Yearly Status Report - 2018-2019

Part A	
Data of the Institution	
1. Name of the Institution	**TOC H INSTITUTE OF SCIENCE&TECHNOLOGY**
Name of the head of the Institution	**Preethi Thekkath**
Designation	**Principal**
Does the Institution function from own campus	**Yes**
Phone no/Alternate Phone no.	**0484-2748388**
Mobile no.	**9946509900**
Registered Email	**mail@tistcochin.edu.in**
Alternate Email	**naac.tist2017@gmail.com**
Address	**Toc H Institute of Science & Technology Arakkunnam Ernakulam, Kerala**
City/Town	**Ernakulam**
State/UT	**Kerala**
Pincode	**682313**

2. Institutional Status

Affiliated / Constituent	**Affiliated**
Type of Institution	**Co-education**
Location	**Rural**
Financial Status	**private**
Name of the IQAC co-ordinator/Director	**Prof.Dr.Georgina Benoy Joseph**
Phone no/Alternate Phone no.	**04842798129**
Mobile no.	**9566110163**
Registered Email	**mail@tistcochin.edu.in**
Alternate Email	**naac.tist2017@gmail.com**

3. Website Address

Web-link of the AQAR: (Previous Academic Year)	https://tistcochin.edu.in/wp-content/uploads/2018/12/AQAR-2017-2018.pdf

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://tistcochin.edu.in/wp-content/uploads/2021/01/Academic-calendar-2018-19.pdf

5. Accrediation Details

Cycle	Grade	CGPA	Year of Accrediation	Validity	
				Period From	Period To
1	**B**	**2.71**	**2012**	**21-Apr-2012**	**20-Apr-2017**
2	**B+**	**2.62**	**2019**	**04-Mar-2019**	**03-Mar-2024**

6. Date of Establishment of IQAC

6. Date of Establishment of IQAC	**21-Jun-2010**

7. Internal Quality Assurance System

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

IQAC		
International Conference on Business and Information (ICBI)	28-Nov-2018 1	135
National Level workshop on Building Construction	15-Mar-2019 2	35
National Seminar on Sustainable Technologies	02-Jul-2018 5	26
FDP on Mobile Robotics & Internet of Things	16-Jan-2019 2	16
FDP on Machine Learning Using Python	21-May-2019 2	18
QIP on Innovations in sustainable waste Management	19-Jul-2018 3	30
FDP on Emerging trends in Information Technology	02-Jul-2018 7	8
International Conference Bio-Insipired Computing and Application IBICA	18-Dec-2018 2	40
IEEE International Conference on Emerging Trends and Innovation in Engineering and Technological Research	11-Jul-2018 3	185
National Workshop on Leaving No One Behind	22-Mar-2019 2	85

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8. Provide the list of funds 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
IEDC	Entrepreneurship Development	Kerala Startup Mission	2019 365	100000
Dr. Perumal Shankar	Funded Project	AJACO	2017 1095	100000
Kerala Startup Mission	Funded Project	Kerala Startup Mission	2018 365	200000
CSE	Industry Sponsored	Kerala Higher Education Department	2019 365	445800
ECE	Funded Project	CERD	2019 365	32500
CSE	Funded Project	CERD	2019	20000

			365	
IT	UBA	MHRD	2019 365	100000
ME	UBA	MHRD	2019 365	100000
ECE	UBA	MHRD	2019 365	100000
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9. Whether composition of IQAC as per latest NAAC guidelines:	**Yes**
Upload latest notification of formation of IQAC	View Link
10. Number of IQAC meetings held during the year :	**2**
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	**Yes**
Upload the minutes of meeting and action taken report	View Uploaded File
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)

• **Launched ERP • Volunteer Association of Students (KARMA) STEPS (Specialized Training Employability Programs for Students) • IEDC Startup Mission**

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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
NAAC Re accreditation	Got NAAC Reaccredited
KTU funded FDPs for NBA Depts.	Civil and Mechanical departments Conducted FDPs with KTU funding
International conference	CSE department conducted International Conference
Placement Initiatives	Achieved placement for MBA students and 90 for others
Remedial Class	Classes arranged after regular college hours and the results improved.

Research Activities	Submitted proposals to KSCSTE and KTU

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14. Whether AQAR was placed before statutory body ?	**Yes**

Name of Statutory Body	Meeting Date
IQAC	**28-Sep-2020**

15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?	**Yes**
Date of Visit	**22-Feb-2019**
16. Whether institutional data submitted to AISHE:	**Yes**
Year of Submission	**2020**
Date of Submission	**03-Mar-2020**
17. Does the Institution have Management Information System ?	**No**

Part B

CRITERION I – CURRICULAR ASPECTS

1.1 – Curriculum Planning and Implementation

1.1.1 – Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words

Curriculum Delivery Mechanism: University academic calendar is strictly adhered to. In order to enable the planned coverage of syllabus, a detailed academic calendar including all important dates for curricular, co-curricular and extracurricular activities is prepared by a committee headed by Dean Academics and is implemented. Curriculum planning and delivery is documented regularly in ERP, launched during academic session 2018-19. Course plan: Before the beginning of semester, faculty members prepare and upload course plan duly approved by respective HOD in ERP. As per this, the course syllabus is covered at appropriate pace including proper revisions prior to the commencement of university examination. A model/practice session examination is also conducted for all courses in accordance with university question pattern. Students are also made aware of course plan in the beginning of the semester. Also if a faculty finds that he or she is lagging behind, extra classes will be scheduled as and when required during holidays. The HOD monitors the implementation of course plan. Course/class committee meetings with student representatives are conducted and feedback from students is taken twice in a semester. Students' progress is assessed through class tests and reported to parents/PTA meeting. Course plans for lab Course plans for lab are also prepared. Additional experiments are also included. Laboratory manuals are prepared covering all the

experiments in the course plan and are issued to the students at the commencement of the practical course. Pedagogical model: The institution follows pedagogical model based on Revised Blooms Taxonomy (RBT) enabling the students to achieve the knowledge through all levels of learning. Faculty prepare learning materials, question bank, previous question papers, follow chalk and board and ICT. The abstract concepts are explained with reference to real world situations. During tutorial hours, extra problems will be given to students for problematic courses or difficult concepts will be explained for other courses. Two teachers will be in charge of this hour which will provide individual attention. Student mentoring is practiced to continuously monitor and motivate the students. Remedial classes are offered by concerned faculty, to students who have fallen behind the rest of class in academics. Online feedback for all courses are collected from students of respective semesters twice in a semester. Tools used for curriculum delivery: • Lecture • PPT • Videos • Case study • Role play • Invited talks by luminaries • On the job training • Peer learning • Hands on entrepreneurial experience • Demonstration of certain topics in syllabus by taking students to laboratories • Hands on training by conducting workshops Documentation: • Portion coverage of course syllabus is shown in lesson plan • PPT and videos are shared in Google drive and in ERP • Lecture notes are shared in Google drive and in ERP • Mentoring details • Remedial class details

1.1.2 – Certificate/ Diploma Courses introduced during the academic year

Certificate	Diploma Courses	Dates of Introduction	Duration	Focus on employ ability/entrepreneurship	Skill Development
AI ML	Nil	14/01/2019	365	Employability	Additional Skill Acquisition Program conducted under ASAP ASDC
Make Intern, IIT Kharagpur	Nil	13/03/2018	3	Employability	BIM Modelling
NPTEL Online Certification on Database Management System	Nil	02/05/2019	56	Employability	Skill Development

1.2 – Academic Flexibility

1.2.1 – New programmes/courses introduced during the academic year

Programme/Course	Programme Specialization	Dates of Introduction
No Data Entered/Not Applicable !!!		
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1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BTech	Electronics	01/08/2018

		Communication Engineering	
BTech	Computer Science & Engineering	01/08/2018
BTech	Information Technology	01/08/2018
BTech	Electrical & Electronics Engineering	01/08/2018
BTech	Civil Engineering	01/08/2018
BTech	Mechanical Engineering	01/08/2018
BTech	Safety and Fire Engineering	01/08/2018
BTech	Electronics Communication Engineering	14/01/2019
BTech	Computer Science & Engineering	14/01/2019
BTech	Information Technology	14/01/2019
BTech	Electrical & Electronics Engineering	14/01/2019
BTech	Civil Engineering	14/01/2019
BTech	Mechanical Engineering	14/01/2019
BTech	Safety and Fire Engineering	14/01/2019

