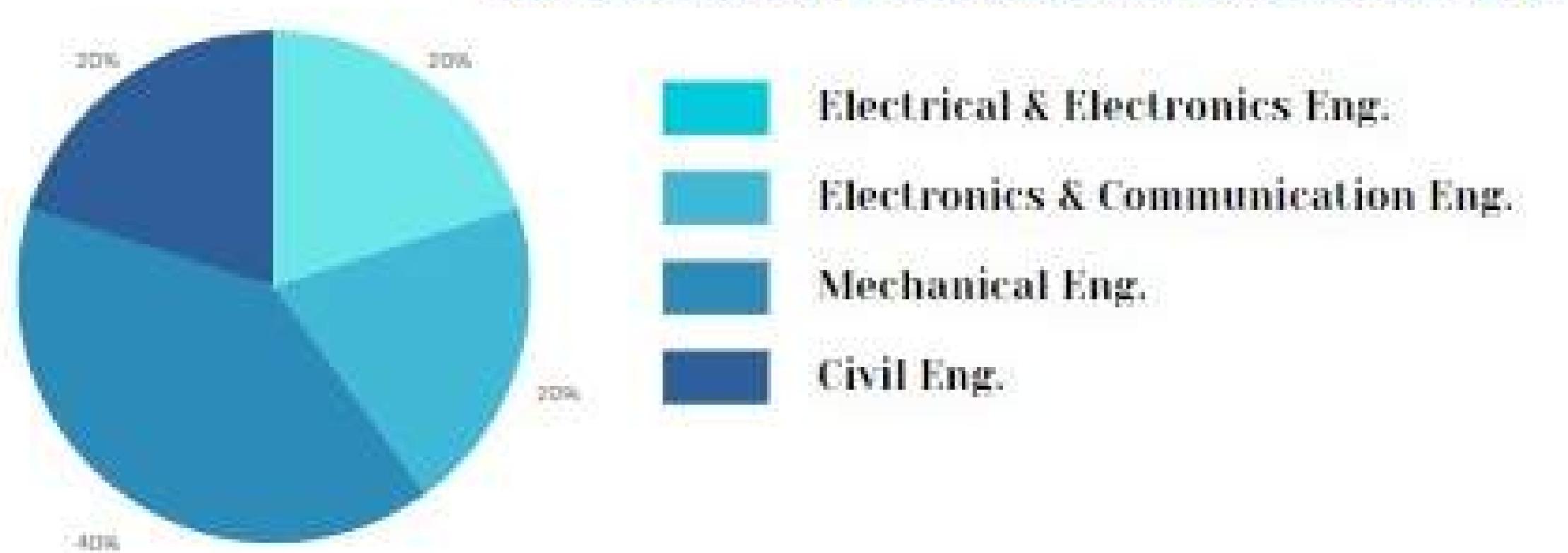
Centre for Disaster Management and Research (CDMR) offers a degree in Master of Science by Research - (MS(R)) in Disaster Management and Risk Reduction (DMRR). The course for MS(R) programme emphasize project work along with credited course work with a blend of compulsory and elective courses that can be chosen according to the specialization and interest of the student.

Uniqueness of MS(R) programme:

MS(R) 4-semester - 1 semester of coursework + 1 semester of Project and Coursework + 2 semesters of Project.

- Students enrolling in these programmes have B.E/B.Tech./M.Sc. degree or equivalent in any discipline.
- Students having a valid GATE (Graduate Aptitude Test in Engineering) score or NET(JRF)/INSPIRE qualification.

UNDERGRADUATE BACKGROUND OF CURRENT BATCH



<u>Click here to know more</u>

Doctoral Degree

Centre for Disaster Management and Research (CDMR) offers a degree in Doctor of Philosophy (Ph.D.) in Disaster Management and Risk Reduction. The doctoral programme requires a minimum necessity of taking four course work in the first two semesters. After the completion of course work, the doctoral students have to appear for the Ph.D. comprehensive examination. The research scholar is further allowed to carry out his/ her research work after successful completion of the Ph.D. comprehensive examination. The maximum duration for the doctoral programme is about five years.

Click here to know more

CENTRE FOR DISASTER MANAGEMENT AND RESEARCH (PG & PHD)

KEY COURSES OFFERED

MS(R) students at CDMR undergo two-semester of coursework with a mixture of compulsory (CORE) and optional (ELECTIVE) courses according to their research topics and interests.

