



Admission to Ph.D. Programmes 2019-20

IIT Jodhpur invites applications for admission to Ph.D. programmes for the Semester commencing in July 2019.

The aim of the Ph.D. Program is to develop graduates having good knowledge and research training in classical and emerging areas. IIT Jodhpur hosts Ph.D. program in areas of technology, engineering, sciences, and humanities and social sciences. For the Semester commencing in July 2019, applications are invited in the following departments:

- Bioscience and Bioengineering:** Ph.D. positions are open in following areas- Environment Biotechnology, Bioenergy, Cell division, Cancer Biology, Microtubules, Genetic Engineering, Molecular Neurobiology, Neuroscience, Neurodegeneration, Cellular and Molecular Physiology, Cellular and Molecular Neuroscience, Immunology and Molecular Microbiology.
- Chemistry:** Ph.D. positions are open in following areas- Computational chemistry, Solid state and solution state NMR method development and application, Theoretical and Computational Chemistry, Chemical Reaction Dynamics, Organic Synthesis and Catalysis, C-H Functionalization and Activation, Novel Synthetic Methods, Nanomaterials and Solid State Chemistry, Catalysis, Quantum information and computation, Coordination Chemistry, Asymmetric Synthesis and Catalysis.
- Computer Science and Engineering:** Ph.D. positions are open in following areas- Deep Learning for Image Analysis, Software Engineering for IoT and AI cloud services, Computer Vision, Multimodal Analysis.
- Electrical Engineering:** Ph.D. positions are open in following areas- Microelectronics, Microwave Engineering, Communications, Control Systems, Power Electronics and Power Systems, Signal Processing and Machine Learning.
- Humanities and Social Sciences:** Ph.D. positions are open in following areas- Philosophy, Digital Sociology (with an emphasis on Gender Studies), Psychology (in the area of Wisdom in Education and Wisdom in Organization).
- Mathematics:** Ph.D. positions are open in following areas- Statistics, Topology and its Applications.
- Mechanical Engineering:** Ph.D. positions are open in following areas- Solid Mechanics and Design (Design; Robotics; Multibody Dynamics; Flexible Robots; Rotor Dynamics; Micro-mechanics and Modelling), Thermal and Fluids Engineering (Heat Transfer; Combustion; Solar Thermal; Multiphase Flow; Experimental Heat Transfer), Manufacturing (CNC Machine Tools; Smart Manufacturing).
- Metallurgical and Materials Engineering:** Ph.D. positions are open in following areas- Mechanical behaviour study using atomistic Modelling, Thermoelectric transport study using atomistic Modelling, Alloy Design: Magnesium and High Entropy Alloys, Superhydrophobic self-cleaning coating, Biodegradable Magnesium Alloys.
- Physics:** Ph.D. positions are open in following areas- Experimental Condensed Matter Physics, Computational Condensed Matter Physics, Theoretical Astrophysics, Ultra-fast optics, Computational Optics, Open Quantum Systems, Quantum Field Theory, Quantum Information, Quantum Optics, Quantum Thermodynamics, Photonics, Particle Physics and Cosmology.

Detailed information about the research areas of Faculty Members in the above departments can be obtained from the Institute website at www.iitj.ac.in. The applicants are strongly encouraged to go through [profiles of Faculty Members](#) and to get familiar with their specialization and research interest.

A. Application Procedure

Applicants are requested to use the following link to fill and submit the application form online:
https://oa.iitj.ac.in/OA_PG_ADMISSION

For admission to the 2019-20 First Semester commencing in July 2019, this online link will remain active till 12 April 2019.

Applicants are required to pay the processing fee of Rs.300 for General and OBC applicants and Rs.150 for SC, ST, and PD applicants *online* while submitting the application form.

In case of any query with respect to online application, candidates may contact Office of Academics (office_academics@iitj.ac.in) and other general queries may be directed to the offices of the respective departments (See Section G of this letter).

Applicants shortlisted for the written test and/or interview will be required to bring the final submitted application form duly signed along with a copy of GATE, NET, CSIR, UGC or NBHM (or equivalent) score card at the time of written test and/or interview.

The Institute admits students to the doctoral degree programmes in three categories, namely

(a) Regular Full-Time Ph.D. Program

Students admitted in this category shall not be a registered student in any other academic program in India or abroad, and shall not be a full-time or part-time employee of any organization in India or abroad. The students shall be eligible for financial assistance in the form of *Teaching Assistantship* or *Research Assistantship* as per norms of the Institute, or Scholarship or Fellowship as per norms of the funding agency, *e.g.*, UGC, CSIR, DBT, NBHM, DST-INSPIRE, and DEITY (*Visvesvaraya* PhD Scheme).

(b) Part-Time Ph.D. Program

Students admitted in this category shall be a full-time employee of a recognized Institute, University or Organization. *The student shall not be eligible for any financial support, and needs to get her/his application forwarded by her/his employer. No-Objection certificate from parent Institute is mandatory to be submitted along with the application form.* The student shall complete the minimum course and residence requirements at IIT Jodhpur; she/he can undertake research at a location other than the Institute.

(c) Sponsored Ph.D. Program

Students admitted in this category shall be a full-time Government employee and sponsored by Industry, Organization and National Laboratory equipped with research facilities and recognized by Department of Science and Technology (DST). The student shall not be eligible for any financial assistantship from the Institute. The student shall be allowed to carry out a part or all of her/his research in the parent Industry, Organization or National Laboratory, under the supervision of a *Supervisor from IIT Jodhpur* and a *Co-Supervisor from the parent Industry, Organization or National Laboratory*. The Co-Supervisor should have earned a Ph.D. Degree herself/himself in the area of the research work of the student.

B. Eligibility for Admission

The eligibility criteria prescribed below are the absolute minimum. The Selection Committee may prescribe requirements over and above these. The relaxation for SC/ST candidates in the qualifying degree marks is as per MHRD rules.

(a) *Ph.D. Program in an Engineering discipline*

1. Applicants with a Regular Full-Time Master's degree in appropriate branch of Engineering namely M.Tech., M.E., M.Sc. (Engineering) or MS by Research with at least 60% marks or at least 6.5/10 Cumulative Performance Index (CPI) or Cumulative Grade Point Average (CGPA). Such students are required to have at least 60% marks or 6.5/10 CPI or CGPA in Bachelor's degree.
2. Applicants with a Regular Full-Time Master's degree in Sciences with at least 70% marks or at least 7.0/10 CPI or CGPA with a valid GATE, CSIR, UGC or NBHM score card. Such students are required to have 70% marks or 7.0/10 CPI or CGPA in Bachelor's degree. Applicants should have taken Mathematics course(s) in undergraduate degree.
3. Applicants with a Regular Full-Time Bachelor's degree in Engineering with
 - (i) a B.Tech., B.E. or B.Sc. (Engineering) degree with at least 80% marks or at least 8/10 CPI or CGPA and a valid GATE score, and
 - (ii) a B.Tech. degree from any of the IITs with at least 8/10 CPI or CGPA OR a valid GATE Score Card.
4. Applicants with a Regular Full-Time Master's degree in Engineering from a University or an Institute abroad with at least 60% marks, 3.0/4 CPI or CGPA, or 8.0/10 CPI or CGPA.

(b) *Ph.D. Program in Science discipline*

1. Applicants with a Regular Full-Time Master's degree in Sciences with at least 60% marks or at least 6.5/10 CPI or CGPA with a valid GATE, CSIR, UGC score card or equivalent. Such students are required to have at least 60% marks or 6.5/10 CPI or CGPA in Bachelor's degree. Applicants holding a Regular Full-Time Master's degree in Engineering also are eligible to apply for Ph.D. Programme in Sciences with at least 70% marks or 7/10 CPI or CGPA. Again, such applicants are required to have at least 70% marks or 7/10 CPI or CGPA in both the Bachelor's and Master's degree.
2. Applicants holding only Regular Full-Time Bachelor's degree in Engineering with
 - (i) a B.Tech., B.E. or B.Sc.(Engineering) degree with at least 80% marks or 8/10 CPI or CGPA and a valid GATE score card
 - (ii) a B.Tech. degree from any of the IITs with at least 8/10 CPI or CGPA OR a valid GATE score card.
3. Applicants with a Regular Full-Time Master's degree in Engineering from a University or an Institute abroad with at least 60% marks, 3.0/4 CPI or CGPA, or 8.0/10 CPI or CGPA.

(c) *Ph.D. Program in Humanities and Social Science Discipline*

1. Applicants with a Regular Full-Time Master's degree in Social Sciences, Sciences, Engineering or allied areas with at least 55% marks or 6.0/10 CPI or CGPA with a valid GATE, UGC or CSIR score.
2. Applicants holding only a Regular Full-Time Bachelor's degree in Engineering with
 - (i) a B.Tech., B.E. or B.Sc.(Engineering) degree with at least 80% marks or 8/10 CPI or CGPA and a valid GATE score card
 - (ii) a B.Tech. degree from any of the IITs with at least 8/10 CPI or CGPA or a valid GATE score card.
3. Applicants with a Regular Full-Time Master's degree in Engineering from a University or an Institute abroad with at least 60% marks, 3.0/4 CPI or CGPA, or 8.0/10 CPI or CGPA.

(d) *Part-Time and Sponsored students in any discipline:* Three years of relevant experience is needed for those with a Regular Full-Time M. Tech degree and five years of relevant experience is needed for those with a Regular Full-Time B.Tech. or M.Sc. degree. This category is only for those who are working in research labs or in similar institutions. Please note that no financial assistance will be provided under this category and the candidate has to fulfill the respective Minimum Eligibility criteria mentioned in the Section B.

C. Financial Assistance

Ph.D. students shall be offered *Teaching* or *Research Assistantships* in return for 8 hours of work per week. Institute will provide the financial assistantship to Ph.D. students enrolled in Regular Full-Time Ph.D. program as per funding agency norms.

D. Reservation Policy

The norms of reservation for different categories shall be adopted as laid down by the Ministry of Human Resource Development, Government of India.

E. Important Dates

Milestones	Date
Last date of filling online application form:	12 April 2019
Announcement of short listed applicants for the admission process	18 April 2019
Date of written test and/or Interview	To be announced

F. Communications

All communications related to Ph.D. admissions will be done only through email.

G. Whom to contact

In case of any query, the applicants may contact to the offices of the department, where they are applying to.

Department	Phone No.	Email
Bioscience and Bioengineering	0291-2801202	office_bb@iitj.ac.in
Computer Science and Engineering	0291-2801252	office_cse@iitj.ac.in
Chemistry	0291-2801302	office_chemistry@iitj.ac.in
Electrical Engineering	0291-2801352	office_ee@iitj.ac.in
Humanities and Social Sciences	0291-2801252	office_hss@iitj.ac.in
Mathematics	0291-2801252	office_mathematics@iitj.ac.in
Mechanical Engineering	0291-2801502	office_me@iitj.ac.in
Metallurgical and Materials Engineering	0291-2801502	office_materials@iitj.ac.in
Physics	0291-2801352	office_physics@iitj.ac.in