YEARLY STATUS REPORT - 2022-2023

Part A
Data of the Institution

1.Name of the Institution	Indian Institute of Space Science and Technology
• Name of the Head of the institution	Dr. Unnikrishnan Nair S
• Designation	Director
• Does the institution function from its own campus?	Yes
• Phone no./Alternate phone no.	04712568402
• Mobile no	9446550650
• Registered e-mail	registrar@iist.ac.in
• Alternate e-mail address	director@iist.ac.in
• City/Town	Valiamala Road, Valiamala, Kerala
• State/UT	Thiruvananthapuram
• Pin Code	695547
2.Institutional status	
• University	Deemed
• Type of Institution	Co-education
• Location	Rural

• Name of the IQAC Co-ordinator/Director	**Prof. Kuruvilla Joseph**
• Phone no./Alternate phone no	**04712568403**
• Mobile	**9447366479**
• IQAC e-mail address	**iqac@iist.ac.in**
• Alternate Email address	**iqac-office@iist.ac.in**
3.Website address (Web link of the AQAR (Previous Academic Year)	https://www.iist.ac.in/iqac
4.Whether Academic Calendar prepared during the year?	**Yes**
• if yes, whether it is uploaded in the Institutional website Web link:	https://www.iist.ac.in/academics/calendar

5.Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	**B**	**2.87**	**2013**	**08/07/2013**	**07/07/2018**

6.Date of Establishment of IQAC	**16/02/2012**

7.Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/ Department/Faculty	Scheme	Funding agency	Year of award with duration	Amount
Nil	**Nil**	**Nil**	**Nil**	**0**

8.Whether composition of IQAC as per latest NAAC guidelines	**Yes**
• Upload latest notification of formation of IQAC	View File
9.No. of IQAC meetings held during the year	**2**
• The minutes of IQAC meeting and compliance to the decisions have been uploaded on the institutional website. (Please upload, minutes of meetings and action taken report)	**Yes**

• (Please upload, minutes of meetings and action taken report)	[View File](#)	

10.Whether IQAC received funding from any of the funding agency to support its activities during the year?	No
• If yes, mention the amount	0

11.Significant contributions made by IQAC during the current year (maximum five bullets)

A task team has been constituted for learning NEP 2020. A Workshop on NEP and implementation was conducted on 08.05.2023.

14 MoUs are signed.

Curriculum revision for all undergraduate programs is initiated through IQAC in line with NEP. New Dual Degree programs(PG-PHD) and B.Tech in Computer Science and AI are proposed.

A data portal (for data collection) and a webpage (for IQAC) are initiated with the support of the SSG of IIST. IQAC has reviewed and analyzed the teaching-learning processes and learning outcomes based on a Student Satisfaction Survey (SSS).

IQAC @ IIST has conducted seminars, workshops, invited lectures, and other interactions.

12.Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year

Plan of Action	Achievements/Outcomes
Digital Data portal to be created for collection of data from IIST faculty members and staffs	Data portal is raedy and under review for launching
Initiate more MoUs	Signed 14 MoUs
Students Satisfaction Survey (SSS)	Completed, analysed. The Nalysis and recomendations are updated in IQAC website.
Revision of curriculum (Undergraduates) based on NEP guidelines	Initiated the curriculum revision for B.Tech (AE & ECE) and the dual degree in EP in line with NEP
New UG and Dual Degree programs (PG-PhD)	Proposal submitted for Dual Degree programs (PG-PHD)), B.Tech in Computer Science and AI.
Completion of B.tech (ECE) curriculum revision	Completed and Implemented for 2023-2024 admissions
Enhancement of placements for UG and PG students	Established Centre for Career Guidance and Placements(CCGP) in addition to the Institute Placement Cell (IPC).
Filing of new Patent applications	7 Patent applications filed
Offers courses on Indian Knowledge System	Yoga classes are offered. Credited Courses will be starting soon.

13.Whether the AQAR was placed before statutory body?	No

- Name of the statutory body

Name	Date of meeting(s)
Board of Management meeting	Nil

14.Whether NAAC/or any other accredited	No

body(s) visited IQAC or interacted with it to Assess the functioning?	

15.Whether institutional data submitted to AISHE

Year	Date of Submission
2024	03/04/2024

16.Multidisciplinary / interdisciplinary

The programs, core and elective courses, and research offered by the seven academic departments of the Indian Institute of Space Science and Technology (IIST) span engineering, Science, and humanities disciplines and demonstrate a strong multidisciplinary and interdisciplinary nature. Overall, IIST provides a diverse and comprehensive range of programs for undergraduate, master, and doctoral students, enabling them to explore various fields related to aerospace engineering, electronics and communication, engineering physics, physics, chemistry, Mathematics, and humanities. In 2023, the curriculum committee for both the Undergraduate program and the dual degree program was re-constituted to revise the curriculum in line with NEP-2020. Here's an overview of how this aspect is reflected in the curriculum of various programs, the syllabus of courses, and the other activities of IIST.

- The B.Tech in Aerospace Engineering focuses on aerospace engineering principles, experiments, and applications, including aircraft and spacecraft design, aerodynamics, propulsion, robotics, and more. The program is an inherently multidisciplinary field that involves the application of principles from various disciplines. The students of IIST gain knowledge in the areas of Mechanics and Structures, where the students learn about the principles of mechanics and structural analysis, which draw from disciplines such as physics and mechanical engineering; Aerodynamics, where the syllabus includes the principles of fluid mechanics and the application of mathematical models, and it draws on knowledge from physics and mathematics; Propulsion Systems dealing the understanding of propulsion systems which requires knowledge of thermodynamics, fluid mechanics, and materials science; Materials, Manufacturing and Industrial Engineering covers the processes and precision of manufacturing. By integrating knowledge from disciplines like physics, mathematics, mechanical engineering, electrical engineering, and computer science, the Aerospace Engineering program equips students with a multidisciplinary skill set necessary for addressing

the challenges in the aerospace industry.

- B.Tech in Electronics and Communication Engineering covers the fundamentals of electronics and communication engineering, including electronic circuits, communication systems, signal processing, and related topics, VLSI, power electronics, and electrical engineering. Through this program, students at IIST gain knowledge in the areas Avionics and Control Systems, which deals avionics and control systems encompass the integration of electronics, electrical engineering, and computer science with aerospace applications, and students learn about flight control systems, navigation systems, and electronic communication systems. The curriculum also includes Electronics, where the students learn about electronic circuits, semiconductor devices, digital and analog electronics, and microprocessors. This knowledge is essential for designing and analyzing electronic systems. The other courses are Communication Systems which involves understanding various communication techniques, signal processing, modulation and demodulation techniques, and transmission of data; Electromagnetics, where the students learn about the principles of electromagnetics, including electromagnetic wave propagation, antenna theory, and electromagnetic compatibility; Digital Signal Processing focuses on processing and analysis of signals using digital techniques, drawing from mathematics, computer science, and electrical engineering. The Electronics and Communication program combines electronics, electrical engineering, computer science, and mathematics knowledge to equip students with skills related to the design, analysis, and implementation of communication systems and electronic devices.
- The IIST's Aerospace Engineering and Electronics and Communication undergraduate programs incorporate multidisciplinary aspects by integrating principles and knowledge from various fields. This interdisciplinary approach enables students to develop a holistic understanding and skill set essential to addressing the complex challenges in aerospace engineering and communication technology.
- The Dual Degree Program in Engineering Physics, later it will be branched out into 4 major post-graduate programs at the end of the 3rd year of students, exemplifies the interdisciplinary approach by offering specializations in solid state physics, earth systems and science, astronomy, and\ astrophysics, and optical engineering. Students can explore multiple fields within physics, engineering, space science, and astronomy fostering interdisciplinary knowledge and research. This program in Engineering Physics offers a dual degree, a B.Tech

at the end of 4th year and an M.Tec/Ms at the end of 5th year in Engineering Physics with specializations in the following areas: (1) Solid State Physics -Concentrating on the study of properties and applications of solid materials, (2) Earth Systems, and Science- Focusing on studying Earth's systems, including geology, climate, and environmental science. (3) Astronomy and Astrophysics- Concentrating on the study of celestial objects, their properties, and the universe, and (4) Optical Engineering: Covering the principles and applications of optics and photonics.

- IIST offers 14 M.Tech programs spanning six departments, promoting multidisciplinary research and learning, as seen from the curriculum, which will be meticulously revised once in three years. The programs offered in the six departments, such as Aerospace Engineering, Avionics, Earth Science and Systems, Physics, Chemistry, and Mathematics, and the courses offered in Humanities allow students to delve into diverse fields of study. This interdisciplinary exposure enables students to gain a broader perspective and encourages cross-disciplinary collaboration. This is reflected in their placements and admissions in higher learning education globally. Specifically, the Master of Science in Astronomy and Astrophysics bridges the fields of astronomy, astrophysics, and space science, encouraging students to explore interdisciplinary research areas within these domains and enabling them to find a placement in the space industry. The programs are coordinated by the departments as follows:

- The Department of Aerospace Engineering: Aerodynamics and Flight Mechanics, Structures and Design, Thermal and Propulsion, Control Systems, Manufacturing Technology

- The Department of Avionics: Digital Signal Processing, Power Electronics, RF and Microwave Engineering, VLSI, and Microsystems.

- The Department of Earth Science and Systems: Earth System Science, Geoinformatics, Astronomy and Astrophysics.

- The Department of Chemistry: Materials Science and Technology.

- The Department of Mathematics: Machine Learning and Computing.

- Apart from the above, IIST's emphasis on offering electives from all departments, including the Humanities, further

enhances the multidisciplinary nature of the programs. Students could choose courses from different disciplines, expanding their knowledge base and encouraging interdisciplinary connections.

- IIST offers PhD programs in all disciplines, encouraging multidisciplinary research. Students pursuing a PhD can engage in advanced research in their respective fields and contribute to the scientific community. Doctoral students are encouraged to collaborate across departments, fostering interdisciplinary research and innovation.

By offering programs that span diverse areas of study, providing electives from various departments, and facilitating interdisciplinary research through PhD programs, IIST creates an environment where students can explore and contribute to multidisciplinary approaches in science, engineering, and technology. This interdisciplinary focus allows for integrating knowledge, ideas, and methodologies from different fields, leading to innovative research and problem-solving in complex real-world challenges.

17.Academic bank of credits (ABC):

Implementation of Academic Bank of Credits is Initiated in the institute in the year 2022. This was deliberated and approved in the IIST Board of Management meeting held in July 2023. Degree certificates (UG, PG, PhD) of 2021,2022,2023 passed out batches are uploaded in the Digilocker. Uploading of transcripts is in progress.

18.Skill development:

Interested students at the Indian Institute of Space Science and Technology (IIST) get chances to participate in designing and developing satellites through experimental learning, through which IIST students will learn all the skills required to make satellites/payloads. The training in this area and hands-on experience and experiments make the students confident in making the payloads. IIST made history by sending two scientific payloads to space on-board PSLV C55, recently. The payloads, ARIS 201F and PiLOT101F, were put into the approximately 600 km lower earth orbit on board the POEM 2 (PSLV Experimental Orbital Module 2) platform of

the PSLV C55 on 22nd April 2023. ARIS 201F is the second prototype of the Advanced Retarding-potential-analyse for Ionospheric Studies (ARIS) project of IIST, aimed at studying the space plasmas, including planetary ionospheres and solar flares. These payloads were designed, fabricated, tested, and qualified by the professors and students of IIST with the help of various ISRO entities across Thiruvananthapuram. ARIS measured the energy and quantity of charged particles in the Earth's ionosphere. The ARIS payload is an essential tool for assessing space weather. Any fluctuations in the ionosphere of Earth indicate possible adverse effects on day-to-day life. These effects are primarily due to geomagnetic storms caused by dangerous solar activity.

19.Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course)

The institute has approved a new elective course on Indian knowledge systems, which will be offered to the final-year BTech students of all branches as an elective course in the academic year 2023-24. This course aims to empower learners by connecting them with the contributions from the past and enable the students to connect them to the present knowledge, which may shape their future in alignment with the ethos of the knowledge traditions created earlier. Through the exploration of India's contributions to mathematics, astronomy, and their applications in allied fields, students will gain a comprehensive understanding of ancient knowledge. Embracing the principles of inquiry and innovation inherent in the syllabus offered under Indian knowledge systems. In addition yoga classes are offered to the students by yoga trainers as a regular event under the Yoga Club of IIST.

20.Focus on Outcome based education (OBE):Focus on Outcome based education (OBE):

IIST has moved to Outcome Based Education (OBE) along with revising the curriculum for every programme. The Institute started practising (OBE) for the NBA in the UG and PG programmes, from the academic year 2021- 2022, and it is continuing. The faculty members handling different courses prepare the course outcomes (CO) for lectures at the beginning of each semester. The prepared COs are mapped with program outcomes (PO), program specific outcomes (PSO) and mapped to form the articulation matrix. The department offering their programme at their department-level meetings reviews the results. The Course Outcome, Course Plan, Mapping between PO/CO/PSO, Course assessment methodology, and Mapping between course assessment and CO/PO/PSO are done simultaneously. Periodically, the schedule of activities for practising OBE is implemented by mapping CO with Quiz questions, conducting course exit surveys, and course attainments. Finally, course attainments must be computed and reviewed at the end of each semester. We will move to accreditation of OBE once the exercise is completed for every semester of a particular programme.

21.Distance education/online education:

IIST does not offer distance/online education

Extended Profile

1.Programme

1.1 Number of programmes offered during the year:	**21**

File Description	Documents
Data Template	[View File](#)

1.2 Number of departments offering academic programmes	**7**

2.Student

2.1 Number of students during the year	**1170**

File Description	Documents
Data Template	View File

2.2 Number of outgoing / final year students during the year:	**272**

File Description	Documents
Data Template	View File

2.3 Number of students appeared in the University examination during the year	**851**

File Description	Documents
Data Template	View File

2.4 Number of revaluation applications during the year	**0**

3.Academic	
3.1 Number of courses in all Programmes during the year	**267**

File Description	Documents
Data Template	View File

3.2 Number of full time teachers during the year	**95**

File Description	Documents
Data Template	View File

3.3 Number of sanctioned posts during the year	**nil**

File Description	Documents
Data Template	No File Uploaded

4.Institution	
4.1 Number of eligible applications received for admissions to all the Programmes during the year	**18180**

File Description	Documents
Data Template	View File

| **4.2**

Number of seats earmarked for reserved category as per GOI/ State Govt. rule during the year | **224** |

File Description	Documents
Data Template	View File

4.3 Total number of classrooms and seminar halls	**36**
4.4 Total number of computers in the campus for academic purpose	**743**
4.5 Total expenditure excluding salary during the year (INR in lakhs)	**6662.06**

Part B

CURRICULAR ASPECTS

1.1 - Curriculum Design and Development

1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the University

The curriculms@IIST has been systematically developed by kepping importanceof fundamental knowledge in STEM courses, where students get an option to choose elective courses in interdisciplinary fields, space-related topics. It provides a multi-track option with hands-on experience through internships, field-works, and projects at space research centres.The curriculum of all undergraduate/graduate programs is developed/updated/reviewed by the

department curriculum committee, consists of experts from ISRO/DoS centres and other stakeholders. This is vetted by BoS and the academic Council. While meeting the national needs it ensures alignment with international standards and practices by fostering international collaborations and facilitating knowledge exchange on a global scale.

The curricula @ IIST is developed and implemented in a structured manner aligning with vision and mission of the institute. This is reflected in Program Outcomes (POs), Programme Specific Outcomes (PSOs), Course Outcomes (COs). A holistic development via co-curricular /extracurricular activities at different levels are envisaged in the curriculum. The POs and PSOs, Course Outcomes (COs) mappings, stakeholder-feedback, Practical-Applications, Interdisciplinary-Approach, Performance-Metrics, Quality-Assurance, flexibility in selecting electives and specializations, Integration of Research components, and the possibility of Industry Collaboration are reflected in the curriculum.

