IIT MANDI

Master of Technology Computer Science And Engineering

2024-2026

Indian Institute of Technology Mandi

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Indian
Institute of
Technology
Mandi

INDIAN INSTITUTE OF TECHNOLOGY, MANDI

| From the Director

Prof Laxmidhar Behera
Director, IIT Mandi

I am pleased to welcome you to IIT Mandi, which is located on the 538-acre picturesque river valley in the Shivalik Range. Since its inception in 2010, IIT Mandi has consistently worked to nurture professionals with industry-ready skills. We achieve this by periodically revising the curriculum in consultation with academic and industry experts to keep it relevant to the fast-changing global human resource needs. Academic excellence is our greatest strength. Students are introduced to practical learning with innovative pedagogy very early into the training. This ensures that they are better prepared to succeed in ambitious corporate environments. We provide a learning environment to allow individuals to express their passion and apply their innate abilities to solve real-world problems.

In the first year, the B.Tech. students participate in the Foundations of Design Practicum: Robotics and Reverse Engineering course which introduces them to existing engineering systems with hands-on experience. Design Practicum introduced in the second year to our B.Tech. students enables them to get exposure to real-world engineering problem-solving with interdisciplinary collaborations. With a budget of Rs. 25,000, award-winning projects include an intelligent drip irrigation system, a 3D printer, an autonomous garbage collector, etc. Socio-Technical Practicum introduced during B.Tech. 3rd year provides exposure to the impact of new technologies on society, often doing fieldwork in villages and towns in the neighborhood. Typical projects include alleviating traffic congestion in Mandi town, mechanization in terraced farms in the Himalayas, and education and livelihood for village women. These interdisciplinary and group projects build up perseverance, leadership, connection with society, and the opportunity to apply their technical skills.

The M.Tech. and M.Sc. degree programs contain a substantial component of thesis work relying heavily on practical learning aspects for over two semesters. In this open-ended thesis, students learn to work independently and in great depth on a research problem. The thesis contains globally novel contributions to the discipline in some aspects. Thus, the Master's graduates are well suited to take a lead role. The institute also encourages the student to explore collaboration and to work on projects guided by industry experts for their thesis. Research by our MS and Ph.D. students has achieved global recognition in international journals and conferences.

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| From the Director

In addition, the diaspora of student-driven extracurricular activities creates a lively learning environment and provides leadership abilities and confidence in our students. All this is impossible without the support of our able faculty, who give a holistic learning experience with their excellent teaching and exposure to cutting-edge research and publication in the best international scholastic journals. We have a total faculty strength of 189 active in research and teaching in several areas of engineering, sciences, and the humanities. Faculty have received research grants totaling over Rs. 160.7 crores and the Institute has invested heavily in developing state-of-the-art lab infrastructure. Our faculty members are also involved in mentoring startups supported by our Technology business incubator, IIT Mandi Catalyst. The IIT Mandi Catalyst supported 460+ startups and disbursed about INR 20+ crores for prototyping and commercialization of diverse start-ups in clean energy, environment, health care, agriculture, enterprise management, biotech, education, manufacturing, and consumer internet. The fact that about 37 of the total start-ups have been founded by the IIT Mandi faculty, staff, and students underlines the innovative and entrepreneurial spirit of IIT Mandi once again.

The IIT Mandi alumni have done extremely well, as evident from receiving the youngest scientist award in the Indian Science Congress, INYAS award, etc. Our current alumni strength is over 1513 B.Tech, 114 MS, 509 M.Tech, 392 MSc, 48 MA, and 8 I-Ph.D., and 288 Ph.D. graduates. Our alumni have excelled in different spheres of academia, industry, and central government administration, thanks to our innovative curriculum. Most of these alumni have been hired by top multinational companies, a few have chosen higher studies in leading universities and several of them are serving different administrative positions in the Govt. of India including IAS.

