



INDIAN INSTITUTE OF SPACE SCIENCE AND TECHNOLOGY
(Declared as Deemed to be University under section 3 of the UGC act 1956)
Government of India, Department of Space, Thiruvananthapuram – 695547

IIST Ph.D. Programme – January 2014

Indian Institute of Space Science and Technology envisions the integration of Space Technology and Space Science educational programs with basic and applied research for meeting the national R&D requirements of science and technology in general and of the Indian Space Programme in particular. The institute provides a vibrant research atmosphere and offers doctoral and postdoctoral programmes.

Applications are invited from highly motivated candidates for admission to the Ph.D. Programme starting in January 2014, in the areas of Aerospace Engineering, Avionics Engineering, Earth and Space Sciences, Mathematics and Physics.

Eligibility

Minimum Qualifications:

1. Applicants with Master's Degree in Engineering/Technology

Applicants with Master's Degree in Engineering / Technology must have secured first class or equivalent in the Master's and Bachelor's degrees. They must have pursued their Master's degree on the basis of qualified GATE score. Candidates with MS in Engineering or equivalent from leading foreign Universities with outstanding academic record (or) MS by Research with outstanding academic record can be considered without GATE. Candidates with Integrated Masters degree (or Dual Degree) in Engg/Tech from IITs and IISc with minimum CGPA 9.0/10 can be considered without GATE.

2. Applicants with Master's Degree in Science

Applicants must have Master's Degree in the relevant area with first class or equivalent in their Master's and Bachelor's degrees. They must have qualified UGC/CSIR NET -JRF (or) NET-Lectureship (or) GATE qualified in the relevant disciplines.

4. Applicants with Bachelor's Degree in Engineering/Technology

Outstanding candidates with Bachelor's degree in Engineering with an excellent academic record and aptitude for research may be considered for direct admission to the Ph.D. Programme. Such candidates must have secured CGPA of 9.0/10 or better and a valid GATE score of 675 or better.

B. Tech students from IITs with CGPA better than 9.0/10 do not require GATE.

Age Limit: Applicant should be below 28 years as on 16th December 2013. Age relaxation applicable as per Government Rules.

Nationality: Applicant should be an Indian citizen

Result awaited candidates in the final year/semester are also eligible to apply, if they have qualified for GATE/NET as required. Such candidates may be screened in for Test/Interview based on the marks obtained by them until the current year/semester. Based on their Test/Interview performance, these candidates may be provisionally selected subject to the condition that they have to produce the provisional certificate of obtaining the qualifying degree with required percentage of marks by the date stipulated in their provisional admission letter. If they fail to produce the provisional/ degree certificate by this date their admission offer will be withdrawn and the offer may be given to next eligible candidate in the waiting list.

In exceptional cases, a provisionally selected candidate may be allowed to join IIST without submitting the provisional/degree certificate on the stipulated date of joining, subject to the conditions that (a) At the time of joining the candidate should have completed all the requirements for the award of the qualifying degree including all examinations, project works and viva voce (b) The candidate should produce at the time of joining a Course Completion Certificate issued by the competent authority in the University/Institute specifically confirming that all examinations, project works and viva voce for the qualifying degree are completed (c) If the above condition is satisfied, the candidate can be given provisional admission with the undertaking that all pending certificates, mark sheets, degree certificates (Original or Provisional) will be submitted to IIST latest by 30th April 2014, failing which the admission stands cancelled. For such candidates who are provisionally admitted to the IIST Ph.D. Programme as per (c) above, no fellowship is paid during the period before the required certificates are submitted. However, on regularization of admission following the submission of all required documents before the stipulated date, the candidate will be paid fellowship with retrospective effect from the date of joining.

Areas of current research (Opportunity is available for a total number of 17 research scholars for the current session)

Department Code	Research Area	Eligibility
AE /IIST	High speed flows; Computational fluid Dynamics; Two-Phase flow and Heat transfer; Combustion	ME/M.Tech or equivalent in Aerospace / Aeronautical / Mechanical / Applied Mechanics / Chemical / other relevant areas
AV/IIST	Computer Networking/Delay Tolerant Networking; Power Electronics	ME/M.Tech or equivalent in relevant areas with BE/B.Tech in ECE/Computer Science
ES /IIST	a. Astronomy and Astrophysics; b. Atmospheric Sciences; c. GIS Analysis	a. M.Sc. in Physics with relevant Specialization b. M.Sc. in Physics or M.Sc./M.Tech in Atmospheric Sciences or Earth System Sciences or Oceanography or Climate Sciences or equivalent in related areas c. M.Sc/ME/M.Tech or equivalent post graduate degree in Geo-informatics or RS & GIS or specialization in related subjects
MA /IIST	a. Stochastic Modeling / Queuing Theory; b. Suspension Rheology c. Mathematical theory of Control and Computation	a. M.Sc in Mathematics / Statistics / Operations Research or MS/ME/M.Tech in EE / ECE / Computer Science b. M. Sc in Mathematics/ Physics or MS /ME / M.Tech in space science area. c. M.Sc. Mathematics
PH /IIST	Theoretical Physics; Solid State Device Physics and Nano-electronics; Laser Optics.	M.Sc. in Physics with relevant specialization (or) ME/M.Tech or equivalent in related areas.

RESEARCH FELLOWSHIP

1. The Scholars selected for IIST Ph.D. programme with Master's Degree in Engineering/Technology will receive a Fellowship of Rs. 18000/- p.m., and scholars with Master's degree in Science or Humanities with NET-JRF or GATE qualification will be given a Fellowship of Rs. 16000/ pm. Scholars with NET-Lectureship will be given a Fellowship of Rs. 12000/ pm, which will be enhanced to Rs. 16000/ pm if the scholars qualify for NET-JRF.

2. After two years of research experience, their performance will be evaluated by a review committee constituted by Director IIST. Based on the review, the fellowship amount of Rs. 18000/16000/12000 may be enhanced to Rs. 20000/18000/14000 respectively.
3. The scholars will be required to assist the Departments in tutorials / practicals or related academic activities normally limited to 6 hours per week.
4. The scholars will have to pay for the services provided by the Institute like boarding / lodging / medical facilities etc., as per IIST rules.

SELECTION PROCEDURE:

1. Applications in the prescribed format will be received until **16th December 2013**
2. From the eligible applicants, a short-listing will be done taking into account their applicable GATE/NET scores.
3. The final selection is based on a written test/ interview or interview alone depending on the number of candidates.
4. List of short-listed candidates for written test or interview will be displayed in IIST website by **4th week of December 2013**
5. Written test of two hours duration as applicable and Interview will be conducted at IIST, Trivandrum during **2nd week of January 2014**.
6. The written test is aimed to evaluate the basic understanding and proficiency in the relevant area.
7. Selected candidates will be intimated within a week after the final interview. Results will also be displayed in our website.
8. Outstation candidates will be paid to and fro sleeper class train fare by shortest route, or actual fare (whichever is lower) for attending the interview.

HOW TO APPLY:

1. Application form can be downloaded from IIST website www.iist.ac.in
2. Duly filled application form along with attested copies of documents mentioned in the application form should be sent to **The Administrative Officer, IIST, Valiamala Post, Thiruvananthapuram - 695547** with the superscription **“Application for IIST Ph.D. Programme-January 2014”**.
3. Application form should be accompanied by a fee of Rs. 250/- (Rs. 125/- for ST / SC candidates) in the form of Demand Draft drawn in favour of The Registrar, IIST payable at Thiruvananthapuram.
4. **Last date for receipt of application form: 16th December 2013.**