



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 – January 2025 Admissions

Indian Institute of Space Science and Technology 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 January 2025, in the departments given below: -

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

Eligibility

- 1. Nationality: Applicant should be an Indian citizen.
- **2. Age Limit:** Applicant should be **below 35 years* as on 31st October, 2024**. *Age relaxation is applicable as per Government Rules.

Minimum Qualifications:

- 1. Applicants with Master's Degree in Engineering/Technology as their highest qualifying degree
- ME/M.Tech with 60% marks or its equivalent grade in a point scale, if 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 minimum CGPA 8.00/10 or 3.60 /4 or equivalent.

- 2. Applicants with Bachelor's Degree in Engineering/Technology as their highest qualifying degree
- BE/B.Tech with 75% marks or its equivalent grade in a point scale, if grading system is followed. (70% marks or equivalent CGPA for OBC/EWS/SC/ST/PwD) in the Qualifying Bachelor' degree. **They should have a valid GATE score.**

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

i) BE/B.Tech from Indian Institute of Technology (IIT) /Indian Institute of Space Science and Technology (IIST) with 8.00 CGPA (CGPA of 7.50 for OBC/EWS/SC/ST/PwD) on a scale of 10 or equivalent in the Qualifying Bachelor's degree

OI

ii) Dual degree (Bachelors in Engineering and Masters in Science from IITs and Indian Institute of Space Science and Technology) with minimum score in Bachelor's degree as mentioned above

or

- iii) Applicants who have qualified **UGC-CSIR-NET-JRF/LS or NBHM/JEST** in the relevant disciplines. The score/certificate should be valid at the time of application. Applicants with JEST should have valid JEST rank.

 (Applicants coming under i) and ii) categories need to qualify the screening test conducted by IIST.
- 3. Applicants with Master's 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 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 UGC-CSIR-NET-JRF/LS or NBHM/JEST/GATE in the relevant discipline.
- The score/certificate should be valid at the time of application
- Applicants with JEST should have valid JEST rank.
- 4. Applicants with Bachelor's Degree with 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 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 UGC-CSIR-NET-JRF/LS or NBHM/JEST/GATE score in the relevant discipline.
- The score/certificate should be valid at the time of application
- Applicants with JEST should have valid JEST rank.

Note:

 Ph.D scholars with Bachelor's degree as their highest qualification need to undergo additional course work, as prescribed by the institute

	IMPORTANT D	ATES
SI. No.	Event	Date
1.	Opening of IIST website for online submission of applications	04 October, 2024 - 1600 hrs (Friday)
2.	Closing of IIST website for online submission of applications	31 October, 2024 - 2359 hrs (Thursday)
3.	Display of shortlisted candidates for Online Screening Test & Direct Interview	13 November, 2024 (Wednesday) - 1600hrs
4.	Date of online screening test	23 November, 2024 (Saturday)*
5.	Publishing of screening test results	03 December, 2024 (Tuesday)-1700hrs
6.	Interview Dates (Venue: IIST Campus, Valiamala)	17-20 December, 2024
7.	Display of provisionally selected candidates	December 27, 2024 (Friday) - 1700hrs
8.	Reporting date at the Institution	06 January 2025 (Monday)
9.	Classes begin for Ph.D Programme	07 January, 2025 (Tuesday)
10.	Last date of Admission	20 January, 2025 (Monday)

*Tentatively

Selection Procedure:

- The selection process is either through (1) Direct Interview (OR) (1) Online Screening Test + Interview based on the following conditions.
- Criteria for Direct Interview: Candidates with a valid UGC-CSIR-NET-JRF /LS/ NBHM / JEST Rank/GATE score (2022, 2023, 2024)

- The selection process for all other eligible candidates will be through Online Screening
 Test + Interview with the details provided below: -
 - (i) The candidates who have participated in the screening test will be shortlisted if they secure a minimum of 50 % combined for Section A (Section A comprises questions based on Aptitude and class 12 Mathematics) and Section B (the research area).
 - (ii) There will be a relaxation of 5 % for SC/ST/PD and OBC / EWS candidates, i.e., SC/ST/PD and OBC / EWS candidates require a combined mark of 45 % and above for Section A and Section B together.
 - (iii) There will be a 70 % weightage for the PhD screening test and 30 % weightage for the interview.
 - (iv) Candidates securing less than 10 marks out of 30 marks in the interview will not be selected irrespective of category and irrespective of the performance in the screening test.
 - (v) The combined mark for the PhD screening test and interview for a UR candidate should be 60 % and above to be selected and for the SC/ST/PD and OBC / EWS candidates, the combined mark should be 55 % and above.

RESEARCH FELLOWSHIP:

- 1) All scholars selected to the PhD programme (listed in Table 1) shall receive a fellowship of ₹ 37,000/- per month. (Research Scholars selected with UGC/CSIR/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 ₹ 42,000/- per month based on a performance review after two years of the programme.
- 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 have to pay applicable fees as well as charges for the services provided by the Institute like boarding/lodging/medical facilities etc., as per 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 State Government Science and Technology Scheme through 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) The Institute is residential and will provide accommodation to all the regular Ph.D students. However, in the event of shortage of rooms in the hostels, for room allotment, preference will be given to candidates whose fellowships are borne by the Institute.

FEE STRUCTURE:

(To be paid at the beginning of every semester)

Description of Fees	Amount (₹)
Tuition Fees(*)/ Semester	₹2500(*)
Other Fees/Semester	₹4950
Total Fee(A)	₹7450
Hostel Fee/ Semester	₹10250
Admission Fee (Non-Refundable) One-time	₹1500
Caution Deposit (Refundable)(One-time)	₹5000
Total Fee(B)	₹16750(**)
Mess Bill/(Nominal) in advance	₹18000 (#)
Grand Total 1st Semester (A+B)	₹42200
2 nd Semester onwards (A+B-one time)	₹35700

Note:

- A candidate who confirms the seat has to remit Seat Acceptance fee of ₹4950/with in the stipulated time.
- (*) SC/ST/PD students are exempted from payment of Tuition Fees.
- (**) Will be collected at the time of physical reporting at the Institution.
- (#)3000 p.m. X 6 months as advance will be collected after the student physically reports to the Institute by Canteen Office
- Additional fees: Supplementary Examination fees ₹100/- per paper and Thesis Submission ₹1000/- and Convocation fees ₹2000/- & Alumni Registration fees ₹500/-, which will be collected with the final semester fee.

GENERAL INFORMATION:

- 1) Applications will be received through on-line only (at https://admission.iist.ac.in).
- 2) Candidates are permitted to apply up to maximum four broad research areas only, including research areas across different departments, if eligible
- 3) Candidates are advised to visit the department profile in www.iist.ac.in for more details on the areas of research.
- 4) Candidates with 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 short-list of applicants for Online screening test or interview will be displayed in IIST admission portal.
- 6) Online screening test will be held on 23rd November 2024, Saturday (tentatively).
- 7) Shortlisted candidates will be called for an interview which will be conducted in IIST campus, Valiamala, Thiruvananthapuram.

- 8) Out-station applicants will be reimbursed to-and-fro sleeper class train fare/bus fare by the shortest route from the place mentioned in the online application to Thiruvananthapuram, or actual fare paid (whichever is less) for attending the interview. The applicants are advised to make their own arrangements for their stay at Thiruvananthapuram
- 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 Interview.
- 10) Provisionally selected candidates list, after the interview, will be displayed in the IIST admission portal.
- 11) Admissions are governed by Ph.D Rules and Regulations of IIST. (https://www.iist.ac.in/academics/rules-regulations).
- 12) The date of the Online screening test will not be changed under any circumstances. The date of interview would span over a period of several days. In case the date and time of the interview clashes with the applicant's End semester examination in his/her qualifying examination, the Institute will consider shifting the date and time of interview within the overall window available.
- 13) During interview, candidates will be tested in their main research area and not restricted to the syllabus of the online screening test.

HOW TO APPLY:

- Applications received online at the IIST website: https://admission.iist.ac.in_only will be considered.
- 2) No changes will can be done in the registration profile once submitted. Hence utmost care should be taken by the applicants while filling their profile.
- 3) The application fee should be paid through online after completing the process of registration.
- 4) Application fee for General/EWS/OBC candidates are ₹700/- (for SC/ST/PD and Women applicants ₹350/-). The application fee is non-refundable.
- 5) SC/ST/OBC (Non-Creamy Layer)/EWS/Persons with Disabilities (PD) candidates shall upload the relevant certificates as per the format available in admission portal before the last date of online application. **GEN-EWS/OBC-NCL candidates need to produce updated certificate issued on or after 01**st **April, 2024 during the reporting at the Institute**.
- 6) Applications of GEN-EWS/OBC-NCL/SC/ST/PD 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 January 2025 PhD Admission

		Table 1 (Fu	nded by IIST)		
	Department of Aerospace Engineering				
SI No	Department code	Broad Area	Eligibility		
1	PAE01	Aerodynamics, Fluid Mechanics, Combustion and Propulsion (Experimental and computational analysis) No.of positions – 6 nos	ME/M. Tech /MS in Aerospace/ Mechanical /Chemical/ Applied Mechanics or equivalent OR BE/B. Tech in Aerospace / Mechanical / Chemical / Engineering Mechanics or equivalent (AMIE/AesI B. Tech equivalent)		
	Syllabus for	screening test - PAE01 & EPAV0	2		
	Please click th	nis link for syllabus.			
2	PAE02	Nonlinear dynamics and vibrations	Master degree in Mechanical/Aerospace /Civil/Applied Mechanics Engineering or equivalent OR BE/ B.Tech in Aerospace / Mechanical / Chemical / Engineering Mechanics, or equivalent.		
	Syllabus for screening test – PAE02				
	Please click th	nis link for syllabus.			
3	PAE03	Industrial Engineering and Operations Research	M.E./M.Tech/M.S.(Engineering) in Industrial Engineering /Production Engineering/ Manufacturing Technology/ Manufacturing Management/Operations Management /Operations Research or MBA in Operations Management or equivalent with a B.E./B.Tech. degree in any specialization. OR B.E./B.Tech in Mechanical Engineering /Production		
			Engineering/ Industrial Engineering/Manufacturing		
	Syllabus for	screening test – PAE03	Engineering or equivalent		
	Please click this link for syllabus.				
4	PAE04	Precision Manufacturing	Masters (M.Tech / ME/ MS) in Manufacturing Technology / Production Engineering / Mechanical Engineering / Applied Mechanics / Machine Design or equivalent OR BE / B.Tech in Mechanical Engineering / Aerospace Engineering/ Production Engineering/ Manufacturing or equivalent		
	Syllabus for	screening test – PAE04	1		
	Please click th	nis link for syllabus.			

Department of Avionics				
1	PAV01	Al based Complex Fractional Order Control Systems Design	M.E/M.Tech/MS in Control System / Instrumentation and control / Process control or equivalent areas OR B.E./B.Tech in Electronics and Communication Engineering / Electrical and Electronics Engineering / Electronics and Instrumentation / Avionics/ Aerospace / Mechanical Engineering or equivalent areas	
2	PAV02	Control Systems, Control of Network Systems, Security of cyber-physical systems	M.Tech/M.E/MS in Signal Processing / Control Systems / Data Science/ AI & ML or equivalent areas M.Sc in Mathematics / Applied Mathematics and equivalent areas OR B.E./B.Tech in Electronics and Communication Engineering / Electronics and Electronics Engineering / Electronics and Instrumentation / Avionics or equivalent areas	
	Syllabus for s	screening test - PAV01 & PAV02		
	Please click th	nis link for syllabus.		
3	PAV03	Power Systems and Control	ME/M Tech in Power Systems / Control Systems or equivalent OR BE/B. Tech in Electrical and Electronics Engineering or equivalent	
	Syllabus for s	screening test – PAV03	equivalent	
	Please click th	nis link for syllabus.		
4	PAV04	Signal processing for 6G wireless communication system	M.Tech/ ME in Signal processing, communication and its equivalent OR B.E./B.Tech in Electronics and Communication Engineering / Avionics or equivalent	
	Syllabus for screening test –PAV04			
	Please click this link for syllabus.			
			M.E/M.Tech/MS in Power Electronics/ Power Systems/Control System or equivalent areas. OR	
5	PAV05	Power Electronics in Distributed Generation and Microgrid	B.E./B.Tech in Electrical Engineering/ Electronics and Communication Engineering / Electrical and Electronics Engineering / Electronics and Instrumentation / Avionics or equivalent areas.	
	Syllabus for s	screening test - PAV05 & EPAV0	1	
	Please click t	his link for syllabus.		
6	PAV06	Semiconductors MEMS and Microelectronics	ME/M. Tech/MS in Microelectronics/ Microsystems/ VLSI/Electronics/ Applied electronics/Solid State Technology or equivalent areas OR B. Tech/ B.E. in Electronics & Communication Engineering/ Electronics Engineering/ Applied Electronics & Instrumentation Engineering/ Electrical Engineering/Engineering Physics or equivalent	

	Syllabus for s	screening test - PAV06		
	Please click this link for syllabus.			
7	PAV07	Sensor Electronics, Instrumentation and Embedded Systems, Analog Signal Processing, Industrial Electronics, Biomedical Instrumentation	M. Tech/ M. E./M. S. or equivalent in Applied Electronics and Instrumentation/ Embedded Systems/Electronics and Communication /Instrumentation and Control/ Instrumentation & Signal Processing /VLSI/Biomedical Instrumentation or equivalent areas. OR B.E./B.Tech in Applied Electronics and Instrumentation/Electronics and Communication Engineering / Electrical and Electronics Engineering / Electronics and Instrumentation / Biomedical Engineering / Avionics or equivalent areas	
	Syllabus for s	screening test - PAV07		
	Please click th	nis link for syllabus.		
8	PAV08	Digital VLSI Design, VLSI Signal/ Image processing	ME/M. Tech/M. S in VLSI Design /Signal Processing/ Communication/ Microelectronics/ Digital Systems/ Embedded Systems or equivalent areas OR B.E./B.Tech in Electronics and Communication Engineering /Electrical and Electronics Engineering / Electronics and Instrumentation / Avionics or equivalent areas.	
	Syllabus for screening test – PAV08			
	Please click th	nis link for syllabus.		
9	PAV09	Agent Based Modelling and Complexity Theory	M.Tech/M.E /MS in Signal Processing / Control Systems / Computer Science/ Data Science/ Al & ML and equivalent areas OR M.Sc in Mathematics / Applied Mathematics and related areas OR B.E./B.Tech in Electronics / Computer Science / Communication Engineering / Information Technology/ Electrical and Electronics Engineering /Electronics and Instrumentation / Avionics or equivalent areas OR Four year B.Sc in Mathematics / Physics and related areas	
	Syllabus for s	screening test -PAV09		
	Please click th	nis link for syllabus.		
	Department of Chemistry			

1	PCH01*	Nano materials/ functional materials/polymeric materials for energy/environmental/sensing applications	MSc/BS-MS in Chemistry (all branches) or equivalent /MSc Materials Science and allied areas/ M. Tech in Materials Science, Nanoscience& Technology, Polymer Technology, Chemical Engineering, and related areas or equivalent areas OR B.Tech/BS in Materials Science, Nanoscience& Technology, Nanotechnology, Polymer Technology, Chemical Engineering or equivalent areas	
		Department of Eartl	n and Space Sciences	
1	PES01*	Astronomy & Astrophysics	Master of Science in Physics / Astronomy & Astrophysics / Space Physics / Integrated MS (Physics) / BS-MS (Physical Sciences) or equivalent. OR B.Tech in Engineering Physics.	
2	PES02*	Geology, Planetary Geosciences and Astrobiology	MSc in Geology, Applied Geology, Earth Science, Earth System Sciences, Remote Sensing, Disaster Management, Geoinformatics and allied fields.	
			s. They must have qualified a national eligibility lid GATE score in relevant subjects	
		Department of Humani	ties and Social Sciences	
1	PHS01	Operations and Supply Chain Management	M.B.A (Any Specialization) / M.E / M.Tech (Any Specialization) or equivalent areas OR B.E/B.Tech (Mechanical Engineering/ Electrical Engineering/ Industrial Engineering/Manufacturing Engineering/ Production Engineering/ Automobile Engineering/Equivalent or related areas	
	Syllabus for screening test –PHS01			
	Please click this link for syllabus.			
	Department of Mathematics – Number of research positions available : 2 Nos			
1	PMA01	Computational Methods and Analysis of Partial Differential Equations	MSc in Mathematics / Applied Mathematics or BS-MS in	
2	PMA02	Partial Differential Equations (Theory and Numerics)	Mathematics or equivalent	
	Department of Physics			
1	PPH01#	Theoretical Physics	M.E/ M. Tech, MSc, Integrated MSc, MS in any discipline.	
2	PPH02 #	Experimental Condensed Matter Physics	OR B.E/ B. Tech, Four-year BS in any discipline.	
			hey must have qualified a national eligibility test Physics) or a valid GATE score in Physics	

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.

SI. No.	Department code	Broad Area	Eligibility
140.	COUG	Departmen	t of Avionics
1	EAV01	Modeling of Physiological Systems	M.Tech/MS in Signal Processing / Control Systems / Applied Electronics / Biomedical Engineering / Instrumentation / and equivalent areas OR B.E./B.Tech in Electronics and Communication Engineering / Electrical and Electronics Engineering / Electronics and Instrumentation / Biomedical Engineering / Avionics/ Aerospace / Mechanical Engineering or equivalent areas
2	EAV02	Signal/Image processing, Computer vision, Machine Learning/VLSI signal processing	ME/M. Tech/M. S in Signal Processing/ Communication/Microelectronics/Digital Systems/ Embedded Systems/ Computer Science/ VLSI Design or equivalent areas OR B.E./B.Tech in Electronics and Communication Engineering / Electrical and Electronics Engineering / Electronics and Instrumentation / Avionics or equivalent areas.
3	EAV03	1. Data analysis of sun solar spectrum in soft X-ray band for InspireSat1 2. Control Systems - Application of Parameterisation of States and input 3. Deep space Navigation studies using X-ray pulsars 4. Study of bacteria growth in micro gravity 5. Control Systems	M.Tech/M. E/MS in Signal Processing / Control Systems / Applied Electronics / Biomedical Engineering /Instrumentation/ Avionics/Mechanical and equivalent areas OR M.Tech/M. E/MS in Aerospace Engineering/Aeronautical/Aerodynamics and Control/ and equivalent Areas OR M.Sc in Mathematics / Applied Mathematics and related areas M.Sc in Physics / Biology / Zoology / Botany and related Areas OR B.E./B.Tech in Electronics and Computer Science / Communication Engineering / Electrical and Electronics Engineering /Electronics and Instrumentation / Biomedical Engineering / Avionics/ Aerospace / Aeronautical /Mechanical Engineering or equivalent areas OR B.Sc in Mathematics / Physics / Biology and related areas
4	EAV04	Power Electronics and Control of Electric Drives	M.E/M.Tech/MS in Electrical Engineering /Power Electronics/Power Systems or equivalent and related areas OR B.E./B.Tech in Electronics and Communication Engineering / Electrical and Electronics Engineering / Electronics and Instrumentation / Avionics or equivalent areas
		Department	of Chemistry

1	ECH01	Nano materials/polymeric materials for energy/ environmental/sensing/space applications	MSc/BS-MS in Chemistry (all branches) or equivalent /MSc Materials Science and allied areas, M. Tech in Materials Science, Nanoscience& Technology, Polymer Technology, Chemical Engineering and related areas or equivalent OR B.Tech/ BS in Materials Science, Nanoscience & Technology, Nanotechnology, Polymer Technology, Chemical Engineering or equivalent M. Sc/BS-MS in Chemistry (all branches) or equivalent /		
2	ECH02	Smart and functional materials	MSc in Biochemistry /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/BS in Materials Science, BSc in Biochemistry/BSc/B. Tech in Biotechnology, Polymer Technology, Chemical Engineering or equivalent		
		Department of Earth	n and Space Sciences		
1	EES01	Geology, Planetary Geosciences and Astrobiology	MSc in Geology, Applied Geology, Earth Science, Earth System Sciences, Remote Sensing, Disaster Management, Geoinformatics and allied fields.		
2	EES02	Remote Sensing	Masters in Geoinformatics, Remote Sensing, GIS, Geography, Civil Engineering, Computer Science, Computer Applications, Machine Learning, Information Technology, Image Processing, Natural Resource Management, Urban planning or relevant fields		
3	EES03	Astronomy & Astrophysics	Master of Science in Physics / Astronomy & Astrophysics / Space Physics / Integrated MS (Physics) / BS-MS (Physical Sciences) or equivalent. OR B.Tech in Engineering Physics.		
	Department of Mathematics				
1	EMA01	Computational Methods and Analysis of Partial Differential Equations	MSc in Mathematics / Applied Mathematics or BS-MS in Mathematics or		
2	EMA02	Partial Differential Equations (Theory and Numerics)	equivalent		
	Department of Physics				
1	EPH01	Atomic and molecular physics	M.Sc/ MS/ M.Tech in Physics/ Solid-State Physics/ Optical Engineering/ Quantum Technology or related areas OR 4 year Bachelor's Degree in Physics/ B.Tech in Engineering Physics/Physical Sciences or related areas		
2	EPH02#	Theoretical Physics	M.E/ M. Tech, MSc, Integrated MSc, MS in any discipline.		
3	EPH03#	Experimental Condensed Matter Physics	OR B.E/ B. Tech, Four-year BS in any discipline.		

	Table 3: External Projects			
SI. No	Department code	Broad Area& Project Title	Eligibility	
	Department of Avionics			
1	EPAV01	Powertrain for All Electric HANSA NG - Technology Demonstration - Power Electronics and Drives	M.E/M.Tech/MS in Electrical Engineering/Power Electronics/Power Systems or equivalent and related areas OR B.E./B.Tech in Electronics and Communication Engineering / Electrical and Electronics Engineering / Electronics and Instrumentation / Avionics or equivalent areas	
	Syllabus for	screening test - PAV05 & EP		
	Please click	this link for syllabus.		
2	EPAV02	Powertrain for All Electric HANSA NG - Technology Demonstration - Thermal Engineering/ Mechanical Engineering	M.E/M.Tech/MS in Mechanical Engineering/ Therma Engineering/ Aerospace Engineering/ Engineering Design or equivalent and related areas OR B.E./B.Tech in Mechanical Engineering/ Aerospace Engineering/ Production Engineering or equivalent areas	