



सूचना विवरणिका INFORMATION BROCHURE

एम.टेक. प्रवेश सत्र 2024-25 (2-वर्षीय एम.टेक कार्यक्रम)
M. TECH. ADMISSION 2024-25 (2-YEAR M. TECH. PROGRAMS)



भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ)
धनबाद-826004, झारखंड, भारत
Indian Institute of Technology (Indian School of Mines)
Dhanbad - 826004, Jharkhand, India

www.iitism.ac.in

1. ABOUT THE INSTITUTE

Indian Institute of Technology (Indian School of Mines) Dhanbad was established in 1926, and offers B. Tech., Dual-degree (B. Tech. and M. Tech.), Integrated M. Tech., M.Sc./M.Sc. Tech., M. Tech., MBA and Ph.D. in various areas of Science: Applied Geology | Applied Geophysics | Chemistry | Mathematics & Computing | Physics | and Engineering: | Chemical | Civil | Computer Science and Engineering | Electrical | Electronics | Environmental Science and Engineering | Fuel, Minerals & Metallurgical Engineering | Mechanical | Mining | Mining Machinery | Petroleum | Humanities | and Management. IIT (ISM) has centenary long credentials of outperforming achievements/contributions in academia and the industry. It has been focusing its academic and research activities on various aspects of science, technology and industry, occupying a unique position not only in India, but also abroad. It has substantially contributed to the development of the Science, Engineering and Mineral sector through its in-house state-of-the-art facilities for advanced studies and research.

1.1 Location of the Institute

IIT(ISM) is located in the city of Dhanbad, the coal capital of India, which is at the heart of major Indian coalfields, in the state of Jharkhand. One can reach Dhanbad by rail and road. It is 260 km from Kolkata and 160 km from Ranchi. Nearby airports are in Kolkata, Durgapur and Ranchi. Deluxe and Express buses run regularly from Kolkata, Ranchi, Jamshedpur and Bokaro to Dhanbad. IIT(ISM) campus is just 3 km away from Dhanbad railway station where taxis and autos operate round the clock.

2. M. TECH. PROGRAMS

The aim of the programs is to train the students in a high level of knowledge enabling them to tackle practical complex problems in industrial fields as well as to excel in further higher education through research. Enough flexibility is provided in the structure of the program in respect of lecture courses, laboratory and project work to help the students to achieve their goal. All the Departments are equipped with sufficient facilities for this purpose. IIT(ISM) offers admission in M. Tech. in three different modes:

- (1) Candidates with GATE score (may be called *GATE candidates*)
- (2) IIT Graduates with B. Tech degree
- (3) Candidates sponsored by government organizations/reputed Industrial Organization/ Academic Institutions (may be called *Sponsored candidates*).

Various M. Tech. programs offered by IIT(ISM) and the names of the offering Departments are shown in Table 1.

This brochure is not for **Foreign / NRI / PIO** candidates, they are requested to see the institute website on 'Foreign Students' under 'Admission' and they may contact Dean (International Relations and Alumni Affairs) (diraa@iitism.ac.in).

2.1 Financial Assistance

- (a) The Financial assistance will be offered to M. Tech. Students (admitted under GATE and IIT Graduates with B Tech. Degree) as per MOE, GOI Norms/Institute rules. Students getting assistantship will be required to assist the department for 8 hours of work per week related to academic activities of the department such as laboratory demonstration, tutorials, evaluation of assignments etc. The details about the Financial Assistance are given below.

(For more details, please follow Chapter 10 of the PG manual

<https://people.iitism.ac.in/~academics/assets/manuals/pg2223.pdf>)

- Institute Assistantship shall be awarded to M. Tech. students on a semester-to-semester basis for a maximum period of 4 semester.

- The assistantship will be paid up to 15th May of that year for the graduating students.
- A student is expected to devote up to eight hours per week towards job(s) assigned to her / him by the departmental authority.
- The monthly payment or renewal of assistantship is contingent on the student's performance in the academic program and in the discharge of assistantship duties.
- A pro-rata deduction from the amount of the Assistantship will be made if student avails any leave beyond the admissible period.
- The student will be eligible for getting financial assistance from a single source (Institute/Other funding agency) at a time.

(b) Sponsored candidates are NOT eligible for any financial assistantships.

2.2 Program Fee

The existing structure of the Semester fees is given below. A candidate will be required to deposit the first semester fee including the Admission Fee (under revision), when the candidate, through online portal, finally accepts the admission:

Semester	GEN/OBC/EWS (Rs.)	SC /ST/PwD/ Transgender (Rs.)
I	67,850/- *	52,850/-*
II	23,400/-	8,400/-
III	33,450/-	18,450/-
IV	23,400/-	8,400/-

* The above fee also includes Rs. 21,000/- as additional mess charges for first semester and Rs. 5000 /- caution money.

Candidates are required to deposit the first semester fee including the Admission Fee etc. through an online portal after receiving an offer letter to confirm admission.

3. ELIGIBILITY OF CANDIDATES

3.1 For GATE Candidates

An applicant with the following degree is eligible for admission:

- (a) The candidate should have a Bachelors' degree in Engineering or a Masters' degree in Science from Institutes recognized by the Government. The qualifying degrees for each of the M. Tech. programs are mentioned in Table 2.
- (b) The minimum marks are 60% or CGPA of 6.0 (on a 10-point scale) in Bachelors' degree in Engineering or a Masters' degree in Science.
- (c) Candidates belonging to SC / ST and who have the basic qualifying degree is eligible to apply, provided s/he has secured marks not less than 55% or CGPA not less than 5.5 in the relevant degree.
- (d) Admission to this program is through the Common Offer Acceptance Portal (COAP).
- (e) Candidate must be an Indian National.
- (g) Candidates with an equivalent degree and discipline recognized by professional bodies, such as the Institution of Engineers (India), the Institute of Chemical Engineers, the Aeronautical Society of India, the Institute of Electronics and Telecommunication Engineers, the Indian Institute of Metals, etc. are not eligible.

3.2 For IIT Graduates

For Bachelors' degree holders from IIT system having a CGPA of 8.0 and above, the requirement of GATE / NET is waived off and would be given direct admission to M. Tech. programs. The respective department as per allocated seats will review such applications. The number of seats for such candidates will be super numeric.

3.3 For Sponsored Candidates

- A candidate working in an academic institution/PSU/Govt. R&D organizations/Govt. recognized private R&D organizations/industry, is considered as a sponsored candidate. Such a candidate must be sponsored by his/her employer and must have been in employment with the sponsoring organization for at least 2 years at the time of admission.
- Candidate must be an Indian National.
- Candidates working in private firms/organizations have to submit their latest Salary Bank Account statement/Employees' Provident Fund (EPF) statement during uploading documents as well as during the admission process.
- The applications of candidates sponsored by the organizations under a MoU between Institute and/or under QIP program shall be eligible for admission.
- The employer must undertake to relieve the candidate to stay in the campus for the specified period to enable the candidate to complete the program.
- Candidates must have a valid GATE score (remains valid at the time of Admission) in the appropriate GATE Paper as per Table 2.
- Candidates seeking admission to M. Tech. programs of the Institute should have
 - Minimum 60% or CGPA/CPI of 6.0 in 10 point scale (without rounding off) in the qualifying degree for UR/OBC candidates.
 - Minimum 55% or CGPA/CPI of 5.5 in 10 point scale (without rounding off) in the qualifying degree for SC/ST/PwD candidates.
- For sponsored candidates having Bachelor's degree from Centrally Funded Technical Institutes (CFTIs) having a CGPA of 8.0 or above, the requirement of GATE/NET is waived off.
- The number of seats for sponsored candidates will be super numeric, subject to a maximum limit of 20% of total sanctioned seats.

3.4 Selection Criteria

(A) For GATE Candidates and IIT Graduates

- (i) The admission to different M. Tech. programs will be made on the basis of their GATE score for GATE candidates. For IIT Graduates, it will be based on CGPA & Departmental Review.
- (ii) In case of equal GATE score, the older candidate in terms of date of birth will get preference.

(B) For Sponsored Candidates

The admission to different M. Tech. programs for sponsored candidates will be made based on **Departmental Review and Recommendation** after fulfilling the requisite criteria as per section 3.3 of information brochure.

3.5 Reservation of seats

- a) Reservation for SC/ST/OBC (Non-Creamy Layer)/PwD/EWS candidates will be as per Government of India rules.
- b) Forms of OBC (Non-Creamy Layer) Certificate (given in Annexure I) must be produced by OBC (Non-Creamy Layer) candidates in the format for 'Admission to Central Educational Institutions (CEIS) under the Government of India' and **should be issued on or after April 01, 2023.**

- c) Parental Income Certificate for EWS category (given in Annexure II) must be produced by a candidate in the format for 'Admission to Central Educational Institutions (CEIS) under the Government of India' and **should be valid and issued on or after April 01, 2023.**

3.6 Medical Fitness

- (a) Candidates must be in good health. A candidate is required to submit a medical certificate (as per Annexure II) at the time of reporting at IIT(ISM) Dhanbad signed by the chief medical officer (CMO) or equivalent of a government hospital.
- (b) The candidate must check his/her eligibility criteria (wherever applicable) as given in table 2 about colour blindness/unilocularity.
- (c) A candidate will be allowed to take admission only if the certificate produced by the candidate is verified to be satisfactory by IIT(ISM) officials, whose decision in this regard will be final.

4. ADMISSION PROCEDURE

- (a) Online application form is required to be submitted through online portal, which will remain available on the IIT(ISM) website www.iitism.ac.in from March 15, 2024 to April 17, 2024 (tentative). The GATE candidates will also have to register themselves at COAP 2024 portal as seat allotment will be made through COAP. The admission of IIT Graduates and Sponsored candidates will be carried out through the online portal of IIT (ISM) Dhanbad. After filling the form, the candidates are advised **to take a print of the application** and keep the same for record.
- (b) Candidates can apply for more than one program and can select up to 10 preferences.
- (c) Non-refundable application fee for each program for GATE candidates/IIT Graduates is Rs. 600/- for UR/EWS/OBC candidates and Rs. 300/- for SC/ST/PWD/Transgender candidates. The application fee needs to be paid through online payment gateway only along with the online application.
- (d) Non-refundable Application fee for each program for all Sponsored candidates is Rs. 2000/-.
- (e) It is the **responsibility of the candidate** to ensure that he/she satisfies all eligibility criteria for a particular program, as mentioned in this information brochure, and submit complete and correct information in the Institute admission portal accordingly.
- (f) The M. Tech. admission will be through online counselling through COAP based on the GATE score and CGPA and Departmental Review (for IIT Graduates and sponsored candidates) as per schedule given in Table 5. The details of the counselling procedure is given in Annexure-A.
- (g) Image quality of the uploaded documents must be good enough to enable easy verification of the documents/items. Care should be taken to scan the documents (with file format jpg/jpeg) with the help of a high quality scanner. The candidate should check the quality of the soft document before uploading.
- (h) The following documents are to be uploaded during the document uploading.
- Image files of your recent passport size photograph and signature.
 - Qualifying Degree Marks-Sheet of final semester / final year (7th semester / pre-final year marks-sheet for the 'appearing candidates' whose final semester / final year results are pending).
 - Valid GATE score card as indicated in the application form (for GATE-candidates).
 - 2-year experience certificate for candidates of M. Tech. in Mining Engineering
 - Caste certificate/EWS income certificate to avail seat reservation under respective reserved category. (The OBC (NCL) certificate as per Annexure I and issued on or after April 01, 2023).
 - Intermediate mark sheet (10+2) for eligibility of Mathematics as a requisite subject for M. Tech. in Pharmaceutical Science and Engineering
 - Persons with Disability (PwD) are required to upload a certificate of disability from the **authorized medical board** attached to one of the following - Vocational Rehabilitation Centre (VRC) for Physically Handicapped persons/ Special Employment Exchange for Physically Handicapped/ Government Hospital (District and State level).

- (viii) Endorsement certificate from the present employer (*for Sponsored candidates*).
- (ix) Salary Bank Account statement/Employees' Provident Fund (EPF) statement (*for Sponsored candidates working in private firms/organizations*)
- (i) The admission of selected candidates through online counselling will be **provisional** after the payment of admission fee.
- (j) The candidate is to report in-person at IIT(ISM), Dhanbad on the scheduled date, time and venue for completing his/her admission. If the candidate fails to report at the admission venue in-person along with the requisite documents in original by that date and time, he/she will not be considered afterwards for admission. The date for reporting at the Institute for physical verification of documents will be notified later.
- (k) In addition to original copy of above mentioned documents following original documents must be produced by the candidate at the time of **reporting** to IIT (ISM) to complete his/her Admission:
- Copy of the online application form.
 - Copy of the seat allotment letter.
 - Copy of Admission fee payment receipt.
 - The Migration Certificate or College Leaving Certificate.
 - Photo ID (Aadhaar/PAN/DL etc) and Proof of age (Plus 2 certificate/Aadhaar/Matriculation certificate, etc.)
 - Valid certificate wherever applicable:
 - OBC cum Non-Creamy Layer certificate** issued on or after **1st April 2023** (in central govt. format).
 - SC/ST** (in central govt. format).
 - EWS** certificate issued on or after **1st April 2023** (in central govt. format).
 - Persons with Disability** (PwD) are required to produce original certificate of disability from the authorized **medical board** attached to one of the following - Vocational Rehabilitation Centre (VRC) for Physically Handicapped persons/ Special Employment Exchange for Physically Handicapped/ Government Hospital (District and State level)
 - All the relevant educational qualification certificates, including the qualifying examination, class awarded, recently issued migration certificate, GATE Score card, etc.
 - A Medical fitness certificate** as per Annexure III
 - A medical certificate** separately from Chief Medical Officer (CMO) or Equivalent of a Government Hospital, indicating **no colour blindness/ uniocularity** for candidates of M. Tech. in **Mining engineering**.
 - 4 passport size and 10 stamp size colour photographs.
 - Undertaking regarding not claiming scholarship *for sponsored candidate*.
 - It is important for the 'Appearing candidates' to note that their admission will be provisional even after completing all other procedures & formalities which will be confirmed only after submission of final semester / final year marks-sheet of qualifying degree and college leaving certificate / migration certificate in original to the Academic Section through the coordinators of the respective M. Tech. programs latest by September 30, 2024. Such candidates will not be entitled for any scholarship till confirmation of their admission, if otherwise eligible. Failure to submit the requisite document by the stipulated date will lead to cancellation of admission of all such candidates and names of all such candidates will be deleted from the rolls of the Institute w.e.f. October 01, 2024 without further notice. In such cases the candidates will be refunded only caution money deposited at the time of admission.
 - Salary Bank Account statement/Employees' Provident Fund (EPF) statement (*for Sponsored candidates working in private firms/organizations*)
- (l) The documents of the candidates will be verified by IIT(ISM) officials. Admission of only those candidates, whose documents are found in order and verified as satisfactory, will be confirmed.
- (m) All other formalities related to identity card, hostel and bank account, etc. will be completed subsequently by the candidate.

- (n) Hostel mess fee for the first semester have to be paid at the time of admission. Caution money and security deposits are refundable only after completion of the program.

4.1 Withdrawal of Admission

Candidate may withdraw his/her provisional admission before physical reporting at IIT(ISM), Dhanbad and withdrawal request may be sent to AR (Admissions) at aradm@iitism.ac.in by e-mail from the registered email ID of the candidate. Refund on withdrawal of admission will be processed as per following refund guidelines:

- If a candidate withdraws the offer of admission before the commencement of the 5th main round, the entire fee collected from the candidate will be refunded after a deduction of processing fee of Rs.2000/-.
- If a candidate withdraws the offer of admission after the 5th main round, the candidate will be refunded only the caution money and advance hostel mess fee.

5. OTHER IMPORTANT POINTS

- In the event of any information being found false or incorrect or incomplete or non-eligibility being detected at any time before or after admission, his/her candidature is liable for rejection without further communication.
- An applicant once admitted in a particular postgraduate program will not be allowed to shift to any other program, even if seats remain available in other courses. However, if an adequate number of students is not available in a particular program, IIT(ISM) may not run that Program. In such case, a candidate who has taken admission in that Program may be allowed to change his/her admission to other M. Tech. program (even if the candidate has not applied for that program), where vacant seat is available in the respective categories and matches the qualifications of the candidate with the eligibility condition of that program.
- Students are required to observe prescribed Rules & Regulations and orders issued by the IIT(ISM) authorities from time to time.
- The rules for GATE scholarship are as follows: (Refer Chapter 10 of the PG manual for details, <https://people.iitism.ac.in/~academics/assets/manuals/pg2223.pdf>)
 - The Assistantship will be awarded to the candidates on the basis of GATE score.
 - Assistantship will also be applicable for IIT Graduates.
 - The students are required to provide teaching assistance of 8 hours/week.
 - The continuation of the assistantship during each semester is contingent upon good academic performance and achievement of a minimum Semester Grade Point Average (SGPA) of 6.50 (on a scale of 10) for UR/OBC students and SGPA of 6.25 (on a scale of 10) for SC/ ST/ PwD students.
 - The assistantship will be stopped if the criterion mentioned at point (iv) above is not fulfilled. The date of publication of semester result will be the key date for the purpose.
 - If the assistantship is stopped due to non-fulfilment of criterion mentioned at point (iv) above, it will be resumed from the date of publication of semester result on which the above criterion is fulfilled by the student. The resumption of scholarship/stipend will only be done if the student is registered for the semester.
 - Maximum duration of scholarship is 4 Semesters for M. Tech.

