

INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI
TIRUPATI - 517506

M.S/Ph.D Admissions Information Brochure July-2018 Semester

Important Dates

Opening date for on- line application	18-03-2018(Sun)
Closing date for on- line application	15-04-2018(Sun)
Written test/ Interview Engineering Sciences & Humanities	June (4-9) 2018
Announcement of Results Engineering Sciences & Humanities	11-06-2018(Mon)
Joining date of candidate	16-07-2018(Mon)

Important Note

In situations which are not covered or made clear in this document, an appropriate decision will be taken by the Dean (Academics) after examining the situation carefully. His/her decision on the matter will be final.

I. Important Guidelines for Ph.D. & M.S. (Research) Application

1. Please read the instructions given in the admission brochure carefully before filling up the application form.
2. Online application form is available at the Institute website iittp.ac.in. After filling the form, please take a printout and keep it for records.
3. The application fee is as follows:

GN/OBC-NCL Male candidates	: Rs.100/-
GN/OBC-NCL Female candidates	: Rs.50/-
SC/ST and PwD candidates	: Rs.50/-

APPLICATION FEE IS NON-REFUNDABLE

Application fee payable through online.

4. A valid **OBC-NCL** Certificate must be uploaded with the ONLINE application and submitted at the time of admission.
5. You should check the IIT Tirupati website for important announcements and the results.
6. Candidates called for written test/interview must bring with them printed copy of the application that they submitted online along with originals and photocopies of the relevant certificates.

General

1. The Institute

Indian Institute of Technology Tirupati is the first among the 3rd phase of IITs, to have its foundation stone laid in March 2015. Presently, it is operating from a temporary campus on Tirupati – Renigunta Road and plans are well underway to setup its own campus (about 530 acres) in the coming 2 to 3 years in Merlapaka Village, Yerpedu Mandal, Chittoor District, A.P.

IIT Tirupati offers B. Tech. programs in Civil Engineering, Computer Science & Engineering, Electrical Engineering, Mechanical Engineering, and M.S.(Research) programs in Civil Engineering, Computer Science & Engineering, Electrical Engineering and Mechanical Engineering.

In addition to the above Ph.D. programs in Chemistry, Civil Engineering, Electrical Engineering, Humanities & Social Sciences, Mathematics, Mechanical Engineering and Physics are offered from July 2018.

Doctor of Philosophy (Ph.D.)

2. Research Areas

2.1 Engineering

Civil Engineering:

Geotechnical Engineering, Structural Engineering (Structures / Materials), Hydrology and Water Resources Engineering, Transportation Engineering (Materials / Systems), Environmental Engineering.

Computer Science & Engineering:

Software Engineering, Computing for Education, Internet of Things, Software Defined Networking, Wireless Networks, Machine Learning Algorithms & Applications, Algorithmic Engineering, Advanced Data Structures & Algorithms, Parallel Computing, and Route-Planning Algorithms.

Electrical Engineering:

Signal and Image Processing, Medical Image Analysis, Computer Vision and Machine Learning, Semiconductor Devices, Control and Robotics, Measurements & Instrumentation, Communication and Networks.

Mechanical Engineering:

Fluids and Thermal Engineering, Solid Mechanics and Design, Manufacturing Science.

2.2 Sciences & Humanities and Social Sciences

2.2.1 Sciences:

Chemistry:

Theoretical and Computational Chemistry (*Quantum Theory of Molecules & Materials; Spectroscopic Modelling & Simulations; Equilibrium & Non-Equilibrium Statistical Mechanics, Physics of Polymers, Stochastic Thermodynamics*).

Mathematics:

Fixed Point Theory, Fractals, Inverse Problems and Statistics (*Design of Experiment, Machine Learning, Non-Parametric Regression, and Biostatistics*).

Physics:

Experimental Condensed Matter Physics (*Magnetism and Superconductivity*)

2.2.2 Humanities and Social Sciences

English:

Indian Writing in English, Comparative Literature, Indian Poetics, Cultural Studies, Critical Theory, Film Studies, Indian Aesthetics and other relevant areas.

Economics:

Climate Change Economics, Impact Evaluation, Environmental Economics and Development Economics, Comparative Political Economy and other relevant areas.

Philosophy:

Social & Political Philosophy and Indian Philosophy.

Categories of Admission:

Candidates will be admitted to the Ph.D. programme of the Institute under one of the following categories:

- (a) Regular full-time scholars.
- (b) Research scholars under the external registration programme, sponsored by, employed in an industry/organisation/national laboratory having R&D facilities, and recognised by DST or by IIT Tirupati. A research scholar under the external registration programme will normally carry out part or all of his/her research work in the industry/organization/ national laboratory employing the scholar under the supervision of a guide employed in the same organization and a guide at IIT Tirupati. The candidate must have at least two years' experience in the parent organization.

