



# Indian Institute of Space Science and Technology

Thiruvananthapuram 695 547

## Department of Humanities and Social Sciences

Academic Audit Report

2022-2023

### Academic audit committee

Internal members		
Sl.No.	Faculty Name	Role
1	Dr. C. S. Shaijumon, Associate Professor, Humanities and Social Sciences	Chairman
2	Dr. Gigy. J. Alex, Associate Professor, Humanities and Social Sciences	Convenor
3	Dr. K. Prabhakaran, Professor, Chemistry	Member

External members						
Sl. No.	Name	Designation	Email	Mobile	Name of the Institute	Role
1	Prof. S R Sheeja	Professor & Head	sheejasunil99@gmail.com	9497211518	University of Kerala	Member
2	Dr. Sathyaraj Venkatesan	Professor	sathya@nitt.edu	09894568617	NIT Trichy	Member

I Department profile		
1	No. of Permanent Faculty Members	5
2	No. of Adjunct Faculty Members	0
3	No. of Contract Faculty Members	0
4	No. of Guest Faculty Members	0
5	No. of Emeritus Professors / Visiting Faculty Members	0
6	No. of Technical Staff / Tutors (Permanent)	0
7	No. of Technical Staff / Tutors (Contract)	3

8	No. of JRFs/ SRF/ JPF (excluding PhD students)	0
9	No. of Project Fellows	
10	No. of Research Associates	
11	No. of Post Doctoral Fellows	2

## II Details of academic programmes and student strength in numbers

### A .Undergraduate/ Dual Degree / Postgraduate programmes

Sl. No.	Programme	Year	Sanctioned strength in the academic year	Student strength in the academic year (At the start of even semester)	Female student strength in the academic year	No. of passed out Students	Pass Percentage
1			0	0	0	0	0.00
Total			0	0	0	0	

### B. Details of Student Demand Ratio

Programme	No. of students applied	No. of students admitted	Comments	Suggestions
	0	0		

### C. Doctoral Degree

PhD	During the academic year			Degree awarded
	Sanctioned seats	No. of students admitted	Current student strength	
PART TIME	5	5	6	1
FULL TIME	17	17	21	3
Total	22	22	27	4

## III Details of core courses and electives in each programme

Sl. No.	Programme Name	Course code	Course name	Core/ Elective	Credits assigned	As per curriculum revision/ newly added elective course/ syllabus revised
1	B.Tech.: Aerospace Engineering	HS461	Science Fiction	Institute Elective	3	
2	B.Tech.: Aerospace Engineering	HS466	Space Economics and Policy	Institute Elective	2	
3	B.Tech.: Aerospace Engineering	HS469	Game Theory	Institute Elective	2	

4	B.Tech.: Aerospace Engineering	HS321	Principles of Management Systems	Core	3	
5	B.Tech.: Aerospace Engineering	HS211	Introduction to Economics	Elective	2	
6	B.Tech.: Aerospace Engineering	HS221	Introduction to Social Science and Ethics	Core	2	
7	B.Tech.: Aerospace Engineering	HS111	Communication Skills	Core	3	
8	B.Tech.: Electronics and Communication Engineering(Avionics)	HS461	Science Fiction	Institute Elective	3	
9	B.Tech.: Electronics and Communication Engineering(Avionics)	HS466	Space Economics and Policy	Institute Elective	2	
10	B.Tech.: Electronics and Communication Engineering(Avionics)	HS469	Game Theory	Institute Elective	2	
11	B.Tech.: Electronics and Communication Engineering(Avionics)	HS321	Principles of Management Systems	Core	3	
12	B.Tech.: Electronics and Communication Engineering(Avionics)	HS212	Introduction to Social Science and Ethics	Elective	2	
13	B.Tech.: Electronics and Communication Engineering(Avionics)	HS222	Introduction to Economics	Core	2	
14	B.Tech.: Electronics and Communication Engineering(Avionics)	HS111	Communication Skills	Core	3	
15	Dual Degree: Engineering Physics	HS311	Principles of Management Systems	Core	3	
16	Dual Degree: Engineering Physics	HS211	Introduction to Economics	Elective	2	
17	Dual Degree: Engineering Physics	HS221	Introduction to Social Science and Ethics	Elective	2	
18	Dual Degree: Engineering Physics	HS111	Communication Skills	Core	3	

