Yearly Status Report - 2017-2018

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 V K Dadhwal
Designation	Director
Does the Institution function from own campus	Yes
Phone no/Alternate Phone no.	04712568402
Mobile no.	7022267122
Registered Email	registrar@iist.ac.in
Alternate Email	director@iist.ac.in
Address	Valiamala Post
City/Town	Thiruvananathapuram
State/UT	Kerala
Pincode	695547

2. Institutional Status

University	Deemed
Type of Institution	Co-education
Location	Rural
Financial Status	central
Name of the IQAC co-ordinator/Director	Dr K S Subrahamanian Moosath
Phone no/Alternate Phone no.	04712568538
Mobile no.	9495743148
Registered Email	iqac@iist.ac.in
Alternate Email	smoosath@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

4. Whether Academic Calendar prepared during the year	Yes
if yes,whether it is uploaded in the institutional website: Weblink :	https://iist.ac.in/sites/default/files/academic/calendar/Academic%20Calendar%202021-22%20Jan-July%20even%20sem%2006.1.22.pdf

5. Accrediation Details

Cycle	Grade	CGPA	Year of Accrediation	Validity	
				Period From	Period To
1	B	2.87	2013	08-Jul-2013	07-Jul-2018

6. Date of Establishment of IQAC

6. Date of Establishment of IQAC	16-Feb-2012

7. Internal Quality Assurance System

Quality initiatives by IQAC during the year for promoting quality culture		
Item /Title of the quality initiative by IQAC	Date & Duration	Number of participants/ beneficiaries

NIL	28-Jun-2022 0	0
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8. 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	2018 0	0
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9. Whether composition of IQAC as per latest NAAC guidelines:	Yes
Upload latest notification of formation of IQAC	View File
10. Number of IQAC meetings held during the year :	0
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	No
Upload the minutes of meeting and action taken report	No Files Uploaded !!!
11. Whether IQAC received funding from any of the funding agency to support its activities during the year?	No

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

To modify the name of B.Tech (Avionics) programme to a more acceptable name, B.Tech in Electronics and Communication Engineering (Avionics) The institute decided to apply and go through the AICTE approval process. The institute decided and implemented the decision to base its UG Admission only to those candidates who have written the JEE (Advanced) Examination 2017 and performed as per the institute's minimum mark requirement in aggregate as well as secured minimum mark requirement in each of the three subjects in the JEE (Advanced) Examination 2017. The institute discussed the modalities internally and decided to implement the PhD Admission Test in the following year for all the PhD aspiring candidates who have not qualified in National Level Test for PhD. However, candidates from Science/Humanities streams who have not cleared a national level exam for PhD are not eligible to write the IIST PhD Entrance test. It was decided to also extend the PhD Admission Test to sponsored candidates from ISRO/DoS. The institute discussed the modalities internally and decided to implement choice based credit system as well as option to the students to audit a course in the following year.

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

Plan of Action	Achivements/Outcomes
• The institute decided and implemented the decision to base its UG Admission only to those candidates who have written the JEE (Advanced) Examination 2017 and performed as per the institute's minimum mark requirement in aggregate as well as secured minimum mark requirement in each of the three subjects in the JEE (Advanced) Examination 2017.	Proposed and accepted
The institute discussed the modalities internally and decided to implement the PhD Admission Test in the following year for all the PhD aspiring candidates who have not qualified in National Level Test for PhD. It was decided to also extend the PhD Admission Test to sponsored candidates from ISRO/DoS	Proposed and accepted
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14. Whether AQAR was placed before statutory body ?	No
15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?	No
16. Whether institutional data submitted to AISHE:	Yes
Year of Submission	2017
Date of Submission	07-Dec-2017
17. Does the Institution have Management Information System ?	Yes
If yes, give a brief descripiton and a list of modules currently operational (maximum 500 words)	IIST does have the information system (iCampus) that assist the complete academic module and admission portal for UG/PG and PhD programmes. The highlights of the iCampus is as following: 1. Marking students attendance 2. Course allocation 3.

Part B

CRITERION I – CURRICULAR ASPECTS

1.1 – Curriculum Design and Development

1.1.1 – Programmes for which syllabus revision was carried out during the Academic year

Name of Programme	Programme Code	Programme Specialization	Date of Revision
Mtech	MCH01	Materials Science and Technology	24/07/2017

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1.1.2 – Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year

Programme with Code	Programme Specialization	Date of Introduction	Course with Code	Date of Introduction
Nill	Not Applicable	Nill	Not Applicable	Nill

View File

1.2 – Academic Flexibility

1.2.1 – New programmes/courses introduced during the Academic year

Programme/Course	Programme Specialization	Dates of Introduction
Nill	Not Applicable	Nill

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1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the University level during the Academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BTech	Electronics and Communication Engineering(Avionics)	01/01/2018
BTech	Aerospace Engineering	01/01/2018
BTech	Engineering Physics	01/01/2018

1.3 – Curriculum Enrichment

1.3.1 – Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled
Interface Electronics	01/01/2018	133

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1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships

BTech	Aerospace Engineering	56

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1.4 – Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	No
Employers	No
Alumni	No
Parents	No

1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

Feedback Obtained
All the academic programmes and curricula are designed based on extensive feedback given by academic peers, engineers/scientists from various ISRO centers, other research organizations, and industry experts. We also take the parents into confidence regarding our academic programmes at the time of student counselling when parents visit the campus. The input from all the stakeholders is considered at the time of curriculum revisions. In IIST, we have a formal mechanism to obtain student feedback on all the courses. Students give anonymous feedback on the course they have attended at the end of each semester. Students play an important role in providing the detailed feedback about the course content, and delivery methodology adopted by the instructor. The feedbacks are collected, evaluated and discussed in the department level meetings. These inputs are taken into consideration while revising the curriculum. We also collect feedback from alumni for getting useful suggestions for improving the curriculum. Informal feedbacks are also collected from students on the courses and curriculum during discussions in the respective class committee meetings which we regularly conduct after each quiz. We use indigenously developed iCampus portal to collect the feedback from students. They are asked to give their feedback with respect to reading material provided, reference books, examination pattern, teaching method, doubt clearing, quality of question papers/ assignments, etc. A summary report is then generated and forwarded to the respective faculty. Suitable corrective action if necessary is taken by the faculty in consultation with Head of the department.