File Description	Documents
Upload relevant supporting document	[View File](#)

1.1.2 - Number of Programmes where syllabus revision was carried out during the year

8

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

1.1.3 - Total number of courses having focus on employability/ entrepreneurship/ skill development offered by the University during the year

1.1.3.1 - Number of courses having focus on employability/ entrepreneurship/ skill development during the year

83

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

1.2 - Academic Flexibility

1.2.1 - Number of new courses introduced of the total number of courses across all programs offered during the year

67

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

1.2.2 - Number of Programmes in which Choice Based Credit System (CBCS)/elective course system has been implemented during the year

9

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

1.3 - Curriculum Enrichment

1.3.1 - Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum

• Four courses offered as part of the undergraduate programs, cover various aspects related to gender, gender equality, issues faced by marginalized communities, environmental issues and solutions, and sustainable development. Specifically, courses like Introduction to Economics, Social Science and Ethics, Principles of Management offered by the department of Humanities and social Sciences, and Environmental Science and Engineering offered by the department of Chemistry incorporate these topics into their curriculum.

• A course on Research methodology is offered and is mandatory to all the doctoral students of IIST.It covers certain methods that a researcher needs to know to ensure reliable, valid results that address the objectives. It encompasses the details of the data they're going to collect and the methods to analyse the data. It also gives the utmost ethics to be followed by a scientific community.

• The projects, field visits and tribal studies undertaken by students provide opportunities to collect empirical data from

society and filed of study, enabling them to understand the
challenges to be faced by different groups, including women,
children, transgender individuals, disabled individuals, and
marginalized communities. It also covers the difficulties to be
encountered, while doing field visits for data collection,
especially in the filed of Geology, remote sensing, and
geoinformatics.

File Description	Documents
Upload relevant supporting document	View File

1.3.2 - Number of value-added courses for imparting transferable and life skills offered during the year

18

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

1.3.3 - Total number of students enrolled in the courses under 1.3.2 above

1.3.3.1 - Number of students enrolled in value-added courses imparting transferable and life skills offered during the year

873

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

1.3.4 - Number of students undertaking field projects / research projects / internships during the year

263

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

1.4 - Feedback System

1.4.1 - Structured feedback for design and review of syllabus – semester wise / is received from Students Teachers Employers Alumni

- Any 1 of the above

File Description	Documents
Upload relevant supporting document	[View File](#)

1.4.2 - Feedback processes of the institution may be classified as follows

- Feedback collected, analysed and action taken and feedback available on website

File Description	Documents
Upload relevant supporting document	[View File](#)

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Demand Ratio

2.1.1.1 - Number of seats available during the year

597

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

2.1.2 - Total number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per applicable reservation policy during the year (Excluding Supernumerary Seats)

2.1.2.1 - Number of actual students admitted from the reserved categories during the year

133

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

2.2 - Catering to Student Diversity

2.2.1 - The institution assesses the learning levels of the studentsand organises special Programmes for advanced learners and slow learners

- IIST adopts a continuous evaluation scheme for assessing academic performance.
- Continuous assessment accounts for 50% (two quizzes- 15% each, and assignments, class tests/seminars/mini-projects – 20%). The remaining 50% is determined by an end-semester examination.
- Underperformers in the first year are offered summer courses, which include lectures and tutorials for assisting them for examination.
- A class Committee -comprising head of the department, all course instructors and student representatives- meets to assess the progress, and address students' concerns/grievances related to the ongoing classes , if any.
- At the commencement of each programme, faculty mentors a group of three/four students and meets them frequently. This helps students to communicate difficulties they face. The mentor takes necessary steps to address the same, identifies slow learners and the same is brought to the notice of the course-instructor.
- Peer group learning and buddy mentoring systems are also in place to support students.
- The professional counselors appointed by IIST give necessary support and guidance to needy students.
- The Humanities Department helps students in improving communication skills by designing tailored modules for different levels of learners.
- Advanced learners can do projects at Small-spacecraft Systems and PAyload CEntre (SSPACE) instituted by IIST. SSPACE is involved in manufacturing payloads, small satellites, related electronics, their testing and integration.

File Description	Documents
Upload relevant supporting document	[View File]
Link For Additional Information	Nil

2.2.2 - Student - Full time teacher ratio during the year

Number of Students	Number of Teachers
1170	99

File Description	Documents
Upload relevant supporting document	[View File](#)

2.3 - Teaching- Learning Process

2.3.1 - Student centric methods, such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences

The curriculum for all programmes has a substantial number of laboratory courses to provide students with practical experience applying the concepts and theoretical content they have learned in their theory courses. Several courses are associated with specific, extensive initiatives, such as satellite development, ground station data handling and instrumentation. Students are encouraged to take up internships during their semester breaks and a credited summer internship is mandatory for all UG students at the end of their 6th semester. Students are required to give seminars, make presentations and are encouraged to lead discussions in graduate courses, helping them to enhance their critical thinking skills. In keeping with the larger goals of the Department of Space, several students actively participate in projects on satellite payload development, launch vehicles and related subsystems in the different ISRO/DoS centres. This helps them to get accustomedwith the latest research and technological development happening in ISRO. Students, as part of the social science and economics papers have compulsory field visits which helps them to understand the real life situation of people in society. The different clubs in IIST provide a forum for students to discuss ideas and research in a critical yet constructive manner.

File Description	Documents
Upload relevant supporting document	[View File](#)

2.3.2 - Teachers use ICT enabled tools including online resources for effective teaching and learning processes during the year

The institute is equipped with 4 smart classrooms having interactive screens, while all 35 classrooms in the institute have multimedia support and internet connectivity. In addition, students and teachers have easy access to laptops/desktops, printers, e-mail, etc. The institute also has an active subscription to Microsoft's Office-365 that covers all students, research scholars and faculty members. Teachers use scientific computing and visualization software such as Python, Matlab, Mathematica, Maple, Synopsis, CAMSOL, etc. Multimedia Computing labs are also available. Use of

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pod casts; online platforms; web-based libraries and online
statistical data sets are also promoted. The courses are also
managing through Moodle, a customized learning platform, which
provides study materials, assignments, class tests and evaluation of
students' progress.
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File Description	Documents
Upload relevant supporting document	[View File](#)

2.3.3 - Ratio of students to mentor for academic and other related issues during the year

2.3.3.1 - Number of mentors

`53`

File Description	Documents
Upload relevant supporting document	[View File](#)

2.4 - Teacher Profile and Quality

2.4.1 - Total Number of full time teachers against sanctioned posts during the year

`95`

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

2.4.2 - Total Number of full time teachers withPh.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit. during the year

`95`

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

2.4.3 - Total teaching experience of full time teachers in the same institution during the year

2.4.3.1 - Total experience of full-time teachers

`12511`

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

2.4.4 - Total number of full time teachers who received awards, recognition, fellowships at State, National, International level from Government/Govt. recognised bodies during the year

18

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

2.5 - Evaluation Process and Reforms

2.5.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results during the year

20

2.5.1.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the year

20

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

2.5.2 - Total number of student complaints/grievances about evaluation against total number appeared in the examinations during the year

0

File Description	Documents
Upload relevant supporting document	[View File](#)

2.5.3 - IT integration and reforms in the examination procedures and processes (continuous internal assessment and end-semester assessment) have brought in considerable improvement in examination management system of the institution

The institute uses a web-based application namely, "iCampus" for the purpose of maintaining examination related activities like Students' course registration, continuous assessment record, exam management and result processing and annoucement. Faculty members who offer courses related to various programmes set the evaluation pattern and grade setting in iCampus in line with IIST academic guideline . Results are published online through this platform. Students can login to their accounts and see their internal marks and end semester results. This system helps students to know their results, by logging into their accounts. Students who do internship or course projects outside the institute are being evaluated through hybrid online/offline mode. Also, for conducting annual review of doctoral and project students the institute adopts the hybrid mode, if required. By taking into consideration of the convenience of the outside doctoral committee members of PhD students, sometimes their pre-synopsis presentations are also conducted on hybrid mode over Microsoft Teams platform configured for IIST. Assignment submission, class test, etc. are being conducted using Moodle platform.

File Description	Documents
Upload relevant supporting document	[View File](#)

2.5.4 - Status of automation of Examination division along with approved Examination Manual

A. 100% automation of entire division & implementation of Examination Management System (EMS)

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

2.6 - Student Performance and Learning Outcomes

2.6.1 - The institution has stated learning outcomes (generic and programme specific)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents

For the academic year 2022-2023, the institute has established the Programme Outcomes (POs), Programme Specific Outcomes (PSOs), and Course Outcomes (COs) of the programmes offered by the various departments. Quizzes 1 and 2, the end semester examination and

internal assessments, which comprise homework/assignments, viva, seminars, and projects, are used to bring the learning objectives of the different courses in these programmes into the continuous evaluation process. All undergraduate (UG) and postgraduate (PG) course evaluations are built on a combination of components mentioned earlier to provide students with a fair chance for evaluation. The teacher regularly evaluates the laboratory tasks to ensure the lab course's goals and objectives are met through the lab report and viva. Furthermore, the students plan, carry out, and analyse their experiments and present the findings. In addition, undergraduate students must complete a two-month-long research internship programme. Both IIST faculty members and outside researchers oversee the completion of each project. The committee appointed by the Subject Board evaluates the UG and PG project work through an oral presentation and written report. Theyare all uploaded on the IIST website using the iCampus interface.

After finishing their coursework, PhD students must pass a comprehensive examination to complete the registration process. After each academic year, the PhD student's performance is assessed by yearly presentations to the doctoral committee.

The department assesses the attainment of programme outcomes, program-specific outcomes, and course outcomes for each course after each semester.

Details are available in https://www.iist.ac.in/iqac

File Description	Documents
Upload relevant supporting document	View File

2.6.2 - Attainment of Programme outcomes, Programme specific outcomes and course outcomes are evaluated by the institution during the year

The institute has defined Programme outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) of the Programmes offered by all the departments during the academic year 2022-23. Currently, outcome based education is being initiated and followed in various programmes offered by different departments. For the UG programmes, the courses on basic subjects are assessed via continuous internal assessments. The lab experiments are continuously assessed by the lab instructor and ensure the attainment of outcome as envisaged and framed for the lab courses

through lab report and viva. In addition to this, the students design and conduct their own experiments and present the results with analysis. The project work carried out under the supervision of a faculty member is evaluated in terms of a written report and oral presentation by the committee set up by the Subject Board. At the end of each semester, attainment of the COs , POs and PSOs are evaluated. The PhD students, after completing the coursework, have to undertake a comprehensive exam for completing the PhD registration. The PhD student's performance is evaluated through annual presentations to the doctoral committee at the end of every academic year.

File Description	Documents
Upload relevant supporting document	[View File](#)

2.6.3 - Number of students passed during the year

2.6.3.1 - Total number of final year students who passed the university examination during the year

236

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a web link)

https://www.iist.ac.in/iqac

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Promotion of Research and Facilities

3.1.1 - The institution Research facilities are frequently updated and there is well defined policy for promotion of research which is uploaded on the institutional website and implemented

The institute has set up state-of-the-art facilities in all departments to support its research activities. The research facilities are frequently augmented with funding from DoS and extramural research projects. The research policy of the institute is framed so as to encourage faculty members to take up fundamental as well as applied research to benefit the society. Research Council

(RC) chaired by Dean (R & D) promotes and nurtures research activities, and oversees progress and academic matters of the research scholars. An advanced Space Research Group(ASRG) headed by Chief Technology Officer has been established for all collaborative research activities of IIST with ISRO. An empowered overseeing committee comprising members from all the research centres of ISRO is the apex body which realises the coordination and implementation of the projects in the concerned centres. IIST also ensures protection of intellectual property created by its stakeholders. Towards this IPR cell is established to fulfil Institute's commitment to endorse academic freedom and provide a conducive environment for research, innovation and advancement. The research culture at IIST has enabled the generation of skilled manpower in cutting edge research fields specifically in Space Science and Technology.

File Description	Documents
Upload relevant supporting document	[View File](#)

3.1.2 - The institution provides seed money to its teachers for research (amount INR in Lakhs)

Nil

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	No File Uploaded

3.1.3 - Number of teachers receiving national/ international fellowship/financial support by various agencies for advanced studies/ research during the year

64

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.1.4 - Number of JRFs, SRFs, Post-Doctoral Fellows, Research Associates and other research fellows enrolled in the institution during the year

194

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

3.1.5 - Institution has the following facilities to support research Central Instrumentation Centre Animal House/Green House Museum Media laboratory/Studios Business Lab Research/Statistical Databases Moot court Theatre Art Gallery

A. Any 4 or more of the above

File Description	Documents
Upload relevant supporting document	View File

3.1.6 - Number of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other recognitions by national and international agencies during the year

1

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

3.2 - Resource Mobilization for Research

3.2.1 - Extramural funding for Research (Grants sponsored by the non-government sources such as industry, corporate houses, international bodies for research projects) endowments, Chairs in the University during the year (INR in Lakhs)

45

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

3.2.2 - Grants for research projects sponsored by the government agencies during the year (INR in Lakhs)

2822

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.2.3 - Number of research projects per teacher funded by government and non-government agencies during the year

2

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.3 - Innovation Ecosystem

3.3.1 - Institution has created an eco-system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge

With a mission to foster the spirit of innovation and mould successful entrepreneurs, IIST has established a Space Technology Innovation and Incubation Centre(STIIC) in the campus. STIIC promotes (i) Innovation and entrepreneurship by converting and translating technology ideas (ii) transitions of results in various disciplines of science and engineering into products, processes and services for commercial exploitation (ii) integrating teaching, learning, research and innovation with real world needs and (iii) efforts to accelerate our nation's ability to innovate and lead a knowledge driven economy for the larger benefit of humanity.

To protect the intellectual property of the stakeholders, IIST has established an IPR cell. With well-defined policies and procedures, the cell guides and processes the applications for obtaining IPR protection such as patents and copyrights.

STIIC provides the incubatees, physical, technical and networking support and services to assist product innovations and development. Currently nine companies are incubated with STIIC, viz; Vashishtha Research Pvt. Ltd., SPACETIME 4D printing solutions LLP, BhuhPramaan PVT Ltd., InterCosmos Space Exploration Technologies Pvt. Ltd and Specrule Scientific Pvt Ltd, Zeroing in, Fluxx Ev Electric Pvt Ltd., Space Curve India Pvt Ltd, Hathor Rockets . These companies work in diverse fields from robotics assisted NDT, custom built 3D printers, geospatial technologies, novel propellants to the development of

`laser diagnostic tools, Science popularisation, electric vehicles and rocket engines.`

File Description	Documents
Upload relevant supporting document	[View File](#)

3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

`27`

3.3.2.1 - Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development year wise during the year

`27`

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.3.3 - Number of awards / recognitions received for research/innovations by the institution/teachers/research scholars/students during the year

3.3.3.1 - Total number of awards / recognitions received for research/innovations won by institution/teachers/research scholars/students year wise during the year

`47`

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.4 - Research Publications and Awards

3.4.1 - The institution ensures implementation of its stated Code of Ethics for research

3.4.1.1 - The institution has a stated Code of Ethics for research and the implementation of which is ensured through the following

`A. All of the above`

1. Inclusion of research ethics in the research methodology course work
2. Presence of institutional Ethics

committees (Animal, chemical, bio-ethics etc)
3. **Plagiarism check**
4. **Research Advisory Committee**

File Description	Documents
Upload relevant supporting document	[View File](#)

3.4.2 - The institution provides incentives to teachers who receive state, national and international recognitions/awards Commendation and monetary incentive at a University function Commendation and medal at a University function Certificate of honor Announcement in the Newsletter / website

D. Any 1 of the above

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.4.3 - Number of Patents published/awarded during the year

3.4.3.1 - Total number of Patents published/awarded year wise during the year

2

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.4.4 - Number of Ph.D's awarded per teacher during the year

3.4.4.1 - How many Ph.D's are awarded during the year

70

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.4.5 - Number of research papers per teacher in the Journals notified on UGC website during the year

3

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.4.6 - Number of books and chapters in edited volumes published per teacher during the year

3.4.6.1 - Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings during the year

135

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.4.7 - E-content is developed by teachers For e- D. Any 2 of the above
PG-Pathshala For CEC (Under Graduate) For
SWAYAM For other MOOCs platform For
NPTEL/NMEICT/any other Government
Initiatives For Institutional LMS

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.4.8 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

Scopus	Web of Science
5.71	2.13

File Description	Documents
Any additional information	[View File](#)
Bibliometrics of the publications during the year	[View File](#)

3.4.9 - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University

Scopus	Web of Science
21	57

File Description	Documents
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View File
Any additional information	View File

3.5 - Consultancy

3.5.1 - Institution has a policy on consultancy including revenue sharing between the institution and the individual and encourages its faculty to undertake consultancy

Institute is under the process of framing the consultancy policy

File Description	Documents
Upload relevant supporting document	No File Uploaded

3.5.2 - Revenue generated from consultancy and corporate training during the year (INR in Lakhs)

3.5.2.1 - Total amount generated from consultancy and corporate training during the year (INR in lakhs)

Nil

File Description	Documents
Upload the data template	No File Uploaded
Upload relevant supporting document	No File Uploaded

3.6 - Extension Activities

3.6.1 - Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the year

Nirmaan, the social outreach club of IIST is manned by the department of Humanities.

