

# Indian Institute of Space Science and Technology

Thiruvananthapuram 695 547

### **Department of Humanities and Social Sciences**

Academic Audit Report 2021-2022

### Academic audit committee

	Internal members						
SI.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								
SI. 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	University of Kerala	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				
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	and a negation of the many parties	
10	No. of Research Associates	Marine Marine Andrews Andrews 4	
11	No. of Post Doctoral Fellows	Tus per l'aprè de la company d	

# II Details of academic programmes and student strength in numbers

A .Undergraduate/ Dual Degree / Postgraduate programmes

SI. 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	students	No. of students admitted	Comments	Suggestions
	0	0		THE PERSON NAMED IN

C. Doctoral Degree							
	During the academic year						
PhD	Sanctioned seats	No. of students admitted	Current student strength	Degree awarded			
PART TIME	4	4	0	1			
FULL TIME	11	11	0	1			
Total	15	15	0	2			

III Details of core courses and electives in each programme						
Si. 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	I to the set
2	B.Tech.: Aerospace Engineering	HS466	Space Economics and Policy	Institute Elective	2	the state of
3	B.Tech.: Aerospace Engineering	HS469	Game Theory	Institute Elective	2	

4	B.Tech.: Aerospace Engineering	HS462	Visual Communication	Elective	3	
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.: Electronics and Communication Engineering(Avionics)	HS461	Science Fiction	Institute Elective	3	V
10	B.Tech.: Electronics and Communication Engineering(Avionics)	HS466	Introduction to Space Economics and Policy	Institute Elective	2	
11 .	B.Tech.: Electronics and Communication Engineering(Avionics)	HS469	Game Theory	Institute Elective	2	
12	B.Tech.: Electronics and Communication Engineering(Avionics)	HS462	Visual Communication	Elective	3	
13	B.Tech.: Electronics and Communication Engineering(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	Core	2	
16	B.Tech.: Electronics and Communication Engineering(Avionics)	HS111	Communication Skills	Core	3	
17	Dual Degree: Engineering Physics	HS311	Principles of Management Systems	Core	3 .	
18	Dual Degree: Engineering Physics	HS211	Introduction to Economics	Core	2	
19	Dual Degree: Engineering Physics	HS221	Introduction to Social Science and Ethics	Core	2	nie nie ni
20	Dual Degree: Engineering Physics	HS111	Communication Skills	Core	3	

	IV Re	view on Cur	riculum	
Criteria	Reponse	Revision made during this academic year	Comments on curriculum,	Suggestions for improvement

Qualitative comment on the content of the curriculum	EXCELLENT	yes	Two new papers on Game Theory(Economics) and Critical Writing( English) were introduced and revised the syllabus of Principles of Management System (Management) and Science Fiction (English). Involving expert members from the Board of Studies ensu	
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SI. No.	Criteria	Response based on criteria	Comments	Suggestions
		and the control of th	Invert traditional teaching by having students review lecture materials or	
			readings at home and use class time for active discussions,	
			debates, and collaborative projects.	
			Promotes deeper engagement with	
			course content, allows for	
			personalized learning experiences,	
	Any innovative teaching		and fosters critical thinking and	
1	Any innovative teaching methods/aids adopted?	Yes	application of concepts. Present	
			real-life scenarios or historical	
			cases for analysis and discussion	
			in class. Encourages application of	
			theoretical knowledge to practical	
			situations, enhances problem-	
			solving skills, and provides context	
			for understanding complex issues	
			in humanities, management, and	
			social sciences.	
			Include a variety of multimedia	
			elements like audio recordings,	
			videos, interactive exercises, and	
	Is any e-learning		animations to cater to different	
2	modules developed?	Yes	learning preferences and enhance	
	modules developed?		engagement. Incorporate	
			interactive quizzes and exercises	
			to reinforce learning and provide	
			immediate feedback to learners.	
3	Student evaluation pro	cedure	A K	
	Criteria	Response	Comments	Suggestion