1.2.3 – Students enrolled in Certificate/ Diploma Courses introduced during the year

	Certificate	Diploma Course
Number of Students	171	0

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
ASAP Course on AI-ML	14/01/2019	24
REDHAT RHCSA Certification	05/06/2018	7
Industrial Training program on 'Machine Learning' in association with Mie Robot	18/07/2018	50
Training on 'Cyber security, Web development and Networking' in association with Softnet talentz Softwares	25/07/2018	52
Workshop on Web Technologies (Web and PHP Training) in association with Infocom Software	10/01/2019	33
Placement training	08/01/2018	57
Workshop on "R Programming"	13/05/2019	30

Technical Talk on "Emerging Trends in Information Technology"	12/02/2019	83
IEDC-ICTAK "Foundation skills on Entrepreneurship" workshop	10/10/2018	5
IEEE Kochi Hub Meet	21/07/2018	5
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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	Electronics & Communication Engineering	65
BTech	Computer Science & Engineering	62
BTech	Civil Engineering	90
BTech	Mechanical Engineering	128
BTech	Information Technology	48
BTech	Electrical & Electronics Engineering	43
BTech	Safety & Fire Engineering	71
MBA	Marketing Strategies	59
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1.4 – Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes

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

Feedback Obtained

a) Course end surveys from students and faculty feedback are taken for evaluating the quality of course contents. Based on these surveys, recommendations on required revision of the syllabus will be intimated to the university authorities through Head of the Institute. This when carried out by the university will narrow the curricular gaps in the course. b) Student exit feedback taken at the end of graduation on overall facilities at the department c) Program exit surveys helps the department to identify the gaps in different courses included in the program. d) Alumni survey helps the department to identify the latest technologies that the program should include. e) Employer surveys collected can be used to identify the performance gaps in students which can be mitigated by providing training in appropriate skills and by

including add on courses. f) Through the meeting with the experts from industry and reputed institution, we can identify the weaknesses of our students in general and appropriate temporary remedial measures could be adopted to strengthen them. g) After every event like technical talk, workshop, awareness class, seminar, conferences, etc., Student feedback is taken and analyzed to check the effectiveness of the same. To check the effectiveness and impact of the industrial interaction on students, a feedback is taken and analyzed after every industrial visit/ internship as follows • Questionnaire for feedback are prepared based on POs and PSOs. • Feedbacks are collected from students to assess the impact, based on the level of improvement through the mapped POs/PSOs. • Feedback collected is compiled and segregated with respect to the three correlation levels viz. level 1- 1, level 2- 2 level 3- 3 for each mapped PO and PSO • Weighted average of mapped POs and PSOs are calculated. • Average of PO and PSO for the various feedbacks for the particular academic year /admission is calculated. • Attainment obtained from feedback is used to calculate the indirect attainment for the year/admission.

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	FS	60	68	26
BTech	IT	30	16	13
BTech	CE	60	96	42
BTech	ME	120	136	62
BTech	EEE	60	51	29
BTech	CS	60	165	57
BTech	ECE	60	58	36
Mtech	Construction Engineering	24	21	21
Mtech	CS	18	6	6
Mtech	Power Electronics	18	5	5

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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 (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2018	1435	172	100	37	137

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	Number of	ICT Tools and	Number of ICT	Numberof smart	E-resources and

Teachers on Roll	teachers using ICT (LMS, e-Resources)	resources available	enabled Classrooms	classrooms	techniques used
137	126	3	39	21	3

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)

TIST follows student mentoring system since its inception. In each department, students in groups, are assigned to mentors, who are the faculty from the respective department. The institute also has a separate Department of Applied Psychology and Counselling, with two full time counsellors available in the campus. The students are at liberty to approach any of them for help and guidance. Initially, in each class, the class in charges were assigned as mentors for each half. The mentors interacted with students and any academic or personal difficulties identified were taken care in consultation with the respective HOD. The students who had emotional instabilities, family problems or learning disabilities were referred to the psychology department. The counsellors would discuss the cases and provide psychological counselling and the feedback is given to the respective HOD. If a particular student's case is grave or is of a very sensitive nature, the same was informed to the Head of the Institution. In such cases, parents were also called for counselling so that an overall intervention could be done, both at the institution level and at the family level. Referral services were also provided by the counsellors. If additional expertise required, the student was referred to the Director in the Management Board, who is a senior counsellor with more than 40 years of experience in counselling. Students who required psychiatric help were referred to a psychiatrist. From the academic year 2014-'15, the mentoring system was refined. The students of each class were divided in groups of 15 or 20 and each group was assigned with a mentor who would be in charge of the student from third semester till eighth. A mentor form was developed by the counsellors in consultation with the Head of the Institution, HODs and class in charges. To start with, the mentor forms were maintained for the students of the third semester to eighth semester. From 2015-'16 onwards, the mentor forms were maintained for all semesters by the respective departments. The mentor form for each semester consists of personal details of the students such as address, whether a hostler/day scholar, academic details, attendance, academic difficulties, any professional help needed, whether active or indifferent interest is shown towards mentoring, all round development of the student and vulnerability to drug/alcohol abuse. In addition to this form, the mentors maintain an individual mentor record for each student, in which details of the mentoring sessions are recorded. The mentor meets the student at least twice in each semester. The academic progress, attendance, other activities and achievements are discussed and they are counselled with care to sustain and improve their performance. This information along with any discrepancies in the student behaviour is noted in the mentor form as well as mentor record. Parents are informed regarding the progress as well as problems, if any, of their wards. In each semester, the consolidated mentor form is passed on to the counsellors for professional counselling, remedial action and follow up. Regarding the remedial action, the mentor arranges professional guidance or special academic assistance regarding the area in which the student has requested for help. The counsellors maintain follow ups by regularly reviewing the mentor form.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
1607	137	1:12

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
137	137	0	1	22

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

	2018	Ms. Elsaba Jacob, National Level	Assistant Professor	Longest Continuous SBC Award from Computer Society of India

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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	CSE/CE/CSE,ECE,ME,SF,CE,EEE,IT,ME,FS	S1	29/11/2018	17/04/2019
BTech	CSE,ECE,ME,SF,CE,EEE,IT,ME,FS	S2	29/04/2019	24/08/2019
BTech	CSE,ECE,ME,SF,CE,EEE,IT,ME,FS	S3	29/11/2018	05/01/2019
BTech	CSE,ECE,ME,SF,CE,EEE,IT,ME,FS	S4	29/04/2019	16/08/2019
BTech	CSE,ECE,ME,SF,CE,EEE,IT,ME,FS	S5	29/11/2018	29/04/2019
BTech	CSE,ECE,ME,SF,CE,EEE,IT,ME,FS	S6	29/04/2019	30/07/2019
BTech	CSE,ECE,ME,SF,CE,EEE,IT,ME,FS	S7	29/11/2018	05/04/2019
BTech	CSE,ECE,ME,SF,CE,EEE,IT,ME,FS	S8	29/04/2019	16/07/2019
MBA	MBA	T1,T3	09/07/2018	25/04/2019
MBA	MBA	T2,T4	26/11/2018	11/07/2019

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2.5.2 – Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

Internal Assessment Test for theory courses • Two internal assessment test are conducted during a semester • As per academic calendar the schedule for the internal assessments are prepared by the Internal Assessment (IA) cell and circulated to the department • Faculty members are instructed to use Revised Bloom's taxonomy to prepare the question papers that test the various levels of learning and the relevant course outcomes. • The analytical and descriptive skills of students are tested by these internal assessment tests. • Question paper scrutiny committee assesses the quality of question papers submitted by individual faculty members. Also, it ensures the clarity of the questions on various aspects. • IA Exams are conducted through Internal Examination Cell. •