Dhwani, a program to audio record the text books was also done to

help the visually challenged students of Jagathy Blind School.

Faculty members have delivered quite a good number of talks in the form of keynote addresses and had handled plenary sessions for conferences/ workshops/ seminars/ webinars and FDPs.

Contributed as motivational speakers in various forums at schools, colleges and universities.

Actively engaged in the print, visual and social media panel discussions on international and socioeconomic and cultural topics.

Conducted various outreach/training programmes to school and college students such as Geoconnect, Astronomy School, STORM etc. Also contribute actively to various outreach activities for school/ college students initiated by Student Activity Board of IIST.

File Description	Documents
Upload relevant supporting document	[View File]()

3.6.2 - Number of awards received by the Institution, its teachers and students from Government /Government recognised bodies in recognition of the extension activities carried out during the year

3.6.2.1 - Total number of awards and recognition received for extension activities from Government / Government recognised bodies during the year

0

File Description	Documents
Upload the data template	No File Uploaded
Upload relevant supporting document	No File Uploaded

3.6.3 - Number of extension and outreach programs conducted by the institution including those through NSS/NCC/Red cross/YRC during the year(including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)

9

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.6.4 - Total number of students participating in extension activities listed at 3.6.3 above during the year

230

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.7 - Collaboration

3.7.1 - Number of collaborative activities with other institutions/ research establishment/industry for research and academic development of faculty and students during the year

3.7.1.1 - Total number of Collaborative activities with other institutions/ research establishment/industry for research and academic development of faculty and students during the year

58

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.7.2 - Number of functional MoUs with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the year

14

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

4.1.1 - The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc.

IIST offers 2 undergraduates, 1 dual-degree, 15 masters, doctoral and post-doctoral programmes, hosted in Aerospace, Avionics, Interdisciplinary, and Science blocks. There are 30 classrooms, 6 seminar-halls, 2 council rooms, and four conference halls. Eight classrooms, Seminar/ conference rooms are air conditioned. The average seating capacity of each classroom is sixty. All class rooms are equipped with longer writing board, mike and speaker system, and a beamer. Also, the recording of video lectures is enabled in Audio/ visual lab using professional video recording/ editing software in the interdisciplinary block. The institute uses the open source MOODLE as a LMS tool to seamlessly interact with the students and other stakeholders. IIST's Multidisciplinary Computing Centre (MCC) has 120 teraflops, 40 workstations, 2 GPU Servers, and 200 TB Storage. MCC caters to the entire institute's scientific computing. Hundred instructional/research labs including high-end equipment are spread across the seven academic departments to provide hands-on experience to students. Trained lab-staff upkeep each lab/ equipment. Small-Spacecraft Systems and PAyload CEnter (SSPACE) dedicated for the design and development of different payloads by the students such as ARIS-101F, 102F, INSPIRESAT-1, PILOT. Another uniqueness of IIST is the ground station to track its own/ ISRO satellites.

File Description	Documents
Upload relevant supporting document	[View File](#)

4.1.2 - The institution has adequate facilities for cultural activities, yoga, games (indoor, outdoor) and sports. (gymnasium, yoga centre, auditorium, etc.)

Physical and mental fitness of each student studying in IIST is the highest priority of the institute.

The Institute has the following facilities for both outdoor and indoor games.

- Open ground (110 sq.m.) for football, and cricket
- An outdoor basketball court, volleyball court, and a net bowling facility for cricket.
- Indoor recreational facilities like unisex Gymnasium (236 sq.m.), Badminton (545 sq.m.) and Squash courts (85 sq.m.) are

housed in the Student Activities Center (SAC).

- Air conditioned Multipurpose Hall (400 persons), Aerospace seminar hall (100 persons) are used for Yoga/ cultural/ Hindi sessions/ workshops/ induction programs.
- IQAC used to conduct workshops for all IIST members.
- A recreational hall (315 sq.m.) has chess, table tennis, billiards board, and carom.
- In addition, all academic blocks have Table tennis and badminton courts.
- An open-air auditorium (850 seating capacity) hosts cultural activities, yoga, and Dhanak, the cultural fest of the Institute.
- A music club with various musical instruments is available.

Hostels:

- IIST has 9 boy's and 2 girl's furnished hostels to accommodate all its students and enabled with WiFi facility.

Counselling and Medical facility:

- A hospital is inside the campus with dedicated doctors/ nurses/ student counsellor.

File Description	Documents
Upload relevant supporting document	[View File](#)

4.1.3 - Availability of general campus facilities and overall ambience

IIST is situated in Valiamala hills which is well away from busy city. Its ambience is calm and serene. It is located adjacent to the world renowned Liquid Propulsion System Centre, Valiamala. It is a fully residential campus for students. IIST has several boys/ girls' hostels with modern amenities which provides the best hospitality to the students. Each hostel is maintained by a dedicated hostel manager. A round-the-clock medical bay with doctors and nurses is available to address students health ailments. An ambulance is there to transport students at emergency. Professional counsellors help students to overcome their mental worries. A central mess is available. It serves both healthy and tasty south/ north Indian cuisine that is prepared in a very hygienic kitchen. IIST has a magnificent library. It has a large collection of technical, and general books. It has dedicated reading and study rooms. Reprographic section in library helps students in printing, photocopy as well as binding of important study materials. An

incinerator is available for proper waste management. Two big ponds are available for the rain water harvesting. The harvested water is treated and utilized for cleaning, and gardening purposes. The entire institute is protected by CISF security personnel.

File Description	Documents
Upload relevant supporting document	[View File](#)

4.1.4 - Total expenditure excluding salary for infrastructure augmentation during the year (INR in Lakhs)

2267.68

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

4.2 - Library as a Learning Resource

4.2.1 - Library is automated using Integrated Library Management System (ILMS) and has digitisation facility

IIST library was automated since its inception in 2007 using NewGenLib software. Later it was moved to Koha - an open source ILMS. Presently library uses Koha (V. 20.11.06.000). The automation was done in a full-fledged manner with all functional modules. All library operations, such as acquisition, cataloguing, periodical control, circulation, administration etc. are automated with OPAC facility for users to search and suggest books. Facility to search the OPAC of other DoS/ISRO libraries to avail books/article as Inter Library Loan is also availabile in the Library.

The library provides access to digital contents through the intranet and library portal. In addition, IIST Virtual Library (IVL) facilitate remote access to subscribed e-resources from anywhere at any time. Three multi-functional production printing cum scanner machines (one black & white and two colours) are available to meet the digitisation requirements. In addition, a table top scanner is also available for users to scan their materials.

The Graphic Design Facility in the library helps in making various digital documents such as Newsletter, Annual Report, Convocation Speeches, and Conference Proceedings etc. Library hosts the full text of PhD theses and digital copies of conference papers / posters

by students in the institute website. Library archives the
photographs of various events of the institute. It manages the
social media pages of the institute by uploading and updating
digital contents of various events and programmes of the institute.

File Description	Documents
Upload relevant supporting document	[View File](#)

4.2.2 - Institution has subscription for e-Library resources Library has regular subscription for the following: e – journals e-books e-ShodhSindhu Shodhganga Databases

A. Any 4 or all of the above

File Description	Documents
Upload relevant supporting document	[View File](#)

4.2.3 - Annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the year (INR in Lakhs)

273.28

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

4.2.4 - Number of usage of library by teachers and students per day (foot falls and login data for online access)

473

File Description	Documents
Upload relevant supporting document	[View File](#)

4.3 - IT Infrastructure

4.3.1 - Number of classrooms and seminar halls with ICT - enabled facilities such as LCD, smart board, Wi-Fi/LAN, audio video recording facilities during the year

36

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

4.3.2 - Institution has an IT policy, makes appropriate budgetary provision and updates its IT facilities including Wi-Fi facility

At IIST, Internet and Intranet services are the lifeline of students, faculties & staff to conduct academic, research, and administrative activities in a seamless manner. Information Technology (IT) policies of the Dept. of Space, Govt. of India is predominantly followed to administrate the IT infrastructure and services at IIST. All IISTians have privileged access to academic/ administrative information and digital resources made available within the institution and all the research entities of the Dept. of Space, Govt. of India. The institution allows use of privately-owned 'bring-your-own-IT devices' that belong to all students/ permanent employees to access the institution's IT services and Computing resources on a roaming basis within the campus and also remotely. The institution adopts the use of IT-enabled equipment and services in aiding and facilitating visualisation and digitalisation of lectures, conferences, reviews and examinations. Web Technologies and IT-enabled authentication and authorisation methods, including web-portals, biometrics, short-messaging services, e-procurement and digital payments are adopted to assure safety in handling all IT services. Computer Systems Group is responsible for the operation, maintenance and security of the IT infrastructure and services in IIST. IT infrastructure and services are constantly augmented and upgraded to improve the user experience.

File Description	Documents
Upload relevant supporting document	[View File](#)

4.3.3 - Student - Computer ratio during the year

Number of students	Number of Computers available to students for academic purposes
1170	743

4.3.4 - Available bandwidth of internet connection in the Institution (Leased line)

- ?1 GBPS

File Description	Documents
Upload relevant supporting document	[View File](#)

4.3.5 - Institution has the following Facilities for e-content development Media centre Audio visual centre Lecture Capturing System(LCS) Mixing equipment's and softwares for editing   A. All of the above

File Description	Documents
Upload relevant supporting document	[View File](#)
Upload the data template	[View File](#)

4.4 - Maintenance of Campus Infrastructure

4.4.1 - Total expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the year

520.39

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

IIST has several instructional and research laboratories. Each lab has a faculty coordinator. He is responsible to upkeep all the equipment in the respective lab. As the lab staffs are skilled, periodic maintenance shall be taken care of by them. In case of repair, the concerned vendor will be communicated and the equipment will be repaired. For the repair and maintenance expenses, a separate budget is earmarked for each department. High-value equipment are secured with annual maintenance contract which also has dedicated budget. As the research equipment was procured on demand by a faculty, it will be maintained by him. Suitable research equipment are shared between labs on demand. The class rooms are maintained by the respective head of departments of the academic blocks. Any repair of window glass panes, or furniture in the class rooms are handled by the institute's maintenance department. The audio-visual systems in the class rooms are maintained by a lab staff. The repair or upgradation of computers in several labs,

offices are done through a central committee. Budget are earmarked for the whole institute. The licences of important academic software are handled by the respective department.

File Description	Documents
Upload relevant supporting document	View File

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Total number of students benefited by scholarships and free ships provided by the institution, Government and non-government agencies (NGOs) during the year (other than the students receiving scholarships under the government schemes for reserved categories)

715

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

5.1.2 - Total number of students benefited by career counselling and guidance for competitive examinations offered by the Institution during the year

720

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

5.1.3 - Following Capacity development and skills enhancement initiatives are taken by the institution Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) Awareness of trends in technology   A. All of the above

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

5.1.4 - The Institution adopts the following for redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organisation wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

- **All of the above**

File Description	Documents
Upload relevant supporting document	[View File](#)

5.2 - Student Progression

5.2.1 - Number of students qualifying in state/ national/ international level examinations during the year (eg:NET/SLET/GATE/GMAT/CAT/ GRE/TOEFL/Civil Services/State government examinations)

5.2.1.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT GRE/ TOEFL/Civil Services/State government examinations) during the year

21

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

5.2.2 - Total number of placement of outgoing students during the year

190

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

5.2.3 - Number of recently graduated students who have progressed to higher education (previous graduating batch) during the year

14

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

5.3 - Student Participation and Activities

5.3.1 - Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter -university/state/national/international events (award for a team event should be counted as one) during the year

2

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

5.3.2 - Presence of Student Council and its activities for institutional development and student welfare

In IIST, the Student Activity Board (SAB), led by the Dean of Student Activities and Student Welfare, oversees and ensures the welfare of students on campus. SAB comprises members like the Registrar, Heads of all Departments, and Chairpersons of institute committees, with student representatives. Each committee, chaired by a senior faculty member, includes faculty and student representatives providing crucial feedback on student matters. Meetings are held monthly or as needed to address specific concerns.

In the academic year 2022-23, SAB played a pivotal role in organizing major events at IIST, including the intercollegiate cultural fest Dhanak, the inter-collegiate tech fest Conscientia, the Annual Sports Day, and various other student activities. Additionally, SAB managed student clubs, organized a 7-day induction program, and supervised the mentoring system. These initiatives not only allow students to apply theoretical knowledge but also foster collaboration, leadership skills, and a sense of social responsibility. SAB's efforts contribute significantly to the holistic development of students at IIST.

File Description	Documents
Upload relevant supporting document	View File

5.3.3 - Number of sports and cultural events / competitions organised by the institution during the year

12

File Description	Documents
Upload the data template	[View File]()
Upload relevant supporting document	[View File]()

5.4 - Alumni Engagement

5.4.1 - The Alumni Association/Chapters (registered and functional)contributes significantly to the development of the institution through financial and other support services during the year

The Indian Institute of Space Science & Technology Alumni Association (IISTAA) was officially established on September 14, 2019, with the aim of fostering a dynamic platform to encourage interaction and networking among the Institute's alumni. Its activities included facilitating vibrant forums for alumni interaction and networking, nurturing cordial and mutually beneficial relations between IIST alumni and the alma mater, promoting individual and institutional growth through the exchange of professional knowledge, organizing conferences, seminars, workshops, and training courses across professional, social, and cultural domains

The 3rd edition of the Ankesh Mishra Memorial Quiz (AMMQ) was successfully conducted on September 24th, 2022, jointly by IISTAA and the Quiz Club IIST, with alumni members serving as quiz masters.The other activities included a webinar titled "Entrepreneurship Opportunities in the Space Sector" for the students of IIST on October 9th, 2022, Coffee Talk online series, in connection with International Women's Day 2023, on March 12th, inviting women from IIST to share their diverse stories and celebrate their experiences, an informational session on "Life beyond IIST," for IIST students, on April 8th, 2022, a single-day football event, Futsal Reloaded, on May 1st, 2022, welcoming alumni, faculty, and staff from Btech, M.Tech, and PhD programs.

https://www.iist.ac.in/sites/default/files/library/AnnualReport2022-23E.pdf

File Description	Documents
Upload relevant supporting document	[View File](#)

5.4.2 - Alumni contribution during the year (INR in Lakhs)   `E. <1Lakhs`

File Description	Documents
Upload relevant supporting document	[View File](#)

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

6.1.1 - The institution has a clearly stated vision and mission which are reflected in its academic and administrative governance

```
IIST provides a teaching-learning ecosystem emphasizing innovation
and social sensitivity and promotes ethical, value-based education.
To ensure this it has initiated courses on Indian Knowledge systems,
Universal Human Values and interdepartmental programmes. The
Academic Bank of Credit (ABC) as directed by the University Grants
Commission (UGC), is now set to be integrated into IIST's
educational framework. The NEP implementation at IIST began with a
dedicated task team studying NEP 2020, engaging in extensive
discussions with faculty groups, and formulating proposals. Through
numerous international collaborations and a decentralized structure,
IIST aims to seamlessly integrate research with academics. Students
do projects/ internships at CalTech and ANU- FRT, NTU, Boulder
Colorado etc. This is in addition to the already existing MoUs with
national and international institutes. IIST has developed and
successfully launched a student satellite INSPIRESat-1 which is a
joint collaboration with the Laboratory of Space Physics, University
of Colorado, Boulder, USA, Nanyang Technological University,
Singapore and National Central University, Taiwan for various
scientific experiments. Recognizing the imperative of strengthening
and streamlining IIST's research environment and catching up with
the advances in the Indian Space Sector, an Advanced Space Research
Group (ASRG) was constituted in IIST. The vision of ASRG is to
facilitate the seamless integration of ideas, expertise, and know-
how between IIST and ISRO centers, thereby leveraging collective
wisdom for futuristic space programs.

https://www.iist.ac.in/aboutus/vision-mission
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https://www.iist.ac.in/innovation/asrg-vision

File Description	Documents
Upload relevant supporting document	[View File](#)

6.1.2 - The effective leadership is reflected in various institutional practices such as decentralization and participative management

The Institute's executive bodies include the Governing Council chaired by the Secretary-DoS, the Additional Secretary-DoS, the Joint Secretary-DoS (Personnel), and the Scientific Secretary-DoS as members and the Joint Secretary-DoS (Finance)as an invitee, and the Director, IIST as member secretary. This is followed by the Board of Management and the Academic Council. The Director IIST heads the institute, under whom Deans, Registrar, department heads, faculty members, officers, and staff remit their duties. The dean (Academics) manages academic activities; the Dean (R&D) handles projects and other research-related activities, the Dean (IPR) handles patent-related activities, and the Dean (Student Activity, Student Welfare, and Outreach) leads student support activities. Registrar heads the administration and is supported by deputy registrars. The Deputy Registrar (Academics) takes care of exams, admissions, and other academic responsibilities. The Deputy Registrar (Finance) monitors accounts and financial matters; the procurement of various equipment/ facilities is managed by the Deputy Registrar (Purchase) and Deputy Registrar (Stores), and the administration is by the Deputy Registrar (Administration). The recruitment and review are handled by the Deputy Registrar (Recruitment and Review). A Senior Administrative Officer monitors the Establishment/Public Relations/Transport Operation and Maintenance Division (TOMD). Other sections include the Canteen, CMD, IT& software, official language, Hostel, Library, Sports, Medical, Transport, and CISF teams are overseen by different committees.

File Description	Documents
Upload relevant supporting document	[View File](#)

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic plan is effectively deployed

IIST devices and implements its strategic plan through integration of programmes, cutting-edge research, interdisciplinary courses to

train the next generation of space engineers/scientists/professionals. Accordingly, it implemented the following activities.

- Implemented Choice Based Credit System (CBCS) and elective courses.

- Students enrolled SWAYAM and NPTEL courses offered by MHRD.

- Used in-house LMS for online education.

- Small Spacecraft System and Payload Center(SSPACE) developed PslvInorbitaL Obc andThermals (PILOT) andAdvancedRetarding potential analyser forIonosphericScience (ARIS) for PS-4 payloads on the POEM platform of PSLV C-55 mission and launched successfully on 22nd April 2023.

- ASRG's (Advanced Space Research Group) collaborative research led to 27 live projects as on 30.06.2023.

- STIIC (Space Technology Innovation and Incubation Cell) supports an innovative ecosystem to incubate startups and foster entrepreneurships. Nine of them are established.

- Initiated a Space Biology Lab (SBL) and enhanced all labs to have state-of-the-art facilities.

- Strengthened partnerships with international space agencies, research institutions, and universities and signed 14 MoUs in 2022-23. This includes University of Cambridge, CalTech, CNRS, École Polytechnique, University Space Research Association and so on.

- Continuing student exchange programs with CALTECH, ANU and USRA for student's global exposure and collaboration.

- Organizes many outreach-programs/workshops/events/camps including Astronomy School, YTN, NuMATS, IIST@School, etc. every year.

- IQAC encourages continuous improvement to maintain the institute's competitiveness and relevance.

File Description	Documents
Upload relevant supporting document	[View File](#)

6.2.2 - The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.

The Director, in consultation with senior officials, and Deans, formulates various Committees and administrative policies for the smooth functioning of the Institute. The annual budget, finance, and audit queries are overseen by Director, Registrar, and Deputy Registrar (Finance) in conformity with DoS rules and regulations. Registrar and Director oversees civil works and Dean (Academics), ensures that academic policies are uniform and in accordance with the UGC rules. The IQAC ensures various programmes for institutional functioning towards quality enhancement as per NAAC Guidelines and prepares AQAR annually. Apart from that faculty members, officers, and staff, should submit Annual Performance Report for assessing their performance every year. The manpower requirement of the institute for various academic, administrative, and research activities are monitored, assessed, and vacancies are notified in leading print media/ IIST website (https://www.iist.ac.in/career/opportunity). The project fellows, SPF and JPF are recruited and paid as per UGC mandate. The administrative ladder of IIST consists of Director, Registrar, and Deans followed by faculty, officers, and staff. IIST has 95 faculty members, to conduct lectures, tutorials, and practical sessions; 25 technical officers/staff to support lab and research activities, 11 permanent administrative officers and 8 office assistants, and 341 contract employees to support various activities.

File Description	Documents
Upload relevant supporting document	[View File](#)

6.2.3 - Institution Implements e-governance in its areas of operations

6.2.3.1 - e-governance is implemented covering following areas of operation **A. All of the above**

1. **Administration**
2. **Finance and Accounts**
3. **Student Admission and Support**
4. **Examination**

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

6.3 - Faculty Empowerment Strategies

6.3.1 - The institution has a performance appraisal system, promotional avenues and effective welfare measures for teaching and non-teaching staff

Welfare Measures:

- Medical Welfare Program CHSS (1% of their basic pay monthly)

- 24X7 Health centre and Polyclinic facility In-house counseling center

- LTC scheme

- SAFE (Scheme for Assistance to Families in Exigency)

- Vikram A. Sarabhai Trust (VAST)

- Financial Assistance in Exigency (FAE)

Promotional Avenues and Welfare Measures:

- The Annual Performance Assessment Report (APAR) of all permanent employees is submitted to the reporting officer and a three-tier reviewing system is in place. The head of the department/controlling officer reviews the report and forwards it to the next levels for assessment and approval. A copy of the graded APAR will be communicated to the concerned faculty/employee from the office of the registrar, IIST. Grievances can be represented within 15 days from the date of their receipt. IIST follows a Merit Promotion Scheme (MPS) for permanent faculty members and Limited Flexible Complement Scheme (LFCS) for its permanent Administrative Staff.

Other welfare programmes include:

- Organizational (@ 10 to 16 %) and Group (@ 7 to 9.5%) Performance Relative Incentive Scheme)

- **Financial support for purchasing computers Housing Loan Scheme**

- **Transport allowance/conveyance facility**

- **Financial support for membership in scientific and professional bodies**

- **Professional update allowance/Space technology allowance**

- **Reimbursement of telephone/internet bill**

- **Pension Scheme**

- **Earned leave encashment/Sabbatical Leave/Maternity Leave/Paternity Leave/Child care Leave**

- **Upload relevant supporting document**

File Description	Documents
Upload relevant supporting document	[View File](#)

6.3.2 - Total number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

48

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

6.3.3 - Number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the year

10

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

6.3.4 - Total number of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the year(Professional Development Programmes, Orientation / Induction Programmes Refresher Course, Short Term Course)

7

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institutional strategies for mobilisation of funds and the optimal utilisation of resources

The major funding is from DoS for recurring and non-recurring expenses. It comes in the form of an annual Grant-in-Aid for meeting Capital, General, and Salary expenditure. In addition, IIST receives funds from other ISRO centers through the projects approved under ASRG. The other incomes are from extramural funds (DST-SERB, ICSSR, MoES, DBT, Ministry of Electronics and Information Technology -MeitY), tuition fees, application fees, etc. For optimizing resources, IIST follows the biannual model BE (Budget Estimate)-RE (Revised Estimate). We consolidate and review budget requirements from the departments/sections and recommendations are made to DoS. On receipt of the budget, the expenditure is incurred as per the approved budget/line item under the management of the budget coordinators at department/section/institute levels. A higher-level committee led by the Director takes care to achieve the expenditure targets by conducting reviews regularly. Based on the review of the expenditure, by DoS, it releases the fund every quarter (22%, 23%, 25%, 30%). Each financial year the institute prepares a road map for completing the technical reviews and financial appraisals of major technology development programmes, facilities, research labs, and projects. Funds generated through other resources like Extramural Grants etc. are utilized as per applicable guidelines of IIST and Funding Agencies.

File Description	Documents
Upload relevant supporting document	[View File](#)

6.4.2 - Funds / Grants received from government bodies during the year for development and maintenance of infrastructure (not covered under Criteria III and V) (INR in Lakhs)

2789

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

6.4.3 - Funds / Grants received from non-government bodies, individuals,philanthropists during the year for development and maintenance of infrastructure (not covered under Criteria III and V)(INR in Lakhs)

0.7664

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

6.4.4 - Institution conducts internal and external financial audits regularly

IIST has a well-framed financial auditing system with expertise and guidance provided on a timely basis by DoS. The institution has three different audits. The finances are audited with respect to purchases, academics, and accounts. The detailed audited statements are tabled in the parliament regularly along with the Annual Report.

A. Statutory Audit:- It is carried out on a yearly basis by CAG empaneled Chartered Accountants. Financial statements are certified by Chartered Accountants and financial compliance is ensured.

B. Internal Audit: - It is carried out by the Department of Space on a regular basis. Procedural compliances in finance, purchase, and administrative areas are reviewed. Audit queries raised are replied and corrective actions wherever necessary are taken in accordance with the advice of the internal auditors.

C. CAG Audit: - It is carried out every few years with an emphasis on propriety and efficiency. Audit objections raised are clarified and corrective measures are adopted wherever necessary. Audited Financial Statements are uploaded on the Institute's website.

The link for the statement for the year 2022-23 is https://www.iist.ac.in/sites/default/files/library/AnnualReport2022-23E.pdf

File Description	Documents
Upload relevant supporting document	[View File](#)

6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes by constantly reviewing the teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals

The IQAC@IIST has initiated the following activities during the year 2022-23.

- IQAC launched an IIST Digital Data Portal, http://icampus.iist.ac.in/app in 2022-2023), to collect and preserve data about all activities of IIST. Here, one can assimilate information regarding journal publications/conferences/articles, awards, workshops/seminars, session-chaired/organised, books/book-chapters, events/visits/outreach programs etc. It also ensures efficiency and transparency by digitalising its activities through the Software Systems Group (SSG).

- In 2022, IQAC IIST reviewed the teaching-learning processes and learning outcomes based on a Student Satisfaction Survey (SSS). The analysis identifies areas of improvement and recommends reforms to be implemented for quality enhancement of education.

- IQAC also launched a separate webpage for showcasing its activities, teaching, learning and evaluation process, report on SSS, and details of IIST's national rankings.

- IIST decided to adopt recommendations of NEP 2020 in a phased manner. A task team has been constituted for learning NEP 2020 and the activities were started with a Workshop on NEP and implementation conducted on 08.05.2023.

- IIST decided to implement Academic Bank of Credit (ABC) as per NEP 2020 and the same was deliberated and approved in IIST Board of Management meeting held in July 2023.

- Institute has started offering an elective course on the Indian Knowledge system.

- The Buddy Mentoring System in IIST facilitates the academic

and personal growth of students through peer support and guidance. The senior students (mentors) are paired with junior students (mentees) based on their academic disciplines/interests.

File Description	Documents
Upload relevant supporting document	[View File](#)

6.5.2 - Institution has adopted the following for Quality assurance Academic Administrative Audit (AAA) and follow up action taken Confernces, Seminars, Workshops on quality conducted Collaborative quality initiatives with other institution(s) Orientation programme on quality issues for teachers and studens Participation in NIRF Any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)   B. Any 4 of the above

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting documment	[View File](#)

6.5.3 - Incremental improvements made for the preceding during the year with regard to quality (in case of first cycle) Post accreditation quality initiatives(second and subsequent cycles)

Following the first NAAC accreditation in 2013, IIST has taken the followinginitiatives:

- IIST started M.Tech (Quantum Technology) in 2022-23.

- The Advanced Space Research Group (ASRG) has expanded its activities with various ISRO centres resulting in 27 live projects as on 30.06.2023.

- The Space Technology Innovation and Incubation Cell (STIIC) inaugurated in 2018 has instrumental in incubating more new startups. As a result, 9 companies commencing operations, promoting entrepreneurship in the space sector.

- IIST has signed 14 additional MoUs with ISRO centers and international institutions in 2022-23, enhancing collaborative research.

- Small Spacecraft System and Payload Centre (SSPACE) developed payloads like PSLV InorbitaL Obc and Thermals (PILOT) and Advanced Retarding potential analyzer for Ionospheric Science (ARIS) for PS-4 payloads on the POEM platform of PSLV C-55 mission, successfully launched on April 22, 2023.

- IIST has increased student outreach and exchange programs, such as workshops, Astronomy School, YTN (Young Talent Nurture), NuMATS (Nurturing Mathematics Talent Search), seminars, and conferences.

- Curriculum updating in line with the National Education Policy (NEP) was completed in 2022-23 and will be implemented in the following academic year.

- Integrated M.Tech-Ph.D. programs in various disciplines have been introduced in 2022-23 for students from centrally funded institutions.

- IIST conducted a Purchase Manual Familiarization Program for familiarisation and introduced E-procurement in 2022-23, for transparency in procurement processes.

File Description	Documents
Upload relevant supporting document	[View File]()

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

IIST has been proactive in promoting gender equality and providing support for its female members. Some initiatives are:

- Established Internal Complaints Committee (ICC) @ IIST to address gender-related issues.
- Celebrated International Women's Day Celebrations (8th March 2023) in hybrid mode.The chief guest was Ms. Nishanthini IPS, DIG of Police, Thiruvananthapuram. A motivational Speech was

given by Ms. Jaya G Nair, Writer/poet/former-Scientist/Engineer, VSSC. As part of the event an exhibition cum sales and cultural programs were organized by students/faculty/staff.

- Organized a health Camp and Awareness Session on Breast Cancer (10th March 2023) with support from doctors at Regional Cancer Centre, Thiruvananthapuram.
- IIST faculty and staff attended a Training Program on Defensive Mechanism for Women a program organized by VSSC.
- 24x7 counselling service available in the institute.
- Every student assigned a faculty mentor and a senior student as part of the buddy mentoring system.
- Separate lady washrooms provided on every floor of every building.
- Incinerators available in all floors of the ladies' hostel.
- ICC actively conducts programs on gender sensitization and equality for students, faculty, and staff.

File Description	Documents
Upload relevant supporting document	[View File](#)
Annual gender sensitization action plan(s)	https://www.iist.ac.in/sites/default/files/Internal-Complaints-Committee/Gender%20sensitization%20action%20plan22-23.pdf
Specific facilities provided for women in terms of: a. Safety and security b. Counseling c. Common rooms d. Daycare Centre e. Any other relevant information	[Counseling and common room](#)

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation Solar energy   Biogas plant Wheeling to the Grid   Sensor-based energy conservation Use of LED bulbs/ power-efficient equipment

A. Any 4 or All of the above

File Description	Documents
Upload relevant supporting document	[View File](#)

7.1.3 - Describe the facilities in the Institution for the management of the following types of

degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

A no waste incinerator is maintained in the campus for proper waste disposal. Napkin Incinerators are also installed in all ladies' hostel and one ladies toilet each in all academic buildings. A Biogas plant is operated and maintained by Canteen Services and the byproducts of biogas are used as fertilizer. A compost pit has been made where dry leaves are collected and disposed and is used for of gardening purpose. Food waste, plastic waste, paper waste collected separately and disposed. For collecting these, separate dust bins are provided in each floors of all buildings. The campus has banned the use of plastic. Still it comes to the campus along with some purchases by the students staying in hostels.Plastic bottles, disposed by students are reused for planting. As part of Green Kerala Mission policy, the plastic waste generated in the campus are also disposed through Haritha Karma Sena, an authorized/registered recycler.Paper waste generated is shredded using Paper Shredders within the campus and disposed through authorised recyclers. Water treatment plants are installed inside the campus for recycling used water which is later used for gardening purpose. Since the campus is relatively new, E- waste generated is almost nil.

File Description	Documents
Upload relevant supporting document	[View File](#)