6. DISCLAIMER

This website has been launched to provide candidates and public-at-large information about IIT(ISM) M. Tech. Admission. If you do not agree to the terms and conditions given below, do not access this site or any pages thereof.

TERMS AND CONDITIONS

No Warranty

Information displayed on the site, including text, graphics, links or other items - are provided on an "As Is" and "As Available" basis. Although, IIT(ISM) M. Tech. Admission Committee-2024 which organizes their best effort to provide information accurately it expressly disclaims the liability for errors or omissions thereon. No warranty of any kind, implied, express or statutory, including but not limited to the warranty of fitness for a particular purpose and freedom from computer virus, is given in conjunction with the information.

Limitation of Liability

In no event, IIT (ISM) will be liable for any damages, including without limitation, direct or indirect, special, incidental, or consequential damages, losses, or expenses arising in connection with this site or use thereof or inability to use by any persons, or in connection with any failure of performance, error, omission, interruption, defect, delay of operation or transmission, computer virus or line or system failure, even if IIT (ISM) or any representative thereof is advised of the possibility of such damages, losses or expenses.

Network Services

The IIT(ISM) M. Tech. Admission Committee 2024 cannot be held responsible for reduced access speeds due to bandwidth overloads especially close to the deadlines of any online activity.

Jurisdiction

In case any claim or dispute arises in respect of M. Tech. admission, it is hereby made absolutely clear that the Courts at Dhanbad and Dhanbad alone shall have the exclusive jurisdiction to entertain and settle any such dispute or claim.

TABLE-1: M. TECH. PROGRAMS [SESSION: 2024-25]

Sl. No.	Name of M. Tech. Program	Program Code	Name of Department
1	Earthquake Science & Engineering	GP	Applied Geophysics
2	Chemical Engineering	CH	Chemical Engineering
3	Pharmaceutical Science and Engineering	CY	Chemistry & Chemical Biology
4	Civil Engineering	CE	Civil Engineering
5	Computer Science and Engineering	CS	Computer Science and Engineering
6	Power System Engineering	PS	Electrical Engineering
7	Power Electronics & Electrical Drives	PD	Electrical Engineering
8	Electronics Engineering (Communication & Signal Processing)	SP	Electronics and Communication Engineering
9	Electronics Engineering (Optical Communication & Integrated Photonics)	OC	Electronics and Communication Engineering
10	Electronics Engineering (RF & Microwave Engineering)	RF	Electronics and Communication Engineering
11	Electronics Engineering (VLSI Design)	VL	Electronics and Communication Engineering
12	Environmental Science & Engineering	ES	Environmental Science & Engineering
13	Fuel and Energy Engineering	FE	Fuel Minerals and Metallurgical Engineering
14	Mineral Engineering	FM	Fuel Minerals and Metallurgical Engineering
15	Metallurgical Engineering	MT	Fuel Minerals and Metallurgical Engineering
16	Industrial Engineering & Management	MS	Management Studies and Industrial Engineering
17	Data Analytics	MA/DA	Mathematics and Computing
18	Mechanical Engineering (Machine Design)	MD	Mechanical Engineering
19	Mechanical Engineering (Manufacturing Engineering)	MF	Mechanical Engineering
20	Mechanical Engineering (Thermal Engineering)	TH	Mechanical Engineering
21	Mining Engineering	MN	Mining Engineering
22	Geomatics	GM	Mining Engineering
23	Tunneling and Underground Space Technology	TU	Mining Engineering
24	Petroleum Engineering	PE	Petroleum Engineering

TABLE-2: QUALIFYING DEGREES, DISCIPLINES & GATE PAPER CODES FOR M. TECH. PROGRAMS.

Sl. No.	Name of M. Tech. Program (Program Code)	Name of Department	GATE Paper Code	Eligibility Criteria
1	Earthquake Science & Engineering (GP)	Applied Geophysics	CE / GG / MN	Any one of the followings: 2-years M.Sc. / 3-years M.Sc. Tech. / 5-years integrated M. Tech. in Geophysics / Applied Geophysics / Exploration Geophysics / Geology / Applied Geology 5-years Integrated M. Tech. in Geophysical Technology B. E. / B. Tech. degree in Mining Engineering / Civil Engineering.
2	Chemical Engineering (CH)	Chemical Engineering	CH	B. E./B. Tech. in Chemical Engineering/ Petrochemical Engineering/ Petroleum Engineering/ Biochemical Engineering/ Biotechnology/ Energy Engineering/ Environmental Engineering/ Nanotechnology and Nano-science/ Metallurgical Engineering/ Materials Science/ Mechanical Engineering/ Polymer Science and Engineering and allied areas or any combination of the disciplines given as mentioned.
3	Pharmaceutical Science and Engineering (CY)	Chemistry & Chemical Biology	CY / CH / BT / XL	Candidates with B. E./B. Tech. degree in Chemical Engineering /Biotechnology/Chemical Technology or M. Sc. (Chemistry/Biochemistry) or B. Pharma from a recognized university/institute with Mathematics at 10+2 level. Final Year students can also apply for the program.
4	Civil Engineering (CE)	Civil Engineering	CE	B. E. /B. Tech. or equivalent degree in Civil Engineering.
5	Computer Science and Engineering (CS)	Computer Science and Engineering	CS / EC / EE / DA	B. E. /B. Tech. or equivalent in Computer Science and Engineering/ Information Technology/Electronics Engineering/Electronics and Communication Engineering/Electronics and Telecommunication Engineering/Telecommunication Engineering/Electronics and Instrumentation Engineering/Electrical & Electronics Engineering/Electrical Engineering or any combinations of these disciplines given as mentioned.
6	Power System Engineering (PS)	Electrical Engineering	EE/EC/IN/DA	B. E./B. Tech. or equivalent degree in Electrical/ Electrical & Electronics /Electrical & Communication/Power Electronics & Drives/ Electrical & Instrumentation/Power Engineering/ Power Plant Engineering
7	Power Electronics & Electrical Drives (PD)	Electrical Engineering	EE/EC/IN/DA	B. E./B. Tech. or equivalent degree in Electrical/ Electrical & Electronics /Electrical & Communication / Instrumentation & Control/Electronics & Instrumentation/Power Electronics & Drives/ Power Engineering/ Power Plant Engineering
8	Electronics Engineering (Communication & Signal Processing) (SP)	Electronics and Communication Engineering	EC/CS/IN/EE/MA	B. Tech. / B. E. or equivalent degree in Electronics Engineering / Electronics & Communication Engineering / Electronics & Telecommunication Engineering / Telecommunication Engineering / Electrical Engineering/ Electrical and Electronics Engineering / Computer Science and Engineering/ Information Technology / Electronics and Instrumentation Engineering. OR M. Sc. in Electronics/Maths

9	Electronics Engineering (Optical Communication & Integrated Photonics) (OC)	Electronics and Communication Engineering	EC/PH/IN	B. Tech. / B. E. or equivalent degree in Electronics Engineering / Electronics & Communication Engineering / Electronics & Telecommunication Engineering / Telecommunication Engineering / Engineering Physics / Optics and Optoelectronics. OR M. Sc. in Electronics/Physics
10	Electronics Engineering (RF & Microwave Engineering) (RF)	Electronics and Communication Engineering	EC/PH/IN	B. Tech. / B.E. or equivalent degree in Electronics Engineering / Electronics & Communication Engineering / Electronics & Telecommunication Engineering / Telecommunication Engineering. OR M. Sc. in Electronics/Physics
11	Electronics Engineering (VLSI Design) (VL)	Electronics and Communication Engineering	EC/IN/PH/EE	B. Tech. / B.E. or equivalent degree in Electronics Engineering / Electronics & Communication Engineering / Electronics & Telecommunication Engineering / Telecommunication Engineering / Electrical Engineering / Electrical and Electronics Engineering / Electronics and Instrumentation Engineering. OR M. Sc. in Electronics/Physics
12	Environmental Science & Engineering (ES)	Environmental Science & Engineering	BT/ CE /CH/ EY /MN /ES /XL/XE (with Section H)	Any one of the following: • M.Sc. Degree in Environmental Science/Chemistry/Zoology/Botany/ Geology/Microbiology/Atmospheric Science/Biochemistry/Biotechnology/ Earth Science/Geochemistry/ Remote Sensing and GIS • M.Sc. Tech. Degree in Environmental Science/ Biotechnology/Atmospheric Science/Remote Sensing and GIS • B.E./B. Tech. or equivalent degree in Environmental/Civil/ Chemical/Mining/Biotechnology. OR B. Tech. /M. Sc. in any branch with the GATE in ES only.
13	Fuel and Energy Engineering (FE)	Fuel Minerals and Metallurgical Engineering	ME/MN/CH/ES/MT/XE	B. Tech. or B. E in Energy, Fuel, Combustion, Bioenergy, Mechanical, Mining, Geology, Mineral, Chemical, Environment, Waste management, Metallurgy, and allied branches.
14	Mineral Engineering (FM)	Fuel Minerals and Metallurgical Engineering	CH/ES/GG/ME/MN/MT/PI/ XE	B. Tech. or B. E. in Mechanical, Mining, Mineral, Chemical, Environment, Fuel, Metallurgy, Geology, Production, and allied branches.
15	Metallurgical Engineering (MT)	Fuel Minerals and Metallurgical Engineering	MT/ ME/PI.	B. Tech. or B. E. in Metallurgy, Mechanical, Production, Materials, and allied branches.
16	Industrial Engineering & Management (MS)	Management Studies and Industrial Engineering	AE/AG/BT /CE/CH/CS /EC/EE/IN/ ME/MN/MT/PE/PI/TF /XE	B. E. /B. Tech. or equivalent degree in any branch of Engineering.

17	Data Analytics (MA/DA)	Mathematics and Computing	MA/ST	<p>Any one of the following:</p> <ul style="list-style-type: none"> ● B.E./B. Tech. in Computer Science and Engineering and equivalent ● B.E./B. Tech. in Information Technology ● Four year B.S./B. Tech. in Mathematics & Computing, ● Four year B.S./ B. Tech in Mathematics ● M. Sc. in Computer Science ● MCA ● M. Sc./MS In Mathematics/Mathematics & Computing/ ● Statistics/Statistics & Informatics ● 5 Year Integrated M. Sc./M. Tech. in Mathematics & Computing ● 5 Year Integrated M. Sc. in Statistics & Informatics.
			CS/DA	<p>Any one of the following:</p> <ul style="list-style-type: none"> ● B.E./B. Tech. in Computer Science and Engineering and equivalent ● B.E./B. Tech. in Information Technology ● Four year B.S./B. Tech. in Mathematics & Computing, ● Four year B.S./ B. Tech. in Mathematics ● M.Sc. in Computer Science ● MCA ● M.Sc./MS In Mathematics/Mathematics & Computing/ ● Statistics/Statistics & Informatics ● 5 Year Integrated M. Sc./M. Tech. in Mathematics & Computing ● 5 Year Integrated M. Sc. in Statistics & Informatics.
18	Mechanical Engineering (Machine Design) (MD)	Mechanical Engineering	AE / ME/XE	B. E./B. Tech. or equivalent degree in Mechanical Engineering/Aerospace Engineering/Aeronautical Engineering/Automobile Engineering/ CAD-CAM/ Automation Engineering/ Mechatronics Engineering/Robotics/ Marine Engineering/Mining Machinery Engineering/Engineering and Computational Mechanics/Any combination of the disciplines given as mentioned
19	Mechanical Engineering (Manufacturing Engineering) (MF)	Mechanical Engineering	ME/PI	B. E./B. Tech. or equivalent degree in Mechanical Engineering /Automobile Engineering/Manufacturing Engineering/Production Engineering/ Production and Industrial Engineering/ CAD-CAM/ Automation Engineering/ Mechatronics Engineering/Robotics/ Marine Engineering/Mining Machinery Engineering /Any combination of the disciplines given as mentioned
20	Mechanical Engineering (Thermal Engineering) (TH)	Mechanical Engineering	AE / ME/XE	B. E./B. Tech. or equivalent degree in Mechanical Engineering/Aerospace Engineering/Aeronautical Engineering/Automobile Engineering/ Energy Engineering/ Power Plant / Marine Engineering/Mining Machinery Engineering/ Chemical Engineering/ Civil Engineering/Engineering and Computational Mechanics/Any combination of the disciplines given as mentioned

भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ) धनबाद

21	Mining Engineering (MN)	Mining Engineering	MN/ ME	B.E. / B. Tech. or equivalent degree in Mining/Opencast Mining/Mining Machinery Engineering Note: Candidates with colour blindness / unicolority are not permissible
22	Geomatics (GM)	Mining Engineering	MN/ CE/ CS/ ES/ EC/ AG/GG/ GE	B.E./B. Tech. in (Mining Engineering/Civil Engineering/Computer Science Engineering/ Information Technology/Environmental Science and Engineering/ Electronics and Communication Engineering/ Agriculture & Farm Engineering/ Geosciences/ Geoinformatics)/ civil and Urban Engineering, Construction Engineering and Management, Infrastructure Engineering/M.Sc. in Geoinformatics/M.Sc. in Remote sensing and GIS
23	Tunneling and Underground Space Technology (TU)	Mining Engineering	MN/ CE/ PE/ GG	B.E./B. Tech. in (Mining Engineering/Civil Engineering/Civil and Urban Engineering /Petroleum Engineering/ Construction Engineering and Management/Infrastructure Engineering / Geoscience Engineering Or M.Sc./M.Sc. Tech. in Applied Geology/Applied Geophysics/Engineering Geology
24	Petroleum Engineering (PE)	Petroleum Engineering	PE	B. Tech. / B. E. or equivalent degree in Petroleum Engineering/ Applied Petroleum Engineering/ Gas Engineering/ Petroleum Management/Petroleum Studies/ Petroleum Technology/ Petroleum Science/ Petroleum Science and Engineering.

TABLE-3: GATE PAPERS AND CODES 2024

GATE Test Paper	Code	GATE Test Paper	Code
Aerospace Engineering	AE	Geology & Geophysics	GG
Agricultural Engineering	AG	Instrumentation Engineering	IN
Architecture and Planning	AR	Mathematics	MA
Biomedical Engineering	BM	Mechanical Engineering	ME
Biotechnology	BT	Mining Engineering	MN
Civil Engineering	CE	Metallurgical Engineering	MT
Chemical Engineering	CH	Naval Architecture & Marine Engineering	NM
Computer Science & Information Technology	CS	Petroleum Engineering	PE
Chemistry	CY	Physics	PH
Data Science & Artificial Intelligence (NEW)	DA	Production & Industrial Engineering	PI
Electronics & Communication Engineering	EC	Statistics	ST
Electrical Engineering	EE	Textile Engineering & Fibre Science	TF
Environmental Science & Engineering	ES	Engineering Sciences	XE*
Ecology and Evolution	EY	Humanities & Social Sciences	XH***
Geomatics Engineering	GE	Life Sciences	XL**

The paper sections under XE*, XL** and XH*** are defined by some dedicated codes which are mentioned in the following table-

*XE PAPER SECTIONS	CODE	**XL PAPER SECTIONS	CODE	***XH PAPER SECTIONS	CODE
Engineering Mathematics (Compulsory)	A	Chemistry (Compulsory)	P	Reasoning and Comprehension (Compulsory)	B1
Any TWO optional sections		Any TWO optional sections		Any TWO optional sections	
Fluid Mechanics	B	Biochemistry	Q	Economics	C1
Materials Science	C	Botany	R	English	C2
Solid Mechanics	D	Microbiology	S	Linguistics	C3
Thermodynamics	E	Zoology	T	Philosophy	C4
Polymer Science and Engineering	F	Food Technology	U	Psychology	C5
Food Technology	G			Sociology	C6
Atmospheric and Oceanic Sciences	H				