CRITERION II – TEACHING- LEARNING AND EVALUATION

2.1 – Student Enrolment and Profile

2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
BTech	Aerospace Engineering	60	6968	60

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2.2 – Catering to Student Diversity

2.2.1 – Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution	Number of students enrolled in the institution	Number of fulltime teachers available in the	Number of fulltime teachers available in the	Number of teachers teaching both UG

	(UG)	(PG)	institution teaching only UG courses	institution teaching only PG courses	and PG courses
2017	464	230	6	5	89

2.3 – Teaching - Learning Process

2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)

Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Numberof smart classrooms	E-resources and techniques used
100	100	30	27	4	4

View File of ICT Tools and resources

View File of E-resources and techniques used

2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

The mentoring system at IIST nurtures the very goal, and is initiated to help student grow into self sufficient individuals within the 4-5 years of academic life. Institute has an actively functioning mentors committee under the Students Activity (SA) board since 2014. This is a voluntary service rendered by the faculty members of IIST focusing primarily the first year B. Tech. students. The aim is to provide a friendly guidance to the newly joined teen-age students who are possibly going to stay outside of their parents umbrella for the first time. Many students find the transition difficult and mentoring provides extra support for them in finding footing in the institute. Mentoring system at IIST assist the first year students in adapting to the new system, helping them solve multiple issues be it administration, language issues, logistics, personal problems, academics and so on. Each volunteered faculty have been assigned 4-5 students each year. The students are advised to meet the assigned faculty once a week and discuss their difficulty at various levels. Mentors also make sure that the assigned students meet them regularly on a one to one basis. In fact mentors bridges between the mentees, first year teaching faculty, counsellors, and parents in case a situation arises. During the time of counselling, opportunities are provided for the parents of the mentees to interact with the mentors. Personal contact numbers of the mentors are given to the students as well as parents for any further interaction in the future. Mentors meet once a month along with the teaching faculty to discuss the issues of their mentees and collectively take quality decisions and develop strategies to further help the students. Mentors continue to support the students in the following years too in case they are in need. Committee of mentors is chaired by Dean - Student Affairs and based on the input given by mentors, possible changes are implemented in the hostel, administration etc. and suggestions were forwarded to academics for addressing in a timely manner.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
694	100	1:7

2.4 – Teacher Profile and Quality

2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
123	87	4	4	4

2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year)

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2017	Dr.Anup S	Associate Professor	Best Paper Design Award, 3rd

			INCAM-2017, MNNIT, Allahabad

View File

2.5 – Evaluation Process and Reforms

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

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
BTech	BAE01	I/I	22/11/2017	06/12/2017

View File

2.5.2 – Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year

Number of complaints or grievances about evaluation	Total number of students appeared in the examination	Percentage
0	0	0

2.6 – Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

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

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
BAE01	BTech	Aerospace Engineering	56	56	100

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2.7 – Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

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

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.1 – Promotion of Research and Facilities

3.1.1 – Teachers awarded National/International fellowship for advanced studies/ research during the year

Type	Name of the teacher awarded the fellowship	Name of the award	Date of award	Awarding agency
National	0	0	Nill	0
International	0	0	Nill	0
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3.1.2 – Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other fellows in the Institution

enrolled during the year

Name of Research fellowship	Duration of the fellowship	Funding Agency
JRF (2 numbers)	1825	IIST-ISRO, DST, ISRO-MOM AO, DBT, SAC-funded NAVIC-GAGAN
View File		

3.2 – Resource Mobilization for Research

3.2.1 – Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Major Projects	1825	DST, SERB, DBT, DAE,MEITY , DRDO, MaxPlank, Mangroove cell	69055053	31682981
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3.3 – Innovation Ecosystem

3.3.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Dept.	Date
Live Demo of Stock Market Operations-Prof. V K Vijayakumar,Investment Strategist, Geojit BNP Paribas	Humanities	25/10/2017
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3.3.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
Best MTech thesis award	Karthikayan	Indian National Academy of Engineering	15/12/2017	Student
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3.3.3 – No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsored By	Name of the Start-up	Nature of Start-up	Date of Commencement
0	0	0	0	0	Nill
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3.4 – Research Publications and Awards

3.4.1 – Ph. Ds awarded during the year

Name of the Department	Number of PhD's Awarded
Avionics	5
Chemistry	5
Earth and Space Sciences	5

Humanities	2
Physics	1

3.4.2 – Research Publications in the Journals notified on UGC website during the year

Type	Department	Number of Publication	Average Impact Factor (if any)
International	Aerospace Engineering	31	Nill

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3.4.3 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication
Aerospace Engineering	1
Avionics	3

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3.4.4 – Patents published/awarded/applied during the year

Patent Details	Patent status	Patent Number	Date of Award
0	Nill	0	Nill

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3.4.5 – Bibliometrics of the publications during the last academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
Bio-inspired composites with functionally graded platelets exhibit enhanced stiffness.	Tapse, S., Anup, S	Bioinspiration biomimetics, 13(1),	2017	Nill	IIST	Nill

View File

3.4.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
Bio-inspired composites with functionally graded platelets	Tapse, S., Anup, S	Bioinspiration biomimetics, 13(1), 016011	2017	Nill	Nill	IIST

exhibit enhanced stiffness.					
View File					

3.4.7 – Faculty participation in Seminars/Conferences and Symposia during the year

Number of Faculty	International	National	State	Local
Attended/Seminars/Workshops	10	19	4	0
Presented papers	81	53	2	1
Resource persons	42	109	57	10
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3.5 – Consultancy

3.5.1 – Revenue generated from Consultancy during the year

Name of the Consultan(s) department	Name of consultancy project	Consulting/Sponsoring Agency	Revenue generated (amount in rupees)
Physics	Development and implementation of diagnostic tools for.High Thrust Electric Propulsion System	LPSC	6000000
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3.5.2 – Revenue generated from Corporate Training by the institution during the year

Name of the Consultan(s) department	Title of the programme	Agency seeking / training	Revenue generated (amount in rupees)	Number of trainees
0	0	0	0	0
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3.6 – Extension Activities

3.6.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
Helping to look at sciences in an experimental way by demonstrations and also by giving guidance for their future endeavours/Counselling to deprived students	Nirmaan-Students initiative	5	108
View File			