Proper records are maintained for question paper collection and conduct of retest • The scheme of evaluation and answer key of each question paper is prepared. • Grading should be done strictly based on evaluation scheme. • Answer scripts are evaluated by the concerned subject faculty members within a week and the result is published. • Student may be allowed to take retest only on medical or other genuine grounds. • Each faculty provides effective feedbacks regarding performance and presentation of answers to students. • Marks scored for individual questions are recorded to ascertain the attainment of COs. • During ISO and KTU audit, the function of IA cell and its process are assessed. For Lab Evaluation • For practical paper, Continuous Assessment (CA) is done by considering day to day laboratory work, record submission and viva is carried out every lab hour. For B.Tech, 70 marks is allotted for continuous evaluation in lab as per KTU norms and 30 marks is allotted for laboratory examination which will be conducted at the end of the semester. For M.Tech, 40 marks is allotted for continuous evaluation in lab as per KTU norms and 60 marks is allotted for laboratory examination which will be conducted at the end of the semester. For Project • The project guides regularly monitor the progress of project based on weekly discussions. • Interim Presentation is done by each project group for B.Tech and for each student for M.Tech before the expert committee. • The committee of internal and external examiners along with the guide will evaluate the final project/research work for B.Tech and M.Tech. For Seminar • A seminar guide is allotted for each student. • Students have to submit the seminar report to guide before the final presentation. • Presentation is done by each student before the expert committee. The committee of internal examiners along with the guide will evaluate the final seminar work done by student in B.Tech and M.Tech.

2.5.3 – Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)

University academic calendar is strictly adhered to. For planned coverage of syllabus and criterion evaluation, a separate academic calendar is prepared by a committee headed by Dean Academics and it is communicated to all departments for strict compliance. This calendar will indicate all academic, co-curricular and extracurricular activities viz, The commencement of the semester, Class committee and Course Committee meetings, Arts/sports and other festivals and celebrations, Submission of internal marks, Closing of attendance, University exams, Internal assessment test, End of the semester, Seminars, Workshops, Technical fest, Schedule for practical exams as specified by KTU, Last date for announcement of shortage of attendance, Last working day. In the light of college academic calendar, each faculty prepares a course plan. According to this course plan the course syllabus is covered at appropriate pace including proper revisions prior to the commencement of the university examination. A Model/Practice examination is also conducted for all courses in accordance with university question pattern. KTU Academic Audit: External academic auditor physically verifies all internal audit statements twice in a semester at the college. The academic auditing shall cover course delivery, syllabus covered, adherence to course plan, timely conduct of internal exams and publishing of internal marks, course committee and class committee minutes, students' grievances, welfare, discipline committee functioning and their minutes.

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://tistcochin.edu.in/wp-content/uploads/2020/12/Course-Objecctives.pdf

2.6.2 – Pass percentage of students

Programme	Programme	Programme	Number of	Number of	Pass Percentage

Code	Name	Specialization	students appeared in the final year examination	students passed in final year examination	
ECE	Mtech	Wireless Technology	1	1	100
ECE	Mtech	VLSI	4	4	100
ME	Mtech	Thermal Engineering	2	2	100
SF	BTech	SF	62	36	58.1
EEE	BTech	EEE	48	36	75
IT	BTech	IT	35	23	65.7
ME	BTech	ME	122	65	53.2
CE	BTech	CE	66	55	87.3
CSE	BTech	CSE	61	42	68.9
ECE	BTech	ECE	125	84	67.2
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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://tistcochin.edu.in/wp-content/uploads/2021/01/Student-satisfaction-survey.pdf

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.1 – Resource Mobilization for Research

3.1.1 – 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
Industry sponsored Projects	365	H.Edn	4.5	2.2
Students Research Projects (Other than compulsory by the University)	365	Kerala Start up Mission	2	1
Major Projects	365	Kerala Start up Mission	1	1
Major Projects	1095	AJACO Softwares	7	1
Major Projects	365	MHRD	3	3
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3.2 – Innovation Ecosystem

3.2.1 – 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
A workshop on "Electrical Maintenance"	EEE	17/07/2018
Workshop on First Aid and CPR	SF	10/12/2018
IEEE International Conference on Emerging Trends and Innovation in Engineering and Technological research	ECE	11/07/2018
Motivational Talk on Higher Studies Options,Canterburry University, New Zealand	CSE	04/02/2019
Technical talk on Fuel cell technology by Dr.R. Balaji, Scientist, Centre for Fuel cell technology, ARCI, Chennai	ECE	11/07/2018
Technical talk on Networking by Dr. David Hong Jer Lang, Chief research officer, Evault technologies, Malaysia	ECE	11/07/2018
Technical talk on Nanotechnology in molecular science by Dr. R Rajesh Kannan, Scientist, Centre for Nanoscience and Nanotechnology, KalpakkamEC	ECE	12/07/2018
Workshop on Arduino Microcontroller and Applications	ECE	17/07/2018
Workshop on LiFi Technology using ATMEGA	ECE	21/07/2018
Managerial Workshop	ECE	21/07/2018
Workshop on Digital Port Folio Making using Wordpress	ECE	21/07/2018
Workshop on Django	ECE	21/07/2018
Talk by Dr.Suresh Subramanium, Professor,Electrical Computer Engineering,George Washington University,USA	ECE	26/07/2018
Workshop on Virtual Instrumentation using LABVIEW	ECE	17/08/2018