CORE COURSES FROM CDMR

- FUNDAMENTALS OF DISASTER MANAGEMENT
- SOCIO-ECONOMIC AND POLICY ASPECTS OF DRR
- HAZARDS MONITORING AND PREDICTION
- RESEARCH METHODOLOGY AND FIELD VISIT

ELECTIVE COURSES FROM CDMR

- REHABILITATION AND RETROFITTING OF RC STRUCTURES
- FINANCING FOR DISASTER RISK REDUCTION (DRR)
- APPLICATION OF ARTIFICIAL INTELLIGENCE FOR DISASTER MANAGEMENT

DOMAIN WISE ELECTIVE COURSES TAKEN BY CURRENT BATCH

CIVIL CS&EE OTHERS

- PRECISION REMOTE SENSING
- ADVANCED REMOTE SENSING
- WATERSHED MANAGEMENT AND REMOTE SENSING APPLICATIONS
- CLIMATE CHANGE: CAUSES, EFFECTS AND MITIGATION

- INTERNET OF THINGS
- IMAGE PROCESSING USING MACHINE LEARNING
- SYSTEM DESIGN FOR SUSTAINABILITY
- MONTE CARLO SIMULATION
- MATRIX COMPUTATIONS

AREAS OF RESEARCH

Since it is an interdisciplinary centre so students are involved with projects in different fields and the chart below shows the projects taken by the current batch.

- Operational Modal Analysis using Python
- Design for Sustainability
- 5G-Based Communication System in Post-Disaster Situation
- Water Management System in Drought-Prone Areas
- Assessment of Flood Hazard and Vulnerability
- Transboundary Water Governance in Disaster Risk Assessment
- Disaster Mitigation for Infrastructure Located in Hill Slopes
- Seismic Vulnerability Assessment and Disaster Mitigation
- Mechanisms and Mitigation of Rainfall-induced Landslides
- Geotechnical Aspects of Vulnerability Assessment for Heritage Structures
- Sustainable Community-Based Disaster Risk Mitigation
- Climate Change and Water Security.
- Remote Sensing Technologies in Disaster Management
- Lifecycle Assessment and Design
- Sustainable Product-Service System Design in Disaster Management

RESEARCH FACILITY











Possible Recruiters



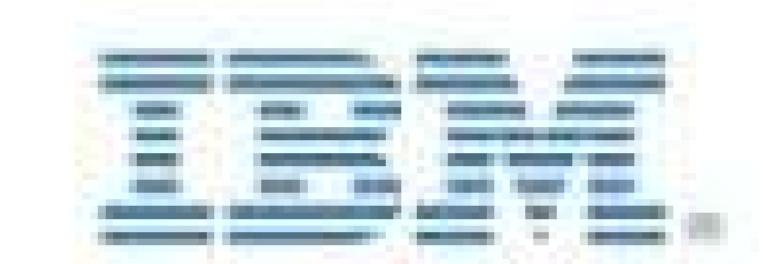






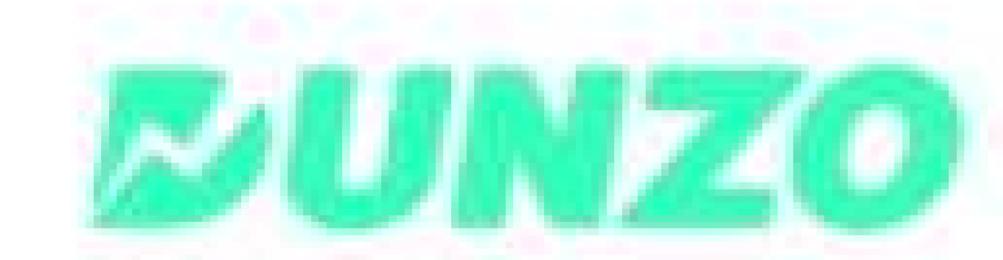














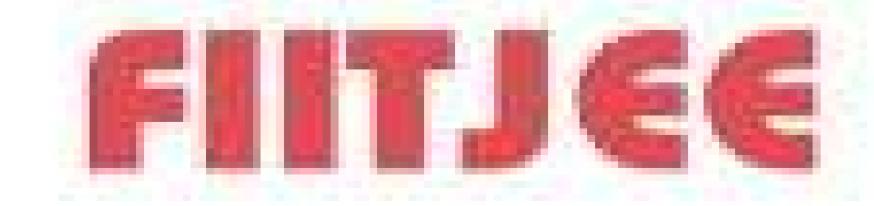
















CONTACTUS

We are looking forward to have you on our Campus.

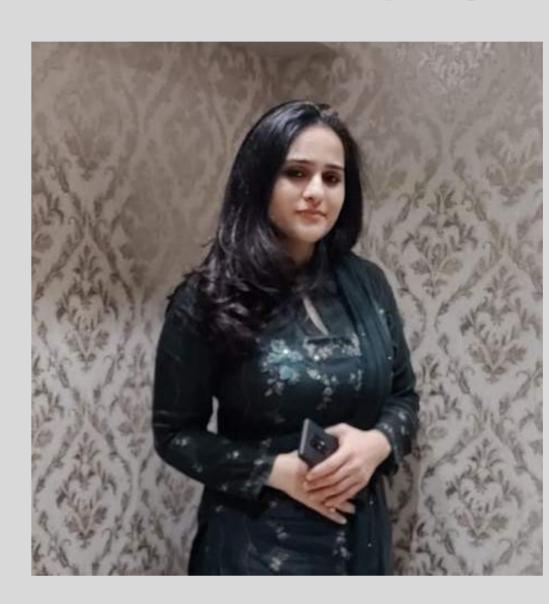


FACULTY PLACEMENT COORDINATOR



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