3.6.2 – Awards and recognition received for extension activities from Government and other recognized bodies

during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
Nil	Nil	Nil	0

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3.6.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agency/collaborating agency	Name of the activity	Number of teachers participated in such activites	Number of students participated in such activites
Nil	Nil	Nil	0	0

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3.7 – Collaborations

3.7.1 – Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of activity	Participant	Source of financial support	Duration
Student Exchange (CALTECH)	Shri Mohit Singh Malik	Professor Satish Dhawan Fellowship (MS program)	300

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3.7.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
Internship	Internship	CALTECH	11/09/2017	06/07/2018	Shri Mohit Singh Malik

View File

3.7.3 – MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
Nil	Nill	Nil	0

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CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

4.1 – Physical Facilities

4.1.1 – Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
320000000	199122684

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Campus Area	Newly Added
View File	

4.2 – Library as a Learning Resource

4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or patially)	Version	Year of automation
Koha	Fully	3.02.05.000	2011

4.2.2 – Library Services

Library Service Type	Existing		Newly Added		Total	
Text Books	9758	4420220	587	413005	10345	4833225
View File						

4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e-content
Nil	Nil	Nil	Nill
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4.3 – IT Infrastructure

4.3.1 – Technology Upgradation (overall)

Type	Total Computers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departments	Available Bandwidth (MBPS/ GBPS)	Others
Existing	829	311	767	14	129	149	226	1	0
Added	78	24	73	0	50	1	3	0	0
Total	907	335	840	14	179	150	229	1	0

4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

1 MBPS/ GBPS

4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
Auto Visual Lab	https://www.iist.ac.in/departments/humanities-lab#22222 https://drive.google.com/file/d/1e5CUymHIdFInO3M6oixNr8Ty1sOrmOnN/view?usp=sharing

4.4 – Maintenance of Campus Infrastructure

4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurredon maintenance of physical facilites
11500000	9576513	22300000	21062989

4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

The physical assets of the Institute, such as the buildings, classrooms, electrical power, air condition and landscaping, are all maintained by the Construction and Maintenance Division (CMD) Section. The transport department caters to running and maintaining buses, conveyance light vehicles, and ambulance services. The Purchase and Stores Section takes care of purchase and making inventory by following the approved standard procedures. Library staff manages acquisition of print and electronic resources for the academic and research needs of the academic community. The Computer System Group manages the campus network, servers and other infrastructure and handles computer-related maintenance. Software Support Group (SSG), led by a team of IT professional provides various software services and technical assistance in the institute. The finance and accounts department, with its designated head and staff, cater to the financial aspects of the Institute. The institute has a medical clinic, with round the clock presence of a doctor and nurses to cater to any day-to-day medical requirements/emergencies. With its head (Dean Academics) and support staff, the Academic Section caters to the admission to graduate, postgraduate, and Ph.D. courses and conduction of examinations, etc. The hostel department maintain the hostels and manage day-to-day activities with its head and associated staff. A food and canteen committee constituted of faculty, students, and the canteen head addresses various food-related details such as the menu, mess timings, etc. A hostel committee constituted of faculty, students, and the hostel head addresses various hostel-related issues such as water supply, pest control in hostels, etc. Several administrative officers cater to the general administration of the Institute, which includes general upkeep and janitorial maintenance of the Institute. The Institute also employs a full-time counselor to guide students and staff of the Institute to achieve their goals. The counselor also addresses mental health issues and workload issues at a very personal level. The sports facilities and activities of the institute are administered through a sports committee consisting of faculty, students, and physical education instructors. Through the help of the instructors, the committee is also responsible for the maintenance and running of the day-to-day sports-related activities of the Institute and conducting the annual sports day. The cultural and other technical activities carried out by students are monitored and guided by a cultural committee similarly. The tech fest Conscientia, and the cultural fest Dhanak of the Institute, is facilitated by this committee. The Students Activities Center (SAC) caters to these requirements. The classrooms, furniture, seminar halls, and other associated accessories such as projectors, etc., are all attached to the respective academic department heads. The laboratories attached to each department come under an identified faculty coordinator/in charge in the department. The purchase and maintenance of the lab equipment, etc., is facilitated through the purchase and stores department. All the research and development activities of the institute are monitored and facilitated by the deans research and development. Computer Systems Group manages and maintains computer systems, networking, and related electronic infrastructure in IIST for provisioning and facilitating IT and non-IT services.

https://www.iist.ac.in

CRITERION V – STUDENT SUPPORT AND PROGRESSION

5.1 – Student Support

5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees
Financial Support from institution	Department of Space Assistanceship	173	7884000
Financial Support from Other Sources			
a) National	0	0	0
b) International	0	0	0
View File			

5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implemetation	Number of students enrolled	Agencies involved
German Class	02/08/2017	78	Goethe Zentrum Institute, Trivandrum
View File			

5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passedin the comp. exam	Number of studentsp placed
2017	Nil	0	0	0	0
2018	Nil	0	0	0	0
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5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
0	0	0

5.2 – Student Progression

5.2.1 – Details of campus placement during the year

On campus			Off campus		
Nameof organizations visited	Number of students participated	Number of stduents placed	Nameof organizations visited	Number of students participated	Number of stduents placed
Finisar Technology	35	2	AIR INDIA	1	1
View File					

5.2.2 – Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Depratment graduated from	Name of institution joined	Name of programme admitted to
2017	3	M.Tech	Avionics	IIT Madras	PhD
View File					

5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying
GATE	21
View File	

5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
Annual sports meet 2017-2018 was held on February 17th 2018 at LNCPE (Kariyavattom)..	Intra-institute	350
View File		

5.3 – Student Participation and Activities

5.3.1 – Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2018	Best College in Trivandrum	National	4	Nill	SC17B141	Abhishek
View File						