#### IV Review on Curriculum

Criteria	Reponse	Revision made during this academic year	Comments on curriculum, if any	Suggestions for improvement
Qualitative comment on the content of the curriculum	EXCELLENT	no	As the curriculum makes timely changes and accommodates feedback from the stakeholders, it maintains quality	

## V Review on Teaching, Learning and Evaluation

Sl. No.	Criteria	Response based on criteria	Comments	Suggestions
1	Any innovative teaching methods/aids adopted?	Yes	class room discussions, group discussions, project-based discussions, team presentation language games and role plays	
2	Is any e-learning modules developed?	Yes	E-learning modules for language teaching and IIST LMS MOODLE for sharing lessons and presentations	
3	<b>Student evaluation procedure</b>			
	<b>Criteria</b>	<b>Response</b>	<b>Comments</b>	<b>Suggestions</b>
	Course evaluation	Internal External	Incorporating quizzes, projects, presentations, and assignments provides a well-rounded evaluation approach. This variety allows for assessing different aspects of student learning, including knowledge retention, practical application, communication skills, and project management abilities. Projects and assignments specifically emphasize application skills, ensuring that students can apply theoretical knowledge to practical scenarios. This approach aligns well with real-world expectations in technical fields where practical skills are highly valued.	
	Project evaluation	Internal		
4	<b>Evaluation components</b>			
	<b>Criteria</b>	<b>Response</b>	<b>Comments</b>	<b>Suggestions</b>
	Theory	Continuous assesment and end semester exam, Continuous assesment and course project	Evaluate students' ability to articulate and communicate effectively during speaking exercises or dialogues. Assess reading comprehension through activities involving texts or online resources available in the lab. Evaluate students' writing skills by assigning tasks such as compositions or responses to prompts.	

	Lab	Continuous assesment and course project	Designed assessments that target specific language skills such as listening, speaking, reading, and writing. Use a variety of tasks and formats to assess different aspects of language proficiency. This could include role-plays, simulations, interactive exercises, and multimedia projects.
	Project/ Internship/ Seminar	Final evaluation	Evaluate students' ability to articulate and communicate effectively during speaking exercises or dialogues. Assess reading comprehension through activities involving texts or online resources available in the lab. Evaluate students' writing skills by assigning tasks such as compositions or responses to prompts. Along with quizzes and assignments presentations are also given to understand and assess the students.
5	<b>Continuous Assessment Components</b>		
	Theory	Quiz I Quiz II	A well-designed evaluation procedure that includes quizzes, projects, presentations, and assignments offers a robust framework for assessing students' comprehensive understanding and skills development. By ensuring clarity, balance, alignment with learning objectives, and flexibility, the institute can create a conducive learning environment that supports student success in technical education.
	Lab	Class exercise evaluation & End Semester Examination	Conduct summative assessments at the end of the term to evaluate students' overall language proficiency. This could include comprehensive exams, project presentations, or portfolio assessments that showcase students' progress over time. Analyze assessment data to identify trends in students' performance and areas where additional support or instruction may be needed.

6	Is there any remedial coaching to support weak performers?	Yes	<p>Remedial sessions are crucial for supporting slow performers in language learning and ensuring they can catch up with their peers. After conducting diagnostic assessments to pinpoint specific areas where students are struggling, such as grammar, vocabulary, comprehension, or speaking skills, we have tailored remedial sessions based on each student's strengths and weaknesses identified through assessments.</p>	
7	Is academic feedback from students taken regularly?	Yes	<p>Prioritize feedback based on the frequency of mentions, severity of issues, and alignment with learning objectives. Identify actionable steps that can be taken to address concerns or make improvements. Share summarized feedback with students to demonstrate responsiveness and transparency. Communicate how their feedback is being used to enhance the learning experience. We use feedback as a basis for continuous improvement of teaching practices, course content, and instructional methods. Implement changes gradually and assess their impact on student satisfaction and performance.</p>	
8	What are the steps taken based on student's feedback?		<p>We analyse quantitative data from surveys to identify trends and patterns in student responses. Look for areas of consensus and discrepancy across different aspects of the course. We review qualitative feedback to gain deeper insights into students' perceptions, suggestions for improvement, and specific examples of positive or negative experiences.</p>	