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

A. Any 4 or all of the above

File Description	Documents
Upload relevant supporting document	[View File](#)

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows:

A. Any 4 or All of the above

1. Restricted entry of automobiles
2. Use of bicycles/ Battery-powered

vehicles
3. **Pedestrian-friendly pathways**
4. **Ban on use of plastic**
5. **Landscaping**

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.6 - Quality audits on environment and energy are regularly undertaken by the institution

7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:

1. **Green audit**
2. **Energy audit**
3. **Environment audit**
4. **Clean and green campus recognitions/awards**
5. **Beyond the campus environmental promotional activities**

A. Any 4 or all of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.7 - The Institution has a disabled-friendly and barrier-free environment Ramps/lifts for easy access to classrooms and centres. Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software,mechanized equipment, etc. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.

A. Any 4 or all of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance

and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words)

All major festivals such as Holi, Diwali, Dusshera, Pongal, Onam, Ugadi,Christmas etc are celebrated with the active participation of students andstaff.The Institute has established SC/ ST Cell, Students Grievance RedressalCell, Anti ragging Cell to maintain a peaceful academic environment.Canteen Services in IIST caters to satisfy the food preferences of thestudents by ensuring a menu serving the palates of the pan Indiancommunity in consultation with the students.

The institute also has disabled inclusive measures such as buildings withdisabled access ramp, lifts, accessible toilets etc., for the convenience of personswith reduced mobility.IIST Hindi Section conducts various instructional programs to improve Hindiproficiency of not only student as well as staff.English Language Support Programme was offered by Dr Mackenzie Bristowfrom the University of at IIST from January 16 - Feb 22-2023 as part of theEnglish Language Support Programme offered by the Regional EnglishLanguage Office of the US Embassy.With a will to "demystify" science to the less privileged tribal students, the socialoutreach club of IIST- Nirmaan organized science camp for the students of thetribal settlement of Thenmala and Athrirapally forest divisions and for selectedstudents of Government Upper Primary School, Ponmudi.SPICMACAY, IIST hosted a SPIC MACAY programme on November 1, 2022, aspart of the induction programme. Shri Shashank Subramanyam, the renownedflautist performed the Carnatic flute, accompanied by Shri Trivandrum Sampath onviolin, Shri Palakkad Mahesh on mridangam and Shri Udupi Sreedhar on ghatam.

File Description	Documents
Upload relevant supporting document	[View File](#)

7.1.9 - Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:

IIST Celebrated the following to sensitize the students and employees :

* The Constitution Daywas celebrated on November 26, 2022.
* Azadi Ka Amrit Mahotsav, was celebrated the 75 years of Indias independence, its glorioushistory, culture and achievement was flagged off on 15th August 2022.

- The 132nd Birth Anniversary of 'Bharat Ratna' Dr. B. R.Ambedkar was celebrated on April 26th 2023. Dr. Sindhu Thulaseedharan , Department of Law, University of kerala delivered the talk.
- As part of observance of 'Partition Horrors Remembrance Day' in the year ofAzadi Ka Amrit Mahotsav, an exhibition of photographs has been arranged in theLibrary.
- The courses offered by the Humanities department such as Introduction to SocialScience and Ethics and Economics cover several aspects of rights, duties andresponsibilities of citizens. Universal Human value course -AICTE sponsored isalso offered to the students
- Independence day and Republic day were celebrated with all dignity andfervour which helped in inculcating the values of harmony and national integrity.
- Ø Swachhta Pakhwada was celebrated by administeringthe pledge from their respective departments. A, webinar on the Importance of Health, Personal hygiene andcleanliness was organised on February 8, 2023. Dr. L.B. Shaebha Irence,Medical Officer, IIST handled the session. Cleaning drives within the campusand in the neighboring community were also organized.
- Sadbhavana DiwasIIST observed the Sadbhavana Diwas on August 18, 2022
- Vigilance Awareness Week Celebrations With the theme, Corruption freeIndia for a developed Nation, Vigilance Awareness Week brings together allstake- holders to collectively participate in the prevention of and fight againstcorruption

7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on Code of Conduct are organized

`Any 3 of the above`

File Description	Documents
Upload relevant supporting document	[View File]()

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and

festivals

- Festivals Like Diwali was celebrated on October 24, 2022 where the students joinedtogether to illuminate the premises with an array of beautifully decorated diyas,symbolizing the triumph of light over darkness.
- Amidst the backdrop of academia and scientific pursuits, Holi was celebrated on March 8, 2023
- Celebrated National Science day on February 28, 2023. Dr. S. Suresh Babu, Head and Scientist G, ATRF Branch, SPL, VSSC delivered a talk
- Celebrated International Women's Day on March 8, 2023. The Chief Guest Ms.Nishanthini R, IPS, DIG of Police, Thiruvananthapuram and the Guest of honour Dr.Jaya G Nair, Former Scientist/ Engineer, VSSC delivered inspirational talk
- Celebrated National Mathematics Day.on 22nd December, on the birth anniversary of one of the greatest Indian mathematicians, Srinivasa Ramanujan.
- The Constitution Daywas celebrated on November 26, 2022.
- The 132nd Birth Anniversary of 'Bharat Ratna' Dr. B. R.Ambedkar was celebrated on April 26th 2023. Dr. Sindhu Thulaseedharan , Department of Law, University of kerala delivered the talk.
- As part of observance of 'Partition Horrors Remembrance Day' in the year ofAzadi Ka Amrit Mahotsav, an exhibition of photographs has been arranged in theLibrary.
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- Swachhta Pakhwada was celebrated by organizing a webinar on the Importance of Health, Personal hygiene andcleanliness on February 8, 2023.
- Sadbhavana DiwasIIST observed the Sadbhavana Diwas on August 18, 2022
- Vigilance Awareness Week Celebrations With the theme, Corruption freeIndia

Part B

CURRICULAR ASPECTS

1.1 - Curriculum Design and Development

1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the University

The curriculms@IIST has been systematically developed by kepping importanceof fundamental knowledge in STEM courses, where students get an option to choose elective courses in interdisciplinary fields, space-related topics. It provides a multi-track option with hands-on experience through internships, field-works, and projects at space research centres.The curriculum of all undergraduate/graduate programs is developed/updated/reviewed by the department curriculum committee, consists of experts from ISRO/DoS centres and other stakeholders. This is vetted by BoS and the academic Council. While meeting the national needs it ensures alignment with international standards and practices by fostering international collaborations and facilitating knowledge exchange on a global scale.

The curricula @ IIST is developed and implemented in a structured manner aligning with vision and mission of the institute. This is reflected in Program Outcomes (POs), Programme Specific Outcomes (PSOs), Course Outcomes (COs). A holistic development via co-curricular /extracurricular activities at different levels are envisaged in the curriculum. The POs and PSOs, Course Outcomes (COs) mappings, stakeholder-feedback, Practical-Applications, Interdisciplinary-Approach, Performance-Metrics, Quality-Assurance, flexibility in selecting electives and specializations, Integration of Research components, and the possibility of Industry Collaboration are reflected in the curriculum.

File Description	Documents
Upload relevant supporting document	[View File](#)

1.1.2 - Number of Programmes where syllabus revision was carried out during the year

8

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

1.1.3 - Total number of courses having focus on employability/ entrepreneurship/ skill development offered by the University during the year

1.1.3.1 - Number of courses having focus on employability/ entrepreneurship/ skill development during the year

83

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

1.2 - Academic Flexibility

1.2.1 - Number of new courses introduced of the total number of courses across all programs offered during the year

67

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

1.2.2 - Number of Programmes in which Choice Based Credit System (CBCS)/elective course system has been implemented during the year

9

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

1.3 - Curriculum Enrichment

1.3.1 - Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum

- Four courses offered as part of the undergraduate programs, cover various aspects related to gender, gender equality, issues faced by marginalized communities, environmental issues and solutions, and sustainable development. Specifically, courses like Introduction to Economics, Social Science and Ethics, Principles of Management offered by the department of Humanities and social Sciences, and Environmental Science and Engineering offered by the department of Chemistry incorporate these topics into their curriculum.

- A course on Research methodology is offered and is mandatory to all the doctoral students of IIST.It covers certain methods that a researcher needs to know to ensure reliable, valid results that address the objectives. It encompasses the details of the data they're going to collect and the methods to analyse the data. It also gives the utmost ethics to be followed by a scientific community.

- The projects, field visits and tribal studies undertaken by students provide opportunities to collect empirical data from society and filed of study, enabling them to understand the challenges to be faced by different groups, including women, children, transgender individuals, disabled individuals, and marginalized communities. It also covers the difficulties to be encountered, while doing field visits for data collection, especially in the filed of Geology, remote sensing, and geoinformatics.

File Description	Documents
Upload relevant supporting document	View File

1.3.2 - Number of value-added courses for imparting transferable and life skills offered during the year

18

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

1.3.3 - Total number of students enrolled in the courses under 1.3.2 above

1.3.3.1 - Number of students enrolled in value-added courses imparting transferable and life

skills offered during the year

873

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

1.3.4 - Number of students undertaking field projects / research projects / internships during the year

263

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

1.4 - Feedback System

1.4.1 - Structured feedback for design and review of syllabus – semester wise / is received from Students Teachers Employers Alumni	• Any 1 of the above

File Description	Documents
Upload relevant supporting document	[View File](#)

1.4.2 - Feedback processes of the institution may be classified as follows	• Feedback collected, analysed and action taken and feedback available on website

File Description	Documents
Upload relevant supporting document	[View File](#)

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Demand Ratio

2.1.1.1 - Number of seats available during the year

597

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

2.1.2 - Total number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per applicable reservation policy during the year (Excluding Supernumerary Seats)

2.1.2.1 - Number of actual students admitted from the reserved categories during the year

133

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

2.2 - Catering to Student Diversity

2.2.1 - The institution assesses the learning levels of the studentsand organises special Programmes for advanced learners and slow learners

- IIST adopts a continuous evaluation scheme for assessing academic performance.
- Continuous assessment accounts for 50% (two quizzes- 15% each, and assignments, class tests/seminars/mini-projects – 20%). The remaining 50% is determined by an end-semester examination.
- Underperformers in the first year are offered summer courses, which include lectures and tutorials for assisting them for examination.
- A class Committee -comprising head of the department, all course instructors and student representatives- meets to assess the progress, and address students' concerns/grievances related to the ongoing classes , if any.
- At the commencement of each programme, faculty mentors a group of three/four students and meets them frequently. This helps students to communicate difficulties they face. The mentor takes necessary steps to address the same, identifies slow learners and the same is brought to the notice of the course-instructor.
- Peer group learning and buddy mentoring systems are also in

- place to support students.
- The professional counselors appointed by IIST give necessary support and guidance to needy students.
- The Humanities Department helps students in improving communication skills by designing tailored modules for different levels of learners.
- Advanced learners can do projects at Small-spacecraft Systems and PAyload CEntre (SSPACE) instituted by IIST. SSPACE is involved in manufacturing payloads, small satellites, related electronics, their testing and integration.

File Description	Documents
Upload relevant supporting document	[View File](#)
Link For Additional Information	Nil

2.2.2 - Student - Full time teacher ratio during the year

Number of Students	Number of Teachers
1170	99

File Description	Documents
Upload relevant supporting document	[View File](#)

2.3 - Teaching- Learning Process

2.3.1 - Student centric methods, such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences

The curriculum for all programmes has a substantial number of laboratory courses to provide students with practical experience applying the concepts and theoretical content they have learned in their theory courses. Several courses are associated with specific, extensive initiatives, such as satellite development, ground station data handling and instrumentation. Students are encouraged to take up internships during their semester breaks and a credited summer internship is mandatory for all UG students at the end of their 6th semester. Students are required to give seminars, make presentations and are encouraged to lead discussions in graduate courses, helping them to enhance their critical thinking skills. In keeping with the larger goals of the

Department of Space, several students actively participate in projects on satellite payload development, launch vehicles and related subsystems in the different ISRO/DoS centres. This helps them to get accustomedwith the latest research and technological development happening in ISRO. Students, as part of the social science and economics papers have compulsory field visits which helps them to understand the real life situation of people in society. The different clubs in IIST provide a forum for students to discuss ideas and research in a critical yet constructive manner.

File Description	Documents
Upload relevant supporting document	[View File](#)

2.3.2 - Teachers use ICT enabled tools including online resources for effective teaching and learning processes during the year

The institute is equipped with 4 smart classrooms having interactive screens, while all 35 classrooms in the institute have multimedia support and internet connectivity. In addition, students and teachers have easy access to laptops/desktops, printers, e-mail, etc. The institute also has an active subscription to Microsoft's Office-365 that covers all students, research scholars and faculty members. Teachers use scientific computing and visualization software such as Python, Matlab, Mathematica, Maple, Synopsis, CAMSOL, etc. Multimedia Computing labs are also available. Use of pod casts; online platforms; web-based libraries and online statistical data sets are also promoted. The courses are also managing through Moodle, a customized learning platform, which provides study materials, assignments, class tests and evaluation of students' progress.

File Description	Documents
Upload relevant supporting document	[View File](#)

2.3.3 - Ratio of students to mentor for academic and other related issues during the year

2.3.3.1 - Number of mentors

53

File Description	Documents
Upload relevant supporting document	[View File](#)

2.4 - Teacher Profile and Quality

2.4.1 - Total Number of full time teachers against sanctioned posts during the year

95

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

2.4.2 - Total Number of full time teachers withPh.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit. during the year

95

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

2.4.3 - Total teaching experience of full time teachers in the same institution during the year

2.4.3.1 - Total experience of full-time teachers

12511

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

2.4.4 - Total number of full time teachers who received awards, recognition, fellowships at State, National, International level from Government/Govt. recognised bodies during the year

18

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

2.5 - Evaluation Process and Reforms

2.5.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results during the year

20

2.5.1.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the year

20

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

2.5.2 - Total number of student complaints/grievances about evaluation against total number appeared in the examinations during the year

0

File Description	Documents
Upload relevant supporting document	View File

2.5.3 - IT integration and reforms in the examination procedures and processes (continuous internal assessment and end-semester assessment) have brought in considerable improvement in examination management system of the institution

The institute uses a web-based application namely, "iCampus" for the purpose of maintaining examination related activities like Students' course registration, continuous assessment record, exam management and result processing and annoucement. Faculty members who offer courses related to various programmes set the evaluation pattern and grade setting in iCampus in line with IIST academic guideline . Results are published online through this platform. Students can login to their accounts and see their internal marks and end semester results. This system helps students to know their results, by logging into their accounts. Students who do internship or course projects outside the institute are being evaluated through hybrid online/offline mode. Also, for conducting annual review of doctoral and project students the institute adopts the hybrid mode, if required. By taking into consideration of the convenience of the outside doctoral committee members of PhD students, sometimes their pre-synopsis presentations are also conducted on hybrid mode over Microsoft Teams platform configured for IIST. Assignment

submission, class test, etc. are being conducted using Moodle platform.

File Description	Documents
Upload relevant supporting document	[View File](#)

2.5.4 - Status of automation of Examination division along with approved Examination Manual	A. 100% automation of entire division & implementation of Examination Management System (EMS)

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

2.6 - Student Performance and Learning Outcomes

2.6.1 - The institution has stated learning outcomes (generic and programme specific)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents

For the academic year 2022-2023, the institute has established the Programme Outcomes (POs), Programme Specific Outcomes (PSOs), and Course Outcomes (COs) of the programmes offered by the various departments. Quizzes 1 and 2, the end semester examination and internal assessments, which comprise homework/assignments, viva, seminars, and projects, are used to bring the learning objectives of the different courses in these programmes into the continuous evaluation process. All undergraduate (UG) and postgraduate (PG) course evaluations are built on a combination of components mentioned earlier to provide students with a fair chance for evaluation. The teacher regularly evaluates the laboratory tasks to ensure the lab course's goals and objectives are met through the lab report and viva. Furthermore, the students plan, carry out, and analyse their experiments and present the findings. In addition, undergraduate students must complete a two-month-long research internship programme. Both IIST faculty members and outside researchers oversee the completion of each project. The committee appointed by the Subject Board evaluates the UG and PG project work through an oral presentation and written report. Theyare all uploaded on

