



Indian Institute of Space Science and Technology

Thiruvananthapuram 695 547

Department of Humanities and Social Sciences

Academic Audit Report

2020-2021

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)	3
9	No. of Project Fellows	2
10	No. of Research Associates	2
11	No. of Post Doctoral Fellows	1

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	3	3	6	0
FULL TIME	9	9	21	2
Total	12	12	27	2

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	HS462	Visual Communications	Institute Elective	3	

4	B.Tech.: Aerospace Engineering	HS466	Space Economics and Policy	Institute Elective	2	
5	B.Tech.: Aerospace Engineering	HS321	Principles of Management Systems	Core	3	
6	B.Tech.: Aerospace Engineering	HS211	Introduction to Economics	Core	2	
7	B.Tech.: Aerospace Engineering	HS221	Introduction to Social Science and Ethics	Core	2	
8	B.Tech.: Aerospace Engineering	HS111	Communication Skills	Core	3	
9	B.Tech.: Avionics	HS461	Science Fiction	Institute Elective	3	
10	B.Tech.: Avionics	HS466	Space Economics and Policy	Institute Elective	2	
11	B.Tech.: Electronics and Communication Engineering(Avionics)	HS462	Visual Communications	Institute Elective	3	
12	B.Tech.: Electronics and Communication Engineering(Avionics)	HS466	Space Economics and Policy	Institute Elective	2	
13	B.Tech.: Electronics and Communication Engineering(Avionics)	HS321	Principles of Management System	Core	3	
14	B.Tech.: Electronics and Communication Engineering(Avionics)	HS212	Introduction to Social Science and Ethics	Core	2	
15	B.Tech.: Electronics and Communication Engineering(Avionics)	HS222	Introduction to Economics	Core	2	
16	B.Tech.: Electronics and Communication Engineering(Avionics)	HS111	Communication Skills	Core	3	
17	Dual Degree: Astronomy & Astrophysics	HS461	Science Fiction	Institute Elective	3	
18	Dual Degree: Solid State Physics	HS461	Science Fiction	Institute Elective	3	
19	Dual Degree: Engineering Physics	HS311	Principles of Management Systems	Core	3	
20	Dual Degree: Engineering Physics	HS211	Introduction to Economics	Core	2	
21	Dual Degree: Engineering Physics	HS221	Introduction to Social Science and Ethics	Core	2	
22	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
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Qualitative comment on the content of the curriculum	VERYGOOD	no	<p>Incorporating timely inputs from students through feedback demonstrates a proactive approach to curriculum development. This responsiveness helps in addressing the evolving needs and preferences of students, enhancing their learning experience. Makin</p>
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V Review on Teaching, Learning and Evaluation

Sl. No.	Criteria	Response based on criteria	Comments	Suggestions
1	Any innovative teaching methods/aids adopted?		<p>to emphasize active learning, and student-centered approaches, and with the integration of technology novel methods have been employed including online discussions, multimedia interaction , E Pathsala: interactive e-books, multimedia feedback; collaboration tools for engaging learning; creative writing, artistic expression, and virtual field trips; Field Visits: Museum Visits, Photographic site visits, Heritage visits; Interactive worksheets Real-world project applications, interactive activities like gamification and debates, guest speakers taking the classes beyond textbooks, and flipped classrooms. This combined approach fosters critical thinking, communication, and well-rounded engineers for the modern world.</p>	
2	Is any e-learning modules developed?		<p>for language teaching and to develop LSRW skills set e learning modules are developed, E-learning modules: bite-sized grammar lessons, in-depth courses, interactive simulations, and engaging games. Developing engaging content for E Pathsala and the Hauni language lab app. This content caters to a range of learners, with levels for advanced, intermediate, and elementary users. Additionally, a comprehensive writing course is being created, offering modules on academic, professional, and creative writing skills.</p>	