9	Is Class committee meetings conducted?	Rapid changes in educational trends and student expectations can be promptly addressed through timely feedback and agile adjustments to course structures and materials. Involving students in decision-making processes empowers them to take ownership of their educational experiences and outcomes. Knowing their voices are heard and their input valued, students are more likely to engage actively in their studies and contribute positively to the academic community. Committees foster a sense of community among students by promoting collaboration and collective responsibility for academic excellence.
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### VI Department faculty credentials

Sl. No.	Criteria	Response	Comments	Suggestions
1	Percentage of faculty with PhD	100		
2	No. of journal articles published	13		
3	No. of books published	1		
4	No. of book chapters published	3		
5	No. of invited talks/ conferences/ workshops attended	5		
6	No. of research projects funded by IIST	1	Indian Space Program and its Impact on the Industrial Sector of India Project no - IIST/ VSSC/11/2022/32 (Duration: 2 Years) Collaborating ISRO Centre-VSSC ISRO Focal Point-Santhoshkumar IIST Focal Point-Lekshmi V. Nair & Shaijumon C. S	
7	No. of research projects funded through ASRG/IIST-ISRO/DoS	1	13,0000- Lifeline of Remote India national study on Telemedicine Funding - ICSSR, Govt. of India IIST Focal Point --Shaijumon C.S., Lekshmi V. Nair	
8	No. of externally funded research projects like CSIR, DST, DRDO etc.	1	10,00000-Now and Then Women of Muziris under Govt of Kerala, Muziris heritage project Funding	
9	No. of patents published/awarded			
10	No. of patents filed			
11	No. of faculty/student awards received	0		
12	No. of conferences/Workshops/ seminars/Colloquium Organized	2		
13	No. of conference paper published	2		
14	No. of visits made by the faculty/ student for research collaborations/invited talks/ conferences abroad	0		

15	No. of Industry collaborative projects			
16	No. of ISRO mission related projects/ activities	0		
17	No. of consultancy services entertained	0		

### VIII Details of student co-curricular activities

Criteria	Response	Comments	Suggestions
Whether students are involved in extra curricular & co-curricular activities?		Our students actively participate in the annual cultural festival and technical festival. They also have shown interest in sports and participation in the annual sports day. They also participate in various intercollegiate seminars and national and international conferences and workshops, and have won awards as well	
Whether students are doing internship abroad?		Each year a number of students from various national institutes and universities like Kerala university and JNU come to our department to do internship programmes. Every year many of our students are doing courses from Kerala University, JNU, CDS, etc.	
Whether students are doing internship at national academic institutes / universities?	IIST funded Externally sponsored	Our students take courses and internships from national institutes like the University of Kerala, CDS and JNU. Many students from reputed institutes like IISERs, NITs, state universities, and central universities come to our department for internships. Students who have got scholarships like Aspire also come to our departments. These interns after the completion of their project work submit a report and present their work before the department.	
Whether students are doing internship at ISRO/ Industries/ R&D institutes?			
Whether the department conducts outreach programs?		Department plays an active part in conducting outreach programmes. Many of the research scholars and teachers are active members.	



Whether department has alumni activities?	Alumni collaborate with the dept of HSS to conduct a National workshop on Academic Writing- five-day online workshop on Academic Writing and Publishing from July 24-28, 2023."
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### IX Details of placement/ higher studies of students

Criteria	UG	PG	PhD	Comments	Suggestions
No. of students placed	0	0	2	Dr Raj Kumar joined Kerala Institute of Local Administration, Thrissur on 11 April 2022 Dr Anu Kuriakose joined as Assistant Professor at NIT Trichy on 26 September, 2022. Dr Mohammad Sihas joined as post doc at University of Hyderabad on 21st June 2023 Dr Rajesh joined at IIM Trichy as Assistant Professor (Grade 1) in December 2022.	
No. of students opted for higher studies	0	0	3	Dr Mohammad Sihas joined as post doc at University of Hyderabad on 21st June 2023	
No. of students cleared GATE/ SLET/ NET/ CSIR/ UGC/ Others etc.	0	0	0	Dr. Sabu M (Economics) and Dr. Anu Kuriakose (English Literature) is awarded the first ever Chief Minister's Nava Kerala Post doctoral Fellowships 2022 introduced by Govt of Kerala.	

### X Infrastructure in the Department

Sl. No.	Criteria	Response	Comments	Suggestions
1	No. of classrooms	0		
2	No. of seminar/ conference rooms	2		
3	No. of instruction labs	1		
4	No. of research labs	1		
5	No. of full-fledged e-learning classrooms	1		
6	No. of computing labs	1		

7	Is there any lab with potential for centre of excellence?		
8	Is there any labs sponsored by external agency?		
9	Inter-disciplinary research facility		The Department Promotes public engagement through outreach programs, public lectures, exhibitions, and community-based research initiatives that address local and global challenges. It also encourages collaboration between researchers and practitioners in fields such as education, policy-making, cultural institutions, and social services to bridge theory and practice. Through postdoctoral fellowships and early career researcher programs the department try to attract talented scholars and provide mentorship opportunities in interdisciplinary research.
10	Is there any common amenities like restroom, recreation club, etc.?		There is a recreation room and discussion room available used for academic and non-academic discussions and celebrations. These rooms undergo constant updating improving their technological capabilities.
11	Is there any facilities for differently abled?		ramp and lift facility for differently abled
12	Is there any Department library?		Yes Department library which was initiated through active contribution of books by visitors and visiting faculty who used to take classes at IIST. At present our research scholars and faculty members actively take care of the dept. library

## XII Additional Information

1.	Does the curriculum of each programme offered by the department provide the Programme Educational Objectives (PEOs)/Programme Specific Outcomes (PSOs) and Programme Outcomes (POs)?	Yes
2.	Do the courses offered in each programme by the department provide the Course Objectives and Course Outcomes (COs) written in clear terms?	Yes
3.	Give the status of adopting Choice Based Credit System (CBCS) in the programmes offered by the department	Implemented
4.	Give the status of adopting Objective Based Education (OBE) in the programmes offered by the department.	Implemented
5.	Satisfaction level of support of academic, administrative, and other support units of the institution	Excellent
6.	The status of taking feedback from stakeholders and expert groups for revision and design of curriculum of a programme.	Student

7.	The list of extension programmes conducted by the department	Dept in association with the US embassy conducted an English language support Programme from 16-01-23 to 22-02-2023 for B.Tech, M.Tech and PhD scholars ,and and a lecture titled " Bridging the gap between Science and Communication" for faculty, offic
8.	List Faculty Development Programme conducted (any programme aiming at updating the knowledge of faculty of the department).	
9.	Does students take projects involving Field work/Survey. If yes, give the list.	yes. As part of the courses like Economics and Sociology students conduct fieldwork and surveys for their projects
10.	The List of MoU and MoAs, that are currently operational during thé year.	
11.	Detail the mechanism adopted to help academically disadvantaged students to cope with academic requirements	Regularly evaluate the effectiveness of support mechanisms through student feedback, academic performance metrics, and graduation rates. Adjust programs as needed to better meet the evolving needs of academically disadvantaged students.
12.	Detail the mechanism adopted to help students who perform very much below the class averages	remedial sessions and tutorials. Provides tutoring services tailored to their academic weaknesses, whether through peer tutoring programs, faculty office hours, or professional tutoring services. We also ensure students have access to necessary textbooks, online resources, and educational tools that are crucial for their courses.