the IIST website using the iCampus interface.

After finishing their coursework, PhD students must pass a comprehensive examination to complete the registration process. After each academic year, the PhD student's performance is assessed by yearly presentations to the doctoral committee.

The department assesses the attainment of programme outcomes, program-specific outcomes, and course outcomes for each course after each semester.

Details are available in https://www.iist.ac.in/iqac

File Description	Documents
Upload relevant supporting document	[View File](#)

2.6.2 - Attainment of Programme outcomes, Programme specific outcomes and course outcomes are evaluated by the institution during the year

The institute has defined Programme outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) of the Programmes offered by all the departments during the academic year 2022-23. Currently, outcome based education is being initiated and followed in various programmes offered by different departments. For the UG programmes, the courses on basic subjects are assessed via continuous internal assessments. The lab experiments are continuously assessed by the lab instructor and ensure the attainment of outcome as envisaged and framed for the lab courses through lab report and viva. In addition to this, the students design and conduct their own experiments and present the results with analysis. The project work carried out under the supervision of a faculty member is evaluated in terms of a written report and oral presentation by the committee set up by the Subject Board. At the end of each semester, attainment of the COs , POs and PSOs are evaluated. The PhD students, after completing the coursework, have to undertake a comprehensive exam for completing the PhD registration. The PhD student's performance is evaluated through annual presentations to the doctoral committee at the end of every academic year.

File Description	Documents
Upload relevant supporting document	[View File](#)

2.6.3 - Number of students passed during the year

2.6.3.1 - Total number of final year students who passed the university examination during the year

236

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a web link)

https://www.iist.ac.in/iqac

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Promotion of Research and Facilities

3.1.1 - The institution Research facilities are frequently updated and there is well defined policy for promotion of research which is uploaded on the institutional website and implemented

The institute has set up state-of-the-art facilities in all departments to support its research activities. The research facilities are frequently augmented with funding from DoS and extramural research projects. The research policy of the institute is framed so as to encourage faculty members to take up fundamental as well as applied research to benefit the society. Research Council (RC) chaired by Dean (R & D) promotes and nurtures research activities, and oversees progress and academic matters of the research scholars. An advanced Space Research Group(ASRG) headed by Chief Technology Officer has been established for all collaborative research activities of IIST with ISRO. An empowered overseeing committee comprising members from all the research centres of ISRO is the apex body which realises the coordination and implementation of the projects in the concerned centres. IIST also ensures protection of intellectual property created by its stakeholders. Towards this IPR cell is established to fulfil Institute's commitment to endorse academic freedom and provide a conducive environment for research, innovation and advancement. The research culture at IIST has enabled the generation of skilled manpower in cutting edge research fields specifically in Space Science and Technology.

File Description	Documents
Upload relevant supporting document	[View File](#)

3.1.2 - The institution provides seed money to its teachers for research (amount INR in Lakhs)

Nil

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	**No File Uploaded**

3.1.3 - Number of teachers receiving national/ international fellowship/financial support by various agencies for advanced studies/ research during the year

64

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.1.4 - Number of JRFs, SRFs, Post-Doctoral Fellows, Research Associates and other research fellows enrolled in the institution during the year

194

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.1.5 - Institution has the following facilities to support research Central Instrumentation Centre Animal House/Green House Museum Media laboratory/Studios Business Lab Research/Statistical Databases Moot court Theatre Art Gallery	**A. Any 4 or more of the above**

File Description	Documents
Upload relevant supporting document	View File

3.1.6 - Number of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other recognitions by national and international agencies during the year

1

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

3.2 - Resource Mobilization for Research

3.2.1 - Extramural funding for Research (Grants sponsored by the non-government sources such as industry, corporate houses, international bodies for research projects) endowments, Chairs in the University during the year (INR in Lakhs)

45

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

3.2.2 - Grants for research projects sponsored by the government agencies during the year (INR in Lakhs)

2822

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

3.2.3 - Number of research projects per teacher funded by government and non-government agencies during the year

2

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.3 - Innovation Ecosystem

3.3.1 - Institution has created an eco-system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge

With a mission to foster the spirit of innovation and mould successful entrepreneurs, IIST has established a Space Technology Innovation and Incubation Centre(STIIC) in the campus. STIIC promotes (i) Innovation and entrepreneurship by converting and translating technology ideas (ii) transitions of results in various disciplines of science and engineering into products, processes and services for commercial exploitation (ii) integrating teaching, learning, research and innovation with real world needs and (iii) efforts to accelerate our nation's ability to innovate and lead a knowledge driven economy for the larger benefit of humanity.

To protect the intellectual property of the stakeholders, IIST has established an IPR cell. With well-defined policies and procedures, the cell guides and processes the applications for obtaining IPR protection such as patents and copyrights.

STIIC provides the incubatees, physical, technical and networking support and services to assist product innovations and development. Currently nine companies are incubated with STIIC, viz; Vashishtha Research Pvt. Ltd., SPACETIME 4D printing solutions LLP, BhuhPramaan PVT Ltd., InterCosmos Space Exploration Technologies Pvt. Ltd and Specrule Scientific Pvt Ltd, Zeroing in, Fluxx Ev Electric Pvt Ltd., Space Curve India Pvt Ltd, Hathor Rockets . These companies work in diverse fields from robotics assisted NDT, custom built 3D printers, geospatial technologies, novel propellants to the development of laser diagnostic tools, Science popularisation, electric vehicles and rocket engines.

File Description	Documents
Upload relevant supporting document	[View File](#)

3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual

Property Rights (IPR), Entrepreneurship and Skill Development during the year

27

3.3.2.1 - Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development year wise during the year

27

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

3.3.3 - Number of awards / recognitions received for research/innovations by the institution/teachers/research scholars/students during the year

3.3.3.1 - Total number of awards / recognitions received for research/innovations won by institution/teachers/research scholars/students year wise during the year

47

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

3.4 - Research Publications and Awards

3.4.1 - The institution ensures implementation of its stated Code of Ethics for research

3.4.1.1 - The institution has a stated Code of Ethics for research and the implementation of which is ensured through the following 1. Inclusion of research ethics in the research methodology course work 2. Presence of institutional Ethics committees (Animal, chemical, bio-ethics etc) 3. Plagiarism check 4. Research Advisory Committee	A. All of the above

File Description	Documents
Upload relevant supporting document	[View File](#)

3.4.2 - The institution provides incentives to teachers who receive state, national and international recognitions/awards Commendation and monetary incentive at a University function Commendation and medal at a University function Certificate of honor Announcement in the Newsletter / website	D. Any 1 of the above

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.4.3 - Number of Patents published/awarded during the year

3.4.3.1 - Total number of Patents published/awarded year wise during the year

2

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.4.4 - Number of Ph.D's awarded per teacher during the year

3.4.4.1 - How many Ph.D's are awarded during the year

70

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.4.5 - Number of research papers per teacher in the Journals notified on UGC website during the year

3

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.4.6 - Number of books and chapters in edited volumes published per teacher during the year

3.4.6.1 - Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings during the year

135

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.4.7 - E-content is developed by teachers For e-PG-Pathshala For CEC (Under Graduate) For SWAYAM For other MOOCs platform For NPTEL/NMEICT/any other Government Initiatives For Institutional LMS	`D. Any 2 of the above`

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.4.8 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

Scopus	Web of Science
5.71	**2.13**

File Description	Documents
Any additional information	[View File](#)
Bibliometrics of the publications during the year	[View File](#)

3.4.9 - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-

Index of the University

Scopus	Web of Science
21	57

File Description	Documents
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View File
Any additional information	View File

3.5 - Consultancy

3.5.1 - Institution has a policy on consultancy including revenue sharing between the institution and the individual and encourages its faculty to undertake consultancy

Institute is under the process of framing the consultancy policy

File Description	Documents
Upload relevant supporting document	No File Uploaded

3.5.2 - Revenue generated from consultancy and corporate training during the year (INR in Lakhs)

3.5.2.1 - Total amount generated from consultancy and corporate training during the year (INR in lakhs)

Nil

File Description	Documents
Upload the data template	No File Uploaded
Upload relevant supporting document	No File Uploaded

3.6 - Extension Activities

3.6.1 - Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the year

Nirmaan, the social outreach club of IIST is manned by the department of Humanities.

Dhwani, a program to audio record the text books was also done to

help the visually challenged students of Jagathy Blind School.

Faculty members have delivered quite a good number of talks in the form of keynote addresses and had handled plenary sessions for conferences/ workshops/ seminars/ webinars and FDPs.

Contributed as motivational speakers in various forums at schools, colleges and universities.

Actively engaged in the print, visual and social media panel discussions on international and socioeconomic and cultural topics.

Conducted various outreach/training programmes to school and college students such as Geoconnect, Astronomy School, STORM etc. Also contribute actively to various outreach activities for school/ college students initiated by Student Activity Board of IIST.

File Description	Documents
Upload relevant supporting document	[View File](#)

3.6.2 - Number of awards received by the Institution, its teachers and students from Government /Government recognised bodies in recognition of the extension activities carried out during the year

3.6.2.1 - Total number of awards and recognition received for extension activities from Government / Government recognised bodies during the year

0

File Description	Documents
Upload the data template	No File Uploaded
Upload relevant supporting document	No File Uploaded

3.6.3 - Number of extension and outreach programs conducted by the institution including those through NSS/NCC/Red cross/YRC during the year(including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)

9

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.6.4 - Total number of students participating in extension activities listed at 3.6.3 above during the year

230

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.7 - Collaboration

3.7.1 - Number of collaborative activities with other institutions/ research establishment/industry for research and academic development of faculty and students during the year

3.7.1.1 - Total number of Collaborative activities with other institutions/ research establishment/industry for research and academic development of faculty and students during the year

58

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

3.7.2 - Number of functional MoUs with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the year

14

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

4.1.1 - The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc.

IIST offers 2 undergraduates, 1 dual-degree, 15 masters, doctoral and post-doctoral programmes, hosted in Aerospace, Avionics, Interdisciplinary, and Science blocks. There are 30 classrooms, 6 seminar-halls, 2 council rooms, and four conference halls. Eight classrooms, Seminar/ conference rooms are air conditioned. The average seating capacity of each classroom is sixty. All class rooms are equipped with longer writing board, mike and speaker system, and a beamer. Also, the recording of video lectures is enabled in Audio/ visual lab using professional video recording/ editing software in the interdisciplinary block. The institute uses the open source MOODLE as a LMS tool to seamlessly interact with the students and other stakeholders. IIST's Multidisciplinary Computing Centre (MCC) has 120 teraflops, 40 workstations, 2 GPU Servers, and 200 TB Storage. MCC caters to the entire institute's scientific computing. Hundred instructional/research labs including high-end equipment are spread across the seven academic departments to provide hands-on experience to students. Trained lab-staff upkeep each lab/ equipment. Small-Spacecraft Systems and PAyload CEnter (SSPACE) dedicated for the design and development of different payloads by the students such as ARIS-101F, 102F, INSPIRESAT-1, PILOT. Another uniqueness of IIST is the ground station to track its own/ ISRO satellites.

File Description	Documents
Upload relevant supporting document	[View File](#)

4.1.2 - The institution has adequate facilities for cultural activities, yoga, games (indoor, outdoor) and sports. (gymnasium, yoga centre, auditorium, etc.)

Physical and mental fitness of each student studying in IIST is the highest priority of the institute.

The Institute has the following facilities for both outdoor and indoor games.

- Open ground (110 sq.m.) for football, and cricket
- An outdoor basketball court, volleyball court, and a net bowling facility for cricket.
- Indoor recreational facilities like unisex Gymnasium (236

sq.m.), Badminton (545 sq.m.) and Squash courts (85 sq.m.) are housed in the Student Activities Center (SAC).

- Air conditioned Multipurpose Hall (400 persons), Aerospace seminar hall (100 persons) are used for Yoga/ cultural/ Hindi sessions/ workshops/ induction programs.
- IQAC used to conduct workshops for all IIST members.
- A recreational hall (315 sq.m.) has chess, table tennis, billiards board, and carom.
- In addition, all academic blocks have Table tennis and badminton courts.
- An open-air auditorium (850 seating capacity) hosts cultural activities, yoga, and Dhanak, the cultural fest of the Institute.
- A music club with various musical instruments is available.

Hostels:

- IIST has 9 boy's and 2 girl's furnished hostels to accommodate all its students and enabled with WiFi facility.

Counselling and Medical facility:

- A hospital is inside the campus with dedicated doctors/ nurses/ student counsellor.

File Description	Documents
Upload relevant supporting document	[View File](#)

4.1.3 - Availability of general campus facilities and overall ambience

IIST is situated in Valiamala hills which is well away from busy city. Its ambience is calm and serene. It is located adjacent to the world renowned Liquid Propulsion System Centre, Valiamala. It is a fully residential campus for students. IIST has several boys/ girls' hostels with modern amenities which provides the best hospitality to the students. Each hostel is maintained by a dedicated hostel manager. A round-the-clock medical bay with doctors and nurses is available to address students health ailments. An ambulance is there to transport students at emergency. Professional counsellors help students to overcome their mental worries. A central mess is available. It serves both healthy and tasty south/ north Indian cuisine that is prepared in a very hygienic kitchen. IIST has a magnificent library. It has a large collection of technical, and general books. It has

dedicated reading and study rooms. Reprographic section in library helps students in printing, photocopy as well as binding of important study materials. An incinerator is available for proper waste management. Two big ponds are available for the rain water harvesting. The harvested water is treated and utilized for cleaning, and gardening purposes. The entire institute is protected by CISF security personnel.

File Description	Documents
Upload relevant supporting document	[View File](#)

4.1.4 - Total expenditure excluding salary for infrastructure augmentation during the year (INR in Lakhs)

2267.68

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

4.2 - Library as a Learning Resource

4.2.1 - Library is automated using Integrated Library Management System (ILMS) and has digitisation facility

IIST library was automated since its inception in 2007 using NewGenLib software. Later it was moved to Koha – an open source ILMS. Presently library uses Koha (V. 20.11.06.000). The automation was done in a full-fledged manner with all functional modules. All library operations, such as acquisition, cataloguing, periodical control, circulation, administration etc. are automated with OPAC facility for users to search and suggest books. Facility to search the OPAC of other DoS/ISRO libraries to avail books/article as Inter Library Loan is also availabile in the Library.

The library provides access to digital contents through the intranet and library portal. In addition, IIST Virtual Library (IVL) facilitate remote access to subscribed e-resources from anywhere at any time. Three multi-functional production printing cum scanner machines (one black & white and two colours) are available to meet the digitisation requirements. In addition, a table top scanner is also available for users to scan their materials.

The Graphic Design Facility in the library helps in making various digital documents such as Newsletter, Annual Report, Convocation Speeches, and Conference Proceedings etc. Library hosts the full text of PhD theses and digital copies of conference papers / posters by students in the institute website. Library archives the photographs of various events of the institute. It manages the social media pages of the institute by uploading and updating digital contents of various events and programmes of the institute.

File Description	Documents
Upload relevant supporting document	View File

4.2.2 - Institution has subscription for e-Library resources Library has regular subscription for the following: e – journals e-books e-ShodhSindhu Shodhganga Databases	A. Any 4 or all of the above

File Description	Documents
Upload relevant supporting document	View File

4.2.3 - Annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the year (INR in Lakhs)

273.28

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

4.2.4 - Number of usage of library by teachers and students per day (foot falls and login data for online access)

473

File Description	Documents
Upload relevant supporting document	View File

4.3 - IT Infrastructure