4 1 <sub>a</sub>		Incorporating quizzes, projects,	
		presentations, and assignments	
		provides a well-rounded evaluation	
		approach. This variety allows for	
	111111111111111111111111111111111111111	assessing different aspects of	
		student learning, including	
		knowledge retention, practical	
		application, communication skills,	
Course evaluation	Internal	and project management abilities.	
oodroo ovaldation	External	Projects and assignments	
	1 - 11	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	3+6
		where practical skills are highly	
		valued.	
		Project evaluation is a critical	
		component of assessing students'	
	*	understanding, application of	
		knowledge, and overall learning	
		outcomes. Developed detailed	
		rubrics outlining specific criteria for	
		evaluation. Include categories such	
	The State of the S	as content knowledge, creativity,	
Project evaluation	Internal	organization, presentation skills,	
r roject evaluation	Internal	and adherence to guidelines.	
		Assigned weights to each criterion	
		based on its importance in	
	2	assessing the project so overall	
		quality. Clearly communicate these	
		weights to students to clarify the	
		relative importance of each	
4	1902.	criterion.	
4 Evaluation comp	ponents		<u> </u>
Criteria	Response	Comments	Suggestions
		Evaluate students' ability to	
		articulate and communicate	
		effectively during speaking	
		exercises or dialogues. Assess	
		reading comprehension through	
Theory	Continuous assesment and end	activities involving texts or online	- m-0
•	semester exam, Continuous assesment	_	
	and course project	Evaluate students' writing skills by	

assigning tasks such as compositions or responses to

prompts.

		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. Incorporating	
		quizzes, projects, presentations,	
		and assignments provides a well-	
		rounded evaluation approach. This	
Lab	Continuous assesment and course	variety allows for assessing	
	project	different aspects of student	
		learning, including knowledge	
		retention, practical application,	
		communication skills, and project	
	2.4	management abilities. Projects and	
		assignments specifically	
		emphasize application skills,	
	-	ensuring that students can apply	
		theoretical knowledge to practical	
	1 1	scenarios. This approach aligns	
		well with real-world expectations in	
		technical fields where practical	
		skills are highly valued.	
	A. A.	Project evaluation is a critical	
		component of assessing students'	
		understanding, application of	
		knowledge, and overall learning	
		outcomes. Developed detailed	
		rubrics outlining specific criteria for	
		evaluation. Include categories such	
		as content knowledge, creativity,	
roject/ Internship/ Seminar	Final evaluation	organization, presentation skills,	
		and adherence to guidelines.	
		Assigned weights to each criterion	
	U lo	based on its importance in	
		assessing the project s overall	
		quality. Clearly communicate these	
		weights to students to clarify the	
		relative importance of each	
		criterion.	

	Theory	Quiz I Quiz II -	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.	
	Lab	Class exercise evaluation End Semester Examination	assessments in the language lab align with the broader learning objectives of the course or language program. Assessments should reinforce and measure progress toward these objectives. Leverage the technology available in the language lab to facilitate assessments. This could include recording students' oral presentations or conversations for later review and evaluation.	
6 coad	ere any remedial ching to support k performers?		Offer writing prompts, grammar exercises, and collaborative writing tasks to improve written communication skills. Use adaptive learning technologies to customize the learning experience based on learners' progress and proficiency levels. Create branching scenarios where learners make decisions that lead to different outcomes, promoting critical thinking and language use in context.	

,	1	Through structured surveys that	- 1
		include both quantitative and	
		qualitative (open-ended questions)	
		components. Surveys can be	
		conducted electronically or on	
		paper, depending on accessibility	1
		and preferences. We have also	
		focus group sessions with small	
		groups of students to delve deeper	
		into specific issues or gather more	
	Is academic feedback	detailed qualitative feedback. This	
7	from students taken	allows for interactive discussions	
	regularly?	and brainstorming. We encourage	
	January	students to provide informal	
		feedback through suggestion	1
		boxes, online forums, or one-on-	
		one discussions with instructors.	
		This can capture spontaneous	
		thoughts and suggestions. Collect	1
		feedback at strategic points	
		throughout the academic term,	1
į		such as mid-semester and end of	
		semester, to capture ongoing	
		experiences and improvements.	
		Feedback was collected after	
		specific milestones, assignments,	-
		or projects to address immediate	
		concerns and adjustments. Include	
į		questions that cover various	
	14.0	aspects of the learning experience,	
	What are the steps	such as course content, teaching	
8	taken based on	methods, assessments, and overall	
i i	student's feedback?	organization. Pose specific	
		questions related to students'	
1		understanding of concepts, clarity	
		of instructions, usefulness of	
		resources, and relevance of	- "
		assignments.	
		Committees provide a structured	
		platform for students to voice their	
	The second of the	opinions, concerns, and	
		Luciani de la compania del compania de la compania del compania de la compania del la compania de la compania del compania del compania del compania del com	
		suggestions regarding various aspects of their courses.	
1			
		Representing the student body, committees ensure that feedback	
		reflects the diverse needs and	
	Is Class committee		
9	meetings conducted?	experiences of students,	
	meetings conducted?	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.	