On behalf of the faculty and students of IIT Mandi, I invite you to participate in our placement process. I am confident that you will find it a rewarding experience!

Prof. Laxmidhar Behera
Director, IIT Mandi

| From the Faculty Advisor

Dr. Kala Venkata Uday

During the short span of fourteen years of its existence, the Indian Institute of Technology Mandi (IIT Mandi) has gained a reputation for its cutting-edge research and innovative teaching programs focusing on up-to-date scientific knowledge and state-of-the-art technological know-how in their respective disciplines. The institute prides itself on creating an environment that empowers young minds by developing intellect, and versatility, broadening horizons of creativity and honing interpersonal skills with the help of our top-notch faculty and staff. With the aim of shaping the students into responsible engineers and scientists, the innovative curriculum at IIT Mandi strives to expose students to strong fundamentals of engineering, basic sciences, and humanities while simultaneously sensitizing them to human values and society. Similarly, the institute's focus on research at the fore-fronts of various areas of science and technology has resulted in significant contributions and responsible researchers.

Apart from the technological development of our students, they also participate/organize in a multitude of extra-curricular activities, which exposes them to and tests their skills in sports, culture, dramatics, and music and allows them to develop a healthy overall personality. This has brought several awards to the institute at national and international levels. The students also get first-hand experience in organizing and managing events through various leadership positions they take up during several annual events organized at IIT Mandi.

The Career and Placement Cell (CnPC) invites organizations that have recruited our alumni and have witnessed them deliver well on high expectations placed on them, as well as those whom our students have not yet got an opportunity to serve. The CnP cell strives to facilitate the best possible match between the aspirations of recruiting organizations and the abilities of our students. We welcome suggestions from your organization that will help us realize it. On behalf of the CnPC team at IIT Mandi, I assure you of the prodigious talent of our students and feel elated to invite your esteemed organizations to recruit our students. We look forward to the enthusiastic participation of your organization in our 2025-2026 campus placement process and a lasting and mutually satisfying relationship with your organization.

Dr. Kala Venkata Uday
Faculty Advisor

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| About Programme

The two-year M.Tech programme in Computer Science and Engineering at the Indian Institute of Technology Mandi is proposed to:
(a)Teach the theory and practice behind certain core as well as advanced areas, in the form of courses and labs.
(b)Impart the ability to work on and take ahead large applications in industry and research, in the
form of a project.
(c)Give them an exposure to other disciplines in the form of elective courses.

Demographics
18 Students

Specializations
Systems engineering & TCS
Intelligent Systems

Internship
Students are eligible for 2
months internship as well as 6
months internship with permission from their Faculty advisor.

COURSES OFFERED

SYSTEMS ENGINEERING & TCS

Performance Analysis & Computer Network

Map Reduce & Big Data

Internet Of Things (IOT)

Quantum Computing

INTELLIGENT SYSTEMS

Pattern Recognition

Deep Learning & Applications

Digital Image Processing

Computer Vision

Mobile VR & AI

Generative AI

NLP

CORE

Discrete Mathematics

Linear Algebra

Applied Probability

Advanced Computer Science Practicum

Advanced DSA

FACULTY MEMBERS

Dr. Aditya Nigam
- Chairperson SCEE
- Associate Professor
- PhD from IIT Kanpur
- Area of Interest : Biometrics, Computer Vision, Image Processing PhD from Indian Institute of Technology Kanpur
- Email : aditya@iitmandi.ac.in

Dr. Arnav Bhavsar Vinayak
- Associate Professor
- PhD from IIT Madras
- Area of Interest : Computer vision, Medical image analysis, Biosignal analysis, Machine learning, Deep learning
- Email : arnav@iitmandi.ac.in

Dr. Prateek Vishnoi
- Assistant Professor
- Ph.D. from IIT Kanpur
- Area of Interest : Algorithmic Randomness, Algorithmic Information Theory, Theoretical Computer Science.
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Dr. Varun Dutt
- Assosiate Professor
- PhD from Carnegie Mellon University, USA
- Area of Interest : Artifcial Intelligence, Human-Computer Interaction, Cognitive Science, Judgment and Decision Making
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Dr. Indu Joshi
- Assistant Professor
- PhD from IIT Delhi
- Area of Interest : Biometrics, Medical Image Analysis, Computational Biology, Deep Learning
- Email : indujoshi@iitmandi.ac.in

Dr. Parimala Kancharla
- Assistant Professor
- Ph.D. from IIT Hyderabad
- Area of Interest : Generative Modeling, Deep Learning Based Video Compression, Multimedia Quality Assessment
- Email : parimala@iitmandi.ac.in

| FACULTY MEMBERS

Dr. Padmanabhan Rajan
- Associate Professor
- PhD from IIT Madras
- Area of Interest : Speech and audio processing, Analysis of music, Machine learning and pattern recognition, especially applied to audio signals
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Dr. Awaneesh Kumar Yadav
- Assistant Professor
- PhD from IIT Roorkee
- Area of Interest : Post Quantum Security, Network Security, 5G/6G Security, Fog/Dew Security, Authentication
- Email : awaneesh@iitmandi.ac.in

Dr. Sreelakshmi Manjunath
- Assistant Professor
- PhD from IIT Madras
- Area of Interest : Communication Networks, Vehicular Networks, Time-delayed Systems, Control Theory
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Dr. Gaurav Sood
- Assistant Professor
- PhD from Institute of Mathematical Sciences, Chennai
- Area of Interest: Theoretical Computer Science, Computational Complexity Theory, Proof Complexity
- Email : gaurav@iitmandi.ac.in

Dr. Rohit Saluja
- Assistant Professor
- PhD from IITB-Monash Research Academy
- Area of Interest : Optical Character Recognition, Road Safety, Computer Vison
- Email : rohit@iitmandi.ac.in

Dr. Dinesh Singh
- Assistant Professor
- PhD from IIT Hyderabad
- Area of Interest : Computer Vision, Machine Learning, Big Data Analytics
- Email : dineshsingh@iitmandi.ac.in

| Student Activities

The student clubs at IIT Mandi cater to diverse interests and enable the all-around development of the students. Majority of the clubs fall under the Student Gymkhana with students being club coordinators for various societies, namely Science and Technology Council (SnTC), Cultural Society, Sports Society, English Debating, and Literary Society.

Technical Society

The technical society of IIT Mandi or Science and Technology Council (SnTC) IIT Mandi consists of several technical clubs. The unique feature of the Institute's Technical Society is that all the clubs support open participation. All the students are free to join a club at any point in time and dedicated students are rewarded with experience. Members of the technical society also enthusiastically represent the college in national and international events bring laurels for the Institute.

SnTC constitutes of the following clubs:

- Robotronics Club
- Space Technology and Astronomy Cell (STAC)
- Yantrik Club
- Programming Club
- Nirmaan Club
- SAE Collegiate
- Entrepreneurship Cell
- Kamand Bio Engineering Group (KBG)

Technical events and activities:

- Utkarsh (Intra College Technical Fest)
- Xpecto (Annual Inter College Tech Fest)
- AstraX (Inter College Astro Fest)
- FrostHack (Inter College Hackathon)
- Kamand Premier League (Intra College Annual League)

Literary Society

IIT Mandi has various literary clubs and societies that actively work for enhancing the talent of the students in these fields. The society came up with the first clinical student magazine, Vivaan. The society held its formal debating competition along with several GDs, quizzes, and creative writing. It participated in Casis 2012 at BITS Pilani and won the first prize in Formal Debating. Literary society of IIT Mandi also runs an annual fest named 'Ruvaan'.

