



Indian Institute of Space Science and Technology

Thiruvananthapuram 695 547

Department of Humanities and Social Sciences

Academic Audit Report

2019-2020

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	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	3	3	6	0
FULL TIME	8	8	21	2
Total	11	11	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	HS466	Space Economics and Policy	Institute Elective	2	
2	B.Tech.: Aerospace Engineering	HS467	Entrepreneurship and Innovation	Institute Elective	2	
3	B.Tech.: Aerospace Engineering	HS468	Food and Cultural Studies	Institute Elective	2	

4	B.Tech.: Aerospace Engineering	HS461	Science Fiction	Institute Elective	3	
5	B.Tech.: Aerospace Engineering	HS462	Visual Communication	Institute Elective	3	
6	B.Tech.: Aerospace Engineering	HS321	Principles of Management Systems	Core	3	
7	B.Tech.: Aerospace Engineering	HS211	Introduction to Economics	Core	2	
8	B.Tech.: Aerospace Engineering	HS221	Introduction to Social Science and Ethics	Core	2	
9	B.Tech.: Aerospace Engineering	HS111	Communication Skills	Core	3	
10	B.Tech.: Avionics	HS466	Space Economics and Policy	Institute Elective	2	
11	B.Tech.: Avionics	HS467	Entrepreneurship and Innovation	Institute Elective	2	
12	B.Tech.: Avionics	HS468	Food and Cultural Studies	Institute Elective	2	
13	B.Tech.: Avionics	HS321	Principles of Management Systems	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	HS466	Space Economics and Policy	Elective	2	
18	Dual Degree: Engineering Physics	HS311	Principles of Management Systems	Core	3	
19	Dual Degree: Engineering Physics	HS461	Science Fiction	Institute Elective	3	
20	Dual Degree: Engineering Physics	HS462	Visual Communication	Institute Elective	3	
21	Dual Degree: Engineering Physics	HS211	Introduction to Economics	Core	2	
22	Dual Degree: Engineering Physics	HS221	Introduction to Social Science and Ethics	Core	2	
23	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	This curriculum provides a well-structured and engaging learning experience. It has a balanced structure that promotes organic learning through case studies, problem-based learning and uses multi-sensory aids. We incorporate timely changes and updates.
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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?		Students are also taught creative writing through courses like Science fiction where students are asked to write short stories, critical reviews and poems. For courses like Visual communication, they have to conduct museum visits and they make documentaries and short films also.	
2	Is any e-learning modules developed?		E content for language lab, where students can improve their listening speaking reading and writing skills. Communication Skills course depends to a wide range of e-learning sources	
3	Student evaluation procedure			
	Criteria	Response	Comments	Suggestions
	Course evaluation	Internal External	we have mid-semester quizzes and end semester exams. 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.	
	Project evaluation	Internal	Project is mandatory for all courses.	
4	Evaluation components			
	Criteria	Response	Comments	Suggestions

Theory	Continuous assesment and end semester exam, Continuous assesment and course project	Ensure that assessments are integrated seamlessly with the curriculum, reinforcing key concepts and skills taught in the course. This integration helps students see the relevance of assessments to their overall learning experience.
Lab	Continuous assesment and course project	Be open to refining the assessment procedure based on feedback from both students and instructors. Flexibility allows for adjustments that better cater to students' learning needs and evolving educational trends
Project/ Internship/ Seminar	Final evaluation	Ensure that the weightage given to each assessment method reflects its importance in assessing different learning outcomes. For instance, projects and presentations might carry more weight to emphasize practical skills, while quizzes could focus on foundational knowledge.

5 Continuous Assessment Components

Theory	Quiz I Quiz II Others - surprise tests, assignments	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 assessment based on individual and team presentations, Group discussions and mock interviews	We have developed clear assessment criteria or rubrics for each type of task or activity. Clearly define what constitutes proficient performance for each skill being assessed. We share the rubrics with students beforehand so they understand how they will be evaluated. This transparency helps students align their efforts with the assessment criteria.
6	Is there any remedial coaching to support weak performers? Yes	Remedial sessions are there for slow performers through handouts, dedicated lessons, and mock exams and mock presentations

7	Is academic feedback from students taken regularly?	Yes	<p>Students could assess and give feedback to their teachers.</p> <p>Through structured surveys that include both quantitative and qualitative (open-ended questions) components. Surveys can be conducted electronically or on paper, depending on accessibility and preferences. We have also focus group sessions with small groups of students to delve deeper into specific issues or gather more detailed qualitative feedback. This allows for interactive discussions and brainstorming.</p>	
8	What are the steps taken based on student's feedback?	<p>Teachers always take creative suggestions and feedback positively.</p> <p>Timely suggestions related to topics are also taken care of</p>	<p>Our institution prioritizes and values and prioritizes student feedback. Provide training and resources for instructors to effectively collect, analyze, and act upon feedback. By systematically collecting and utilizing academic feedback from students, institutions can enhance teaching quality, improve learning outcomes, and foster a more collaborative and supportive educational environment. Regular feedback loops help to create a responsive and adaptive approach to teaching and learning.</p>	

9	Is Class committee meetings conducted?	<p>Class Committee Meetings provide a structured platform for students to voice their opinions, concerns, and suggestions regarding various aspects of their courses.</p> <p>Representing the student body, committees ensure that feedback reflects the diverse needs and experiences of students, contributing to more inclusive and comprehensive improvements. By convening regularly, committees facilitate ongoing dialogue between students and faculty/administration, enabling continuous assessment and refinement of course content, delivery methods, and learning experiences. Class Committee Meetings 22- 23 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.</p>
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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	5		
3	No. of books published	2		
4	No. of book chapters published	1		
5	No. of invited talks/ conferences/ workshops attended	11		
6	No. of research projects funded by IIST	1	<p>Assessment of the contributions made by IIST alumni in the ISRO programs</p> <p>----- Dr. V. Ravi</p>	
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	Space Technology and its Penetration into the Socio-Economic Space of the Households of India (25 lakhs), ----- Dr. Shajjumon C S Dr. Lekshmi V Nair
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	7	
13	No. of conference paper published	3	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 PhD students participate in annual cultural and technical festivals of the institute	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?	Yes, The Outreach Wing of IIST, NIRMAAN is spearheaded by Prof.Lekshmi V. Nair who is handing the Sociology course	As part of the Course Introduction to Social Science and Ethics, regular field trips are conducted to tribal settlements, whereby students get first-hand information regarding tribal communities, their habitats, and life. The outreach also includes association with NGOs where students could also participate in community activities	
Whether department has alumni activities?	yes	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	1	After finishing his post doc from IIT Madras Dr Rajesh joined IIITM Gwalior as Assistant Professor (Grade 2) in April 2019,	
No. of students opted for higher studies	0	0	0		
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	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		Establishing an interdisciplinary research facility in the humanities and social sciences area greatly enrich scholarly endeavors, foster collaboration across disciplines, and address complex societal challenges. It clearly articulates the mission and objectives of the research facility, emphasizing interdisciplinary collaboration, innovation in humanities and social sciences, and impact on society. It also helps to identify specific research themes or focus areas that align with the institution's strengths and strategic priorities, such as cultural studies, public policy, digital humanities, or social justice.	
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 available	
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.	Action Initiated
5.	Satisfaction level of support of academic, administrative, and other support units of the institution	
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	Regular meetings with academic counsellors and mentors to set academic goals, track progress, and provide guidance. Access to tutoring services tailored to their academic weaknesses, whether through peer tutoring programs, faculty office hours, or pro
12.	Detail the mechanism adopted to help students who perform very much below the class averages	Foster a supportive peer environment through mentorship programs where academically successful students mentor disadvantaged students. This can help build confidence, motivation, and a sense of belonging.
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 the research potential of our department by bringing together different perspectives, methods, and knowledge from various fields. 3. The interdisciplinary methods enhance our evaluation methods 4. As we have faculty members from various disciplines it broadens the perspectives and enhances critical thinking

XIV Weakness of the Department (maximum 150 words)

1. We have limited number of faculty members 2. Only by increasing the strength of programmes and faculty members, the department could make visibility to attract students. 3. There a potential lack of finding funding resources compared to technical departments. 4. Difficulty in integrating humanities courses into the technical curriculum.

XV Challenges (maximum 150 words)

1. Running phd programme without a PG programme is a 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. 2. Though it is very difficult to float certain courses, we have managed to run successful courses like space economics and space policies

XVI Opportunities (maximum 150 words)

1. 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 showcase their literary talents. 2. We work for innovative interdisciplinary projects and collaborations with other departments and institutes.

XVII Any other details relevant to the department

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

Final Recommendations

Based on the information provided and the context of an academic audit committee's final recommendations, the committee suggested to; 1. Identify weaknesses, gaps, or areas where the department can improve in terms of academic quality, infrastructure, governance, or student support services. 2. Provide specific recommendations for addressing identified deficiencies or implementing improvements. 3. The committee also suggested to evaluate the relevance, currency, and alignment of academic programs with industry standards and educational trends. 4. The committee suggested to incorporate pedagogical Practices and to assess teaching methodologies, faculty development initiatives, and support for innovative teaching practices.

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

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

Approved by,


Dean Academics,
IIST

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