## VI Department faculty credentials

SI. No.	Criteria	Response	Comments	Suggestions
1	Percentage of faculty with PhD	5		
2	No. of journal articles published	12		
3	No. of books published	0		
4	No. of book chapters published	3		
5	No. of invited talks/ conferences/ workshops attended	0		
6	No. of research projects funded by IIST		- X	
- /	No. of research projects funded through ASRG/IIST-ISRO/DoS	1	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	
	No. of externally funded research projects like CSIR, DST, DRDO etc.	1		
9	No. of patents published/awarded	0		
10	No. of patents filed	0	~	
11	No. of faculty/student awards received	0		
1/	No. of conferences/Workshops/ seminars/Colloquium Organized	12		
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	onic de series un	Imedica la elicinio al	
16	No. of ISRO mission related projects/ activities	0	to ut	
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?			

1.	X Deta	ails o	of pla	aceme	ent/ higher stu	udies of studer	nts
					programs of the in		
					They also participa		
as alumni activities?	·				and applying for o	-	
Whether department					scholars in securir		
					They offer guidant		
				127	Yes, Alumni meet are held both onlir		
					also made docum		
					and some of our s		
					conduct field visits	• • • • • • • • • • • • • • • • • • • •	
outreach programs?					various courses th		
department conducts					are active membe	·	
Whether the					research scholars		
					programmes. Man	•	
					part in conducting	outreach	
					The department pl	lays an active	
					department.		
					and present their v	work before the	
					their project work	· I	
					interns after the co		
					come to our depar		
institutes?					scholarships like A		
SRO/ Industries/ R&	ן כ				Students who hav		
doing internship at	_				department for inte		
Whether students are					central universities		
					NITs, state univers		
					reputed institutes		
					like the University and JNU. Many st		
					internships from n		
					Our students take		

No. of students placed	0	0	5	Dr Pavanam Thomas joined as Assistant Professor at S B College, Chenganacherry on 17 June 2021 Dr Anu Kuriakose joined as Assistant Professor on 16 August, 2021 at SRM AP and worked till September 23, 2022. Dr Gayathri joined as Assistant professor on 14 January 2022 at IIIT Kottayam Dr Rakesh R Menon is Deputy Registrar, IIST Dr Jayalekshmi joined as Assistant Professor at Govt college, Nedumangad on 9.9.21	
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

SI. No.	Criteria	Response	Comments	Suggestions
1	No. of classrooms	0		T_ I I I I I I I I I I I I I I I I I I I
2	No. of seminar/ conference rooms	2		110-110-1
3	No. of instruction labs	2	ulua anach	
4	No. of research labs	0		
5	No. of full-fledged e- learning classrooms	1		
6	No. of computing labs	1 < 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		3
7	Is there any lab with potential for centre of excellence?	a fine construction of the		
8	Is there any labs sponsored by external agency?			

	Y		Ton I	21
			The department supports	
			partnerships with other academic	
	4 1 1		institutions, research centers,	
			industry partners, and non-profit	
			organizations to leverage expertise,	
	Inter-disciplinary research		resources, and funding	
9			opportunities We organize regular	
	facility		seminars, workshops, and	
			conferences that bring together	
			scholars, researchers, and	
			practitioners from diverse disciplines	
			to exchange ideas and collaborate	
			on research projects.	
			There is a recreation room and	
			discussion room available used for	
	Is there any common		academic and non-academic	
10	amenities like restroom,		discussions and celebrations, These	
	recreation club, etc.?		rooms undergo constant updating	
	25.1		improving their technological	
		E reguned	capabilities.	
11	Is there any facilities for differently abled?		Ramp and lift facility available	
			Yes Department library which was	
			initiated through active contribution	
121	la thana ann Danadanad		of books by visitors and visiting	
	Is there any Department		faculty who used to take classes at	
	library?		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				
1.	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				
3.	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	outreach activities				
8.	List Faculty Development Programme conducted (any programme aiming at updating the knowledge of faculty of the department).	Online FDP on Life Skills Management from 12-07-21 to 16-07-21				