5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

IIST Students activities board is the apex body under the chairmanship of Dean Students Activities, for streamlining the student activities of IIST. There are four sub-committees' functions under the Students Activities Board. Sports Committee – One faculty member heads the committee and students nominate one representative each from all batches of undergraduate, post-graduate and doctoral students. This committee oversee the organization of various sports activities, competitions, selection of students for inter-collegiate events, maintaining the sports infrastructure, organization of Institute Gym etc. The committee reports to SAB periodically with its regular reports. Canteen and Hostel Committee - One faculty member heads the committee and students nominate one representative each from all batches of undergraduate, post-graduate and doctoral degree programs. The committee periodically review the canteen and hostel facilities, canteen menu, housekeeping etc with the help of students and suggest adequate measures for improvement and correction. Technical Committee – One faculty member heads the committee and students nominate one representative each from all batches of undergraduate, post-graduate and doctoral degree programs. The committee encourages and initiates student projects in science and technology areas, facilitates and enhances various science and technology activities like innovation centre, technical clubs etc. The committee oversees

the organization of IIST Inter-collegiate national student's technical fest named "Conscientia" every year. It also discusses and recommend students for various inter-collegiate events in India and abroad. Cultural Committee – to promote and encourage the cultural and literary activities of students of IIST, a cultural sub-committee has been constituted under the chairmanship of a faculty member and student representatives from various batches. The committee is responsible for organizing annual inter-collegiate National Cultural Fest named "Dhanak" every year. The committee also plans various cultural events, and literary competitions and select best programs / events for inter-collegiate events. Student Clubs: IIST students organizes various clubs named, Quiz Club, Aero Club, Nano-Satellite Club, FOSS Group, Eco Club, Photography Club, Movie and Performing Arts Club, Astronomy Club, Music Club, Model United Nations Club etc. Social outreach clubs like Nirmaan and Panacea are also functioning under student committees. Student Houses: All extracurricular activities are conducted based on various student houses. Student houses are titled as, Akashganga, Devayani, Kritika, Sharmishta, Hamsadhwani etc. Inter-house competitions are conducted for sports, cultural and literary activities. Academic Bodies: Students are members of class committees of each class along with those teachers who take classes during that semester. The class committees meet twice a semester and discuss about the performance of the students and the progress of lectures. Internal Complaints Committee: Internal Complaints Committee (ICC) is re-constituted (Office Order No. 449 dated 05.08.2016) as under to deal with the complaints relating to Sexual harassment at work place. Three student's nominees are representing different batches in the committee along with few members from faculty and staff of IIST Women Cell: Students are members of the women cell of IIST Anti-Ragging committee: Students are members of the anti-ragging committee of IIST.

5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

No

5.4.2 – No. of registered Alumni:

0

5.4.3 – Alumni contribution during the year (in Rupees) :

0

5.4.4 – Meetings/activities organized by Alumni Association :

Annual Alumni Meet held on 14.09.2017 at the campus.

CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 – Institutional Vision and Leadership

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

The organizational structure of IIST is truly decentralized in nature. The vision of the Indian Institute of Space Science and Technology is to establish a world-class institute offering Space Technology and Space Science educational programs which are integrated with basic and applied research for meeting the requirements of the Indian Space Programme. Research forms a significant part of this vision. The main aim is to seamlessly integrate Research and Development with academics and encourage excellence in the Institutes research activity in areas relevant to space science, space technology and space applications. Towards achieving this Research goal, IIST is creating its own

full-fledged infrastructure to develop a vibrant research atmosphere. It is also encouraging and promoting faculty in research activities to offer post-doctoral, doctoral programs and wherever necessary, draw upon research the rich expertise already available with the Indian Space Research Organization. The Director provides overall guidance to academic programs and takes strategic administrative decisions of the institute. The Director sets up necessary committees to conduct academic programs and to get the administrative activities done. The Academics section of the institute is headed by Dean (Academics). This section undertakes all decisions related to admission of students, preparing the academic calendar, the conduct of exams, publishing of results, convocation-related activities, etc. Dean (RD) is responsible for Research and Development activities at the institute level. Research Council (RC) chaired by Dean (RD) monitors the research progress and other academic matters of Faculty members and research scholars. Technical Review Committee (TRC) has the mandate to review the program of research projects in the institute funded by IIST and other external agencies. Faculty members coming up with project proposals is discussed here. IIST Research Board is formed to enable, promote and nurture innovative research activity meeting the requirements and challenges of the Indian Space Programme. The Dean (Students activities) is responsible for overseeing the activities of students. The institute has many clubs as Aero Club, Avionics club, etc., which this office guides. In addition, this office oversees Conscientia, the annual technology and astronomy festival of the institute. Annual cultural festival Dhanak is also organized by this office. Faculty members who come with innovative technologies are encouraged to apply for patents from Dean (IPR) office. Decentralization of selection of IIST-ISRO projects and decentralization of PhD selection of institute funded research scholars is followed in our institute. All the departments are involved in projects and research of national and international importance. Research in departments is through funded projects by IIST as well as government agencies such as the Department of Science and Technology (DST), apart from the regular Ph.D. programs. IIST funds research projects of the faculty members while encouraging active collaborations with ISRO units and institutes and research laboratories of national importance. The research projects implemented in IIST campus are: (i) IIST Research Projects (i) IIST-ISRO Projects and (ii) IIST Fast-Track Research Projects for newly jointed faculty (iv) Externally Funded Projects and (v) Individual Award/ Scheme Research Funds (INSPIRE Programme, NPDF, Young Scientist Award etc.)

6.1.2 – Does the institution have a Management Information System (MIS)?

Yes

6.2 – Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

Strategy Type	Details
Admission of Students	A meritocratic admission policy with predefined minimum standards is formulated for admitting students into IIST at UG, PG, Doctorate, Post-Doctorate levels. UG admission: Candidates desiring to obtain admission in IIST should register their application through online portal http://www.admission.iist.ac.in. IIST Admission Rank list will be generated for those candidates who register online for admission to IIST and satisfy all the eligibility criteria as

	prescribed in the Information Brochure. IIST Admission Rank list is prepared based on their aggregate marks scored in JEE(Advanced) examination. For PG admissions in Engineering/Science departments, a GATE score is mandatory. Applications are shortlisted depending upon the GATE Score and students are admitted based on the interview/rank list. A hybrid policy is followed by respective departments. For engineering/science department's admission to Ph.D. are based on departmental norms/interview. For Humanities Department, admission to Ph.D. are based on score in UGC/JRF score. Admission of post-doctoral studies is purely based on the interview that respective departments hold.
Industry Interaction / Collaboration	The Placement Cell at IIST continually liaise with industry, RD organizations, and management Institutions, with the vision of Training, Career-Guidance, Internship/Project, and Campus Placements for our post graduate and undergraduate students. The Company/Organization would contact the Placement Office for further details and discussions. In this year, 3 M. Tech students did their project internships in various private companies. 14 companies visited IIST for placements during this year. 9 B. Tech students and 21 M.Tech students were placed in companies. Faculty members have strong research collaboration with reputed Indian institutions such as IITs and IISc etc. and international institutions include: University of Oxford, UK, University of Concepcion, Chile and University of Bio-Bio, Chile. Moreover, department is also actively engaged in other activities like organizing training/nurture programme in mathematics for undergraduate/postgraduate students as well as seminars/workshops by renowned scientist from various parts of the world. In this year, 32 research projects are in various stages of execution in IIST, in collaboration with several ISRO centres particularly, Semi-Conductor Laboratory, Space Applications Centre, NRSC, ISAC, VSSC, IISU, LPSC and IPRC.

| Human Resource Management | The quality improvement strategies in human resources across the institute are designed to achieve the desired objectives of IIST along with providing quality research output for ISRO and space related activities. Institute has the following in place: Faculty empowerment strategies: All the faculty members of IIST have excellent academic back ground. Faculty members are also having research publication in reputed international journals. Many of them are members and fellows of prestigious academic societies. In addition, the faculty are encouraged to publish in peer reviewed international journals of repute. They are amply funded to attend conferences at national and international level. Also faculty are encouraged to do collaboration with leading national and international institutions with the aim that they can become best known in their area of research. Faculty are also encouraged to participate in international collaborative research projects with universities like University of Colarado, University of Singapore, JPL etc. Faculty are also encouraged to purse research through extramural grants available premier academic and research institutes in the country. The faculty of IIST also serve as members of Doctoral committees in premier institutes of county like IITs, NITs etc. They also serve on governance bodes and other statutory bodies of various educational institutions in different capacities. Research grants are also given to faculty to travel to foreign institutions for presenting their research work in international conferences. This provides an opportunity for faculty to interact and present their ideas to their peer groups at international level. Green living campus facilities: The campus at IIST has all facilities for the students that are eco-friendly. The campus has a well-equipped hospital that gives treatment to faculty, staff and students in case of emergencies. The campus is eco-friendly wherever possible. Technologies of biogas. waste utilization, recycling etc., are adopted. Water from rainfall is efficiently harvested. The campuses are equipped with adequate sports and |

	recreation facilities. Faculty promotion policies: A fair and transparent policy for policy promotion of faculties is followed based on merit. Annual Performance Appraisal Report (APAR) is required to be filled in by the faculty in which they are required to record their achievements every year.
Library, ICT and Physical Infrastructure / Instrumentation	Library used Koha ILMS for managing in-house library operations. An institutional repository was developed using the DSpace software. All subscribed e-resources were showcased using a library portal. Library portal developed with details and links to various services provided by the library. IIST signed a MoU with INFLIBNET to deposit soft copies of PhD theses to Shodhganga. Library handled book grant (Rs.3000/student/semester) and arranged re-imbursement of the amount by following the procedure. IIST Virtual Library helped users to access subscribed and open e-resources remotely. Spacenet connection established in the library to access data / resources from other Centres. Documentation facility started in the library during the period. Library subscribed to Turnitin - similarity checking service to avoid plagiarism in publications, reports, theses etc. Current Awareness Services provided through JTOCs and also through library portal. Library orientation classes arranged for new students and faculty. Training programmes organised on various resources and tools subscribed by the library.
Research and Development	Research development in various areas of space science, space technology and its applications as well as related areas of basic science and relevant humanities topics is undertaken at IIST through its faculty, visiting researchers and collaborators, postdoctoral fellows and project-funded junior research fellows and project engineers. The RD ecosystem is strongly supported by PhD scholars as well as PG and UG students in their project/internship semesters. While majority of research is funded from the institute, faculty are encouraged to obtain competitive research grants from funding agencies as well as consultancy

	project funds from ISRO and other industries. This is managed under Dean (RD) through an institute level Research Council. 82 research projects were in progress during this period. IIST supported research of its faculty members through various schemes such as Fast Track projects for newly joined faculty, IIST Projects and IIST-ISRO Projects are coordinated by IIST Research Council headed by Dean (RD) and Advanced Space Technology Development Cell (ASTDC). The faculty members are also working on projects funded by other external funding agencies such as DST, CSIR and UGC.
Examination and Evaluation	The evaluation is an integral and important part of the teaching-learning process. In IIST the process of continuous assessment is practiced evaluating the scholars. It is done through quizzes, class tests, home assignments taken periodically, and semester work and course project works taken based on the nature of the course. Few courses also take open book examination which allow students to get the practice of referring books and answering. The complete evaluation is purely internal and it is the responsibility of the course teachers teaching the course to evaluate the students perfectly by knowing the students understanding clearly in the topics they taught and to give a fair evaluation. Continuous assessment system for evaluation of students that carries various components like quizzes, assignments, mini-projects and final examination.The unique feature of the evaluation system is that students are allowed to see the evaluated End Semester Answer scripts and if they are not satisfied with the marks or any other manual errors are found the student can contact the faculty members and get it done. So this type of evaluation provides transparency in the evaluation system and reduces the process of revaluation after declaring the results. This is one of the best systems followed in which the students are satisfied with their results and the re-evaluation procedure is avoided.
Teaching and Learning	As a part of internal assessment, students are asked to do term/mini projects in most of the courses. To

	obtain better knowledge and get latest developments in the field. Students are encouraged to present research paper or demonstrating a concept, modelling and simulations or a combination are encouraged by faculty in their courses. The term project enables students to get a broader perspective, which helps to look beyond the classroom examples and apply the concepts learned in the course. Students are taken to visit various ISRO Centres to enhance their exposure and knowledge.
Curriculum Development	Curriculum development in the institute is framed primarily to mould students with sufficient rigor in the fundamentals and also to meet the student skill requirement for research and work in cutting edge technologies. Curriculum revision and development is carried out in the institute by the respective departments periodically after every three years. Every department prepares a curriculum modification/updation incorporating feedbacks from Alumni, reputed Educationalists, and Industry partners. The departmental committee incorporates the suggestion and implementation through discussions in a BoS (Board of Studies). This is discussed and ratified and approved through an academic council. However, periodic inclusion of any specific electives and minor modification are periodically incorporated into the curriculum through internal departmental discussions and BoS.

6.2.2 – Implementation of e-governance in areas of operations:

E-governace area	Details
Examination	Examination are managed by the iCampus Software developed in house for attendance marking, mark entry, grade setting, result verification and publishing of results. The website for icampus site is: http://icampus.iist.ac.in/
Planning and Development	There is a dedicated software systems group to work on the design, development and enhancement of in-house applications for academic activities, placement, alumni, online examination, CHSS card printing, convocation registration taking care of administrative requirements.

Administration	In particular, for administrative purposes the software COWAA (Computerized Working in Administrative Areas) is used by our institute for smooth administrative management. It helps in processes related to Administration, Purchase Stores, Accounts, Finance, Payroll. One of the special features of this software is that MIS reports also readily available. Recruitment section utilizes online Application Submission for enabling job opportunities like appointment of people in Short-term Contract Basis. Also appointments of SRFs/JRFs for projects of the institute is done in a similar way. icampus is a software used in our institute for the students for academics/administrative which include programme details, course registration, faculty course allotment, attendance management, result publishing, grade sheet printing and feedback related to courses. Also, a Material Management System is in place in the institute for managing activities for the Stores, Construction and Maintenance Divisions.
Finance and Accounts	The following softwares are used by finance and accounts division of IIST for its smooth functioning: 1. Tally ERP 9 – This is a standard accounting software used in the Accounts Department for recording day to day transactions and for generation of all related MIS reports 2. COWAA – This is an ERP software developed in-house (ISRO) which enables processing of indents, accounting and budgetary control. 3. WINMAN – This is a standard software used for processing and filing of TDS / TCS returns 4. Public Financial Management System (PFMS) – This is a web-based online software application developed and implemented by the Controller General of Accounts (CGA), Department of Expenditure, Ministry of Finance, Government of India. PFMS provides a real time, reliable and meaningful management information system and an effective decision support system, as part of the Digital India initiative of Government of India.
Student Admission and Support	Institute efficiently uses the website to publish all details related to admission in UG, PG, Doctoral and

6.3 – Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2017	Anup.S., Arun C. O	3rd Indian Conference on Applied Mechanics (INCAM) 2017 held at MNNIT	Not Applicable	0
		View File		

6.3.2 – Number of professional development / administrative training programmes organized by the University for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2018	Short Term Course on Control Systems Engineering-Theory and Applications	Hindi Workshop for Executives (Deans, HoDs, Division Heads and Officers of Administrative areas)	05/06/2018	08/06/2018	45	9
		View File				

6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the	Number of teachers	From Date	To date	Duration

professional development programme	who attended			
Discussion meeting on teaching differential equations in India Indian Academy of Science, Bangalore (Department of Maths)	1	26/02/2018	28/02/2018	3

View File

6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):			

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
4	1	0	0

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
There are welfare schemes for medical as per the government regulations. Employee including their family is covered under the Contributory Health Services Scheme. Different welfare schemes like VAST, VISWAS, SAFE, Group Insurance, Leave Travel Concession (LTC), Professional Update allowance are available for teaching members. SAFE (Scheme for Assistance to Families in Exigency) is Vikram A. Sarabhai Trust(VAST) as a welfare measure for the DOS/ISRO community. SAFE is a voluntary, contributory and multi-purpose welfare scheme to provide Financial Assistance in Exigency (FAE) to the beneficiaries. The beneficiaries are the employees (The Contributor) who opt to join this scheme and optionally, their family	There are welfare schemes for medical as per the government regulations. Employees including their family is covered under the Contributory Health Services Scheme. Different welfare schemes like VAST, VISWAS, SAFE, Group Insurance, Leave Travel Concession (LTC), Technical Update allowance are available for non-teaching members.	Medical Insurance, Book grant and Assistantship as per IIST/DOS norms are available for all eligible students.

members (Spouse and Children). The exigencies include: The monthly contribution paid by the employee depends on the type of the scheme they opt for. The exigencies covered include death/permanent disability of contributor, Loss of eyes/limbs of contributor, Loss of salary due to prolonged sickness of contributor, Serious sickness of contributor or family members, Prolonged hospitalization of contributor or family members, Permanent disability of family members, Loss of eyes/limbs of family members. Contributors are also eligible to receive Residual Bonus at the time of superannuation or withdrawal from SAFE. VAST Insurance Scheme Whenever Accident Strikes a voluntary and contributory welfare scheme to provide risk coverage for Death due to Accidents - anytime and anywhere in the world. The scope of coverage, generally includes death due to road / rail / air accidents, fire accidents, civil commotion, riots, natural calamities, accidents in work spots, etc., and excludes death due to intentional self-inflicted injury, suicide, insanity and natural deaths due to any disease / ailments. The scope of coverage, however, will be as prescribed by the terms and conditions of Group Personal Accident Policy taken with a reputed insurance company to

| | cover to risk of Death due to Accident. | | |

6.4 – Financial Management and Resource Mobilization

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

IIST conducts statutory financial audit by CAG empanelled Chartered Accountants. Apart from the financial audit, IIST is having regular audit from CAG and also internal audit conducted by the Department of Space.

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose
Nil	0	Nil

No file uploaded.

6.4.3 – Total corpus fund generated

0

6.5 – Internal Quality Assurance System

6.5.1 – Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	No	Not Applicable	Yes	Office order No 497 dated 12 July 2017
Administrative	Yes	CAG	Yes	Office order No 497 dated 12 July 2017

6.5.2 – What efforts are made by the University to promote autonomy in the affiliated/constituent colleges? (if applicable)

No. IIST doesnt have any affiliated/constituent colleges.

6.5.3 – Activities and support from the Parent – Teacher Association (at least three)

The institute is fully residential and all academic and administrative matters pertaining to the functioning of the institute are communicated to parents from time to time. This ensures association with parents and teachers of the institute.

6.5.4 – Development programmes for support staff (at least three)

1. An Awareness programme for Cleaning Staff of IIST was organized on 20th February 2018 as a part of Swaatch Bharat Abhiyan. 2. Training on Public Procurement under General Financial Rules 2017 including procurement of GeM 28-29 August, 2017 3. Residential Workshop on Vigilance, Disciplinary and Legal matters for Officers of DOS/ISRO Centres/Units 07-08 September 2017

6.5.5 – Post Accreditation initiative(s) (mention at least three)

6.5.5 Post Accreditation initiative(s) (mention at least three) 1. Choice Based Credit System (CBCS) guidelines in UG program were worked out. 2. Guidelines for auditing courses in UG and PG program were worked out in this year. 3. The B.Tech (Avionics) program was changed to B.Tech Electronics and Communication Engineering (Avionics). 4. The Board of Studies of all departments were

reconstituted. 5. The existing terms concerning the temporary withdrawal of a full time Ph.D. student from IIST who gets a job during his/her Ph.D. tenure was extended from the current provision of 6 months break to a one year break to return back to the institute for the completion of their research work.

6.5.6 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b)Participation in NIRF	Yes
c)ISO certification	No
d)NBA or any other quality audit	No

6.5.7 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2017	Nil	Nill	Nill	Nill	0
2018	Nil	Nill	Nill	Nill	0
No file uploaded.					

CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 – Institutional Values and Social Responsibilities

7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male
WIWA, Cultural Development Organization based in Trivandrum conducted the workshop for Administrative, technical, transport services, canteen, cleaning and janitorial services staff.	24/07/2017	26/07/2017	300	98
An Awareness Programme for Cleaning Staff of IIST by Smt. Babitha, Green Village, Sasthamangalam.	20/02/2018	20/02/2018	35	11

7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources
Decision to install Solar Power Plan approved and work initiated

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	11
Provision for lift	Yes	11
Ramp/Rails	Yes	11
Braille Software/facilities	Yes	0
Rest Rooms	Yes	11
Scribes for examination	Yes	0
Special skill development for differently abled students	Yes	11
Any other similar facility	No	0

7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2018	2	2	21/10/2017	3	Dhanak 2017	Local people had set up food stalls, 50 Students from orphanages were also brought to IIST during Dhanak to give a feel of the cultural fest of IIST and also to witness the exhibition organized as part of Dhanak	1050
			View File				

7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders		
Title	Date of publication	Follow up(max 100 words)
Handbook	31/12/2016	A handbook which has all rules, regulations, code of conduct, and details of academic programmes are given to the students at the time of counselling. The same is published in IIST website also

7.1.6 – Activities conducted for promotion of universal Values and Ethics			
Activity	Duration From	Duration To	Number of participants
Social outreach club activities in orphanages, schools, blind school provide students a practical ethical framework to understand the society and inculcate a global competency for an inclusive world	03/03/2018	03/03/2018	6
[View File](#)			

7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

World Environment day: World Environment day was celebrated on 5th June, 2017 for encouraging awareness and promote positive actions for the protection of the environment. In this connection, Eco Club Council, IIST and CMD, IIST had arranged planting of tree sapling in the IIST Campus. Director, IIST inaugurated the programme. • Swatch Bharath Abhiyan Implementation: On 12th February, 2018 Director, IIST formally inaugurated the Swachhta Pakhwada in IIST by dedicating the newly installed "NO WASTE" Fuel Free Solid Waste Management System with Air Pollution Control Device Attachment to IIST campus. This incinerator was a special initiative of the Swachh Bharat Abhiyaan implementation Committee of IIST. The total cost of supply and installation of the same was Rs. 8, 48,400/-. • Director IIST along with the staff members also participated in the planting of seedlings in the organic farming area set up on the terrace of Canteen building by IIST canteen Services. This is a very successful initiative of IIST canteen services wherein slurry from the biogas plant is mainly used as manure. • A Market Study in a nearby market on systems of cleaning was organised where 12 team of students visited the nearby market and did a detailed study of the waste generated and systems of waste management currently being practised. They submitted their reports incorporating viable methods for sustainable waste management. • On 14th February 2018 an Essay competition on Eco Hygiene was organised. • 15th February 2018 was declared as Clean Class rooms and Offices Day. The complete staff and students cleaned up their respective premises viz. Offices, lecture halls, laboratories and class rooms. General cleaning of the outside premises of the Institute was carried out on February 19th 2018. A Short Film competition on "What I can do for Clean India?" was organised • An Awareness Programme for Cleaning Staff of IIST by

Smt. Babitha, Green Village, Sasthamangalam • The Swachhta Pakhwada Inter-school Quiz was held on 20th February, 2018. Mr. Mustafa Shahid (Scientist/Engineer C, Vikram Sarabhai Space Centre) served as the Quiz Master. The quiz witnessed participation from 13 teams, belonging to classes VIII to X, from nine different schools. • The Student Activities Board organized a Paper-Bag Making Session on 21st February, 2018. The event witnessed a participation of over 25 students, representing the various academic branches and years of Indian Institute of Space Science and Technology. Old newspapers were transformed into 200 odd paper-bags within a span of an hour and a half. The bags were later donated to the college cafeteria and a nearby shop, frequented by the neighbouring community and students, alike. • On 22nd February 2018, an Awareness campaign about cleanliness in nearby schools viz. Govt. High School in Karippur and Christu Jyoti Senior Secondary School in Chullimanoor was organised. The festival of Holi was made more eco friendly.

7.2 – Best Practices

7.2.1 – Describe at least two institutional best practices

Best Practice – 1 1. Title of the practice: Internship for B.Tech students at ISRO/outside Institutes or companies 2. The context that required the initiation of the practice (100 – 120 words) Students in their under graduation learn theoretical concepts in the course work and these projects are designed to augment the theoretical knowledge with practical exposure. Moreover, the students are required to know the industrial practices before they take up their career in industries. Such initiation will benefit the students to learn the industrial culture and get exposed to such an environment. The students will also be aware of the challenges the industries face and help them learn the technology to solve real life problems. Seamless adaptation to work culture in their industrial career after their graduation may be possible for the students who pursue their final year projects in the industries. 3. Objectives of the practice (50 – 60 words) • To impart practical training to the students to develop their knowledge and skills applicable to their career. • To develop inter personal skills and communication skills with group of workers • To learn proper behavior of corporate life in industrial sector • To enhance the student's ability in lateral thinking, creativity and sharing ideas appropriate to their career. 4. The Practice (250 – 300 words) The list of available topics for B.Tech internship is obtained from all the departments for interdisciplinary projects. In addition to this, different topics also will be made available from ISRO centres, though Internship Planning and Coordination Committee (IPCC) at the institute level. All these topics are made available to the students. Faculty members also contact the different companies/institutes/industrial organizations based on the specific interest from a student to work on a particular area/theme. The students are either permitted to choose the topic of their interest from the list provided to them to pursue the internship or approach the concerned faculty based on their expertise and arrive at a mutually convenient topic. Once the topic is finalized, the students are required to be physically present in the respective organizations and carry out the said work and a supervisor at the other end is identified apart from one of the department faculty to be the internal supervisor. Initial familiarization/orientation to the company/organization is carried out in the initial few days. Then, the students are involved in the given problem and a solution methodology to solve the problem is arrived at. The student will be in continuous contact with both the supervisors during the said course and report the outcome of the work. The student is advised to sum up his findings of the work carried out at the end of the project and an assessment is made again by the panel members to award grades to the student. 5. Obstacles faced if any and strategies adopted to overcome them NA 6. Impact of the practice (100 – 120 words) Students get an opportunity to learn various

methodologies adapted in the industry to solve a particular problem in an economical way. 7. Resources required: Nil Best Practice - 2 1. Title of the practice: Conducting "GeoConnect" programme. 2. The context that required the initiation of the practice (100 – 120 words): Academic institutes are encouraged to conduct various kinds of outreach programme, especially for the students and research scholars. The technological growth in data, software and hardware components of Geospatial domain made it an inevitable wing of a wide range of research studies from climate change to sales and marketing. A better exposure on the recent trends and developments in geospatial technology will encourage the masters and Ph D students to take up the right problem to be addressed with right tools. Geoconnect of every year has received participants across the country from relevant background. 3. Objectives of the practice (50 – 60 words) : Geoconnect aims to encourage and promote the young students and scholars to understand potential of geospatial tools in various branch of studies practiced in various academic and government sectors by organising the optimum ratio of lectures to lab/ hands-on and help them to streamline their ongoing and proposed research. 4. The Practice (250 – 300 words): Students across the country are invited for the programme and shortlisted based on their subject background. Master or Ph D scholars with Civil engineering, Computer science, Electronics and Communication, Agriculture, Forestry, Geology, Architecture and others are encouraged to register for the course. The course structure is aligned with the theme of the course with set of lectures and hands on exercises in handling the instruments, software, analysing the data measured. Other than in-house faculties, experts are invited depending on the need and potential. Hence, the participants get a wide range of exposure in the field of Geoinformatics, and its development that make them think the different perspective of research. 5. Obstacles faced if any and strategies adopted to overcome them: Initial programmes had no eligibility criteria that made the constraint to us in introducing the basics first and then to continue the real subject though there is a wide range of engineering subjects as prerequisites. Hence, later we invited the students/ scholars from specific backgrounds only. Another issue we faced is the receipt of numerous applications from eligible candidates and we were not able to include all of them because of financial constraints. 6. Impact of the practice (100 – 120 words): As we conduct this as an annual event, we get good response from the students and get to know about their development and progress in their research. This makes the platform for the young researchers to interact with experts during the progamme as well as continued collaboration for future research. 7. Resources required: • Resource persons from different fields of expertise. • High end and precise instruments and recent data types to teach contemporary research methods

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link
https://iist.ac.in/iqac

7.3 – Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

As envisioned in the vision statement, IIST has been striving to build a strong and active collaboration with other universities/institutes at the national and international levels. IIST has signed various MOU in three categories, namely (i) with various universities and research organisations to cooperate in the field of education, undertake joint research, exchange faculty and students, (ii) with specific agencies and industries and ISRO to undertake a research project and deliver specific design or product, and (iii) framework MOU, to participate in national and international multi-institutional research programs. MoU has been signed with ? Caltech University, USA, JPL, USA and

University of Surrey, UK ? Exchanged MOU with Technion (Israel) during the visit of PM of Israel to India in January 2018 for faculty and student exchange and joint research and workshops. ? With Mangrove and Marine Biodiversity Conservation Foundation, Mumbai, Office of Chief Conservator of Forests, Government of Maharashtra on March 27, 2018 for undertaking a remote sensing based monitoring of mangroves in the coast of Maharashtra. ? With the Regents of University of Colorado (USA) for joint space education and research in May 2017 to encourage student/faculty to carry our research and development in the area of space science and spacecraft engineering and develop a curicullum for spacecraft engineering ? Laboratory of Atmospheric and Space Physics (LASP), University of Colorado, USA has invited IIST to participate in the International Satellite Program In Research and Education (INSPIRE) program. ? Max Planck Institute for Radio Astronomy (Bonn, Germany) ? Nanyang Technological University (NTU), Singapore and Technion, Israel to carry out research and development in the area of space science and spacecraft engineering through student/faculty exchanges. ? Our participation in Indias space programme increased further this year with the signing of four more MoUs with as many ISRO centers (NARL, IISU, LPSC IPRC), including one with NARL under which PhD students working in NARL will be jointly supervised by IIST faculty,with participation in NARLs research endeavours. ? The BTech toppers of two streams will also be provided an opportunity to enroll and earn a MS at CalTech USA under Satish Dhawan Endowment. Mr. Avinash Chandra who completed his MS under this programme this year received The Abdul Kalam Award instituted annually for exemplary academic performance in Aerospace Engineering Masters program at CALTECH. ? Currently thirty two projects are in various stages of execution in IIST, in collaboration with several ISRO centres - particularly, Semi Conductor Laboratory, Space Applications Centre, NRSC, ISAC, VSSC, IISU, LPSC and IPRC. ? 39 speakers of national and international importance visited the institute during the last year. Such lectures provide a forum to enhance scholarly and scientific learning and to stimulate the intellectual climate of IIST. ? Faculty members, research scholars and students of IIST had excellent opportunities to visit countries abroad for attending seminars/conferences or for doing research internships.

Provide the weblink of the institution
https://iist.ac.in/iqac

8.Future Plans of Actions for Next Academic Year

• The institute decided to implement the PhD Admission Test in the following year from July 2018 for all the PhD aspiring candidates who have not qualified in National Level Test for PhD. It was decided to also extend the PhD Admission Test to sponsored candidates from ISRO/DoS • The institute decided to apply and go through the AICTE approval process that would enable AICTE to pay the MTech scholarship from July 2018 to all the IIST MTech students who join in the academic year 2018-2019 • The institute decided to implement the choice based credit system from July 2018 • The institute decided to implement the option to the students to audit a course from July 2018 without the need for credit registration