Cultural Society

Music, Dramatics and Dance come together with Programme Management under the Cultural Society to provide students a platform to showcase their skills. The society has also started a Photography and Fine arts Club. In the year 2014, this society started collaborating with SPIC-MACAY and has been organizing various events throughout the year. "Aakarshan"-Introduction to Cultural Society and "Exuberance"- Intra College Cultural Nights are some of the major events. Digital Art is another focus area of the cultural society.

Entrepreneurship

At IIT Mandi student clubs especially E-Cell aim to instigate the entrepreneurial spirit among the community. The club shares it's crazy love for subjects related to business and its disciplines, they strive to give a glimpse of the world of business and finance by conducting a variety of events, sessions and competitions.

The main focus is on Personal Finance, Business Analytics, Product Management, and building a good startup culture in the college. IT Mandi Catalyst hereby goes hand-in-hand as an incubator as well as a partner. Stock market and Blockchain networks are also being covered and the result comes out as Himalayas biggest Startup fest 'Himalayan Startup Trek' where startups from around India and World come with their pitches and get incubated.

| Our Alumni

Mr. Athar Amir Khan
Commissioner, Srinagar
Municipal Corporation &
CEO, Srinagar Smart City Limited

Er. Amanjot Kaur
Data Sceintist at Visualping,
Canada

Dr. Palvi Aggarwal
Assistant Professor,
University of Texas, USA

Dr. Hari Vansh Rai Mittal
Assistant Professor, IIT Palakkad

Mr. Shubham Ajmera
Software Engineer at Facebook | Ex-
Google

Mr. Siddharth Gangal
Solarlabs, co founder

Dr. Rishi Sharma
PHD, Computer Science at EPFL

Mr. Harshul Jain
Founder and CEO of
Glood.ai

Mr. Mohit Kumar Malhotra
Scientist, Defense ministry of
Gov. of India

Mr. Tanmay Rustpgi
Software Engineer,
Databricks

Mr. Abhigyan Khaund
MS Computer Science,
Georgia Institute of
Technology

| Student Achievements

IIT Mandi got 11th rank in the world
in terms of number of students selected in GSOC-21.
12 students and 3 mentors got selected in 2021
9 student and 6 mentors got selected in 2020
5 student and 2 mentors got selected in 2019

STAC IIT Mandi received a globally competitive grant of € 4388 from IAU Office of Astronomy Upliftment of Space Technology Cell in Himalayas

Ranking of IIT Mandi in
Inter-IIT Tech Meet
2021-22 : 10th
2020-21 : 12th
2019-20 : 12th

Mr. Arpit Nandi received IEEE Electron Devices Society Masters Student Fellowship 2021.

IIT Mandi alumnus
Dr. Navneet Chandra Verma has won the Indian National Young Academy of Sciences (INYAS) National Award 2020 for Research Excellence.

Lalitesh Kumar Meena
Secured 655th rank in
CSE (2020)

Piyush Kumar
Secured 400th rank in
GATE(2021)

Research and Development

Research Centres

Advanced Materials Research Center (AMRC)

BioX Center

Centre for Design and Fabrication of Electronic Devices (C4DFED)

Center for Artificial Intelligence and Robotics (CAIR)

Center for Quantum Science and Technologies (CQST)

Indian Knowledge System and Mental Health Application Center (IKSMHA)

Reasearch Labs

Manas Lab

MandiCon

CMP

Photoresist Research Group

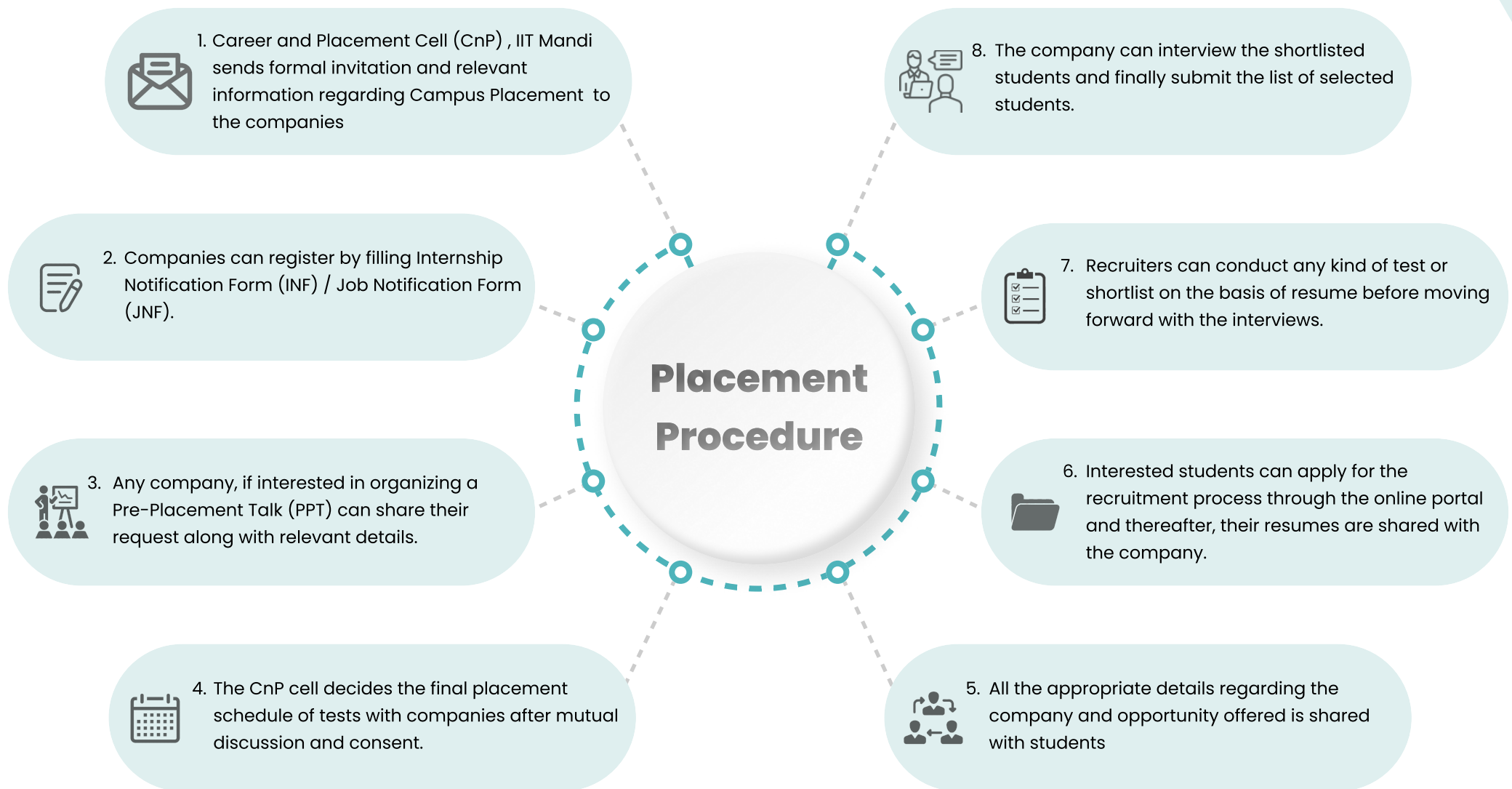MAS

ACS

Innovation Centres

Enabling Women of Kamand (EWOK)

IIT Mandi Catalyst

IIT HCI iHUB

| Our Recruiters

A
Aakash Byju
Aakash+Byju
Accenture
Accolite
ACE
Achnet
Addverb
Aditya Birla
Adobe
Algo university
Amazon
AMD
Applied materails
APT portfolio
Arista Networks
Aspire IIT
Atom One Company
Attentative AI
Avanti fellow
Axestrack Software Solutions
Pvt Ltd
Axtria
Azure power