Eligibility: Ph.D. in Engineering

- (a) Candidates with a Master's degree in Engineering/Technology or a Master's degree by Research in Engineering/Technology with a good academic record.
- (b) Candidates with Master's degree in Sciences with a good academic record and of exceptional merit are eligible for the relevant Engineering discipline. They should have a valid GATE score or UGC/CSIR-NET/NBHM or equivalent qualification in the relevant area tenable for the year of registration.

- (c) Candidates who have qualified for the award of Bachelor's degree in Engineering/Technology from a Centrally Funded Technical Institute (CFTI) with an exceptionally good academic record in an eligible discipline will be considered for direct admission to Ph.D. provided he/she has a minimum CGPA of 8/10 (7.5 for OBC- NCL and 7.0 for SC/ST/PwD on a 10-point scale).
- (d) Candidates under External Registration should have the same qualifications as shown in (a).

Eligibility: Ph.D. in Sciences

- (a) Master's degree in Sciences with a good academic record and having a valid GATE score or UGC/CSIR-NET/NBHM or equivalent qualification tenable for the current year in the relevant area. Master's degree holders in Engineering/Technology are also eligible.
- (b) Candidates who have qualified for the award of Bachelor's degree in Engineering/Technology from a Centrally Funded Technical Institute (CFTI) with an exceptionally good academic record in an eligible discipline will be considered for direct admission to Ph.D. in Sciences provided he/she has a minimum CGPA of 8/10 (7.5 for OBC- NCL and 7.0 for SC/ST/PwD on a 10.0-point scale).

Eligibility: Ph.D in Humanities and Social Sciences

Master's degree in an eligible discipline with a good academic record or equivalent and having a valid GATE score or UGC/CSIR- NET/NBHM or equivalent qualification tenable for the current year in the relevant area.

Master of Science (Research) [M.S. Research] in Engineering:

Research Areas:

Civil Engineering:

Geotechnical Engineering, Structural Engineering (Structures / Materials), Hydrology and Water Resources Engineering, Transportation Engineering (Materials / Systems), Environmental Engineering

Computer Science & Engineering:

Software Engineering, Computing for Education, Internet of Things, Software Defined Networking, Wireless Networks, Machine Learning Algorithms & Applications, Algorithmic engineering, Advanced Data structures & Algorithms, Parallel Computing, and Route-Planning algorithms.

Electrical Engineering:

Signal and Image Processing, Medical Image Analysis, Computer Vision and Machine Learning, Semiconductor devices, Control and Robotics, Measurements & Instrumentation, Communication and Networks.

Mechanical Engineering:

Fluids and Thermal Engineering, Solid Mechanics and Design, Manufacturing Science

Category of Admission:

- (a) Regular full-time scholars
- (b) Research scholars under the external registration programme sponsored by, employed in the parent industry/organisation having R&D facilities, and recognized by DST or IIT Tirupati. A Research scholar under the external registration programme will normally carry out part or all of his/her research work in the industry/organisation/national laboratory employing the scholar under the supervision of a guide employed in the same organisation and a guide at IIT Tirupati. The candidate must have at least two years' experience in the parent organisation.

Eligibility for M.S. by Research

The minimum educational qualifications for admission to the M.S. by research degree for full time scholars are as follows:

- (a) Candidates with a Bachelor's degree in Engineering/Technology in the relevant departments with valid GATE score.
- (b) Candidates having Associate Membership of the following professional bodies are also eligible for admission to the M.S. programme of their parent discipline provided they have a valid GATE score and have passed both part A and part B of the Membership examinations with a good academic record: The Institution of Engineers (India) (Civil/Mechanical/Electrical and Electronics/Electronics and communications), The Institute of Electronics and Tele-Communication Engineering.
- (c) Engineering graduates from IITs and other Centrally Funded Technical Institutes (CFTI) with a CGPA of at least 8/10 (7.5 for OBC-NCL and 7 for SC/ST/PwD) are eligible for seeking admission, without GATE score, to the MS Programme and they can be offered HTRA, if selected.
- (d) Candidates under External Registration should have the same qualification as in (a) however, valid GATE score is not required.

3. Ph.D and M.S(Research) Admission

3.1. Application:

A candidate can apply to more than one department. The maximum number of departments to which He/she can apply will be three.

3.2 Financial Assistance

Assistance will be as per MHRD norms. Fulltime Scholars admitted to M.S. program are eligible for the Half-time Teaching/Research Assistantship (HTRA) for which:

- (i) They should work for 8 hours per week for the Institute to earn this assistantship. The work would normally involve assistance in teaching/research, and will be assigned by the Institute.
- (ii) Renewal of assistantship every semester will be contingent on enrolment, satisfactory progress in research work and good performance during the preceding semester in the discharge of responsibility as teaching/ research assistant.

