

Indian Institute of Information Technology, Design & Manufacturing Jabalpur

(Under Ministry of HRD, Govt of India)

Dumna Airport Road, P O Khamaria, Jabalpur - 482005 (www.iiitdmj.ac.in)

The Institute invites applications for admission to its Doctoral Programme in Computer Science & Engineering, Electronics & Communication Engineering, Mechanical Engineering, Design, Physics, Mathematics and English under the following categories:

FULL TIME

- i) Institute Assistantship (IA)
- ii) Govt./Semi Govt. Fellowship Award (FA) (Deity, CSIR, UGC, DAE, DST, DBT, NBHM, etc.)
- iii) Sponsored Candidates (SW)

PART TIME

- i) Institute Staff (IS), for Institute Staff of IIITDM Jabalpur
- ii) Project Staff (PS), for Project Staff of IIITDM Jabalpur
- iii) External candidates, sponsored by recognized R & D organizations / academic institution / industry (EX) (Institute Assistantship, Govt./Semi Govt. Fellowship Award, Part time for Institute Staff of IIITDM Jabalpur, Project Staff of IIITDM Jabalpur and External candidates, sponsored by recognized R & D organizations / academic institution / industry)

Area of Research:

- i. For Institute Assistantship (IA) category:

CSE	Machine Learning, Machine Learning and Bioinformatics, Machine Learning Applications in Multimedia Security, Data Clustering and Security, Deep Learning, Soft Computing, Natural Language Processing, Image Processing, Computer Vision, Wireless Networks (i.e., Wireless Sensor Networks, Vehicular Ad-hoc Networks, etc.), Robotics and Automation, Internet of Things (IoT), Parallel Computing, Mathematical Modelling, Software Engineering (Maintainability, Testability)
ECE	Advanced RF Circuits & System Design, Smart and Active Antenna Design, Engineered Materials for High Frequency, Nanophotonics and Plasmonics, MMIC, Microwave Absorbers, Wireless and Optical Communication, Cognitive Radio, Digital Communication, Multirate Signal Processing, Biomedical Signal Processing, Speech and Music Signal Processing, Image Processing, Machine Learning, Pattern Recognition, Computer Vision Classification Low Power VLSI Design, VLSI Technology, Emerging Nano Devices: Modeling and Simulation, 2D Materials: Application in Electronics, III-V Quantum Dot, Solar Cell, III-V Heterostructures Robotics, Control systems, Process Analysis and Modeling, Differential Driven Mobile Robots, Delayed Systems, Evolutionary Algorithms, Fractional Order Systems, Coupled Systems.
ME	Advanced Manufacturing, Dieless Manufacturing / Incremental Sheet Forming, Deformation Machining, Hybrid Manufacturing, Additive Manufacturing, Nano Technologies and Nano Materials in Additive Manufacturing Industrial Engineering Computer Aided Design, Reverse Engineering, Generative CAD Biomechanics, Design of Biomedical equipment, Biosensors, Biomaterials and Tissue Engineering, Biomedical Applications of Additive Manufacturing Thermal Cooling, Smart Energy Solutions, Microfluidics Energy Harvesting, Mechatronics and Robotics, Smart materials and structures, Composite materials, Sensors & Actuators
Design	Visual Communication, Service Design, Interaction Design, Design

	Automation and Capturing Design Intent, Generative CAD, Design of Biomedical equipment, Innovative Product Design, Industrial Ergonomics, Design and Occupational Ergonomics
Physics	Theoretical, Computational and Experimental in Condense Matter Physics, Applied Physics, Nanomaterials and Nano-devices
Mathematics	Computational PDE, Optimization, Statistics & Probability, Applied Functional Analysis
English	American Literature, Indian Writing in English, British Literature Transcendentalism and Spiritualism, Cultural Studies, Gender Studies

ii. For other categories, candidate can apply in all areas in the respective discipline.

Eligibility for Admissions

A minimum of 60 percent marks OR a CPI/CGPA of 6.0 (on the scale of 10.00) shall be required at the master's level qualifying examination (M.Tech./ M.Des./ M. Arch./ M.Sc./ M.A /M.B.A., etc.) as the specified minimum for admission in a Ph.D. programme for concerned disciplines only.. Minimum duration for such masters' programme shall be two years.

NB. Masters Degree in Design(MDes), Technology(M.Tech) and Architecture(M.Arch) are only eligible to apply for PhD in Design.

For admission to Doctoral Programme, the candidate must have qualified GATE/ CEED/ (CSIR/ UGC-JRF/ NET) or equivalent examination conducted at national level at any time.

Institute Assistantship (IA)

The students under this category are entitled to financial support (Teaching Assistantship), as per the MHRD norms. Further, the student is required to assist 8 hours of work per week assigned by the Discipline.

Fellowship Award (FA)

These candidates are financially supported under various Govt. / Semi Govt. schemes (CSIR, UGC, DAE, DST, DBT, NBHM, etc.), Department of Electronics and Information Technology (Deity), Aeronautics Research & Development Board (ARDB), Department of Science and Technology (DST), Atomic Energy Regulatory Board (AERB), Department of Atomic Energy (DAE), etc. The candidates under this category may be assigned teaching assignment per week by the Discipline, as per the requirement of the concerned fellowship.

Sponsored Candidate (SW)

These candidates are sponsored by recognized R&D organizations/academic institution/ industry for doing research work in the Institute. Candidates are expected to be relieved for full time research work at the Institute for a minimum period of three years. They will not receive any financial support from the Institute.

Institute Staff (IS)

This category is only for the persons employed as Institute Staff at IITDM Jabalpur and the candidate should have worked in the Institute for at least 2 years on a regular position at the time of admission.

Project Staff (PS)

This category refers to the candidates employed at IITDM Jabalpur and working on sponsored projects undertaken by the Institute and admitted to the Ph.D. programme. A candidate will be eligible to apply under this category if the remaining duration of the project at the time of admission is 2 years or more and subject to following additional conditions:

- a. Project staff shall apply through the PI of the project along with a research proposal in line with the project on which he/she is working. Such application shall be forwarded by the head of the

discipline under PS category and shall clearly mention in her/his application “*Financial Assistance for the Stipend or Fellowship shall strictly be borne by the project funds and not by MHRD/Institute Assistantship*”.

- b. The Project Staff shall not be paid any Institute assistantship (She/ He will be receiving his scholarship /assistantship from the project in which he/she is employed) and the institute shall have no liability whatsoever, in case the project tenure is over and the PI is unable to pay the assistantship to the student. The financial onus of the student strictly lies with the Principal Investigator (PI) and the Project.
- c. The PS shall perform assignment assigned by the PI of the project under this category.
- d. Project staff shall apply through the PI of the project along with a research proposal in line with the project on which he/she is working. Such application shall be forwarded by the head of the discipline under PS category and shall clearly mention in her/his application “*Financial Assistance for the Stipend or Fellowship shall strictly be borne by the project funds and not by MHRD/Institute Assistantship*”.
- e. The Project Staff shall not be paid any Institute assistantship (She/ He will be receiving his scholarship /assistantship from the project in which he/she is employed) and the institute shall have no liability whatsoever, in case the project tenure is over and the PI is unable to pay the assistantship to the student. The financial onus of the student strictly lies with the Principal Investigator (PI) and the Project.
- f. The PS shall perform assignment assigned by the PI of the project under this category.

External (EX)

This category refers to a student employed in an R&D organization/ academic institution/ industry having adequate research facilities. Such organizations shall be approved by the Senate. The Institute does not provide any assistantship/ fellowship to such a student. There shall be two sub-categories in this:

- a. Candidates who are local (that is they are able to attend all classes, labs, etc on regular basis) and have been employed as professionals in an establishment/ organization/ institute. Such candidates shall not be having any bounding of the residence requirement.
- b. Candidates who are non-local (that is they are not able to attend all classes, labs, etc on regular basis) and have been employed as professionals in an establishment/ organization/ institute approved by the Senate. The research work leading to the Ph.D. degree by such students may be carried out largely in the parent organization of the candidate under a local supervisor approved by the Senate from the organization but with the overall guidance provided by a faculty member (Institute Supervisor) of the Discipline in which she/he is registered. Such candidates are:
 - i. required to be resident of the institute till they complete the course work and pass the comprehensive examination and
 - ii. get the approval of the Chairperson, Senate on a written proposal (prepared in consultation with his supervisor(s)) outlining the work proposed to be done in his thesis.

Direct Admission to Ph.D after B.Tech

- A) Students who are currently in their final year in any of the Centrally Funded Technical Institutions (CFTIs) will only be eligible for the admission under this category.
- B) To be eligible for the admission under this category, a candidate is required to have a minimum CPI of at least 8.0 CPI or equivalent (on a scale of 10) at the end of the seventh semester under

OPEN and OBC categories. For SC/ST category students, the minimum CPI requirement will be relaxed to 7.0. Qualified and valid NET/GATE score is mandatory in this case.

C) They shall be admitted through the same regular admission process as specified for the regular Ph.D. students.

General Information:

1. Relaxation for reserved category in the eligibility requirements shall be as per Govt. of India norms.
2. In case of sponsored and part time categories, candidates shall have a regular employment and shall be required to apply through proper channel (the employer or her/his authorized signatory). Such candidate shall have served for at least two years in a reputed R&D establishment/ organization/ academic institution/ company associated with design, development and/or manufacturing of engineering products.
3. Project staff working on sponsored projects undertaken by PDPM IIITDM Jabalpur shall be eligible for admission under the category project staff (PS) if the remaining duration of the project at the time of admission is 2 years or more and subject to following additional conditions:
4. Candidates those are financially supported under various Govt. / Semi Govt. schemes (CSIR, UGC, DAE, DST, DBT, NBHM, etc.), Department of Electronics and Information Technology (Deity), Aeronautics Research & Development Board (ARDB), Department of Science and Technology (DST), Atomic Energy Regulatory Board (AERB), Department of Atomic Energy (DAE), etc are eligible to apply for Fellowship Award (FA) category.
5. For detailed information about the Ph.D Programme, please go through the link: [http://www.iiitdmj.ac.in/academics/download/Academic%20Guidelines 271017.pdf](http://www.iiitdmj.ac.in/academics/download/Academic%20Guidelines%20271017.pdf) and to fill up online application form please go through the link: <http://admission.iiitdmj.ac.in/>
6. Last date for submission of online application is November 05, 2018. Kindly note that Institute will accept only online application forms. A demand draft of Rs. 500/- for Gen and OBC & Rs. **300/-** for SC/ST category candidates, in favor of The Registrar, PDPM IIITDM Jabalpur, issued by any nationalized bank, payable at Jabalpur must be received latest by November 06, 2018 through Speed/ Registered Post only.. **The list of short-listed candidates and other announcements regarding admission will be uploaded on Institute's website www.iiitdmj.ac.in.** For any query, please contact

Assistant Registrar (Academic), PDPM IIITDM Jabalpur,
Dumna Airport Road, Post: Khamaria, Jabalpur (MP) – 482005, Phone: +91 761 279 4032/4035.

Important Dates for Ph D Admission

Program Events	Date	Day
Date of start to fill up on-line application	08-10-2018	Monday
Last date of filling up on line application and Submission of relevant documents if any	05-11-2018	Monday
Announcement of short-listed candidates for written test/Interview	16-11-2018	Friday
Date of Written test/Interview		
PhD- Computer Science and Engineering	10-12-2018	Monday
PhD- Electronics and Communication Engineering	10-12-2018	Monday
PhD- Mechanical Engineering	10-12-2018	Monday
Design	10-12-2018	Monday
Ph.D Natural Science (Physics, Mathematics and English)	10-12-2018	Monday
Registration		
Announcement of Selected candidates on website	19-12-2018	Wednesday
Last date to deposit fee by selected candidates	24-12-2018	Monday
Registration/ Orientation	02-01-2019	Wednesday
Commencement of Classes	03-01-2019	Thursday