

Indian Institute of Information Technology
Design and Manufacturing Kurnool



Information Brochure

Ph.D. admissions

July 2025 Session

Department of Sciences
(Mathematics, Physics & English)

A Brief about the Department:

The Department of Sciences has three divisions: Mathematics, Physics, and English. Department of Sciences offers Ph.D. Programs on emerging topics in Mathematics, Physics, and English. Please visit the faculty research profiles: <https://iiitk.ac.in/Department-of-Sciences/page>

Research areas:

Mathematics: Mathematical Control Theory and its Applications, Inverse Problems, Dynamics and Control, Non-linear Analysis, Multiplicative Lie Algebra, Lie ring and gyrogroups, Numerical methods for Differential equations.

Physics: Experimental Condensed Matter Physics, Magnetism and Magnetic Materials, Skyrmions, Nanocrystalline Materials, Electronic Structure Calculation, Computational Condensed Matter Physics, Computational Materials Science, Quantum Computing, Solar energy materials, Photonics, Fiber Optic Sensors, Thin Film Photo detectors and advanced optical materials.

English: English Language Teaching/Education.

Vacancies:

Available Ph.D. vacancies	Full-Time (HTRA)	Part-time- R&D / Industry/ Academia
Mathematics	8	3
Physics	10	7
English	2	2

*The vacancy is provisional, subject to approval of competent authority.

Eligibility Criteria for Full-Time Ph.D.:

Applicants holding Master's degree:

- Minimum Education Qualifications:** Applicants with a postgraduate degree (M. Tech. / M.E. / M.Sc. /M.S. (Research) or equivalent) in a relevant branch/specialization from any institute with a CGPA of 6.5/10 or 60% for UR/OBC/EWS category and CGPA of 6.0/10 or 55 % for SC/ST/PwD category.
- Screening and Selection:** Entrance Test* and/or Interview. (* based on the number of applications received)

Direct admission to PhD with Graduation (B.E. / B. Tech. /B.S.):

Minimum Education Qualifications:

- Applicants with a Bachelor's degree (B. Tech. / B.E. / B.S. or equivalent) in a relevant branch/specialization from any CFTI with a CGPA of 7.5/10 or 70% for UR/OBC/EWS category and CGPA of 7.0/10 or 65 % for SC/ST/PwD category. (**GATE Qualification is not Mandatory**)
- Applicants with a Bachelor's degree (B. Tech. / B.E. / B.S. or equivalent) in a relevant branch/specialization from any **non-CFTI** with a CGPA of 7.5/10 or 70% for UR/OBC/EWS category and CGPA of 7.0/10 or 65 % for SC/ST/PwD category. (**GATE Qualification is Mandatory**)
- Screening and Selection:** Entrance Test* and/or Interview. (* based on the number of applications received)

- In cases where the candidates are directly admitted to the PhD programme in Engineering /Sciences with a Bachelor's Degree in Engineering/Technology, the scholar should successfully complete prescribed courses (Coursework) with a minimum of 24 Credits.

Eligibility Criteria for Part-Time Ph.D.:

Educational Qualifications:

Master's/M.S. (by Research) degree in the appropriate branch of study with first class and a minimum 60% aggregate marks or CGPA ≥ 6.5 (out of 10) in UG and PG.

Essential experience: (Candidates should satisfy **any one** of the below-mentioned criteria)

Permanent employees who can submit "No Objection Certificate" (NOC) from their employer and are working in the cadre equivalent to Scientist-C/Assistant Professor/Lecturer in Government R&D laboratories /Government organizations / Government industries/ PSUs / State Govt. Undertaking with at least three years of experience are eligible.

(OR)

Permanent/ Regular Employees from Private organization /Industries/Education Institutions with R & D facilities (i.e., established at least five years before the last date of applying for PhD (Part-time) admission as per the advertisement) with membership in CII/ ASSOCHAM or any other equivalent membership having at least three years of experience are eligible.

(OR)

Permanent employees of IIITDM Kurnool, having at least 3 years of experience.

- Screening and Selection:** Entrance Test* and/or Interview. (* based on the number of applications received)
- Shortlisted candidates will go through an interview before the final selection.

Research areas for Ph.D. admissions under Full time/Part time:

Name of the Department	Ph.D. Category	Broad Research Areas
Department of Sciences (Mathematics)	Institute Fellowship (Full-Time) (08)	Control Theory, Inverse Problems, Dynamics and Control, Nonlinear Analysis, Numerical Analysis and Differential Equations, Lie rings & group theory, Numerical methods for Differential equations, Spectral Graph Theory, Combinatorial Matrix Theory, Linear Algebra.
	Part – Time (03)	Control Theory, Inverse Problems, Dynamics and Control, Nonlinear Analysis, Numerical methods for Differential equations.
Department of Sciences (Physics)	Institute Fellowship (Full-Time) (10)	Computational Condensed Matter Physics, Machine learning for materials Science, Quantum Computing & Information, Waste water treatment, Quantum materials for renewable energy production, Experimental Condensed Matter Physics, Magnetism, Magnetic nanoparticles, Skyrmions, Multiferroics, Solar energy materials for Hydrogen Fuel production, Nano scale materials, super capacitors, Water purification Technologies, Photo diodes, Optics, Photonics, Fiber Optic Sensors & optoelectronics.
	Part – Time (07)	Computational Condensed Matter Physics, Machine learning for materials Science, Quantum Computing & Information, Water purification Technologies, Solar energy materials for Hydrogen Fuel production, super capacitors, Photo diodes.

Department of Sciences (English)	Institute Fellowship (Full-Time) (02)	English Language Teaching, English Language Education, English Literature.
	Part – Time (02)	English Language Teaching, English Language Education, English Literature.

Research Laboratories

1. Catalytic Materials for Renewable Energy (CMRE)
2. Laboratory of Magnetism & Novel Magnetic Materials (LMN)
3. Functional Nanomaterials Laboratory (FNL)
4. Computational Condenser Matter Laboratory
5. Optics & Photonics
6. Language Laboratory.

Important Dates:

Web notification of the PhD Advertisement	05-05-2025
Online application registration process start date	05-05-2025
Last date for the submission of online Application form	25-05-2025
Notification of shortlisted candidates for Interview/Written Test	29-05-2025
Tentative dates for Interview/Written Test	16-18 th June 2025
Publication of Final Results	20-06-2025
Last date for seat acceptance and fee payment:	29-06-2025
Reporting to the Institute	02-07-2025