13.	The total grant/revenue generated/received from different agencies by the department conducting research projects/consultancy services during the year.	
14.	The suggestions to improve the efficiency and effectiveness of the IIST system.	

### **XIII Strength of the Department (maximum 150 words)**

1. Our greatest strength is that we have faculty members from four disparate streams-Economics, English, Management and Sociology. This disparity in specialization gives an interdisciplinary flavor to our research and it encourages collaborative projects. 2. As we have scholars from multiple areas this diversity enriches research potential of our department by bringing together different perspectives, methods, and knowledge from various fields. 3. The interdisciplinary methods enhances our evaluation methods 4. As we have faculty members from various disciplines it broadens the perspectives and enhances critical thinking 5. The courses that are discussed by our faculty members often address ethical concerns and moral issues arising from technological developments. This will help students and researchers to understand the broader implications of their work and encourages responsible innovation 6. There are courses that encourages creative writing among students 7. interdisciplinary subjects within the department is the greatest strength 8. efficient and proactive research scholars who are always ready to work for the department 9. scholars support in class management, tutorial sessions and lab

### **XIV Weakness of the Department (maximum 150 words)**

A strong department needs both UG and PG programmes for its healthy growth. In a technical institute Dept of Humanities and Social Sciences could attract students only by strong UG and PG programmes. We have a limited number of faculty members Only by increasing the strength of programmes and faculty members, the department could make visibility to attract students. There is a potential lack of funding resources compared to technical departments. Difficulty in integrating humanities courses into the technical curriculum.

### **XV Challenges (maximum 150 words)**

Running phd programme without a PG programme is another challenge that we face, but still over the time we too have got a good number of research scholars, and even postdoctoral students in our department. Though it is very difficult to float certain courses, we have managed to run successfully courses like space economics and space policies

### **XVI Opportunities (maximum 150 words)**

Ours is the only department that has initiated a literary journal in 2014. Surabhi, the bi annual journal provides an opportunity to all students of IIST and employees of Department of Space to show case their literary talents. We work for innovative interdisciplinary projects and collaborations with other departments and institutes. Our Department spearheads the outreach activities of the institute. The activities initiated by the department for community engagements and outreach are very much active. Undergraduate, postgraduate, and doctoral students actively participate in that. Our Department has organized a lot FDPs on academic writing and publishing and life skills management.

### **XVII Any other details relevant to the department**





Our PhD alumni are placed in reputed universities and institutions, and they very actively pursue their research careers as well.

### **Final Recommendations**

The Academic Audit Committee thoroughly went through the programmes and courses offered by the department and the report that we submitted. The following feedback were given by the committee; 1. To keep record of the various programmes conducted by the department, by keeping geotagged photos of various activities. 2. The department should start various UG and PG programmes for attracting students from all over India to the campus. Then only the department and thereby the institute will grow and flourish. 3. The introduction of UG and PG programme will help in getting better grades during Accreditation. 4. There should be more faculty and more courses, which will help in increasing the diversity of the courses.

On the day of visit, the team verified all the documents and records available in the department and evaluated the academic process. A detailed report of the audit is given above. The report is signed by the following:

**Signature of Committee Members**

- 1 **Dr. C. S. Shaijumon,**  
Associate Professor,  
Humanities and Social  
Sciences: 
- 2 **Dr. Gigy. J. Alex,**  
Associate Professor,  
Humanities and Social  
Sciences: 
- 3 **Dr. K. Prabhakaran,**  
Professor, Chemistry: 
- 4 **Prof. S R Sheeja,**  
Professor & Head,  
University of Kerala:  
**Dr. Sathyaraj**  
5 **Venkatesan,** Professor,  
NIT Trichy: 

**Dr. SHEEJA S. R.**  
Professor & Head  
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Approved by,  
  
Dean Academics,  
IIST

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