Other scholarships like UGC-JRF, CSIR-JRF, ICMR & AICTE etc. may also be available for those who have qualified for these schemes and get admission and the amount of fellowship will be as per

the norms of the funding agency.

Selection Procedure:

The Selection Committee will call eligible candidates possessing the minimum educational qualifications and satisfying additional and stiffer criteria set from time to time, for an interview and/or test.

Based on the academic record and the performance of the candidates in the interview and/or test, the Selection Committee will recommend to the Chairman, Senate the names of candidates found suitable for admission.

3.3 Reservation of Seats

Reservations are applicable to SC/ST/OBC-NCL/PwD candidates as per Govt. of India rules.

3.4 Completing the Qualifying Degree and Production of Provisional Certificate

Candidates joining M.S programme in July-December session have to submit their original mark/grade sheets along with provisional certificates at the time of admission. They should also produce their required degree certificate for having passed the qualifying examination **on or before July 2017**.

3.5 Original Documents to be submitted for Verification

(i) At the time of Interview and/or Written Test:

- a) Printed copy of application submitted.
- b) All the semesters Mark sheet/grade card / provisional / degree certificates beginning from first degree towards proof of qualification and all other educational qualifications (SSC/ 10th onwards)
- c) Community Certificate in the case of SC/ST/OBC-NCL candidates issued by the respective State Government.
- d) Authorised Doctor's Certificate with disability descriptions in the case of Person with Disabled (PwD) candidates.
- e) Copy of GATE score or UGC - JRF/NET/CSIR/ DAE-JEST or other fellowship award.

(ii) At the time of Admission:

- a) Offer of admission.
- b) Birth Certificate.
- c) Aaadhar No. & PAN No.
- d) First page of SSLC/SSC/Matriculation certificate
- e) Copy of the submitted application form.
- f) Original GATE Score Card/UGC-JRF/NET/CSIR-JRF/DAE-JEST or other fellowship award letter.
- g) Degree certificate/Provisional/Course completion certificate/Grade Cards/Mark sheets of all the semesters of degrees obtained.
- h) SC/ST/OBC-NCL community certificate for the candidate belonging to SC/ST/OBC-NCL category. [OBC-NCL scholars to bring a Non-creamy layer community certificate valid at the time of admission].
- i) Relieving order/Resignation acceptance letter from the employer in the case of fulltime candidates, if employed.

4. Fees and Deposits:

Fees for the Research Scholars to be admitted in the Academic Year 2018-19			
S.No	Items of Fees & Deposits	M.S. (Rs.)	Ph.D (Rs.)
I. Institute Fees			
<i>A. One time fees:</i>			
1.	Admission fee	150	150
2.	Grade card/Thesis fee	450	950
3.	Provisional certificate	100	100
4.	Medical Exam fee	100	100
5.	Student welfare fund	500	500
6.	Modernisation fee	500	500
7.	Alumni Life Membership Fee(NS)	1000	1000
8.	Publication fee(NS)	250	250
Total A		3,050	3,050
<i>B. Semester Fees:</i>			
1.	Tuition fee #	2500	2500
2.	Examination fee	300	300
3.	Registration-Enrolment fee	300	300
4.	Gymkhana	1000	1000
5.	Medical fee	500	500
6.	*Hostel Seat Rent	5000	5000
7.	*Fan, Elec. & Water Charges	750	750
8.	Student Wellness fee	100	100
9.	Medical Insurance Premium	1400	1400
Total B		11,850	11,850
<i>C. Deposits(Refundable):</i>			
1.	Institute Deposits and Library Deposits (Each Rs. 1000)	2000	2000
Institute fees payable at the time of admission	Hostellers(A+B+C)	16,900	17,400
	Day Scholars[A+(B-*)+C+II(3)]	16,150	16,650
II. Hostel Fees & Mess Charges per semester			
1.	Hostel Admission fee	200	200
2.	Hostel Deposit (NS)- (refundable)	3000	3000
3.	Estt.'A' charges	5000	5000
4.	Estt 'B' charges	1500	1500
5.	Advance Dining charges (Aug-Nov 2018)	21350	21350
6.	SWD charges	50	50
Total Hostel Fees Payable at the time of Admission		31100	31100

NS – Non-Statutory
fees

* For Hostellers only

SC/ST/PwD scholars are exempted from payment of tuition fee

Hostel rooms are allotted depending on availability on sharing basis. If you wish to be a day scholar, you should register your name in the Office of the Dean (Academics) and obtain day scholar certificate immediately after admission.