

INFORMATION BROCHURE

Admission to Executive M Tech

in

Reservoir Engineering

For working professionals



DEPARTMENT OF PETROLEUM ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY (ISM), DHANBAD
DHANBAD – 826004 (JHARKHAND)

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. & M. Tech. and B. Tech. & MBA), Integrated M. Tech., M.Sc., M.Sc. Tech., M. Tech., MBA and Ph.D. programs in various domains of Engineering, Science, Humanities & Social Science 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.

About the Department

2. NUMBER OF SEATS:

Intake capacity of different programs is mentioned in Table 3.

3. ELIGIBILITY CRITERIA FOR EXECUTIVE MTECH PROGRAM:

The following eligibility criteria to be fulfilled for taking admission in the program:

- B. E./B. Tech. or equivalent degree in Engineering, M. Sc./M. Sc. Tech. in Geology/Geophysics
 - Working professional with Two years' experience in E&P Industry
 - 60% Marks or CGPA 6.0 out of 10 scale.
 - Reservation Policy will not be applicable at the time of selecting the candidate for 2-Year Executive M. Tech. Program

Eligibility for individual programs is mentioned in detail in Table-2.

4. ADMISSION PROCESS:

Following processes will be completed for admission:

- i. Application for Admission in the Two-Year Executive M.Tech. Program will be invited by the Admission Cell of the institute. OR

Through the agencies/organization/industry having a MoU with the Institute.

- ii. In both the cases cited above, all the application forms will be scrutinized by the Admission Committee of the concerned department.
- iii. After scrutinizing the applications, if it is observed that all the eligibility criteria have been fulfilled by the candidate then the HOD of the respective department will send the list of the candidates to the Admission Cell for final verification and issuing of the admission letter after approval from the competent authority. The concerned department may conduct a Written Test / Interview, if desired before sending the list of eligible candidates to the Admission Cell.

4.1 Withdrawal of Admission

Candidate may withdraw his/her admission before physical reporting and withdrawal request maybe 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 after the selection and fee payment, the candidate will be refunded only the caution money.

5. Application Fee (Non – Refundable):

INR 2000 for the applicants.

6. Documents to be Uploaded:

- Applicant's Photo- Max 50 KB in JPEG or PNG format
- Applicant's Signature- Max 50KB in JPEG or PNG format
- UG/PG all Semesters/Year Mark sheets - Max 1 MB in Merged PDF format
- UG/PG Degree/Provisional Certificate- Max 1 MB in PDF format
- 10 + 2 level certificate/mark sheet, if applicable (10 + 2 Mark sheet)- Max 1 MB in PDF format
- Class 10 mark sheet/certificate/ Any Govt. ID/ Proof of Date of Birth- Max 1 MB in PDF format
- Work Experience Certificate- Max 1 MB in PDF format
- Salary account statements corresponding to the Work experience- Max 1 MB in PDF format
- Income Tax Return statements corresponding to the Work experience
- Max. 2 page CV as per Template

7. DURATION OF THE ACADEMIC PROGRAM:

7.1 Minimum duration 2-Year (Four Semesters)

7.2 Maximum duration 3-Year (Six Semesters)

7.3 In any case, student will not be allowed to continue her/his academic program after completion of the maximum duration(i.e., 3 years) and the academic program will be terminated automatically.

8. DURATION OF SEMESTER:

13 Weeks per semester (excluding the examination period).

9. COURSE STRUCTURE*:

Minimum Duration of 2 - Year				Maximum Duration of 3-Years			
Semester	Number of Courses		Credits	Semester	Number of Courses		Credits
	Theory	Practical			Theory	Practical	
1 st Semester	05	--	45	1 st Semester	03	--	27
2 nd Semester	05	--	45	2 nd Semester	03	--	27
Winter Vacation/ Summer	--	04	08	Winter Vacation/ Summer	--	02	04
3 rd Semester	--	36 cr. thesis	36	3 rd Semester	02	9 cr. Thesis	27
4 th Semester	--	36 cr. thesis	36	4 th Semester	02	9 cr. Thesis	27
				Winter Vacation/ Summer	--	02	04
				5 th Semester	-	27 cr. Thesis	27
				6 th Semester	-	27 cr. Thesis	27

*Program wise detailed course structure has been enclosed as Appendix A

10. LIKELY SCHEDULE OF CLASSES PER WEEK:

- Normally, the online theory classes will be conducted Monday to Friday between 6:00 pm to 09:00 pm
- The likely scheduled for M/W/F will be of three classes of 50 minutes duration each.
- The likely scheduled for Tue/ Thu will be of two classes of 75 minutes duration each.
- Classes for the practical courses will be conducted in offline mode during at IIT(ISM) Dhanbad campus during SummerSemester (in two slots) or during Winter Vacation (in one slot).

11. EXAMINATION:

- Mid Semester Examination will be conducted in online mode.
- End Semester Examination will be conducted in offline Mode either at IIT(ISM) Campus or Extension Centre at Delhi/Kolkata. The place of the examination will be decided subject to the number of students registered in the program.
- Practicals to be conducted in offline mode.

12. ALLOTMENT OF SUPERVISOR(S):

- At the time of admission.
- One supervisor from the Institute and co-supervisor (optional) from the respective Industry/company/R & Dorganization.

13. EVALUATION OF THESIS:

Presentation of research work for evaluation in Offline Mode at the end of relevant semester within the specified duration given in the Academic Calendar.

14. ACADEMIC ROAD MAP:

All the courses, theory and practical along with the thesis, needs to be cleared as per the prescribed course structure within the specified duration. The student will present research proposal seminar on completion of 2nd semester i.e., while pursuing the practical during summer semester. Presentation of the Research Proposal before starting the thesis work will be mandatory failing which the student will not be allowed to pursue the research work.

15. WITHDRAWAL FROM THE EXECUTIVE M.TECH. PROGRAM AND ISSUING OF CERTIFICATE / PG DIPLOMA:

If any student could not complete the academic program whatever the reason may be and wants to withdraw then she/he is eligible for certificate and PG Diploma subject to completion of the following requirements:

- For Certificate – After clearing of all the courses including lab courses prescribed in the course structure for 1st semester (i.e., 5 Theory and 2 Practical), a certificate will be issued.
- If any student wants to withdraw from the academic program after completion of 1st year and has successfully completed all the courses prescribed for 1st Year (1st & 2nd semester) (i.e., 10 Theory and 4 Practical) then she/he will be eligible for getting PG Diploma.

Certificate and PG Diploma will be given during or after the convocation of her/his batch.

16. AWARD OF DEGREE:

M. Tech. Degree (under Executive M. Tech Program offered in blended mode) will be awarded to the candidates upon fulfilment of all the requirements of successfully completing the program.

17. FEE STRUCTURE FOR EXECUTIVE M.TECH PROGRAM : As per Institute norm

1. FEE STRUCTURE FOR EXECUTIVE M.TECH PROGRAM

No.	PARTICULARS	
A	ONE TIME CHARGES (To be paid only once at the time of admission)	AMOUNT (RS.)
1.	Institute Admission fee	500
2.	Benevolent fund	200
3.	Identity card	100
4.	Alumnus subscription & IIT(ISM) Alumni fee	3500
5.	Institute development fund	2,000
6.	Convocation charges	1,000
7.	Institute Caution money deposit	5,000
8.	Migration fee	500
	TOTAL "A"	12,800

	ANNUAL CHARGES (To be paid along with the fee for Monsoon Semester)	AMOUNT (RS.)
	Institute Annual fee	1,000
	Student activity fund	1,000
	TOTAL "B"	2,000

	OTHER SEMESTER CHARGES (To be paid for each semester)	MONSOON / WINTER
	Medical Fee	800
	Semester Registration fee	200
	Examination fee	1000
	Computer & Internet charges	4000
	Library fee	300
	TOTAL "C"	6,300

	CONTINGENCY INCLUDING TRANSPORTATION AND OTHERCHARGES (To be paid for each semester)	AMOUNT (RS.)
		20,000/-

	SEMESTER TUITION FEE (To be paid for each semester)	AMOUNT (RS.)
	Tuition Fee	1,00,000

	TOTAL FEE PAYABLE*	AMOUNT (RS.)
	For admission in 1 st semester (Total Fee = A+B+C+D+E)	1,41,100/-
	For Winter Semester (C+D+E) i.e. 2 nd /4 th /6 th Semester	1,26,300/-
	For subsequent Monsoon semester (B+C+D+E) after the 1 st Semester i.e. 3 rd /5 th Semester	1, 28,300/-

* Mess charges would be extra as and when applicable.

TOTAL FEE TO BE PAID FOR EXECUTIVE M.TECH PROGRAM IF COMPLETED IN –
 4 SEMESTERS - Rs. 5,22,000/-, 5 SEMESTERS - Rs. 6,50,300/- 6 SEMESTERS - Rs.
 7,76,600/-

18. 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–2023 puts in its best efforts 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 2023 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.

COMMUNICATION WITH IIT(ISM) DHANBAD

1. Communication regarding Executive M. Tech. 2023 should be done at the following address with the envelope superscribed with “*Ref: EXECUTIVE M. TECH. ADMISSION –2023*”:

Assistant Registrar (Admissions)
INDIAN INSTITUTE OF
TECHNOLOGY (INDIAN
SCHOOL OF MINES)
DHANBAD–826004

Email: admission_executive_mtech@iitism.ac.in

2. Any email communication should be addressed with full identification of the candidate, i.e., name, email, mobile, Program name(s), category, GATE/Sponsored and other identifying codes given by IIT(ISM) (such as registration number, application number etc.). For electronic communication the candidate should use the email/mobile registered in the online application only. *Before asking a query a candidate must go through this Information Brochure/ instructions in the online portal properly.*
3. For withdrawal purpose, a candidate must follow the guidelines as indicated in 4.1 of this brochure.
4. IIT(ISM), Dhanbad will not issue any letter by post to any candidate regarding any admission related activity. The candidate must visit the institute website (www.iitism.ac.in) regularly in this regard for any update / instruction / result / announcement. Candidates will also be informed of important instructions through SMS/email.

TABLE-1: EXECUTIVE M. TECH. PROGRAMS [SESSION: 2023-24]

No.	Executive M. Tech Program	Program Code	Offering Department
	Reservoir Engineering	RE	Petroleum Engineering

TABLE-2: QUALIFYING DEGREES, DISCIPLINES FOR EXECUTIVE M. TECH. PROGRAMS.

Sl. No.	M. Tech Program and Program Code	Qualifying Criteria
	Reservoir Engineering (RE)	B. E. / B. Tech. or equivalent degree in Petroleum Engineering/ Applied Petroleum Engineering/ Gas Engineering/ Petroleum Management/Petroleum Studies/ Petroleum Technology/ Petroleum Science/ Petroleum Science and Engineering./ Mechanical Engineering /Chemical Engineering /Civil Engineering /Petrochemical Engineering M. Sc./M. Sc. Tech. in Geology/Geophysics

TABLE-3: SEAT DISTRIBUTION OF M. TECH. PROGRAMS 2023-24

Sl. No.	Name of Program (Program code)	Total Seats*
1.	Reservoir Engineering (RE)	30
	Grand Total	30

*Minimum 10 candidates will be required to offer this program in any session

TABLE-4: SCHEDULE OF EXECUTIVE M. TECH. ADMISSION 2023-24

Admission Events	IMPORTANT DATES
Application portal opens	4 th November, 2024 (Tentative)
Last date for submission of application	10 th December, 2024 (Tentative)
Interview Date	16 th December, 2024 (Tentative)
Result declaration Date	20 th December, 2024 (Tentative)
Fees payment Date	28 th to 30 th December, 2024 (Tentative)
Academic Registration	1st January, 2025 (Tentative)
Commencement of Classes	2nd January, 2025 (Tentative)

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./Kum. _____
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./Kum. _____ 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/her family resides.

**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 Expandedcm
- 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:

CV Template (Max. 2 page)

Points to be included:

1. Personal Information:

- i) Name
- ii) Current and Permanent address
- iii) Telephone number and E-mail address

2. Objective:

In one short sentence summarize your goal for pursuing the course. It is also effective to highlight your skills in the goal statement.

3. Education:

10th Standard onwards, City and State, Date of graduation, any special courses pursued.

4. Work and Related Experience:

Jobs in Industry/Teaching/R&D organizations, Internships (Include position title, company/organization, city/state, dates and a brief list of the job duties)

5. Research works:

- i. International Journals, Conferences, National Journals/ Conferences, Books, Book chapters
- ii. Patent/ Prototype/ Product/ Technology development

6. Awards and Honors:

Mention only awards and Honors given by National and International organizations.
(Include name of the award/honor, who awarded it, and when it was awarded.)

7. Skills:

Technical skills (Softwares, Programming languages known and other technical skills)

8. References (2 persons):

- i. Teacher/Professor
- ii. Work supervisor (current or past)

Include the name, relationship to you, organization, contact phone numbers.

Other Considerations:

Limit your resume to maximum 02 pages. Do not include birth date. Limit the use of personal pronouns such as "I". Begin sentences with action verbs. Make your resume error free. Use a simple, easy to read font style, 10-12 point.

COURSE STRUCTURE FOR EXECUTIVE M.TECH PROGRAM IN Reservoir Engineering
Semester -I

S.No.	Course Type	Course Name	Lecture	Tutorials	Practical	Contact Hours per week	Credits
1	Department Core 1	Advanced Reservoir Engineering	3	0	0	3	9
2	Department Core 2	Fluid Flow through Porous Media	3	0	0	3	9
3	Department Core 3	Advanced well testing	3	0	0	3	9
4	Department Core 4	Advanced Reservoir Fluid Thermodynamics	3	0	0	3	9
5	Department Core 5	Well Logging	3	0	0	3	9
6	Department Practical 1	Enhanced Oil Recovery Lab	0	0	2	2	2
7	Department Practical 2	Reservoir Engineering Lab	0	0	2	2	2
Total Credits							49

Semester -II

S.No.	Course Type	Course Name	Lecture	Tutorials	Practical	Contact Hours per week	Credits
1	Department Core 6	Reservoir Geomechanics and Hydraulic Fracturing	3	0	0	3	9
2	Department Core 7	Reservoir Simulation	3	0	0	3	9
3	Department Core 8	Enhanced Oil and Gas Recovery Methods	3	0	0	3	9
4	Department Core 9	Advanced Production Technologies	3	0	0	3	9
5	Department Core 10	Secondary Recovery Methods	3	0	0	3	9
6	Department Practical 3	Reservoir characterization Lab	0	0	2	2	2
7	Department Practical 4	Term Project	0	0	2	2	2
Total Credits							49

Semester -III							
S.No	Course Type	Course Name	Lecture	Tutorials	Practical	Contact Hours per week	Credits
1	Thesis Unit 1	Thesis	0	0	0	...	36
Total Credits							36

Semester -IV							
S.No	Course Type	Course Name	Lecture	Tutorials	Practical	Contact Hours per week	Credits
1	Thesis Unit 2	Thesis	0	0	0	...	36
Total Credits							36