B
Bakliwaltutorials
BEL
Brighosha
Burger Singh

C
C DOT
Cadence
Cashfree
Ceremorphic
Cisco
Cogoport
Credgenics
Cubastion
Cummins india
Cyfuture

D
Dash Dynamics
De Shaw
Decision point
Denso
Dolcera
DP World
Dyeus

E
Editorialist YX
Edofora
Evalueserve
EVERVENT
EXL Service

F
FITJEE
Flipkart
Focus energy
Fundsroom
Future First

G
GAN Studio
GE
GE digital
General Electric
GHAI
Globallogic hitachi
GMO
GoldmanSachs

H
HCL
HDFC Bank
Hitachi
Honeywell
HPCL

I
i'm Beside you
IBM
ICICI Bank
IITian's PACE Education Pvt
Ltd
Impact guru
Indag Rubber
Indeed
Infosys
Ingenico
inmobi
Intel
IntelliPaaat
Intuit
ITRA

J
Jaguar Land Rover(EV)
Jaguar Land
Rover(Software)
Jio 5G
JLR diversity

K
KIIT

L
L&T
LTI
Lumenci

M
Mahindra and Mahindra
MAQ
Maruti Suzuki
Maxlife Insurance
Media.net
Medibuddy
Merapasu
Mercedes Benz
Merilytics
Microchip technologies
Miko
Morsebiz
Motion Pvt
MS
Myways

N
Nation with Namo
Newgen
Newzera
Nference
NI
Nimesa technologies
Niyo Solutions
Nohara Holdings, Inc
Nucleus Software
NXP semiconductor

O
ODE
One Geo
Oracle
Orchid

P
Panel Iq
Parallel wireless
Parul University
Paytm
Pentair
Perceptive Analytics
Planet Spark
Publicis Sapient

Q
QbitsLab
Quantsapp
Quicksell
Qulabs

R
Radisys
Rakuten
Razorpay
Reliance Jio
Rippling
Rober Bosch
Robert Bosch
Rohm Semiconductor
RTDS &group

S
Sagacious Research Pvt. Ltd
Samsung Research Institute
Bangalore
Sap Labs
Sarv
Scaler
Schrondinger
Semicon
Shipsy
Siemens
Siemens gamesa
Silicon labs
Sprih
Sprinklr
SRF
Srichaitnya
Stardour
Statcon Electronics
Sterlite

T
TAQ Bit lab
Task Tracker
Task Tracker
Tata 1Mg
Tata Elxi
Tata Motors
TCS
Tech advantage
Tech Mahindra
Tech Vantage
Techladd
Tesco
Tetcos
Texas instruments
Tigris Mobility
Transtutors
Triology
Truminds

U
Uber
Unify Tech
Unisys
Uttranchal University

V
Varroc
VECV
Volvo
vyas edification

W
Walmart
Warner Bros. Discovery
WcB Robotics
WCB Robotics
Western Digital
WSP

Y
Yum

Z
Zavya
Zomato

Placement Procedure

1. Career and Placement Cell (CnP), IIT Mandi sends formal invitation and relevant information regarding Campus Placement to the companies

2. Companies can register by filling Internship Notification Form (INF) / Job Notification Form (JNF).

3. Any company, if interested in organizing a Pre-Placement Talk (PPT) can share their request along with relevant details.

4. The CnP cell decides the final placement schedule of tests with companies after mutual discussion and consent.

5. All the appropriate details regarding the company and opportunity offered is shared with students

6. Interested students can apply for the recruitment process through the online portal and thereafter, their resumes are shared with the company.

7. Recruiters can conduct any kind of test or shortlist on the basis of resume before moving forward with the interviews.

8. The company can interview the shortlisted students and finally submit the list of selected students.

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CONTACT US

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🌐 http://research.iitmandi.ac.in/main/placements/

in linkedin.com/in/career-placement-cell-iit-mandi-85178650

Placement Report

🔗 Link to the file

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