3 Student evaluation procedure

Criteria	Response	Comments	Suggestions
Course evaluation	Internal External	Implemented frequent, low-stakes assessments. These quizzes, pre-lab questions, and in-lab observations encouraged consistent engagement with the material and timely identification of areas needing clarification. Regular assessments also targeted specific lab skills like data analysis and critical thinking, promoting focused practice and skill development throughout the course.	
Project evaluation	Internal	Project is mandatory for all courses. These projects provided students with the opportunity to apply theoretical knowledge from lectures to solve practical problems, fostering a deeper understanding of the subject matter. Designed to target specific lab skills like data collection and troubleshooting, the projects offered extended practice and honed these crucial abilities.	

4 Evaluation components

Criteria	Response	Comments	Suggestions
Theory	Continuous assesment and end semester exam, Continuous assesment and course project	Both: Continuous assessment, end semester exam and course project Continuous assessments served to reinforce learning by verifying comprehension of concepts applied in the project. Additionally, feedback from these assessments informed students on areas requiring focus during their project, ultimately leading to outcomes that are more impactful.	

	Lab	Continuous assesment and course project	<p>Continuous assessment and course project Students received frequent feedback, enabling them to gauge their understanding and adjust their studying or lab preparation accordingly. This approach reduced the pressure of cramming for a final exam and fostered a more distributed and effective learning experience. Additionally, projects often presented open-ended challenges, requiring critical thinking, problem-solving, and creative solutions. Hence, continuous assessment and course projects work together to create a dynamic learning environment in lab courses.</p>	
	Project/ Internship/ Seminar	Final evaluation	<p>Participation in projects hones visual communication skills, enabling students to convey technical concepts effectively. Beyond creativity, arts-based experiences enhance communication, collaboration, and critical thinking improve collaborative, interdisciplinary landscape.</p>	
5	Continuous Assessment Components			
	Theory	Quiz I Quiz II	<p>Multiple tests: In-class discussions, debates, and short answer prompts; "Minute papers" at the end of class prompted students to summarize key points or lingering questions; students created visual representations of course concepts or their relationships through concept maps or diagrams; online platforms were utilized for short, low-stakes quizzes or polls throughout the course</p>	
	Lab	Class exercise evaluation & End Semester Examination	<p>Class exercise evaluation and end semester examination: Immersive audio-visualls and structured lab notebooks for clear data recording; personalize learning through adaptive quizzes, interactive exercises, and targeted activities like sentence completion and vocabulary matching; Summarization and gap-filling tasks further solidify comprehension.</p>	

6	Is there any remedial coaching to support weak performers?	Yes, remedial sessions are offered. Targeted support for students struggling with foundational concepts of grammar and sentence construction. This personalized approach helps bridge knowledge gaps, boost confidence, prevent academic issues, and ensure a level playing field for students. They are not a replacement for strong preparation, but a valuable tool for student success.
7	Is academic feedback from students taken regularly?	Yes, a mix of online surveys and in-class activities are carried out for taking feedback. Questions asked are clear, focused, and actionable; Guarantee anonymity and highlight.
8	What are the steps taken based on student's feedback?	A data-driven approach is taken to improve our classes: Ensure all voices are considered and develop plans to address identified shortcomings; prioritize impactful changes and celebrate "quick wins" to maintain momentum; modifying teaching methods, adjusting content delivery, and refining assessment strategies.
9	Is Class committee meetings conducted?	Student class committees convene regularly to gather feedback and suggest improvements. This ensures our courses are dynamic and responsive to student needs, fostering a culture of continuous improvement.