4.3.1 - Number of classrooms and seminar halls with ICT - enabled facilities such as LCD, smart board, Wi-Fi/LAN, audio video recording facilities during the year

36

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

4.3.2 - Institution has an IT policy, makes appropriate budgetary provision and updates its IT facilities including Wi-Fi facility

At IIST, Internet and Intranet services are the lifeline of students, faculties & staff to conduct academic, research, and administrative activities in a seamless manner. Information Technology (IT) policies of the Dept. of Space, Govt. of India is predominantly followed to administrate the IT infrastructure and services at IIST. All IISTians have privileged access to academic/ administrative information and digital resources made available within the institution and all the research entities of the Dept. of Space, Govt. of India. The institution allows use of privately-owned 'bring-your-own-IT devices' that belong to all students/ permanent employees to access the institution's IT services and Computing resources on a roaming basis within the campus and also remotely. The institution adopts the use of IT-enabled equipment and services in aiding and facilitating visualisation and digitalisation of lectures, conferences, reviews and examinations. Web Technologies and IT-enabled authentication and authorisation methods, including web-portals, biometrics, short-messaging services, e-procurement and digital payments are adopted to assure safety in handling all IT services. Computer Systems Group is responsible for the operation, maintenance and security of the IT infrastructure and services in IIST. IT infrastructure and services are constantly augmented and upgraded to improve the user experience.

File Description	Documents
Upload relevant supporting document	[View File](#)

4.3.3 - Student - Computer ratio during the year

Number of students	Number of Computers available to students for academic purposes
1170	743

4.3.4 - Available bandwidth of internet connection in the Institution (Leased line)

- ?1 GBPS

File Description	Documents
Upload relevant supporting document	View File

4.3.5 - Institution has the following Facilities for e-content development Media centre Audio visual centre Lecture Capturing System(LCS) Mixing equipment's and softwares for editing

A. All of the above

File Description	Documents
Upload relevant supporting document	View File
Upload the data template	View File

4.4 - Maintenance of Campus Infrastructure

4.4.1 - Total expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the year

520.39

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

IIST has several instructional and research laboratories. Each lab has a faculty coordinator. He is responsible to upkeep all the equipment in the respective lab. As the lab staffs are skilled, periodic maintenance shall be taken care of by them. In case of repair, the concerned vendor will be communicated and the equipment will be repaired. For the repair and maintenance expenses, a separate budget is earmarked for each department.

High-value equipment are secured with annual maintenance contract which also has dedicated budget. As the research equipment was procured on demand by a faculty, it will be maintained by him. Suitable research equipment are shared between labs on demand. The class rooms are maintained by the respective head of departments of the academic blocks. Any repair of window glass panes, or furniture in the class rooms are handled by the institute's maintenance department. The audio-visual systems in the class rooms are maintained by a lab staff. The repair or upgradation of computers in several labs, offices are done through a central committee. Budget are earmarked for the whole institute. The licences of important academic software are handled by the respective department.

File Description	Documents
Upload relevant supporting document	[View File](#)

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Total number of students benefited by scholarships and free ships provided by the institution, Government and non-government agencies (NGOs) during the year (other than the students receiving scholarships under the government schemes for reserved categories)

715

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

5.1.2 - Total number of students benefited by career counselling and guidance for competitive examinations offered by the Institution during the year

720

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

5.1.3 - Following Capacity development and skills enhancement initiatives are taken by	A. All of the above

the institution Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) Awareness of trends in technology

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

5.1.4 - The Institution adopts the following for redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organisation wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

- All of the above

File Description	Documents
Upload relevant supporting document	View File

5.2 - Student Progression

5.2.1 - Number of students qualifying in state/ national/ international level examinations during the year (eg:NET/SLET/GATE/GMAT/CAT/ GRE/TOEFL/Civil Services/State government examinations)

5.2.1.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

21

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

5.2.2 - Total number of placement of outgoing students during the year

190

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

5.2.3 - Number of recently graduated students who have progressed to higher education (previous graduating batch) during the year

14

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

5.3 - Student Participation and Activities

5.3.1 - Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter -university/state/national/international events (award for a team event should be counted as one) during the year

2

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

5.3.2 - Presence of Student Council and its activities for institutional development and student welfare

In IIST, the Student Activity Board (SAB), led by the Dean of Student Activities and Student Welfare, oversees and ensures the welfare of students on campus. SAB comprises members like the Registrar, Heads of all Departments, and Chairpersons of institute committees, with student representatives. Each committee, chaired by a senior faculty member, includes faculty and student representatives providing crucial feedback on student matters. Meetings are held monthly or as needed to address specific concerns.

In the academic year 2022-23, SAB played a pivotal role in organizing major events at IIST, including the intercollegiate cultural fest Dhanak, the inter-collegiate tech fest Conscientia,

the Annual Sports Day, and various other student activities. Additionally, SAB managed student clubs, organized a 7-day induction program, and supervised the mentoring system. These initiatives not only allow students to apply theoretical knowledge but also foster collaboration, leadership skills, and a sense of social responsibility. SAB's efforts contribute significantly to the holistic development of students at IIST.

File Description	Documents
Upload relevant supporting document	[View File](View%20File)

5.3.3 - Number of sports and cultural events / competitions organised by the institution during the year

12

File Description	Documents
Upload the data template	[View File](View%20File)
Upload relevant supporting document	[View File](View%20File)

5.4 - Alumni Engagement

5.4.1 - The Alumni Association/Chapters (registered and functional)contributes significantly to the development of the institution through financial and other support services during the year

The Indian Institute of Space Science & Technology Alumni Association (IISTAA) was officially established on September 14, 2019, with the aim of fostering a dynamic platform to encourage interaction and networking among the Institute's alumni. Its activities included facilitating vibrant forums for alumni interaction and networking, nurturing cordial and mutually beneficial relations between IIST alumni and the alma mater, promoting individual and institutional growth through the exchange of professional knowledge, organizing conferences, seminars, workshops, and training courses across professional, social, and cultural domains

The 3rd edition of the Ankesh Mishra Memorial Quiz (AMMQ) was successfully conducted on September 24th, 2022, jointly by IISTAA and the Quiz Club IIST, with alumni members serving as quiz masters.The other activities included a webinar titled "Entrepreneurship Opportunities in the Space Sector" for the students of IIST on October 9th, 2022, Coffee Talk online series, in connection with International Women's Day 2023, on March 12th,

inviting women from IIST to share their diverse stories and celebrate their experiences, an informational session on "Life beyond IIST," for IIST students, on April 8th, 2022, a single-day football event, Futsal Reloaded, on May 1st, 2022, welcoming alumni, faculty, and staff from Btech, M.Tech, and PhD programs.

https://www.iist.ac.in/sites/default/files/library/AnnualReport2022-23E.pdf

File Description	Documents
Upload relevant supporting document	[View File](#)

5.4.2 - Alumni contribution during the year (INR in Lakhs) | **E. <1Lakhs**

File Description	Documents
Upload relevant supporting document	[View File](#)

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

6.1.1 - The institution has a clearly stated vision and mission which are reflected in its academic and administrative governance

IIST provides a teaching-learning ecosystem emphasizing innovation and social sensitivity and promotes ethical, value-based education. To ensure this it has initiated courses on Indian Knowledge systems, Universal Human Values and interdepartmental programmes. The Academic Bank of Credit (ABC) as directed by the University Grants Commission (UGC), is now set to be integrated into IIST's educational framework. The NEP implementation at IIST began with a dedicated task team studying NEP 2020, engaging in extensive discussions with faculty groups, and formulating proposals. Through numerous international collaborations and a decentralized structure, IIST aims to seamlessly integrate research with academics. Students do projects/ internships at CalTech and ANU- FRT, NTU, Boulder Colorado etc. This is in addition to the already existing MoUs with national and international institutes. IIST has developed and successfully launched a student satellite INSPIRESat-1 which is a joint collaboration with the Laboratory of Space Physics,

University of Colorado, Boulder, USA, Nanyang Technological University, Singapore and National Central University, Taiwan for various scientific experiments. Recognizing the imperative of strengthening and streamlining IIST's research environment and catching up with the advances in the Indian Space Sector, an Advanced Space Research Group (ASRG) was constituted in IIST. The vision of ASRG is to facilitate the seamless integration of ideas, expertise, and know-how between IIST and ISRO centers, thereby leveraging collective wisdom for futuristic space programs.

https://www.iist.ac.in/aboutus/vision-mission

https://www.iist.ac.in/innovation/asrg-vision

File Description	Documents
Upload relevant supporting document	[View File](#)

6.1.2 - The effective leadership is reflected in various institutional practices such as decentralization and participative management

The Institute's executive bodies include the Governing Council chaired by the Secretary-DoS, the Additional Secretary-DoS, the Joint Secretary-DoS (Personnel), and the Scientific Secretary-DoS as members and the Joint Secretary-DoS (Finance)as an invitee, and the Director, IIST as member secretary. This is followed by the Board of Management and the Academic Council. The Director IIST heads the institute, under whom Deans, Registrar, department heads, faculty members, officers, and staff remit their duties. The dean (Academics) manages academic activities; the Dean (R&D) handles projects and other research-related activities, the Dean (IPR) handles patent-related activities, and the Dean (Student Activity, Student Welfare, and Outreach) leads student support activities. Registrar heads the administration and is supported by deputy registrars. The Deputy Registrar (Academics) takes care of exams, admissions, and other academic responsibilities. The Deputy Registrar (Finance) monitors accounts and financial matters; the procurement of various equipment/ facilities is managed by the Deputy Registrar (Purchase) and Deputy Registrar (Stores), and the administration is by the Deputy Registrar (Administration). The recruitment and review are handled by the Deputy Registrar (Recruitment and Review). A Senior Administrative Officer monitors the Establishment/Public Relations/Transport Operation and Maintenance Division (TOMD). Other sections include the Canteen, CMD, IT& software, official

language, Hostel, Library, Sports, Medical, Transport, and CISF teams are overseen by different committees.

File Description	Documents
Upload relevant supporting document	[View File](#)

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic plan is effectively deployed

IIST devices and implements its strategic plan through integration of programmes, cutting-edge research, interdisciplinary courses to train the next generation of space engineers/scientists/professionals. Accordingly, it implemented the following activities.

- Implemented Choice Based Credit System (CBCS) and elective courses.

- Students enrolled SWAYAM and NPTEL courses offered by MHRD.

- Used in-house LMS for online education.

- Small Spacecraft System and Payload Center(SSPACE) developed PslvInorbitaL Obc andThermals (PILOT) andAdvancedRetarding potential analyser forIonosphericScience (ARIS) for PS-4 payloads on the POEM platform of PSLV C-55 mission and launched successfully on 22nd April 2023.

- ASRG's (Advanced Space Research Group) collaborative research led to 27 live projects as on 30.06.2023.

- STIIC (Space Technology Innovation and Incubation Cell) supports an innovative ecosystem to incubate startups and foster entrepreneurships. Nine of them are established.

- Initiated a Space Biology Lab (SBL) and enhanced all labs to have state-of-the-art facilities.

- Strengthened partnerships with international space agencies, research institutions, and universities and signed 14 MoUs in 2022-23. This includes University of Cambridge, CalTech, CNRS, École Polytechnique, University Space Research Association and so on.

- Continuing student exchange programs with CALTECH, ANU and USRA for student's global exposure and collaboration.

- Organizes many outreach-programs/workshops/events/camps including Astronomy School, YTN, NuMATS, IIST@School, etc. every year.

- IQAC encourages continuous improvement to maintain the institute's competitiveness and relevance.

File Description	Documents
Upload relevant supporting document	[View File]()

6.2.2 - The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.

The Director, in consultation with senior officials, and Deans, formulates various Committees and administrative policies for the smooth functioning of the Institute. The annual budget, finance, and audit queries are overseen by Director, Registrar, and Deputy Registrar (Finance) in conformity with DoS rules and regulations. Registrar and Director oversees civil works and Dean (Academics), ensures that academic policies are uniform and in accordance with the UGC rules. The IQAC ensures various programmes for institutional functioning towards quality enhancement as per NAAC Guidelines and prepares AQAR annually. Apart from that faculty members, officers, and staff, should submit Annual Performance Report for assessing their performance every year. The manpower requirement of the institute for various academic, administrative, and research activities are monitored, assessed, and vacancies are notified in leading print media/ IIST website (https://www.iist.ac.in/career/opportunity). The project fellows, SPF and JPF are recruited and paid as per UGC mandate. The administrative ladder of IIST consists of Director, Registrar, and Deans followed by faculty, officers, and staff. IIST has 95 faculty members, to conduct lectures, tutorials, and practical sessions; 25 technical officers/staff to support lab and research activities, 11 permanent administrative officers and 8 office assistants, and 341 contract employees to support various activities.

File Description	Documents
Upload relevant supporting document	[View File](#)

6.2.3 - Institution Implements e-governance in its areas of operations

6.2.3.1 - e-governance is implemented covering following areas of operation 1. Administration 2. Finance and Accounts 3. Student Admission and Support 4. Examination	A. All of the above

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

6.3 - Faculty Empowerment Strategies

6.3.1 - The institution has a performance appraisal system, promotional avenues and effective welfare measures for teaching and non-teaching staff

Welfare Measures:

- Medical Welfare Program CHSS (1% of their basic pay monthly)

- 24X7 Health centre and Polyclinic facility In-house counseling center

- LTC scheme

- SAFE (Scheme for Assistance to Families in Exigency)

- Vikram A. Sarabhai Trust (VAST)

- Financial Assistance in Exigency (FAE)

Promotional Avenues and Welfare Measures:

- The Annual Performance Assessment Report (APAR) of all permanent employees is submitted to the reporting officer

and a three-tier reviewing system is in place. The head of the department/controlling officer reviews the report and forwards it to the next levels for assessment and approval. A copy of the graded APAR will be communicated to the concerned faculty/employee from the office of the registrar, IIST. Grievances can be represented within 15 days from the date of their receipt. IIST follows a Merit Promotion Scheme (MPS) for permanent faculty members and Limited Flexible Complement Scheme (LFCS) for its permanent Administrative Staff.

Other welfare programmes include:

- Organizational (@ 10 to 16 %) and Group (@ 7 to 9.5%) Performance Relative Incentive Scheme)

- Financial support for purchasing computers Housing Loan Scheme

- Transport allowance/conveyance facility

- Financial support for membership in scientific and professional bodies

- Professional update allowance/Space technology allowance

- Reimbursement of telephone/internet bill

- Pension Scheme

- Earned leave encashment/Sabbatical Leave/Maternity Leave/Paternity Leave/Child care Leave

- Upload relevant supporting document

File Description	Documents
Upload relevant supporting document	[View File](#)

6.3.2 - Total number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

48

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

6.3.3 - Number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the year

10

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

6.3.4 - Total number of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the year(Professional Development Programmes, Orientation / Induction Programmes Refresher Course, Short Term Course)

7

File Description	Documents
Upload the data template	View File
Upload relevant supporting document	View File

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institutional strategies for mobilisation of funds and the optimal utilisation of resources

The major funding is from DoS for recurring and non-recurring expenses. It comes in the form of an annual Grant-in-Aid for meeting Capital, General, and Salary expenditure. In addition, IIST receives funds from other ISRO centers through the projects approved under ASRG. The other incomes are from extramural funds (DST-SERB, ICSSR, MoES, DBT, Ministry of Electronics and Information Technology -MeitY), tuition fees, application fees, etc. For optimizing resources, IIST follows the biannual model BE (Budget Estimate)-RE (Revised Estimate). We consolidate and review budget requirements from the departments/sections and recommendations are made to DoS. On receipt of the budget, the expenditure is incurred as per the approved budget/line item

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under the management of the budget coordinators at department/section/institute levels. A higher-level committee led by the Director takes care to achieve the expenditure targets by conducting reviews regularly. Based on the review of the expenditure, by DoS, it releases the fund every quarter (22%, 23%, 25%, 30%). Each financial year the institute prepares a road map for completing the technical reviews and financial appraisals of major technology development programmes, facilities, research labs, and projects. Funds generated through other resources like Extramural Grants etc. are utilized as per applicable guidelines of IIST and Funding Agencies.

File Description	Documents
Upload relevant supporting document	[View File](#)

6.4.2 - Funds / Grants received from government bodies during the year for development and maintenance of infrastructure (not covered under Criteria III and V) (INR in Lakhs)

2789

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

6.4.3 - Funds / Grants received from non-government bodies, individuals,philanthropists during the year for development and maintenance of infrastructure (not covered under Criteria III and V)(INR in Lakhs)

0.7664

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

6.4.4 - Institution conducts internal and external financial audits regularly

IIST has a well-framed financial auditing system with expertise and guidance provided on a timely basis by DoS. The institution has three different audits. The finances are audited with respect to purchases, academics, and accounts. The detailed audited statements are tabled in the parliament regularly along with the Annual Report.

A. Statutory Audit:- It is carried out on a yearly basis by CAG empaneled Chartered Accountants. Financial statements are certified by Chartered Accountants and financial compliance is ensured.

B. Internal Audit: - It is carried out by the Department of Space on a regular basis. Procedural compliances in finance, purchase, and administrative areas are reviewed. Audit queries raised are replied and corrective actions wherever necessary are taken in accordance with the advice of the internal auditors.

C. CAG Audit: - It is carried out every few years with an emphasis on propriety and efficiency. Audit objections raised are clarified and corrective measures are adopted wherever necessary. Audited Financial Statements are uploaded on the Institute's website.

The link for the statement for the year 2022-23 is https://www.iist.ac.in/sites/default/files/library/AnnualReport2022-23E.pdf

File Description	Documents
Upload relevant supporting document	[View File]()

6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes by constantly reviewing the teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals

The IQAC@IIST has initiated the following activities during the year 2022-23.

- IQAC launched an IIST Digital Data Portal, http://icampus.iist.ac.in/app in 2022-2023), to collect and preserve data about all activities of IIST. Here, one can assimilate information regarding journal publications/conferences/articles, awards, workshops/seminars, session-chaired/organised, books/book-chapters, events/visits/outreach programs etc. It also ensures efficiency and transparency by digitalising its activities through the Software Systems Group (SSG).

- In 2022, IQAC IIST reviewed the teaching-learning processes and learning outcomes based on a Student Satisfaction Survey (SSS). The analysis identifies areas of improvement

and recommends reforms to be implemented for quality enhancement of education.

- IQAC also launched a separate webpage for showcasing its activities, teaching, learning and evaluation process, report on SSS, and details of IIST's national rankings.

- IIST decided to adopt recommendations of NEP 2020 in a phased manner. A task team has been constituted for learning NEP 2020 and the activities were started with a Workshop on NEP and implementation conducted on 08.05.2023.

- IIST decided to implement Academic Bank of Credit (ABC) as per NEP 2020 and the same was deliberated and approved in IIST Board of Management meeting held in July 2023.

- Institute has started offering an elective course on the Indian Knowledge system.

- The Buddy Mentoring System in IIST facilitates the academic and personal growth of students through peer support and guidance. The senior students (mentors) are paired with junior students (mentees) based on their academic disciplines/interests.

File Description	Documents
Upload relevant supporting document	[View File](#)

6.5.2 - Institution has adopted the following for Quality assurance Academic Administrative Audit (AAA) and follow up action taken Confernces, Seminars, Workshops on quality conducted Collaborative quality initiatives with other institution(s) Orientation programme on quality issues for teachers and studens Participation in NIRF Any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)	B. Any 4 of the above

File Description	Documents
Upload the data template	[View File](#)
Upload relevant supporting document	[View File](#)

6.5.3 - Incremental improvements made for the preceding during the year with regard to quality (in case of first cycle) Post accreditation quality initiatives(second and subsequent cycles)

Following the first NAAC accreditation in 2013, IIST has taken the followinginitiatives:

- IIST started M.Tech (Quantum Technology) in 2022-23.

- The Advanced Space Research Group (ASRG) has expanded its activities with various ISRO centres resulting in 27 live projects as on 30.06.2023.

- The Space Technology Innovation and Incubation Cell (STIIC) inaugurated in 2018 has instrumental in incubating more new startups. As a result, 9 companies commencing operations, promoting entrepreneurship in the space sector.

- IIST has signed 14 additional MoUs with ISRO centers and international institutions in 2022-23, enhancing collaborative research.

- Small Spacecraft System and Payload Centre (SSPACE) developed payloads like PSLV InorbitaL Obc and Thermals (PILOT) and Advanced Retarding potential analyzer for Ionospheric Science (ARIS) for PS-4 payloads on the POEM platform of PSLV C-55 mission, successfully launched on April 22, 2023.

- IIST has increased student outreach and exchange programs, such as workshops, Astronomy School, YTN (Young Talent Nurture), NuMATS (Nurturing Mathematics Talent Search), seminars, and conferences.

- Curriculum updating in line with the National Education Policy (NEP) was completed in 2022-23 and will be implemented in the following academic year.

- Integrated M.Tech-Ph.D. programs in various disciplines have been introduced in 2022-23 for students from centrally funded institutions.

- IIST conducted a Purchase Manual Familiarization Program for familiarisation and introduced E-procurement in 2022-23, for transparency in procurement processes.

File Description	Documents
Upload relevant supporting document	[View File](#)

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

IIST has been proactive in promoting gender equality and providing support for its female members. Some initiatives are:

- Established Internal Complaints Committee (ICC) @ IIST to address gender-related issues.
- Celebrated International Women's Day Celebrations (8th March 2023) in hybrid mode.The chief guest was Ms. Nishanthini IPS, DIG of Police, Thiruvananthapuram. A motivational Speech was given by Ms. Jaya G Nair, Writer/poet/former-Scientist/Engineer, VSSC. As part of the event an exhibition cum sales and cultural programs were organized by students/faculty/staff.
- Organized a health Camp and Awareness Session on Breast Cancer (10th March 2023) with support from doctors at Regional Cancer Centre, Thiruvananthapuram.
- IIST faculty and staff attended a Training Program on Defensive Mechanism for Women a program organized by VSSC.
- 24x7 counselling service available in the institute.
- Every student assigned a faculty mentor and a senior student as part of the buddy mentoring system.
- Separate lady washrooms provided on every floor of every building.
- Incinerators available in all floors of the ladies' hostel.
- ICC actively conducts programs on gender sensitization and equality for students, faculty, and staff.

File Description	Documents
Upload relevant supporting document	[View File](#)
Annual gender sensitization action plan(s)	https://www.iist.ac.in/sites/default/files/Internal-Complaints-Committee/Gender%20sensitization%20action%20plan22-23.pdf
Specific facilities provided for women in terms of: a. Safety and security b. Counseling c. Common rooms d. Daycare Centre e. Any other relevant information	[Counseling and common room](#)

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power-efficient equipment	A. Any 4 or All of the above

File Description	Documents
Upload relevant supporting document	[View File](#)

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

A no waste incinerator is maintained in the campus for proper waste disposal. Napkin Incinerators are also installed in all ladies' hostel and one ladies toilet each in all academic buildings. A Biogas plant is operated and maintained by Canteen Services and the byproducts of biogas are used as fertilizer. A compost pit has been made where dry leaves are collected and disposed and is used for of gardening purpose. Food waste, plastic waste, paper waste collected separately and disposed. For collecting these, separate dust bins are provided in each floors of all buildings. The campus has banned the use of plastic. Still it comes to the campus along with some purchases by the students staying in hostels.Plastic bottles, disposed by students are reused for planting. As part of Green Kerala Mission policy, the plastic waste generated in the campus are also disposed through

`Haritha Karma Sena, an authorized/registered recycler.Paper waste generated is shredded using Paper Shredders within the campus and disposed through authorised recyclers. Water treatment plants are installed inside the campus for recycling used water which is later used for gardening purpose. Since the campus is relatively new, E- waste generated is almost nil.`

File Description	Documents
Upload relevant supporting document	[View File](#)

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

`A. Any 4 or all of the above`

File Description	Documents
Upload relevant supporting document	[View File](#)

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows:

1. Restricted entry of automobiles
2. Use of bicycles/ Battery-powered vehicles
3. Pedestrian-friendly pathways
4. Ban on use of plastic
5. Landscaping

`A. Any 4 or All of the above`

File Description	Documents
Upload relevant supporting document	[View File](#)

7.1.6 - Quality audits on environment and energy are regularly undertaken by the institution

7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:

1. Green audit

`A. Any 4 or all of the above`

2. **Energy audit** 3. **Environment audit** 4. **Clean and green campus recognitions/awards** 5. **Beyond the campus environmental promotional activities**	

File Description	Documents
Upload relevant supporting document	[View File](#)

7.1.7 - The Institution has a disabled-friendly and barrier-free environment Ramps/lifts for easy access to classrooms and centres. Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software,mechanized equipment, etc. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.	A. Any 4 or all of the above

File Description	Documents
Upload relevant supporting document	[View File](#)

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words)

All major festivals such as Holi, Diwali, Dusshera, Pongal, Onam, Ugadi,Christmas etc are celebrated with the active participation of students andstaff.The Institute has established SC/ ST Cell, Students Grievance RedressalCell, Anti ragging Cell to maintain a peaceful academic environment.Canteen Services in IIST caters to satisfy the food preferences of thestudents by ensuring a menu serving the palates of the pan Indiancommunity in consultation with the students.

The institute also has disabled inclusive measures such as buildings withdisabled access ramp, lifts, accessible toilets etc., for the convenience of personswith reduced mobility.IIST Hindi Section conducts various instructional programs to improve Hindiproficiency of not only student as well as staff.English

Language Support Programme was offered by Dr Mackenzie Bristowfrom the University of at IIST from January 16 - Feb 22-2023 as part of theEnglish Language Support Programme offered by the Regional EnglishLanguage Office of the US Embassy.With a will to "demystify" science to the less privileged tribal students, the socialoutreach club of IIST- Nirmaan organized science camp for the students of thetribal settlement of Thenmala and Athrirapally forest divisions and for selectedstudents of Government Upper Primary School, Ponmudi.SPICMACAY, IIST hosted a SPIC MACAY programme on November 1, 2022, aspart of the induction programme. Shri Shashank Subramanyam, the renownedflautist performed the Carnatic flute, accompanied by Shri Trivandrum Sampath onviolin, Shri Palakkad Mahesh on mridangam and Shri Udupi Sreedhar on ghatam.

File Description	Documents
Upload relevant supporting document	[View File](#)

7.1.9 - Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:

IIST Celebrated the following to sensitize the students and employees :

- The Constitution Daywas celebrated on November 26, 2022.
- Azadi Ka Amrit Mahotsav, was celebrated the 75 years of Indias independence, its glorioushistory, culture and achievement was flagged off on 15th August 2022.
- The 132nd Birth Anniversary of 'Bharat Ratna' Dr. B. R.Ambedkar was celebrated on April 26th 2023. Dr. Sindhu Thulaseedharan , Department of Law, University of kerala delivered the talk.
- As part of observance of 'Partition Horrors Remembrance Day' in the year ofAzadi Ka Amrit Mahotsav, an exhibition of photographs has been arranged in theLibrary.
- The courses offered by the Humanities department such as Introduction to SocialScience and Ethics and Economics cover several aspects of rights, duties andresponsibilities of citizens. Universal Human value course -AICTE sponsored isalso offered to the students
- Independence day and Republic day were celebrated with all dignity andfervour which helped in inculcating the values of harmony and national integrity.

- Ø Swachhta Pakhwada was celebrated by administeringthe pledge from their respective departments. A, webinar on the Importance of Health, Personal hygiene andcleanliness was organised on February 8, 2023. Dr. L.B. Shaebha Irence,Medical Officer, IIST handled the session. Cleaning drives within the campusand in the neighboring community were also organized.
- Sadbhavana DiwasIIST observed the Sadbhavana Diwas on August 18, 2022
- Vigilance Awareness Week Celebrations With the theme, Corruption freeIndia for a developed Nation, Vigilance Awareness Week brings together allstake- holders to collectively participate in the prevention of and fight againstcorruption

7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on Code of Conduct are organized	Any 3 of the above

File Description	Documents
Upload relevant supporting document	[View File](#)

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

- Festivals Like Diwali was celebrated on October 24, 2022 where the students joinedtogether to illuminate the premises with an array of beautifully decorated diyas,symbolizing the triumph of light over darkness.
- Amidst the backdrop of academia and scientific pursuits, Holi was celebrated on March 8, 2023
- Celebrated National Science day on February 28, 2023. Dr. S. Suresh Babu, Head and Scientist G, ATRF Branch, SPL, VSSC delivered a talk
- Celebrated International Women's Day on March 8, 2023. The Chief Guest Ms.Nishanthini R, IPS, DIG of Police, Thiruvananthapuram and the Guest of honour Dr.Jaya G Nair,

Former Scientist/ Engineer, VSSC delivered inspirational talk

- Celebrated National Mathematics Day.on 22nd December, on the birth anniversary of one of the greatest Indian mathematicians, Srinivasa Ramanujan.
- The Constitution Daywas celebrated on November 26, 2022.
- The 132nd Birth Anniversary of 'Bharat Ratna' Dr. B. R.Ambedkar was celebrated on April 26th 2023. Dr. Sindhu Thulaseedharan , Department of Law, University of kerala delivered the talk.
- As part of observance of 'Partition Horrors Remembrance Day' in the year ofAzadi Ka Amrit Mahotsav, an exhibition of photographs has been arranged in theLibrary.
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- Swachhta Pakhwada was celebrated by organizing a webinar on the Importance of Health, Personal hygiene andcleanliness on February 8, 2023.
- Sadbhavana DiwasIIST observed the Sadbhavana Diwas on August 18, 2022
- Vigilance Awareness Week Celebrations With the theme, Corruption freeIndia

File Description	Documents
Upload relevant supporting document	[View File](#)

7.2 - Best Practices

7.2.1 - Describe one best practice successfully implemented by the Institution as per NAAC format provided in the Manual

1. Title: Fostering community engagement and social responsibility among the students

2. The context

IIST recognized the need to cultivate social responsibility among students and formed NIRMAAN, a student's outreach club. It aims to foster social responsibility by bridging academia with the community for addressing social challenges.

3. Objectives

- Cultivate IIST student-community connections.

- Plan and Implement special educational programs for the underprivileged section of the community.
- Organize periodic health camps and social awareness campaigns.
- Promote initiatives to save the environment.
- Assure inclusivity for people from different backgrounds.

4. Practice

The Nirmaan Social Outreach Club provides remedial instruction, mental health counselling, disaster relief, and science camps for impoverished youngsters. They exhibit a great dedication to social responsibility by supporting environmental protection, hosting festivals in conjunction with old age homes and orphanages and offering audio-recorded textbooks for blind students.

5. Obstacles & strategies adopted

Due to time constraints caused by balancing social outreach and scholastic requirements, NIRMAAN club volunteers organise themselves into batches and rotate duties.

6. Impact

NIRMAN@IIST have influenced both the local community and IIST student volunteers deeply due to the continuous programs, interactions and help in their difficult times. The activities brought social responsibility and empathy among the local students as well as IIST volunteers. The tangible includes improved education access and awareness. As a result of all these, the volunteers gain a sense of responsibility, civic awareness, leadership and teamwork skills.

https://www.iist.ac.in/administration/nirmaan

7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

In a significant advancement in the field of space science and technology, students and faculty members have successfully carried out two technology demonstration missions. The payloads,

known as PSLV In orbitaL OBC and Thermals (PILOT) and Advanced Retarding Potential Analyser for Ionospheric Science (ARIS), were developed by the Small-Spacecraft Systems and Payload Centre (SSPACE) at IIST and were part of the POEM platform on the PSLV C-55 mission launched by ISRO on 22nd April 2023.

ARIS 201F, an ionospheric plasma and electrostatic instrument, is designed for structural and compositional studies of the ionosphere. ARIS 201F is an upgraded version of ARIS 101F, which was flown to Earth's ionosphere in 2019 as part of the PSLV C45 mission.

On the other hand, PILOT is a technology demonstration payload aimed at showcasing various innovations. The PILOT mission, developed in a compact 1U cubesat form factor, comprises three boards: Command & Data Handling (OBC), PSLV Interface Board, and Sensor Interface Board.

These missions exemplify IIST's commitment to fostering innovation and providing hands-on experience to students in spacecraft engineering and scientific data collection. By pushing the boundaries of technology and exploration, IIST continues to play a pivotal role in advancing India's capabilities in space science and technology.

https://www.iist.ac.in/spaceresearch

https://www.iist.ac.in/pilot

https://www.iist.ac.in/ariss

https://www.iist.ac.in/sites/default/files/space/IIST_C55_Brochure_22-4-2023.pdf

7.3.2 - Plan of action for the next academic year

- Implement a centralized data management system to collect, and process, data from various departments and develop automated reporting tools to generate reports required by ranking/accreditation agencies.
- Add new tabs such as Academics, Establishment, Research, and Quality Assurance to the IQAC webpage and populate these tabs with relevant information.
- Organize regular workshops, seminars, and training sessions for faculty members to enhance their teaching and research.

- Introduce administrative efficiency enhancement programs focusing on streamlined processes, automation, and best practices of office administration

Utilize digital signatures and workflow automation to expedite decision-making processes.

- Develop an online portal for faculty, staff, and students to access necessary resources and services
- Align curriculum with the objectives of the National Education Policy (NEP).
- Support for National/International Conferences/Workshops.
- Encourage departments to propose new programs aligned with the NEP and emerging trends.
- Sign Memoranda of Understanding (MoUs) with reputed institutions to promote collaborative research.
- Provide support and incentives for faculty and students to file patents for innovative research outcomes.
- Strengthen the Science and Technology Innovation and Incubation Center (STIIC) to nurture entrepreneurship and innovation.
- Enhance support for technology development and transfer through dedicated centers such as SSPACE, ARIS, and ASRG.
- Establishment of Instrumentation Center, 5G Research Lab, and Semiconductor Lab.