1 +	1,	i i
9.	Does students take projects involving Field work/Survey. If yes, give the list.	for economics, social science and visual communication courses students are doing fieldwork and
10.	The List of MoU and MoAs, that are currently operational during the year.	surveys
10.	The List of Moo and MoAs, that are currently operational during the year.	Remedial teaching
		sessions for poor
		performers, take
		home exercises, self-
		paced learning
		evaluation
		mechanism. Provide
1		flexible learning
		options such as online
		courses, evening
		classes, or part-time
		enrollment to
		accommodate
ļ		students who may
11.	Detail the mechanism adopted to help academically disadvantaged students to cope with	have work or family
	academic requirements	commitments. A
		regular system for
		monitoring students'
		academic progress
	(above 3) if mumicion) investigated with to riverse	and intervening
	the control and the same of th	promptly if they fall
		behind. This could
1		involve academic
		probation monitoring,
1		early alert systems, or
		regular progress
		reports to identify
	deprove of the Department (Irrax mum 150 words)	struggling students
		early.

XV Challen, its (missimum 150 words)

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12.	Detail the mechanism adopted to help students who perform very much below the class averages	remedial teaching sessions for poor performers, take-home exercises, self-paced learning evaluation mechanism. 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.	
17.	The adgressions to improve the emciency and effectiveness of the fight system.	

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

1. The department has four subcategories: Sociology, Economics, Management and English. This gives an interdisciplinary impact to our research and projects. 2. Research expertise and teaching experience of faculty members play a cumulative impact in strengthening our department. 3. 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. 4. The interdisciplinary methods enhance our evaluation methods

### 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

#### XV Challenges (maximum 150 words)

 To excel in a space science and technology institution where the major thrust is on science and technology humanities programmes may get a supportive role initially. But that challenge has been converted into an opportunity by the faculty members.
 Another challenge that we face is the smaller number of courses
 We have no common programmes for M.Tech students

#### XVI Opportunities (maximum 150 words)

1. The students are closer to Humanities faculty members, and as we teach communication, ethics, and economic policies, and discussions on contemporary topics make our classes more lively 2. 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. 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 lot FDPs on academic writing and publishing and life skills management.

### XVII Any other details relevant to the department

1. The students are closer to Humanities faculty members, and as we teach communication, ethics, and economic policies, and discussions on contemporary topics make our classes more lively 2. 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. 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 for FDPs on academic writing and publishing and life skills management.

#### **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 include various criteria for course evaluation and assessment including quizzes, surprise tests, assignments, take home exercises, presentation and projects. 2. To project the inter-centre collaborations with German centre, US embassy, University of Kerala, Centre for Development Studies 3. To include various life skills programme organised by the department including Neuro Linguistic programming. 4. To give thrust to various students who are coming from prestigious institutes to the department for taking internship programmes.

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

Dr. C. S. Shaijumon,

1 Associate Professor, Humanities and Social Sciences

Dr. Gigy. J. Alex.

Associate Professor, Humanities and Social Sciences:

Dr. K. Prabhakaran, Professor, Chemistry

Prof. S R Sheeja

4 Professor & Head, University of Kerala: Dr. Sathyaraj

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Dr. SHEEJA S. R.

Professor
Department of Economics
University of Kerala, Kariavattom
Thiruvananthapuram - 695 581

Dean Academics,

IIST

प्रोफ. कुरुविळा जोसफ़/Prof. Kuruvilla Joseph डीन (शैक्षिकी), आईआईएसटी Dean (Academics), IIST the contract of the forest contract of the con

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प्रोफ. कुरुविका जोकफ/Prof. Kuruvilla Joseph बीन (बोब-मी), काईआईएनटी Dean (Academics), IIST