VI Department faculty credentials

Sl. No.	Criteria	Response	Comments	Suggestions
1	Percentage of faculty with PhD	100		
2	No. of journal articles published	10		
3	No. of books published			
4	No. of book chapters published	27	creative writing	
5	No. of invited talks/ conferences/ workshops attended	7		
6	No. of research projects funded by IIST	0		
7	No. of research projects funded through ASRG/IIST-ISRO/DoS	0		
8	No. of externally funded research projects like CSIR, DST, DRDO etc.	0	Extramural Research Projects Indian Council of Social Science Research Topic -Lifeline for Remote India: A study on Tele Medicine Units in India - Shaijumon C. S .- 13,97,500	
9	No. of patents published/awarded	0		

10	No. of patents filed	0		
11	No. of faculty/student awards received	0		
12	No. of conferences/Workshops/seminars/Colloquium Organized	0		
13	No. of conference paper published	5	conference proceedings	
14	No. of visits made by the faculty/student for research collaborations/invited talks/conferences abroad	0		
15	No. of Industry collaborative projects	0		
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.	
Whether students are doing internship abroad?			
Whether students are doing internship at national academic institutes / universities?		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?		The department plays an active part in conducting outreach programmes. Many of the research scholars and teachers are active members. As part of various courses they constantly conduct field visits and surveys, and some of our students have also made documentaries as well.
Whether department has alumni activities?		The department has online alumni meetings where they discuss potential areas where scholars could enhance their research and projects.

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 as Assistant Professor at Malabar Christian College, Kozhikode from 21 June 2021 to 31 March 2022 Dr Deepu T S is Senior Purchase Officer, Dept of Space, ISRO Headquarters	
No. of students opted for higher studies	0	0	1	Dr Rashmi M joined for Post doc at Jagiellonian University, Poland in 2023	
No. of students cleared GATE/ SLET/ NET/ CSIR/ UGC/ Others etc.	0	0	0		

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	2		
4	No. of research labs	0		
5	No. of full-fledged e-learning classrooms	1		
6	No. of computing labs			
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	We regularly assess the effectiveness of research programs and initiatives, seeking feedback from stakeholders and adjusting strategies to enhance interdisciplinary collaboration and research excellence. We also implement rigorous ethical review processes to ensure research conducted at the facility upholds ethical standards and promotes responsible scholarship. The department fosters a diverse and inclusive research environment that values different perspectives, backgrounds, and methodologies, enhancing the richness of interdisciplinary scholarship.
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?	yes facilities like ramp and lift are available
12	Is there any Department library?	yes 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	Very good
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	
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.	

10.	The List of MoU and MoAs, that are currently operational during the year.	
11.	Detail the mechanism adopted to help academically disadvantaged students to cope with academic requirements	Provide flexible learning options such as online courses, evening classes, or part-time enrollment to accommodate students who may have work or family commitments. A regular system for monitoring students' academic progress and intervening promptly i
12.	Detail the mechanism adopted to help students who perform very much below the class averages	Recognize that academic challenges often stem from psychosocial factors. Offer counselling services, workshops on stress management, and mental health resources to help students cope with emotional and psychological stressors.
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)

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 limited number of faculty members Only by increasing the strength of programmes and faculty members, the department could make visibility to attract students.

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.

XVII Any other details relevant to the department






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 3 FDPs on academic writing and publishing and life skills management.

Final Recommendations

The academic audit committee meeting thoroughly discussed the initiatives from the department and also its various programmes and courses and suggested the following: 1. to review and include student engagement initiatives, academic support services, and opportunities for experiential learning. 2. To assess adequacy of facilities, technological infrastructure, and resources to support teaching, research, and student services. 3. It also suggested to evaluate support services for students, including counselling, career services, academic advising, and extracurricular activities. 4. The committee suggested to include all the visiting faculties and their contributions, for instance the committee suggested to project the contributions made by inter-centre courses and collaborations

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:

- 5 **Dr. Sathyaraj Venkatesan,** Professor,
NIT Trichy: 

Dr. SHEEJA S. R.
Professor
Department of Economics
University of Kerala, Kariavattom
Thiruvananthapuram - 695 581

Approved by 

Dean Academics,
IIST

प्रोफ. कुरुविला जोसफ/Prof. Kuruvilla Joseph
डीन (शैक्षिकी), आईआईएसटी
Dean (Academics), IIST