TABLE-4: SEAT DISTRIBUTION OF M. TECH. PROGRAMS 2024-25

Sl. No.	Name of M. Tech. Program (Program code)	Name of Department	UR	SC	ST	OBC-NCL	EWS	Total
1	Earthquake Science & Engineering (GP)	Applied Geophysics	10	4	2	7	2	25
2	Chemical Engineering (CH)	Chemical Engineering	19	8	4	13	6	50
3	Pharmaceutical Science and Engineering (CY)	Chemistry & Chemical Biology	11	4	2	7	3	27
4	Civil Engineering (CE)	Civil Engineering	13	5	2	9	3	32
5	Computer Science and Engineering (CS)	Computer Science and Engineering	20	7	4	14	5	50
6	Power System Engineering (PS)	Electrical Engineering	8	3	2	5	2	20
7	Power Electronics & Electrical Drives (PD)	Electrical Engineering	8	3	2	5	2	20
8	Electronics Engineering (Communication & Signal Processing) (SP)	Electronics and Communication Engineering	10	4	2	7	2	25
9	Electronics Engineering (Optical Communication & Integrated Photonics) (OC)	Electronics and Communication Engineering	8	3	2	5	2	20
10	Electronics Engineering (RF & Microwave Engineering) (RF)	Electronics and Communication Engineering	8	3	2	5	2	20
11	Electronics Engineering (VLSI Design) (VL)	Electronics and Communication Engineering	12	5	2	8	3	30
12	Environmental Science & Engineering (ES)	Environmental Science & Engineering	17	6	3	12	4	42
13	Fuel and Energy Engineering (FE)	Fuel Minerals and Metallurgical Engineering	10	4	2	7	2	25
14	Mineral Engineering (FM)	Fuel Minerals and Metallurgical Engineering	10	4	2	7	2	25
15	Metallurgical Engineering (MT)	Fuel Minerals and Metallurgical Engineering	10	4	2	7	2	25
16	Industrial Engineering & Management (MS)	Management Studies and Industrial Engineering	16	6	3	11	4	40
17	Data Analytics (MA)/(DA)	Mathematics and Computing	5	2	1	3	1	12
			3	1	1	2	1	8
18	Mechanical Engineering (Machine Design) (MD)	Mechanical Engineering	16	6	3	11	4	40
19	Mechanical Engineering (Manufacturing Engineering) (MF)	Mechanical Engineering	16	6	3	11	4	40
20	Mechanical Engineering (Thermal Engineering) (TH)	Mechanical Engineering	16	6	3	11	4	40
21	Mining Engineering (MN)	Mining Engineering	16	6	3	11	4	40
22	Geomatics (GM)	Mining Engineering	8	3	2	5	2	20
23	Tunneling and Underground Space Technology (TU)	Mining Engineering	8	3	2	5	2	20
24	Petroleum Engineering (PE)	Petroleum Engineering	19	8	4	13	6	50
		Grand Total	297	114	60	201	74	746

*Number of seats for sponsored/IIT graduate candidates/QIP candidates will be super numeric, subject to a maximum limit of 20% of total sanctioned seats.

Persons with Disability (PwD) with at least 40% impairment – 5% seats in each of UR, EWS, OBC-NCL, SC, and ST category seats.

NOTE:

UR- Unreserved, **SC-** Scheduled Caste, **ST-** Scheduled Tribe, **OBC (NCL)** - Other Backward Classes (Non-Creamy Layers) **EWS-** Economically Weaker Sections.

TABLE-5: SCHEDULE OF M. TECH. ADMISSION 2024-25

Procedure	Date
Online Application Form available for submission	March 15, 2024 to April 17, 2024
Opening of COAP portal for registration	March 20, 2024 (Tentative)
Date of Written Test/Interview for Sponsored Candidates only	June 23, 2024 (Tentative)
COAP Counselling schedule	May 15, 2024 to July 15, 2024(Tentative)
Reporting at IIT(ISM) Dhanbad	July 23, 2024 (Tentative)
Commencement of Semester for all M. Tech. courses for the Session 2024–25	July 25, 2024 (Tentative)
IIT (ISM) online admission portal will be active till July 25, 2024.	

ANNEXURE – A

Important Dates for Counselling at COAP

Please visit the COAP website

FORM OF CERTIFICATE TO BE PRODUCED BY OBC (NON-CREAMY LAYER) APPLYING FOR **ADMISSION TO CENTRAL EDUCATIONAL INSTITUTIONS (CEIs), UNDER GOVERNMENT OF INDIA**

This is to certify that Shri/Smt. /Km. _____ Son/Daughter of Shri/Smt. _____ of Village/Town _____ District/Division _____ in the _____ State belongs to the _____ Community which is recognized as a backward class under:

- (i) Resolution No. 12011/68/93-BCC(C) dated 10/09/93 published in the Gazette of India Extraordinary Part I Section I No. 186 dated 13/09/93.
- (ii) Resolution No. 12011/9/94-BCC dated 19/10/94 published in the Gazette of India Extraordinary Part I Section I No. 163 dated 20/10/94.
- (iii) Resolution No. 12011/7/95-BCC dated 24/05/95 published in the Gazette of India Extraordinary Part I Section I No. 88 dated 25/05/95.
- (iv) Resolution No. 12011/96/94-BCC dated 9/03/96.
- (v) Resolution No. 12011/44/96-BCC dated 6/12/96 published in the Gazette of India Extraordinary Part I Section I No. 210 dated 11/12/96.
- (vi) Resolution No. 12011/13/97-BCC dated 03/12/97.
- (vii) Resolution No. 12011/99/94-BCC dated 11/12/97.
- (viii) Resolution No. 12011/68/98-BCC dated 27/10/99.
- (ix) Resolution No. 12011/88/98-BCC dated 6/12/99 published in the Gazette of India Extraordinary Part I Section I No. 270 dated 06/12/99.
- (x) Resolution No. 12011/36/99-BCC dated 04/04/2000 published in the Gazette of India Extraordinary Part I Section I No. 71 dated 04/04/2000.
- (xi) Resolution No. 12011/44/99-BCC dated 21/09/2000 published in the Gazette of India Extraordinary Part I Section I No. 210 dated 21/09/2000.
- (xii) Resolution No. 12015/9/2000-BCC dated 06/09/2001.
- (xiii) Resolution No. 12011/1/2001-BCC dated 19/06/2003.
- (xiv) Resolution No. 12011/4/2002-BCC dated 13/01/2004.
- (xv) Resolution No. 12011/9/2004-BCC dated 16/01/2006 published in the Gazette of India Extraordinary Part I Section I No. 210 dated 16/01/2006.

N.B. Strikeout whichever resolutions (i-xv) is/are not applicable.

Shri/Smt./Km. _____ and/or his family ordinarily reside(s) in the _____ District/Division of _____

_____ State. This is also to certify that he/she **does not belong to the persons/sections (Creamy Layer)** mentioned in Column 3 of the Schedule to the Government of India, Department of Personnel & Training O.M. No. 36012/22/93-Estt.(SCT) dated 08/09/93 which is modified vide OM No. 36033/3/2004 Estt.(Res.) dated 09/03/2004 and further modified vide OM No. 36033/3/2004-Estt. (Res.) dated 14/10/2008 and OM36033/1/2013-Estt. (Res.) dated 27/05/2013 or the latest notification of the Government of India.

Dated:

District Magistrate/Deputy Commissioner/Competent Authority
(Seal)

*Please delete the word(s) which are not applicable.

NOTE:

- a) The term 'Ordinarily' used here will have the same meaning as in Section 20 of the Representation of the People Act, 1950.
- b) The authorities competent to issue Caste Certificates are indicated below:
 - District Magistrate/Additional Magistrate/Collector/Deputy Commissioner/Additional Deputy Commissioner/ Deputy Collector/Ist Class Stipendiary Magistrate/Sub-Divisional magistrate/Taluka Magistrate/Executive Magistrate / Extra Assistant Commissioner (not below the rank of Ist Class Stipendiary Magistrate).
 - Chief Presidency Magistrate/Additional Chief Presidency Magistrate/Presidency Magistrate.
 - Revenue Officer not below the rank of Tehsildar' and
 - Sub-Divisional Officer of the area where the candidate and/ or his family resides.

**Proforma for ECONOMICALLY WEAKER SECTIONS (EWS) Certificate
(INCOME & ASSETS CERTIFICATE TO BE PRODUCED BY ECONOMICALLY WEAKER SECTIONS)**

Government of.....
(Name & Address of the authority issuing the certificate)

- Certificate No
Date:
VALID FOR THE YEAR

1. This is to certify that Shri/Smt./Kumari..... Son/daughter/wife of.....permanent resident of....., Village/Street..... Post Office..... District..... in the State/Union Territory..... Pin Code..... whose photograph is attested below belongs to Economically Weaker Sections, since the gross annual income* of his/her family** is below Rs. 8 lakh (Rupees Eight Lakh only) for the financial year His/her family does not own or possess any of the following assets*** :
- 5 acres of agricultural land and above;
 - Residential flat of 1000 sq. ft. and above;
 - Residential plot of 100 sq. yards and above in notified municipalities;
 - Residential plot of 200 sq. yards and above in areas other than the notified municipalities.
2. Shri/Smt./Kumari belongs to the caste which is not recognized as a Scheduled Caste, Scheduled Tribe and Other Backward Classes (Central List).

Recent Passport size
attested photograph of
the applicant

Signature with seal of Office.....
Name
Designation

*Note 1: Income covered all sources i.e. salary, agriculture, business, profession, etc.

**Note 2: The term 'Family' for this purpose include the person, who seeks benefit of reservation, his/her parents and siblings below the age of 18 years as also his/her spouse and children below the age of 18 years

***Note 3: The property held by a 'Family' in different locations or different places/cities have been clubbed while applying the land or property holding test to determine EWS status.

The authorities competent to issue Caste Certificates are indicated below:

- District Magistrate / Additional Magistrate / Collector / Deputy Commissioner / Additional Deputy Commissioner / Deputy Collector / 1st Class Stipendiary Magistrate / Sub-Divisional Magistrate / Taluka Magistrate / Executive Magistrate / Extra Assistant Commissioner (not below the rank of 1st Class Stipendiary Magistrate)
- Chief Presidency Magistrate / Additional Chief Presidency Magistrate / Presidency Magistrate
- Revenue Officer not below the rank of Tehsildar and
- Sub-Divisional Officer of the area where the candidate and / or his/her family resides.

The date of issue of EWS certificate should be on or after 1st April 2023

**MEDICAL FITNESS CERTIFICATE OF APPLICANT
FOR ADMISSION IN M. TECH. IN IIT(ISM) DHANBAD**

(To be provided by a Chief Medical Officer (CMO) or Equivalent of a Government Hospital)

I, Dr..... after examining (with necessary investigations)
Mr./Ms.....Son/Daughter of Mr./Mrs.....

born on....., certify that he/she has fairly sound constitution, and that he/she has no disease or physical or mental infirmity unfitting him/her now, or likely to unfit him/her in future, for active outdoor work as practical Engineer/Technologist which involves considerable fatigue and exposure.

The following are the results of tests, measurements, etc.:-

2. Mark of identification :
3. Weight :
4. Height (in cm) :
5. Blood Pressure :
6. Pulse rate (beats/min) :
7. Blood Group :
8. Abuse of substances (if any) : Smoking / Alcohol / Drugs / Any other
9. Chest measurements : Contracted:cm Expanded:.....cm
10. Vision: Right Eye: Near: Distant:
Left Eye: Near: Distant:
11. Colour Blindness, congenital or other disease of eye (if any):
12. Hearing: Right ear: GOOD / FAIR / POOR
Left ear: GOOD / FAIR / POOR
13. X-ray PA view of chest with proper identification mark : Satisfactory / Not satisfactory
If not satisfactory, then specify why:
14. If any other abnormality noticed:
15. Remarks / Special Recommendations, if any:

Conclusion: Certified that the above mentioned student is free of any communicable disease and fit to stay in hostels provided by IIT(ISM) Dhanbad and attend classes with co-students.

Date :
Place :

(Signature and Seal)

Declaration by the candidate: I declare that all the statements above are true and correct to the best of my knowledge. I fully understand that I am responsible for the accuracy of all statements given.

Candidate's Signature with date: