

Information Brochure

Ph.D. ADMISSION

2024 -2025

(Amended during 34th Senate)

Application open round the year



**INDIAN INSTITUTE OF TECHNOLOGY
(INDIAN SCHOOL OF MINES)**

DHANBAD-826004

JHARKHAND, INDIA

<https://admission.iitism.ac.in/index.php/admission/phd>

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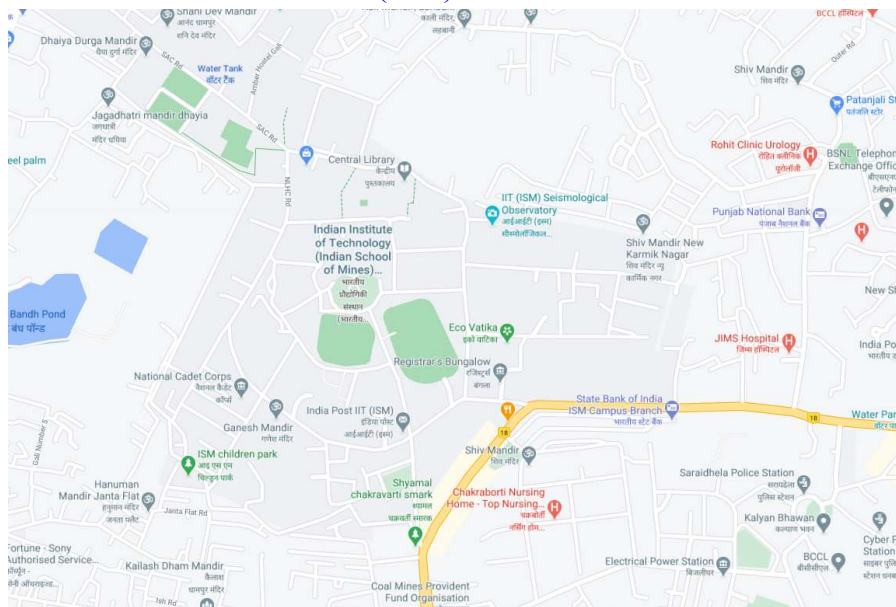
1. ABOUT IIT (ISM) DHANBAD

Indian Institute of Technology (Indian School of Mines) [IIT (ISM)], Dhanbad, previously known as ISM Dhanbad, is one of the prestigious institutes of the country, built on the pattern of the Royal School of Mines, England, United Kingdom (U.K.) in the year 1926. Today, it enjoys the status of an **Institute of National Importance**, fully funded by the Ministry of Education, Govt. of India (GOI) and was declared as an IIT on 6th September 2016. IIT (ISM), while administering its programs through various Departments and Centres of excellence, offers its services to several industries, especially in mining, mineral, petroleum, and metallurgy sectors. IIT(ISM) focuses its education on various engineering, science and management disciplines. The institute offers B.Tech., M.Sc., M.Sc. (Tech.), M. Tech., MBA, M. Tech. Dual Degrees, Integrated M. Tech. programs, besides awarding Ph.D. and D.Sc. in all disciplines.

The Institute aims at excellence in teaching and research that benefits both academia and industry through 18 departments in various areas of **Engineering**: Civil, Computer Science & Engineering, Chemical, Electrical, Electronics, Environmental Science & Engineering, Fuel, Mineral & Metallurgical Engineering, Mechanical, Mineral, Metallurgical, Mining, and Petroleum; **Science**: Physics, Chemistry & Chemical Biology, Mathematics & Computing, Applied Geology, Applied Geophysics, besides **Management Studies & Industrial Engineering, and Humanities & Social Sciences**. It has been focusing its academic and research activities on various aspects of industries ever since its inception.

IIT(ISM) maintains its all-India character, drawing faculty and students from all across the country. It occupies a unique position around the globe and has contributed to the development of the mining, mineral, and petroleum sector substantially. The institute possesses state-of-the-art facilities for advanced studies and research in several areas of Engineering, Sciences, Management, and Humanities & Social Sciences. The institute campus is spread over an area of 220 acres.

IIT(ISM) Dhanbad



IIT (ISM) is located in the city of **Dhanbad**, which is also known for its Coal Mines. Hence referred to as the Coal Capital of India. One can reach Dhanbad by rail and road. It is 259 km from Kolkata, 167 km from Ranchi, 67 km from Bokaro Steel City, and about 180 km from Jamshedpur. Trains are available from all parts of the country to reach Dhanbad via Kolkata, Delhi, and Bombay. Ranchi, Kolkata and Durgapur are the nearest airports. Deluxe and Express buses ply from Kolkata, Ranchi, Jamshedpur, and Bokaro to Dhanbad. IIT (ISM) campus is just 2.5 km from Dhanbad railway station where taxis and rickshaws ply round the clock. People arriving by train should exit from the main gate located near the platform No.1 to avail the taxis/rickshaws for local conveyance to the institute.

2. ABOUT Ph.D. ADMISSION 2024-25

IIT(ISM), Dhanbad provides Institute Assistantship (IA) to the deserving and eligible candidates qualified through the institute selection procedure and, thus, providing ample opportunities for carrying out research leading to the Ph.D. degree. IA is open to the candidates who possess the minimum eligibility criteria given in section 3.1. The respective department will scrutinize the eligibility of the candidate at every stage as per the specific criteria of the respective discipline of the Ph.D. program ([Table 2](#)). The applicants should submit the correct information during online registration and application. The application which has incorrect/insufficient information will be rejected at any stage. Applications for Ph.D. admission are received round the year through online portal. The applications will be processed on monthly basis as per requirement of the Department. Candidates admitted under the IA category will draw their fellowship from IIT (ISM) Dhanbad.

The total number of seats for the 2024-25 admission depends on the availability of funds and vacancy for the academic year 2024-25. The discipline-wise distribution of seats will be as per the requirement of respective departments. The reservation policy directed by the Government of India will be followed, and the number of positions to each category is fixed at the institute level and not for each discipline.

2.1 Classification of Candidates

2.1.1 Full-time Candidate

A candidate who does her/his courses and research at the IIT (ISM) Dhanbad is a full-time candidate. Such candidates are required to stay in the Institute during the entire period of their academic program.

A full-time candidate may have financial support in the form of

- a) Institute Assistantship (IA)
- b) Fellowship from Research Projects at IIT(ISM) Dhanbad (Project Fund)

2.2 Stream in which Ph.D. Programs are offered

2.2.1 Engineering

The following departments offer Ph.D. program in the Engineering Stream:

- Chemical Engineering
- Civil Engineering
- Computer Science and Engineering
- Electrical Engineering
- Electronics and Communication Engineering
- Environment Science and Engineering
- Fuel, Minerals and Metallurgical Engineering
- Management Studies & Industrial Engineering
- Mechanical Engineering
- Mining Engineering
- Petroleum Engineering

2.2.2 Science

The following departments offer Ph.D. program in the Science Stream:

- Applied Geology
- Applied Geophysics
- Chemistry and Chemical Biology
- Mathematics and Computing
- Physics

2.2.3 Humanities and Social Sciences

The Department of Humanities and Social Sciences offers Ph.D. program in the stream of:

- English
- Psychology
- Philosophy
- Sociology

2.2.4 Management

The Department of Management Studies & Industrial Engineering offers Ph.D. program in the stream of:

- Industrial Engineering & Management
- Management

3. Disciplines

This scheme is currently available to only those disciplines given in [Table - 1](#), with an emphasis on interdisciplinary research. IIT(ISM) encourages registration for Ph.D. in the interdisciplinary areas, which may be offered to the successful candidates.

Table - 1: List of disciplines

Sl. No.	Department	Discipline Name	Code
1	Applied Geology	Applied Geology	AGL
2	Applied Geophysics	Applied Geophysics	AGP
3	Chemical Engineering	Chemical Engineering	CHE
4	Chemistry & Chemical Biology	Chemistry	CHY
5	Computer Science & Engg.	Computer Science & Engg.	CSE
6	Civil Engineering	Civil Engineering	CVL
7	Electronics and Communication Engineering	Electronics Engg.	ECE
8	Electrical Engg.	Electrical Engg.	ELE
9	Humanities & Social Sciences	English Language/Literature	ENG
10	Humanities & Social Sciences	Philosophy	PLY
11	Humanities & Social Sciences	Psychology	PSY
12	Humanities & Social Sciences	Sociology	SOC
13	Environmental Science & Engg.	Environmental Science & Engg.	ESE
14	Fuel, Mineral & Metallurgical Engg.	Fuel, Mineral & Metallurgical Engg.	FMM

15	Management Studies & Industrial Engineering	Industrial Engg. & Management	IEM
16	Management Studies & Industrial Engineering	Management	MAN
17	Mathematics & Computing	Mathematics	MAT
18	Mathematics & Computing	Statistics	STA
19	Mechanical Engineering	Mechanical Engineering	MEC
20	Mining Engineering	Mining Engineering	MNE
21	Petroleum Engineering	Petroleum Engineering	PET
22	Physics	Physics	PHY

3.1 Eligibility Criteria for Admission

A candidate, who has qualified GATE/NET/Appropriate National Level Examination, is ELIGIBLE for Ph.D. admission ONLY in Engineering, Science, Management Studies and Humanities & Social Sciences under the IA.

- A. Qualifying NET/GATE is not mandatory for application in Ph. D. in Engineering / Science, if the candidate -
- Has done M. Tech/M.E. with First Class or First Division or with minimum 60% marks or equivalent CGPA *or*
 - Has done B. Tech/ B.E. with a minimum CGPA of 8 (on a 10 point scale) or with equivalent percentage from any CFTI *or*
 - Has done B. Tech/ B.E. with a minimum CGPA of 8 (on a 10 point scale) or with equivalent percentage from any Institute/University having 1 to 100th rank in the Overall category in NIRF India rankings (either in the year of application or in the last year).
- B. Except for the candidates mentioned in the para A above, all other eligible candidates as per para 3.2 below, will have to qualify NET/GATE to apply for Ph. D. admission in Engineering/ Science.
- C. Qualifying CAT/GMAT will be mandatory for applying for Ph. D. in Management.

It may be noted that based on number and quality of applications received in an admission cycle, the respective department may also impose additional shortlisting criteria (and shall also publish it while sending calls for interview) to restrict number of eligible applicants to be called for Interview.

Prime Minister's Research Fellowship (PMRF) Candidates

A candidate, selected under **Prime Minister's Research Fellowship (PMRF)** scheme, shall be directly admitted to the Ph.D. program without any interview.

Candidates appearing for their final semester exams are **ELIGIBLE** to apply under Result Awaiting (RA) category. However, they have to submit proof of the completion of their previous degree by September 30, 2024, failing which their candidature or even admission will be cancelled.

i. Project candidates

This admission procedure also applies to candidates holding positions in projects being executed in various departments at the Institute for availing IA beyond the project tenure. In such cases, the candidate must give the details in the online application portal, such as, the current position, admission number availed, project title, name of the project investigator (PI), department, date of joining, date of completion of the project. Such projects should be of minimum one year duration.

3.2 Essential Qualification

The eligibility criteria for admission to Ph.D. programs of different streams along with the possessing qualifications are mentioned below. **The Candidates must ensure their eligibility to the Ph.D. program in various disciplines of the respective department from the [Table 2](#) before filling the online application form.**

3.2.1 Ph.D. in the Engineering Stream

(a) An applicant must have a Master's degree in Engineering in the relevant subject with first class/division or a minimum of 60% marks/CGPA of 6.0 (on a 10 point scale),

OR

(b) An applicant must have a Bachelor's degree in engineering with a minimum of 60% marks/CGPA of 6.0 (on a 10 point scale),

OR

(c) An applicant must have a Master's degree in science or an allied area with first class/division or a minimum of 60% marks/CGPA of 6.0 (on a 10 point scale).

3.2.2 Ph.D. in the Science Stream

(a) An applicant must have a Master's degree in the relevant subject with first class/division or a minimum of 60 % marks/CGPA of 6.0 (on a 10 point scale),

OR

(b) An applicant must have a Bachelor's degree in engineering with a minimum of 60 % marks/CGPA of 6.0 (on a 10 point scale),

OR

(c) An applicant must have a Master's degree in science or an allied area with first class/division or a minimum of 60 % marks/CGPA of 6.0 (on a 10 point scale).

3.2.3 Ph.D. in the Humanities and Social Sciences Stream

(a) An applicant must have a Master's degree in the relevant subject, arts, commerce, humanities and social sciences with first class/division or a minimum of 60 % marks/CGPA of 6.0 (on a 10 point scale),

OR

(b) An applicant must have a Master's degree in engineering / technology/science/ commerce / management with first class/division or a minimum of 60 % marks/CGPA of 6.0 (on a 10 point scale),

OR

(c) An applicant must have a Bachelor's degree in engineering with a minimum of 60% marks/CGPA of 6.0 (on a 10 point scale).

3.2.4 Ph.D. in the Management Stream

(a) An applicant must have a Master's degree or equivalent in management or allied areas or engineering / technology with first class/division or a minimum of 60 % marks/CGPA of 6.0 (on a 10 point scale),

OR

(b) An applicant with a Bachelor's degree in engineering with a minimum of 60 % marks/CGPA of 6.0 (on a 10 point scale),

OR

(c) An applicant must have a Master's degree in science/arts/commerce with first class/division or a minimum of 60 % marks/CGPA of 6.0 (on a 10 point scale),

OR

(d) An applicant who has qualified for CA/ICAI/ICMA/CS, with first class/division or a minimum of 60 % marks/CGPA of 6.0 (on a 10 point scale) in Bachelor's degree.

Note:

1. Bachelor's degree in Engineering means regular full-time Bachelor's degree. A candidate with AMIE or similar degree is not eligible for admission.

2. The exact qualification and eligibility requirements, and the list of programs to be offered in a year will be available in the Information Brochure published by the Institute before the start of admission process for every Academic Year.

3. For consideration of qualifications obtained from universities/institutes outside India, an equivalence certificate issued by Association of Indian Universities will be required to be submitted along with application.

Table 2: Eligibility and Qualifying degree for various departments.#

Eligibility Criteria			
Sl	Department	Discipline	Code
1	Applied Geology	Applied Geology	AGL
	M.Sc./M.Sc. Tech in Geology / Applied Geology or M.Sc./M.Sc. Tech. in Geology/Applied Geology with specialization in Marine Geology / Oceanography / Hydrogeology / Geochemistry/ Applied Geochemistry / Geoinformatics / Natural Hazards & Disaster Risk Management / Remote Sensing and GIS / Geophysics / Petroleum Geosciences.		
	OR		
	Integrated M.Sc./M.Sc. Tech/M. Tech. in Geology/Applied Geology or M. Tech. in Geological Technology.		
	OR		
	M. Tech in Mineral Exploration/Engineering Geology/Petroleum Exploration/Geo-exploration/ Exploration Geosciences / Remote Sensing / Remote Sensing and GIS applications / Geoinformatics/ Petroleum Geosciences/ Marine Geosciences having		

	M.Sc./M.Sc. Tech in Geology/Applied Geology or Integrated M.Sc./M.Sc. Tech./ M. Tech. in Geology/Applied Geology or M. Tech. in Geological Technology.	
	<ul style="list-style-type: none"> • Colour blind candidates are not eligible for admission in Applied Geology. 	
2	Applied Geophysics	Applied Geophysics : AGP
	M.Sc/M.Sc. Tech././Integrated M. Tech. /M. Tech. in Applied Geophysics/ Exploration Geophysics/ Geophysics or M.Sc. Tech. in Marine Geophysics or M. Tech in Earthquake Science and Engineering or M. Tech. in Geo-exploration/ Petroleum Exploration or M. Tech. in Geotechnical Engineering /Remote Sensing and GIS applications / Geoinformatics or M. Tech. in Geological Technology or M.Tech. in Petroleum Geosciences or M. Tech. in other relevant fields.	
3	Chemical Engg	Chemical Engg : CHE
	ME/M. Tech./MS (Research) in Chemical Engineering / Petrochemical Engineering / Petroleum Engineering / Biochemical Engineering / Biotechnology / Civil Engineering/ 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. OR B. E. / B. Tech. in Chemical Engineering / Petrochemical Engineering / Petroleum Engineering /Biochemical Engineering / Biotechnology / Civil Engineering/ 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. OR M.Sc. or equivalent degree (along with CSIR/UGC NET JRF) in disciplines consistent with the ongoing research areas of the Department of Chemical Engineering of IIT (ISM) Dhanbad.	
4	Chemistry & Chemical Biology	Chemistry : CHY
	i. M.Sc./ M Tech or equivalent in Chemistry/Applied Chemistry/Bio-chemistry/Industrial Chemistry, any branch of Biological Sciences or Pharmaceutical Science ii. B. Pharma and/or M. Pharma iii. B. Tech or M.Sc in Biotechnology iv. M. Tech in Material Science or nanotechnology v. M. Sc in Physics/Bio-physics vi. M. Tech in Pharmaceutical Sciences and Engineering	
5	Computer Science & Engg.	Computer Science & Engg. : CSE
	B. Tech or B. Tech with M. Tech or equivalent in Computer Science & Engg./ Information Technology/Computer Application/Software Engineering /Electronics Engg./Electronics and communication Engg./ Electrical Engineering./Electrical & Electronics Engg.	

6	Civil Engg.	Civil Engg.	CVL
	B. Tech./ B. E. in Civil Engg. / Construction Management/ Aerospace Engg./ Naval Architecture/ Agricultural Engg. and Technology having specialization in their M. Tech./M. E. as Civil Engg./ Structural Engg./ Geotechnical Engg./ Water Resources Engg./ Hydraulic Engg/ Environmental Engg./Transportation Engg./ Remote Sensing & GIS/ Construction Management/Aerospace Engg./ Applied Mechanics/ Applied Geology/ Applied Geophysics/ Tunnel Engineering/ Underground Space Technology/ Earthquake Engineering/ Structural Dynamics/ Soil Dynamics/ Disaster Mitigation and Management/ Naval Architecture/ Agricultural Engg. and Technology or equivalent specialization.		
7	Electronics Engg.	Electronics Engg.	ECE
	M. Tech. / M.E. / MS in Electronics/Electronics & Communication/Electronics & Telecommunication/Electronics & Instrumentation/Instrumentation/Instrumentation & Control/Electronics & Electrical Engineering/Computer Science Engg/Information Technology or related field WITH/OR B. Tech / B.E. or equivalent degree in Electronics/Electronics & Communication/Electronics & Tele-communication/ Electronics & Instrumentation/ Instrumentation/ Instrumentation & Control/ Electronics & Electrical Engineering/Computer Science Engg/Information Technology or related areas. [OR] M.Sc in Electronics, [OR] M.Sc in Physics (Specialization in Electronics) or M.Sc in related areas.		
8	Electrical Engg.	Electrical Engg.	ELE
	B. Tech. or equivalent in Electrical / Electrical & Electronics / Electrical & Instrumentation Engg. OR M.Tech or equivalent in Electrical Engineering with specialization in the fields relevant to Electrical Engineering with B.Tech or equivalent in Electrical / Electrical & Electronics / Instrumentation Engg.		
9	Humanities & Social Sciences	English Language/Literature	ENG
	Masters or equivalent in English /ELT/ linguistics.		
	Humanities & Social Sciences	Philosophy	PLY
	Masters or equivalent in Philosophy or any other discipline.		
	Humanities & Social Sciences	Psychology	PSY
	Masters or equivalent in Psychology or any other discipline		
	Humanities & Social Sciences	Sociology	SOC
	Masters or equivalent in Sociology or any other discipline.		
10	Environmental Science & Engg.	Environmental Science	ESE
	B. Tech / M. Tech. / M.E. or equivalent in Environmental Science & Engineering /Biotechnology /Civil/ Chemical / Water Resource Engg. / Mining /Atmospheric Science / Remote sensing and GIS / Any other Equivalent branch. OR M.Phil./ M.Sc. / M.Sc. Tech. or equivalent in Atmospheric science /Botany / Microbiology / Biotechnology / Chemistry / Physics / Environmental Science / Environmental Science and		

	Management / Geology / Hydrology/ Soil Science / Remote sensing and GIS / Forestry / Any other equivalent branch.		
	OR		
	B. Tech/ M. Tech/ M.Sc. in any branch with the GATE in ES only.		
11	Fuel, Mineral & Metallurgical Engg.	Fuel, Mineral & Metallurgical Engg.	FMM
	B.Tech / M.Tech. or equivalent in Mineral / Fuel / Chemical / Energy / Metallurgical / Mining / Mechanical / Production / Manufacturing / Ceramic / Material Science & Engg. or its related discipline. M.Tech in Environment with B.Tech in above disciplines or M.Sc. or equivalent degree (along with CSIR/UGC NET JRF/GATE) in disciplines such as M.Sc. Physics, M.Sc. Chemistry, MSc. Mathematics, MSc. Tech Applied Geology, M.Sc. Tech. Applied Geophysics etc., consistent with the ongoing research areas of the Department of FMME of IIT (ISM) Dhanbad.		
	<i>Amended on 14-08-2024</i>		
12	Management Studies & Industrial Engineering	Industrial Engg. & Management	IEM
	Postgraduate Degree in Industrial Engg., and Management/Industrial Engg./Production Engineering/Mechanical Engg./Electrical Engg./Civil Engg. or equivalent		
13	Management Studies & Industrial Engineering	Management	MAN
	MBA degree / Postgraduate degree or diploma recognized as equivalent to postgraduate in Management by AICTE / UGC / AIU./Postgraduate degree in Economics / Commerce / Psychology/Professional qualifications like CA / CS / ICWA/Postgraduate Degree in Industrial Engg. and Management/Industrial Management/Industrial Engg./Production Engg.		
14	Mathematics & Computing	Mathematics	MAT
	M. Tech. / M.Sc. or equivalent in Mathematics / Applied Mathematics / Mathematics & Computing / M.Tech. in Computer Science		
	Mathematics & Computing	Statistics	STA
	M.Sc. or equivalent in Statistics/Applied Statistics/Bio-Statistics		
15	Mechanical Engg.	Mechanical Engineering	MEC
	M. Tech. or equivalent degree with specialization in Mechanical /Production / Manufacturing / Industrial Production / CAD/CAM /Machine Design / Mechatronics / Thermal / Heat Power / Energy /Power Plant Engg. / Automobile / Maintenance Engg./Tribology/Welding Technology/Material Science/ Mechanical Science/Hydro and Renewable Energy/Renewable Energy/Energy Environment and Management/ Applied Mechanics/Engineering Mechanics/Stress and Vibration Analysis/Aerospace Engineering/Robotics/Nano Technology/Fluid power and Control/Mechanical Engg with Thermal/Fluid Mechanics as major or in Aerospace Engineering with aerodynamics/Structures and Propulsion/Flight Mechanics as Major or in Civil Engineering with Fluid Mechanics/Structures as Major or Chemical Engineering with Transport Phenomenon/ industrial energy system/ bio energy/ solid waste technology as Major /Mining Machinery Engineering or any combinations of these specializations.		

	WITH/OR B. E. / B.Tech./B.Sc. (Engineering) or equivalent degree in Mechanical / Production / Manufacturing / Aerospace / Energy Engineering /Power Plant Engineering/Automobile Engineering/Mechanical Science/ Aeronautical Engineering/ Industrial Engineering/ Automation Engineering/ Mechatronics Engineering/Robotics/Marine Engineering/ Mining Machinery Engineering/Engineering and Computational Mechanics/ Electrical Engineering/ Electronics Engineering/ Civil Engineering/Chemical Engineering/ Mining Engineering/ Metallurgical Engineering or Any combination of the disciplines given as mentioned.		
16	Mining Engg.	Mining Engineering	MNE
	M. Tech. or equivalent in Mining Engg./Opencast Mining / Mine Planning & design / Rock Excavation Engg./ Geomatics / Tunnelling and Underground Space Technology / Rock Mechanics / Geotechnical Engg. / Petroleum Engg. / Civil Engg. / Mechanical Engg. /Industrial Engg. /Environmental Science/ Environmental Science and Engineering/ Engineering Geology / Electronics Engg. / Electronics & Communication Engg. / Computer Science Engg / Earthquake Science and Engineering; with B. Tech or equivalent / M.Sc. Tech. / M.Sc. in any discipline.		
	OR		
	B. Tech or equivalent in Mining Engineering		
	<ul style="list-style-type: none"> Physically challenged candidates with any form of the physical challenge will NOT be considered for Mining Engineering disciplines. 		
17	Petroleum Engg.	Petroleum Engineering	PET
	M. Tech in Petroleum/ Chemical / Petroleum & Petrochemical / Mechanical / Civil / Computer Science & Engineering/Geology/Geophysics		
	OR		
	M.Sc. in Chemistry/ Mathematics / Geology/ Geophysics		
	OR		
	B.Tech. in petroleum engineering / Chemical Engineering /Mechanical Engineering		
	OR		
	M.Sc. Tech. in Geology/ Geophysics		
18	Physics	Physics	PHY
	M.Sc./Integrated M.Sc. or equivalent in Physics/Applied Physics/Chemistry or B.Tech./M.Tech./Integrated M.Tech. or equivalent in Engineering Physics/Material Science/Nano science and Technology/Optoelectronics or equivalent.		

[#] Equivalence degrees for B. Tech will be BE/BSc Engg. (4 years) and for M. Tech will be ME/M.Sc. Engg.

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's admission portal accordingly.

4. Institute Assistantship (IA)

The Institute may provide IA to full-time Ph. D. students who have qualified under eligibility mentioned in section 3 of this brochure. The Ph.D. students will be awarded the assistantships for a period of **five years** based on the performance every year. The assistantship is paid at the approved rates as specified by the MoE, GOI, time to time. Full-time Ph.D. students, financially supported by research projects, may avail IA after completion of the project, provided that she/he has qualified GATE or any other eligible national level examination and have been admitted through the Institute

selection process ([Section 3 of Ph.D. Manual*](#)). The maximum duration of assistantship is five years (inclusive of Project and Institute funding) from the date of admission to the Ph.D. program. Extension of assistantship shall not be given in any case, beyond five years.

A student should devote eight hours per week towards teaching/laboratory assistantship assigned to him/her. The renewal of assistantship is contingent on the recommendation of the Doctoral Scrutiny Committee (DSC) on the good performance of the candidate in the academic program and the discharge of assistantship duties.

The selected candidates will be provided IA, as delineated in [Table - 3](#).

Table – 3 : Institute Assistance*

Sl. No.	Qualifying Degree	IA per month (INR)	
		First 2 years	3 rd , 4 th and 5 th year
1	M. Tech. / M.Phil. / MBA / B. Tech. / M.Sc. Tech. / M.Sc. or equivalent	37000/-	42000/-

***Subject to satisfactory progress.**

4.1 Contingency grant

A cumulative contingency grant of INR 30,000/- per annum is allowed with prior approval from the Guide and Head of the Department and the contingency is cumulative in nature. The work performance of the research scholars would be assessed as per the Institute rules. The IA may be withdrawn/withheld/discontinued at any time if the performance is unsatisfactory.

5. Rules and Regulations

The details are provided on the academic webpage of the IIT (ISM) website (<https://admission.iitism.ac.in/index.php/admission/phd>). Selected candidates are required to adhere to the prescribed rules and regulations issued through various orders by the IIT(ISM) authorities from time to time. Besides, all Ph.D. students need to complete the Ph.D. course work, including two mandatory subjects, namely, Research Methodology & Statistics and Research & Technical Communication, as per the Ph.D. rules. Research scholars may avail admissible leave as per the relevant section of the Ph.D. manual.

6. Program Fee

The details of fees required at the time of **admission** for Ph.D. programs are given in [Table - 4](#). The fee should be paid through the online payment gateway provided during the registration process. The link for payment will be made available to the selected candidates before the admission. **Payment of fees will be accepted only in online mode (Net banking/debit card, etc.).**

Table -4: Fee structure*

Fee structure (Proportionate) for Ph.D.(Full -Time)			
<u>Fee at the time of admission in Monsoon Semester 2024-25 onward</u>		<u>Fee at the time of admission in Winter Semester 2024-25 onward</u>	
	Total Payable fee		Total Payable fee

Admission in the Month	For GEN/OBC /EWS	For SC/ST/PwD	Admission in the Month	For GEN/OBC /EWS	For SC/ST/PwD
July	₹68,850.00	₹62,850.00	January	₹64,450.00	₹58,450.00
August	₹64,412.00	₹59,412.00	February	₹60,012.00	₹55,012.00
September	₹57,340.00	₹53,340.00	March	₹52,940.00	₹48,940.00
October	₹50,268.00	₹47,268.00	April	₹45,868.00	₹42,868.00
November	₹43,196.00	₹41,196.00	May	₹38,796.00	₹36,796.00
December	₹36,124.00	₹35,124.00	June	₹31,724.00	₹30,724.00

***May be subject to change; including mess fee for one semester.**

Also, payment of an additional amount towards accident insurance etc., as per actual, at the time of admission is required. The fee structure is subject to change from time to time. The exact fee structure will be notified at the time of admission.

7. Opportunities for IIT (ISM) Dhanbad Doctoral Students

7.1 Sandwich PhD program

IIT (ISM) Dhanbad offers its doctoral students the possibility for visiting and working in some of the topmost research laboratories of the world through the Sandwich Ph.D. program. The program serves to provide the Ph.D. students of the institute with an opportunity to improve research capabilities, and to establish and/or increase work opportunities in an international context. The facility is available for up to 20 fellowships per year. The selection of the Ph.D. candidates is dependent on the fulfilment of certain criteria. The institute offers funding of up to Rs. 4.5 lakhs for each individual including fellowship, air travel, visa processing fees, medical insurance, accommodation charges and daily expenses, depending upon the country of the partner Institute/University. For more details, applicants are encouraged to visit IIT (ISM) webpage for Research and Development or by using the following link URL: https://www.iitism.ac.in/deans/research/Sandwich_PhD.php

7.2 Financial support for international travel

IIT (ISM) Dhanbad provides financial support to its doctoral candidates for participation in international seminars/conferences. The opportunity is available to Full-Time doctoral students for presenting oral papers in the seminars/conferences. The criteria for shortlisting eligible candidates as well as the selection criteria are available on the IIT (ISM) Dhanbad, Research & Development webpage. Applicants are encouraged to visit the IIT (ISM) Dhanbad Research & Development webpage or use the following URL for more details: <https://www.iitism.ac.in/deans/research/phdGrant.php>

8. Submission of online application form

(a) General Information

Interested candidates may submit their application **round the year through online mode**. The detailed information are also available on the institute's website at

<https://admission.iitism.ac.in/index.php/admission/phd>

The candidates are advised to save a soft copy of the application form after successful submission for future references. The hard copy of the application form or any other document is **NOT** required to be submitted at the time of application. However, the candidates are advised to keep a hard copy of the application form for their own reference. It is the responsibility of the candidate to follow the instructions given in the Ph.D. admission brochure and on the website carefully before submitting an online application. **Any erroneous/wrong information provided during the online application, intentionally or unintentionally, will result in cancellation of the applicant's candidature.** No further information/clarification will be intimated to the candidates in such cases. Extension of the deadline will **NOT** be allowed in any case.

(b) Application Fee

The application fees for Ph.D. selection are provided in [Table 5](#). The application fee is to be paid by the online payment option provided during the application. The application fee will not be refunded under any circumstances. No communication will be entertained in this regard.

Table 5: Application fee

Sl. No.	Category	Fee (INR) / Program Applied
1	UR/OBC-NCL/EWS	1000.00
2	SC/ST/PwD/Transgender	500.00

9. Admission Procedure

For **IA** the admission procedure consists of (i) scrutiny and shortlisting and (ii) interview. Appropriate shortlisting criteria will be adopted by the department for the shortlisting of applications received against the Ph.D. admission 2024-25 round the year. This includes (a) scrutiny against the eligibility criteria of admission to the particular program, academic credentials, etc (b) fixing appropriate cut-off GATE/CAT/GMAT score and/or (c) NET (LS) marks/rank and/or CGPA/OGPA/percentage in the qualifying degree and will be decided by the respective department, if necessary.

The final selection of the candidates for admission to the Ph.D. program will be based on their performance in the interview conducted by the respective departments.

9.1 Interview procedure

All **IA** candidates shortlisted for the interview have to appear for personal interview on the scheduled date at IIT(ISM), Dhanbad. The information about interview to the candidate will be communicated by respective department only.

The shortlisted candidates are required to bring all the necessary documents, especially the following while coming for the interview:

- a. A print out of your downloaded online application form.
- b. One self-attested copy of all the supporting documents.

- c. All necessary documents **IN ORIGINAL** in support of their claim as given in the application form, especially the ones mentioned below:
- i. Proof of date of birth.
 - ii. Educational qualifications.
 - iii. Eligibility of qualifying examination.
 - iv. Proof of **FIRST CLASS**/the minimum prescribed percentage or grade point average as stipulated in **Table - 2**.
 - v. Proof for category [EWS/OBC-NCL/SC/ST/PwD].
 - vi. Valid OBC-NCL/EWS certificate by the competent authority in the format as per the Central Educational Institutions (CEIs) under GOI given in Annexure I & II of Information Brochure for Ph.D. Admission 2024-25, issued on or after **01st April, 2023**.
 - vii. For PwD candidates, proof of the same along with a certificate of their respective category.
 - viii. GATE score card for GATE qualified candidates.
 - ix. NET certificate for NET qualified candidates.

Only those shortlisted candidates will be interviewed who are found to be eligible after the verification of their **original documents**. Those who do not possess required **original documents** during scrutiny will not be interviewed, and their candidature will stand cancelled. No further communication will be made to the candidate. No TA/DA will be provided for the candidates appearing for the interview. Candidates have to make their own arrangements to attend the interview on the scheduled date and time. Additional instructions, if any, will be published in the institute website (<https://admission.iitism.ac.in/index.php/admission/phd>) and candidates are requested to visit the link, as and when required.

9.2 Final admission

All admissions to the Ph.D. program will be made from the consolidated merit list on the approval of the Chairman, Senate on the recommendations of the Departmental Post Graduate Committee (DPGC) and the Admission Committee. On approval by the Chairman, Senate, the Academic Section will issue the admission letters to the candidates who will be required to accept the offer of admission by depositing the prescribed fee on or before the specified date.

In case, a candidate does not accept the offer by paying the prescribed fee within the specified date, the offer of admission will stand withdrawn. The offer of admission may also stand withdrawn if the candidate, who has accepted the offer, fails to register within the date for late registration.

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.

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.

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.

All such provisionally selected candidates will be invited to take physical admission on a scheduled date at the time and venue mentioned in the offer letter. The original documents will be scrutinized again before physical admission. Selected candidates are required to bring all the **ORIGINAL** documents, including the final grade sheet, while coming for admission on the said date. No extension will be given under any circumstances. All research scholars will be governed by the IIT (ISM)'s Rules and Regulations and the IIT (ISM)'s Ph. D. Manual prevailing at that time.

9.3 Language proficiency

The medium of instruction, the publication of research papers, and reporting will be in English. Therefore, scholars are required to possess adequate knowledge of English language.

10. Reservation Policy

Table 6: Categories

Sl. No.	Code	Category
1.	UR	Unreserved
2.	PwD	Divyang/Persons with disabilities
3.	OBC-NCL	Other Backward Class - Non-Creamy Layer
4.	SC	Scheduled Caste
5.	ST	Scheduled Tribe
6.	EWS	Economically Weaker Section (General)

- Reservation for EWS/ PwD /OBC-NCL/SC/ST candidates will be as per GOI directive/guidelines.
- There shall be a horizontal reservation of 5% of the sanctioned strength, across all categories, for applicants belonging to persons with disabilities (PwD).
- For Other Backward Class - Non-Creamy Layer (OBC-NCL) candidates:
 - 1) Certificate in the Central government format
 - 2) Certificate issued for admission/position to state governments will not be considered.
 - 3) The certificate should be issued **on or after 01st April, 2023**.
 - 4) The original certificate should be produced at the time of the physical interview and physical admission.
 - 5) Candidates **NOT** having a valid OBC-Non-Creamy Layer certificate will not be considered for Interview or admission for the Ph.D. program.
- EWS candidates should provide the valid EWS certificate (central government of India format) in support of their claim. The certificate should be issued **on or after 01st April, 2023**.
- Candidates selected for interview should submit appropriate self-attested PwD /OBC-NCL/SC/ST/EWS category documents (central government format) in support of their claim along with a hard copy of their application or registration form at the time of the interview. Application forms without self-attested supporting documents will not be considered.

11. Medical Fitness

A candidate selected for the Ph.D. program will be offered admission, only if she/he is found fit as per the norms and standards of medical fitness set by IIT (ISM). An overview of the standards of medical fitness set by IIT (ISM) is presented below:

The selected candidates shall submit the medical certificate in the prescribed format at the time of admission which will be intimated to the candidates. However, candidates may be further examined by a medical board set by IIT (ISM) before the admission, whose decision for medical fitness will be final.

A candidate should have good general physique with:

- Chest measurement: Not less than 70 cms with a satisfactory limit of expansion and contraction.
- Vision: Should be normal. In the case of defective vision, it should be corrected to 6/9 in both eyes or 6/6 in the better eye.
- Hearing: Should be normal. A defective hearing should be corrected.
- Heart & Lungs: Should not have any abnormality.
- No history of mental diseases or epileptic fits.

12. Withdrawal and refund of admission fee

Candidate may withdraw his/her provisional admission by sending a request to AR (Admissions) at aradm@iitism.ac.in by e-mail from the registered email ID of the candidate. Refund will be admissible as per following clause:

a) If a candidate withdraws the offer of admission within three days after the last date of provisional admission for the round in which she/he was admitted, the entire fee collected from the candidate will be refunded after a deduction of processing fee of Rs. 2000/-

b) If a candidate withdraws the offer of admission after three days from the last date of provisional admission for the round in which she/he was admitted, she/he will be refunded only the caution money and advance hostel mess fee if any.

13. DISCLAIMER

The website mentioned in this document has been launched to provide the candidates and public-at-large, information about the IIT(ISM) Ph. D. Admission. If you do not agree to the terms and conditions below, kindly do not access this site or any pages thereof.

14. Terms and Conditions

14.1 No warranty

The information and materials contained in the site, including text, graphics, links or other items - are provided on an "As Is" and "As Available" basis. Although Ph.D. Admission Committee which organizes and conducts the interview and admission to the Ph.D. program tries to provide information accurately, it disclaims liability for errors or omissions in this information and materials.

No warranty of any kind, implied, expressed 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 and materials.

14.2 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 person, 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 representative thereof, are advised of the possibility of such damages, losses or expenses.

14.3 Network services

The Ph.D. Admission committee cannot be held responsible for reduced access speeds due to bandwidth overloads, especially close to the last date of application submission.

14.4 JURISDICTION

In case any claim or dispute arises in respect of Ph.D. Admission, it is now made clear that the Courts in Dhanbad and Dhanbad alone shall have the exclusive jurisdiction to entertain and settle any such dispute or claim.

15.COMMUNICATION WITH IIT (ISM) DHANBAD

Communication regarding Ph.D. Admissions 2024-2025 should be sent to the following address with the envelope superscripted with “Ref: Ph.D. Admissions 2024-2025”.

Assistant Registrar (Admissions)

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

DHANBAD - 826004

JHARKHAND, INDIA

Email: aradm@iitism.ac.in

Any email communication should be addressed with full identification of the candidate, i.e., name, email, mobile, program name(s), category, 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.*

16. ANNEXURES

ANNEXURE – I

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 family resides.

ANNEXURE II

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..... intheState/UnionTerritory..... 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*** :
- I. 5 acres of agricultural land and above;
 - II. Residential flat of 1000 sq. ft. and above;
 - III. Residential plot of 100 sq. yards and above in notified municipalities;
 - IV. Residential plot of 200 sq. yards and above in. areas other than the notified municipalities.
2. Shri/Smt./Kumaribelongs 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 15 years

***Note3: 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:

- (i) 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)
- (ii) Chief Presidency Magistrate / Additional Chief Presidency Magistrate / Presidency Magistrate
- (iii) Revenue Officer not below the rank of Tehsildar and
- (iv) 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.

ANNEXURE – III

MEDICAL FITNESS CERTIFICATE OF APPLICANT

(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: