



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

### **IIST Ph.D. Programme – July 2026 Admissions**

Indian Institute of Space Science and Technology (IIST) envisions basic and applied research for meeting the national R&D requirements of Science and Technology in general and the Indian Space Programme in particular. The institute provides a vibrant research atmosphere and offers doctoral and post-doctoral programmes.

Applications are invited from highly motivated applicants for admission to the Ph.D. Programme starting in July 2026, in the departments given below: -

- (i) Aerospace Engineering
- (ii) Avionics
- (iii) Chemistry
- (iv) Earth and Space Sciences
- (v) Humanities and Social Sciences
- (vi) Mathematics
- (vii) Physics

#### **Eligibility**

- 1. Nationality:** The applicant must be an Indian citizen.
- 2. Age Limit:** Applicant should be **below 35 years\* as on 25<sup>th</sup> May 2026.**

\*Age relaxation is applicable as per Government Rules.

#### **Educational Qualifications**

The minimum educational qualification for admission to a Ph.D. programme falls into one of the following four broad categories, based on the highest qualifying examination and category of Ph.D., namely full-time or part-time.

- (a)** Applicants with a Master's Degree in Engineering/Technology as their highest qualifying degree
- (b)** Applicants with a Bachelor's Degree in Engineering / Technology as their highest qualifying degree
- (c)** Applicants with a Master's/BS-MS Degree in Science/ Humanities/ Management/ Social Sciences as their highest qualifying degree
- (d)** Applicants with a Bachelor's Degree with a four-year duration in Science/Humanities / Management / Social Sciences as their highest qualifying degree.

**(a) Applicants with a Master's Degree in Engineering/Technology as their highest qualifying degree**

- M.E./M.Tech. with 60% marks or its equivalent grade in a point scale, if the grading system is followed. (55% marks or equivalent CGPA for OBC/EWS/SC/ST/PwD) in the qualifying master's degree.

**or**

Master of Science in Engineering or equivalent from leading foreign Universities with a minimum CGPA of 8.00/10 or 3.60 /4 or equivalent.

- Applicants must qualify a National Eligibility Test, such as GATE/CSIR/UGC-NET/NBHM/JEST or Screening Test conducted by IIST.

**(b) Applicants with a Bachelor's Degree in Engineering/Technology as their highest qualifying degree**

B.E./B.Tech. with 75% marks or its equivalent grade in a point scale, if the grading system is followed. (70% marks or equivalent CGPA for OBC/EWS/SC/ST/PwD) in the Qualifying Bachelor's degree. **They should have a valid GATE score.**

**Candidates in the following categories are exempted from the requirement of GATE score: -**

- i) B.E./B.Tech. from Indian Institute of Space Science and Technology (IIST) / Indian Institute of Technology (IIT) with 7.50 CGPA (CGPA of 7.00 for OBC/EWS/SC/ST/PwD) on a scale of 10 or equivalent in the Qualifying Bachelor's degree. They need to qualify the screening test conducted by IIST.

**or**

- ii) Dual degree (Bachelor's in Engineering and Master's in Science from Indian Institute of Space Science and Technology / Indian Institute of Technology (IIT)) with a minimum score in the Bachelor's degree as mentioned above. They need to qualify the screening test conducted by IIST.

**or**

- iii) Applicants who have qualified CSIR/UGC-NET/NBHM/JEST in the relevant disciplines, the score/certificate should be valid at the time of application. Applicants with valid JEST rank are required.

**(c) Applicants with a Master's / BS-MS Degree in Science / Humanities/ Management/ Social Sciences as their highest qualifying degree**

- Master's in the relevant area with a minimum of 60% marks or its equivalent grade in a point scale, if the grading system is followed. (55% marks or equivalent CGPA for OBC/EWS/SC/ST/PwD) in the Qualifying Master's degree. They must have qualified a National Eligibility Test, such as CSIR/UGC-NET/NBHM/JEST/GATE, in the relevant discipline.
- The score/certificate should be valid at the time of application
- Applicants with JEST should have a valid JEST rank.

**(d) Applicants with a Bachelor's Degree with a four-year duration in Science/Humanities/Management/Social Sciences as their highest qualifying degree**

- Bachelor's Degree (4 years' duration) with 75% marks or its equivalent grade in a point scale, if the grading system is followed (70% marks or equivalent CGPA for OBC/EWS/SC/ST/PwD).
- They must have cleared a National Eligibility Test, such as CSIR/UGC-NET/NBHM/JEST/GATE score in the relevant discipline.
- The score/certificate should be valid at the time of application
- Applicants with JEST should have a valid JEST rank.

**Note: Candidates with a Bachelor's degree as their highest qualification need to undergo additional coursework, as prescribed by the institute.**

Applicants awaiting results in the final year/semester are also eligible to apply for a Ph.D. if they meet the prescribed eligibility criteria. In such cases, IIST will offer provisional admission to the selected candidates. For confirmation of admission, applicants must produce the relevant documents within the specified time; failing to do so, IIST will cancel the provisional admission.

<b>IMPORTANT DATES</b>		
<b>Sl. No.</b>	<b>Event</b>	<b>Date*</b>
1.	Opening of IIST website for online submission of applications	April 28, 2026 - 1700 hrs (Tuesday)
2.	Closing of IIST website for online submission of applications	May 25, 2026 - 2359 hrs (Monday)
3.	Display of shortlisted candidates for Screening Test & Direct Interview	June 02, 2026 - 1700 hrs (Tuesday)
4.	Date of screening test (Venue : IIST Campus, Valiamala) Note: Orientation and lab visit will be arranged in the afternoon	June 29, 2026 ( Monday) 1000hrs-1100hrs
5.	Interview Dates (Venue: IIST Campus, Valiamala)	June 30-July 03, 2026
6.	Display of provisionally selected candidates	July 07, 2026 – 1700 hrs (Tuesday)
7.	Payment of Seat Acceptance fee & Rounds	July 08, Wednesday 1700hrs – July 10, Friday 1100hrs
8.	Reporting date at the Institution	July 27, 2026 (Monday)
9.	Last date of Admission	August 14, 2026 (Friday)

**\*Tentatively**

## **Selection Procedure**

The selection procedures for various Ph.D. categories are outlined below.

### **Full-time Ph.D. Programme (IIST Fellowship, External Fellowship, ASRG project funded, and External Project funded)**

Ph.D. scholars for the full-time Ph.D. programme will be selected and admitted through the following selection procedure twice in a year for semester sessions beginning (i) January and (ii) July. The call for the PhD programme will be through an open advertisement in national newspapers and on the institute's website. The total number and area-wise distribution of full-time research scholars to be admitted for each of the two sessions in a year will be determined by the institute. The selection process is through one of the following

- (a) Direct Interview
- (b) Screening Test of one-hour duration (Objective type) + Interview.

#### **(a) Criteria for Direct Interview**

Applicants who meet the minimum eligibility criteria and hold a valid CSIR/UGC-NET/NBHM/JEST/GATE score will be shortlisted and invited for an interview.

#### **(b) Screening test + Interview**

Applicants satisfying the minimum eligibility criteria but not having a valid CSIR/UGC-NET/NBHM/JEST/GATE score can be admitted for Ph.D. through the screening test of one hour duration, followed by an interview, with details as provided below:

- i) Based on the performance of candidates in the screening test, the departments will set the minimum qualifying marks for the UR category. There will be a 5% relaxation in qualifying marks for SC/ST/PwD/OBC/EWS candidates. The candidates who qualify for the screening test will only be called to appear for the interview.
- ii) The final selection will be based on performance during the interview.
- iii) Candidates in the UR category must secure 60% or more, while candidates in the SC/ST/PwD/OBC/EWS categories must secure 55% or more in the interview to be considered for selection.

## **RESEARCH FELLOWSHIP:**

- 1) All scholars selected to the PhD programme under IIST Fellowship category shall receive a Junior Research Fellowship (JRF) of ₹ 37,000/- per month from IIST. (Research Scholars selected with CSIR/UGC - NET-JRF / NBHM and State Government Science and Technology Scheme etc., shall draw fellowship from the concerned organizations). For all research scholars with external fellowship, the concerned rules and regulations of the funding agency apply.
- 2) The fellowship will be enhanced to a Senior Research Fellowship (SRF) of ₹ 42,000 per month based on a performance review after two years of the programme. SRF will be given for a maximum of another three years.

- 3) The scholars will be required to assist the Departments in tutorials, practical training in labs, or similar academic activities, normally limited to 6 hours per week.
- 4) The scholars will be required to pay applicable fees, as well as charges for services provided by the Institute, such as boarding/lodging/medical facilities, in accordance with IIST rules.
- 5) For those who receive fellowship from agencies such as DST, CSIR, NBHM, UGC, and candidates who have been provided research fellowship by the State Government Science and Technology Scheme through a competitive written test, etc., the Institute will not bear the fellowship of the student if the same is stopped due to any reasons by the concerned agency.
- 6) Hostel accommodation will be provided to Ph.D. students, subject to availability. Preference will be given to candidates whose fellowships are borne by the Institute. HRA will be provided to those who stay outside the campus.

### **FEE STRUCTURE:**

**(To be paid at the beginning of every semester)**

<b>Description of Fees</b>	<b>Amount (₹)</b>
Tuition Fees(*)/ Semester	₹2500(*)
Other Fees/Semester	<b>₹4950</b>
Total Fee(A)	₹7450
Hostel Fee/ Semester	₹10250
Admission Fee (Non-Refundable) One-time	₹1500
Caution Deposit (Refundable)(One-time)	₹5000
<b>Total Fee(B)</b>	<b>₹16750(**)</b>
Grand Total 1 <sup>st</sup> Semester (A+B)	<b>₹24200</b>
2 <sup>nd</sup> Semester onwards (A+B-one time)	₹17700

\* SC/ST/PwD students are exempted from payment of Tuition Fees.

\*\* Will be collected at the time of physically reporting to the Institute for admission

\*\*\* Amount subject to change according to institute policy

The following are to be noted regarding the above fees.

- **A candidate who confirms the seat must remit the Seat Acceptance fee of Rs. 4,950.**
- The mess bill corresponds to Rs. 3,000 per month. An advance bill of 6 months is collected by the Canteen office after the student physically reports to the Institute.
- The fees are liable to change at the discretion of the Institute.
- Ph.D. students must pay fees till the submission of the thesis. If the student is submitting the thesis, without delay, within one month of the semester (i.e., before July 31 or January 31), only the tuition fee will be waived.

Additional fees:

- Supplementary Examination fees - Rs.100/- per paper
- PhD Re-registration fee- Rs. 1500/-
- Thesis Submission – Rs. 1000/-

- Convocation fees – Rs. 2000/-
- Alumni Registration fees – Rs. 500/-

The Convocation fees and the alumni registration fees will be collected along with the final semester fee.

#### GENERAL INFORMATION:

- 1) Applications will be received through online only (at <https://admission.iist.ac.in>).
- 2) **Candidates are permitted to apply up to a maximum of four broad research areas only, including research areas across different departments, if eligible**
- 3) Candidates are advised to visit the department profile on [www.iist.ac.in](http://www.iist.ac.in) for more details on the areas of research.
- 4) Candidates with a valid fellowship from Government funding agencies shall upload a scanned copy of the fellowship award letter and indicate the period of fellowship validity.
- 5) A shortlist of applicants for the screening test or interview will be displayed on the IIST admission portal.
- 6) **Screening test will be conducted at the IIST campus on 29<sup>th</sup> June 2026 (Monday), and the interview will be held from 30<sup>th</sup> June 2026 to 3<sup>rd</sup> July 2026 (tentatively) for the candidates who qualify the screening test.** [Please click this link to access the Syllabus for the Screening Test.](#)
- 7) Out-station applicants will be reimbursed for the to-and-fro sleeper class train fare/bus fare by the shortest route from the place mentioned in the online application to Thiruvananthapuram, or the actual fare paid (whichever is less), for attending the screening test and/or the interview, upon production of the original tickets.
- 8) Hostel accommodation and canteen facility may be availed by the applicants on a payment basis from **28<sup>th</sup> June 2026 (9.00 am) to 4<sup>th</sup> July 2026 (6.00 pm)**
- 9) Applicants who are employed in Government/Semi-Government/ PSUs/ Autonomous Bodies should produce a “No Objection Certificate (NOC)” from the current employer at the time of the Interview.
- 10) The list of provisionally selected candidates, after the interview, will be displayed on the IIST admission portal.
- 11) Admissions are governed by the Ph.D. Rules and Regulations of IIST. ([IIST PhD Guideline Book](#).)
- 12) **The date of the screening test and interview will not be changed under any circumstances. The interview would span several days. In case the date and time of the interview clash with the applicant’s End semester examination in his/her qualifying examination, the Institute will consider shifting the date and time of the interview within the overall window available.**
- 13) **A fresh allotment list will be prepared and updated on the IIST website every Monday, Wednesday, and Friday at 1700 hours, if vacancies exist. The candidate in the allotment list must remit the stipulated fees on or before the subsequent**

Wednesday, Friday, and Monday at 1100 hours to confirm their candidature for the program and branch allotted. Any changes to the aforementioned schedule will be notified on the website.

- 14) If the candidate's highest preference is allotted and if the candidate fails to remit the fees in the stipulated time, the candidature will be cancelled.

#### HOW TO APPLY:

- 1) Only applications submitted online through the IIST website: <https://admission.iist.ac.in> will be considered.
- 2) No changes can be made to the registration profile once it has been submitted. Hence, applicants should take utmost care while filling out their profiles.
- 3) The application fee should be paid online upon completion of the registration process.
- 4) Application fee for General/EWS/OBC candidates is ₹700/- (for SC/ST/PwD and Women applicants - ₹350/-). **The application fee is non-refundable.**
- 5) SC/ST/OBC (Non-Creamy Layer)/EWS/Persons with Disabilities (PwD) candidates must upload the relevant certificates in the format available on the admission portal before the last date for online application submission. **GEN-EWS/OBC-NCL candidates are required to produce an updated certificate issued on or after April 1, 2026, during the reporting process at the Institute.**
- 6) **Applications of GEN-EWS/OBC-NCL/SC/ST/PwD candidates will be processed only after the receipt of the relevant proof online. In other words, non-submission of proof online will lead to rejection of application.**

### Research Areas for July 2026 PhD Admission

**Table 1: Funded by IIST**

#### Department of Aerospace Engineering

SI No	Department code	Broad Area	Eligibility
1	PAE01	Bio-fluid Mechanics	M.E./ M.Tech / M.S or equivalent degree in Aerodynamics / Aerospace / Bioengineering / Biomedical / Chemical / Computational Science / Energy / Fluid Mechanics / Mechanical / Mechanics / Propulsion / Scientific Computing / Thermal or equivalent OR Masters (MS) in Biomedical / Biomechanics/ Sciences / Computational Natural Sciences or equivalent OR B.E./B.Tech in Aerospace / Bioengineering / Biomedical / Chemical / Mechanical / or equivalent
2	PAE02	Fluid Mechanics, Aerodynamics, Compressible flow, Heat Transfer, Fluid Structure Interaction (Experimental/Numerical analysis)	ME / M.Tech / MS in Aerospace / Mechanical / Chemical / Applied Mechanics / Aerodynamics and Flight Mechanics / Thermal and Propulsion / Computational Science / Scientific Computing / Ocean Engineering or equivalent OR BE / B.Tech in Aerospace / Mechanical / Chemical / Engineering Mechanics or equivalent (AMIE/AeSI B.Tech equivalent)

3	PAE03	Experimental & CFD Combustion, combustion instability	M.Tech / ME / MS in Mechanical / Thermal/ Propulsion / Energy / Aerodynamics / Chemical / Applied Mechanics / Aerospace / Aeronautical or equivalent OR B.Tech / BE in Mechanical / Aerospace / Aeronautical/ Chemical or equivalent
4	PAE04	Space/Atmospheric Flight Mechanics, Machine Learning for Design Optimization	M.Tech / ME / MS in Mechanical / Aerodynamics / Applied Mechanics / Aerospace / Aeronautical / Control Engineering / Avionics or equivalent OR M.Sc Mathematics or equivalent OR B.Tech / BE in Mechanical / Aerospace / Aeronautical / Chemical / Avionics or equivalent (AMIE/ AeSI B.Tech equivalent)
5	PAE05	Manufacturing (Subtractive/Additive Processes/ Welding/ Forming/ Digital Manufacturing)	Masters (M. Tech / ME / MS) in Manufacturing Technology / Production Engineering / Mechanical Engineering / Metallurgical Engineering / Materials Science / Industrial Metallurgy / Applied Mechanics / Mechanical Design / Machine Design / Mechatronics or equivalent with B.Tech./B.E. in relevant disciplines of Engineering OR BE / B.Tech in Mechanical Engineering / Aerospace Engineering / Production Engineering / Manufacturing engineering / Metallurgical engineering or equivalent
6	PAE06	Mechanics of Composites/Structural Dynamics/ Vibrations/ Nonlinear Dynamics/Flexible Body Dynamics/Rotor Dynamics	Masters in Aerospace / Mechanical / Civil / Applied Mechanics / Naval architecture or equivalent OR BE / B.Tech / equivalent in Aerospace / Mechanical / Civil / Applied Mechanics / Naval architecture or equivalent
<b>Department of Avionics</b>			
1	PAV01	Data Driven Modeling and Control / Quantum Cryptography	M.Tech / MS in Control Systems / Signal Processing / Applied Electronics / Biomedical Engineering / Instrumentation / Computer Science and Engineering / Information Technology / Data Science / M.Sc. Mathematics / M.Sc. Data Science / M.Sc. Physics / M.Sc. Electronics / M.Sc. Computer Science and equivalent OR B.E. / B.Tech/BS (four year) in Electronics and Communication Engineering / Electrical and Electronics Engineering / Electronics and Instrumentation / Biomedical Engineering / Avionics / Engineering Physics / Mechanical Engineering / Computer Science and Engineering / Information Technology / Data Science or equivalent
2	PAV02	Micro electronics/ nanoelectronics/ sensors/MEMS	M.Tech / MS in Electronics / Biomedical Engineering / Instrumentation / Biotechnology or equivalent OR B.E./ B.Tech in Electronics and Communication Engineering / Electronics and Instrumentation / Biomedical Engineering / Avionics / Engineering Physics or equivalent area
3	PAV03	Power Electronics and Electric Motor Drives	ME / M.Tech in Electrical Engineering / Power Electronics / Power Electronics and Drives / Power Systems / Electrical and Electronics or equivalent OR B.E./B.Tech in Electrical Engineering / Electrical and Electronics Engineering or equivalent
4	PAV04	Power Electronics in terrestrial and aerospace microgrid	ME/ M.Tech in Electrical Engineering / Power Electronics / Power Systems, Control Systems, Electrical and Electronics or equivalent OR

			B.E./B.Tech in Electrical Engineering / Electrical and Electronics Engineering or equivalent
5	PAV05	RF Circuits and Systems, Microwave Engineering/ Wireless Systems	M.E./ M.Tech / MS in RF Microwave Engineering / Radio Physics and Electronics / Communication / Electronics and Communication / Instrumentation / Applied Electronics / Space Technology / M.Sc. Electronics / or equivalent OR B.E. / B.Tech in Electronics and Communication Engineering / Electronics and Instrumentation / Electrical and Electronics / Avionics / Engineering Physics or equivalent
6	PAV06	Wireless communication and Signal Processing	M.E./ M.Tech in Signal processing / Electronics and Communication / RF and communication / Communication Systems / Applied Electronics or equivalent OR B.E. / B.Tech in Electronics and Communication Engineering / Electrical and Electronics Engineering / Electronics and Instrumentation / Avionics or equivalent
7	PAV07	Guidance Navigation and Control, Satellite Mission Design, Deep Space Navigation	M.E. / M.Tech / M.S. in Electronics and Communication / Guidance Navigation and Control / Avionics / Aerospace Engineering / Mechanical Engineering / Control Systems or equivalent OR M.Sc. in Mathematics / Physics or equivalent OR B.E. / B.Tech / B.S. (4 year) in Electronics and Communication Engineering / Electrical and Electronics Engineering / Electronics and Instrumentation / Avionics / Engineering Physics or equivalent
8	PAV08	Microsensors MEMS and Semiconductor Technology	M.E. / M.Tech. / M.S. in Microelectronics / Microsystems / VLSI / Electronics / Solid State Technology / Applied Electronics or equivalent OR M.S./ M.Sc. in Physics / Electronics or equivalent OR B.Tech. / B.E. in Electronics and Communication Engineering / Electrical and Electronics Engineering / Applied Electronics / Engineering Physics or equivalent
9	PAV09	Agent-Based Modelling and Complex Systems	M.E. / M.Tech. / M.S. in Geoinformatics / Remote Sensing and GIS / Computer Science / Artificial Intelligence / Data Science / Computational Science / Systems Engineering or equivalent OR M.Sc. / M.S. in Physics / Applied Mathematics / Statistics / Data Science / AI / Machine Learning / Computational Science OR B.Tech/ B.E. in Computer Science/ Geoinformatics/ Engineering Physics or equivalent. OR B.S. (4 years) in Mathematics, Physics, or Statistics, Data Science / AI
<b>Department of Chemistry</b>			
1	PCH01	Energy Storage materials/Polymer nanocomposites for space applications	M.Sc. / BS-MS in Chemistry (all branches) / Physics or equivalent / M.Sc. Materials Science and allied areas / M.Tech. in Materials Science / Nanoscience and Technology / Polymer Technology and related areas or equivalent. OR B.Tech. / B.S. (4years) in Materials Science / Nanoscience and Technology / Nanotechnology / Polymer Technology / Chemical Engineering or equivalent.

			Note: Applicants with a valid CSIR/ UGC - NET/NBHM/ JEST/GATE score will only be considered
2	PCH02	Smart and functional materials	M.Sc. / BS-MS in Chemistry (all branches) or equivalent / M.Sc. / M.Tech. in Biotechnology and allied areas / M.Sc. Materials Science and allied areas / M.Tech. in Materials Science / Polymer Technology / Chemical Engineering and related areas or equivalent OR B.Tech / B.S. (4years) in Materials Science / Biochemistry / Biotechnology / Polymer Technology / Chemical Engineering or equivalent
3	PCH03	Bioastronautics	M.Sc. / BS-MS in Biosciences or equivalent / M.Sc. Biochemistry / M.Tech. in Biotechnology / Biomaterials Science and allied areas / M.Tech. in Materials Science / Nanoscience and Technology / Chemical Engineering and related areas or equivalent OR B.Tech. / B.S. (4years) in Biosciences/ Biochemistry / Biotechnology / Agriculture / Polymer Technology or equivalent
<b>Department of Earth and Space Sciences</b>			
1	PES01	Astrophysics	Master of Science in Physics / Astronomy and Astrophysics / Space Physics / Integrated MS in Physics / BS-MS in Physical Sciences or equivalent OR 4 year Bachelor Degree in Engineering Physics / Physics or equivalent. Applicants with a valid CSIR/UGC- NET/NBHM/ JEST/GATE score will only be considered
2	PES02	Atmospheric Science	M.Sc. / M.Tech in Atmospheric Science / Meteorology / M.Tech in Earth System Science / M.Sc. Physics / Integrated MS in Physics / BS-MS in Physical Sciences or equivalent
3	PES03	Astrophysics/Solar Physics	M.Sc. Physics / Astrophysics / BS-MS in Physics / M.Tech. in Engineering Physics or equivalent OR B.Tech in Engineering Physics / Computer Science or equivalent  Note: Applicants with a valid CSIR/ UGC – NET /NBHM/ JEST/GATE score will only be considered
4	PES04	Hyperspectral imaging & data analytics	M.Tech or equivalent in or in related domains of Computer Science Engineering / Geoinformatics / Electronics and Communication Engineering / Digital Signal Processing OR M.Sc. Mathematics OR 4 year Bachelor Degree in Computer Science Engineering / Electronics and Communication Engineering or equivalent
<b>Department of Humanities and Social Sciences</b>			
1	PHS01	Science, Technology and Society	MA in Sociology / Social Work / Political Science or equivalent OR 4 year Bachelor Degree in Sociology / Social Work / Political Science or equivalent
<b>Department of Mathematics</b>			
1	PMA01	Partial Differential Equations (Theory and Numerics)	M.Sc. in Mathematics / Applied Mathematics or BS-MS in Mathematics or equivalent
2	PMA02	Machine Learning Algorithms	M.Sc. in Mathematics/Statistics/Computer Science OR B.Tech in Any Discipline.

3	PMA03	Differential Equation, Numerical Methods and Application to Orbital Mechanics	M.Sc. in Mathematics / Applied Mathematics or BS-MS in Mathematics or equivalent
4	PMA04	Differential Equations, and Applications	M.Sc. in Mathematics / Applied Mathematics or BS-MS in Mathematics or equivalent

### Department of Physics

1	PPH01	Theoretical Physics, Nonlinear sciences	M.Sc or MS in Physics / Applied Physics or equivalent OR 4 Year BS in Physics / B. Tech. in Engineering Physics / Applied Physics or equivalent. Applicants with a valid CSIR/ UGC - NET/NBHM/ JEST/GATE score will only be considered
2	PPH02	Non equilibrium Statistical Mechanics	M.Sc. Physics
3	PPH03	Optics and Quantum Information	M.Sc. in Physics / M. Tech. in Optical Engineering / Quantum Technology / BS-MS in Physics or equivalent. OR 4 Year BS in Physics / B. Tech. in Engineering Physics / Applied Physics or equivalent.  Note: Applicants with a valid CSIR/ UGC - NET/NBHM/ JEST/GATE score will only be considered

### Table 2: External Fellowship Holders

Candidates **having a valid fellowship from** Government agencies such as DST, CSIR, NBHM, UGC or State Government Science and Technology Scheme etc. only are eligible to apply for the positions given in this list. They should have a valid score card/certificate in any of the National level eligibility tests (listed in the minimum qualifications. Such candidates will be selected based on an Interview.

Sl. No.	Department code	Broad Area	Eligibility
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### Department of Aerospace Engineering

1	EAE01	Radiative heat transfer through participating medium	M.Sc Physics, Applied Science (with Physics / Mathematics)
2	EPAE02	Computational Fluid Dynamics	OR B.Sc Applied Science (4 year programme only)

### Department of Avionics

1	EAV01	Data Driven Modeling and Control / Quantum Cryptography	M.Tech. / MS in / Control Systems / Signal Processing / Applied Electronics / Biomedical Engineering / Instrumentation / Computer Science and Engineering / Information Technology / Data Science / M.Sc. Mathematics/ M.Sc. Data Science / M.Sc. Physics / M.Sc. Electronics / M.Sc. Computer Science and equivalent OR B.E. / B.Tech/BS (four year) in Electronics and Communication Engineering / Electrical and Electronics Engineering / Electronics and Instrumentation / Biomedical Engineering / Avionics / Engineering Physics / Mechanical Engineering / Computer Science and Engineering / Information Technology / Data Science or equivalent
2	EAV02	Space Biology	MS/ M.Sc. Biology / Microbiology / Biotech or equivalent M.E/M.Tech Biotechnology OR BS (4 year) Biology/ Microbiology or equivalent OR B.E/B.Tech Biotechnology/ Microbiology or equivalent
3	EAV03	Microsensors MEMS and Semiconductor Technology	M.E. / M.Tech. / M.S. in Microelectronics / Microsystems / VLSI/Electronics / Solid State Technology / Applied Electronics and equivalent.

			OR M.S./ M.Sc. in Physics./ Electronics or equivalent OR B.Tech./ B.E. in Electronics and Communication Engineering / Electrical and Electronics Engineering / Applied Electronics / Engineering Physics or equivalent
4	EAV04	Micro electronics/ nanoelectronics/ sensors /MEMS/Biotechnology /Biochemistry	M.Tech. / M.S. / M.Sc. in Applied Electronics / Biomedical Engineering / Instrumentation / Biotechnology / Biochemistry/Chemistry or equivalent OR B.E. / B.Tech. in Electrical Engineering / Electrical and Electronics Engineering or equivalent
<b>Department of Chemistry</b>			
1	ECH01	Bioastronautics	M.Sc. / BS-MS in Biosciences (all branches) or equivalent / M.Sc. Biochemistry, M.Tech. in Biotechnology / BioMaterials Science and allied areas / M.Tech. in Materials Science / Nanoscience and Technology / Chemical Engineering and related areas or equivalent OR B.Tech. in Biosciences / Biochemistry / Biotechnology / Agriculture / Polymer Technology or equivalent
2	ECH02	Nano materials / functional materials / polymeric materials /high temperature materials for energy / environmental / sensing applications	M.Sc. / BS-MS in Chemistry (all branches) or equivalent OR B.Tech. / BS (4 years) in Materials Science / Nanoscience and Technology / Nanotechnology / Polymer Technology or equivalent
<b>Department of Earth and Space Sciences</b>			
1	EES02	Hyperspectral remote sensing & applications	M.Tech or equivalent in or in related domains of Computer Science Engineering / Geoinformatics / Electronics and Communication Engineering / Digital Signal Processing OR MSc / BS-MS in Mathematics/ Agriculture/ Forestry / Life Sciences / Environmental Sciences / Geosciences
2	EES01	Astrophysics	Master of Science in Physics / Astronomy and Astrophysics / Space Physics / Integrated MS (Physics) / BS-MS in Physical Sciences or equivalent OR 4 year Bachelor Degree in Engineering Physics / Physics or equivalent
<b>Department of Mathematics</b>			
1	EMA01	Partial Differential Equations	M.Sc. in Mathematics / Applied Mathematics or BS-MS in Mathematics or equivalent
2	EMA02	Stochastic Processes; Queueing Theory	M.Sc. / Integrated M.Sc. in Mathematics / Applied Mathematics / Statistics or BS-MS in Mathematics or equivalent.
3	EMA03	Partial Differential Equations (Theory and Numerics)	M.Sc. in Mathematics / Applied Mathematics or BS-MS in Mathematics or equivalent
4	EMA04	Computational Methods and Analysis of Partial Differential Equations	
5	EAM05	Functional Analysis, Partial Differential Equations and Applications to Control and Inverse Problems	
6	EMA06	Commutative Algebra & Affine Algebraic Geometry	
7	EMA07	Differential Equations, and Applications	
<b>Department of Physics</b>			

1	EPH01	Theoretical Physics, Nonlinear sciences	MSc or MS in Physics / Applied Physics or equivalent OR 4 Year BS in Physics / B. Tech. in Engineering Physics / Applied Physics or equivalent
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**Table 3: External Projects**

Sl. No	Department code	Broad Area & Project Title	Eligibility
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**Department of Aerospace Engineering**

1	EPAE01	Materials and Manufacturing	M.Tech. / M.E/ M.S in Manufacturing Technology / Production Engineering / Mechanical Engineering / Metallurgical Engineering / Applied Mechanics / Mechanical Design / Machine Design/ Mechatronics or equivalent OR B.E. / B.Tech. in Mechanical Engineering / Aerospace Engineering / Production Engineering / Manufacturing engineering / Metallurgical engineering or equivalent
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**Department of Earth and Space Sciences**

1	EPES01	Microwave Remote sensing and modelling	Masters in Geoinformatics / Remote Sensing / GIS / Civil Engineering / Computer Science / Computer Applications / Geology / Machine Learning / Information Technology / Natural Resource Management / Environmental Science / Ecology and Ecosystem or equivalent OR B.E./ B.Tech. in Geoinformatics / Remote Sensing / GIS / Computer Science / Machine Learning / Information Technology / Image Processing / Physical Sciences / Engineering Physics or equivalent
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**Table 4 : ASRG Projects**

**Department of Chemistry**

1	ACH01	Development of polymer derived self-healing matrices for TPS applications	M.Sc./ BS-MS in Chemistry (all branches) or equivalent / M.Sc. Materials Science and allied areas / M.Tech in Materials Science / Nanoscience and Technology / Polymer Technology and related areas or equivalent
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**Department of Earth and Space Sciences**

2	AES01	Astronomy and Astrophysics	Master of Science in Physics / Astronomy and Astrophysics / Space Physics / Integrated MS in Physics / BS-MS in Physical Sciences or equivalent OR B. Tech. in Physical Sciences / Engineering physics. Applicants with a valid CSIR/ UGC - NET/NBHM/ JEST/GATE score will only be considered
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