Workshop on Virtual Instrumentation using LABVIEW	ECE	04/08/2018
Technical Talk on Embedded systems by Mr.Thomas Salu,CEO,Digital Core Technologies	ECE	08/08/2018
Workshop on Analog Custom IC Design Flow using Cadence Tools	ECE	10/08/2018
Workshop on Arduino Microcontroller and Applications	ECE	28/09/2018
Workshop on Arduino Microcontroller and Applications	ECE	05/10/2018
Technical talk on Practical applications of antenna by Prof. A. K Prakash, Retd. Scientist, NPOL, Kochi	ECE	09/10/2018
Workshop on Arduino Microcontroller and Applications	ECE	09/11/2018
Workshop on Arduino Microcontroller and Applications	ECE	16/11/2018
Workshop on Arduino Microcontroller and Applications for Bhavans Munshi Vidyashram,Thiruvankulam	ECE	26/11/2018
Talk on" How to Exceed Industry Expectations" by Mr.Kurien Thomas(Director, Xtend Technologies)	ECE	29/11/2018
Technical Session on Redhat Open source Emerging Technologies by Mr. Amal Mathew, Manager, Redhat India	CSE	18/07/2018
Workshop on Arduino Microcontroller and Applications for Bhavans Newsprint Vidyalaya	ECE	04/12/2018
Talk on Predictive Analytics by Mr.Sujith Jose, Manager, Health Care Analytics, Samsung.Bangalore	ECE	19/01/2019

Workshop on Interfacing with Arduino	ECE	24/01/2019
Workshop on VHDL	ECE	25/01/2019
Workshop on Virtual Instrumentation using LABview	ECE	01/02/2019
Workshop on Latex by Dr.K.Gnanasheela	ECE	04/02/2019
Talk on Embedded Systems Softwares has made a paradigm shift in the modern life style by Transiot	ECE	22/02/2019
Electronics Made EZ -Analog Electronics Workshop	ECE	01/03/2019
Electronics Made EZ -Analog Electronics Workshop	ECE	08/03/2019
Alumni Interaction Session on Industrial Experience and Project Managementby Mr. Hareesh (CEO, Immneos) Ms.Gopika Jayalal (Infosys)	CSE	03/08/2018
Anti-Drug Awareness Program by Mr. V T Job, Kerala State Excise Department	CSE	04/08/2018
Technical Quiz	ECE	23/03/2019
Workshop on Digital marketing and web development by Mr. Abhijth A Kumar, Defoxes, Ernakulam	ECE	23/03/2019
workshop on Paper Presentation	ECE	23/03/2019
Antenna Design and Analysis by Asst. Prof. Sreelekshmi S	ECE	26/03/2019
Analog Custom IC Design Flow using Cadence Tools	ECE	27/03/2019
Career Orientation in Big Data Analytics by Vishnu Prakash and Vysakh, Suntec (Alumni)	CSE	21/09/2018
Motivational talk on Industrial Experience by Sidharth Prajosh (Turbo labs), Manju Mohan, Amrutha T G (IBS)	CSE	28/09/2018

(Alumni)		
Session on Career Orientation in GATE/MBA by Abhishek T.S, Sahil Riyaz, TIME	CSE	29/09/2018
Technical Session on Accelerated Block Chain Competency by Prasanth K N, ICT Academy of Kerala (ICTAK)	CSE	30/10/2018
Webinar on AI :Deep Reinforcement by Mr.Anirban Ghatak,MieRobot	CSE	08/11/2018
International Conference on Bio Inspired Computing and Applications IBICA 2018	CSE	18/12/2018
Project Expo - Exhibition of various academic projects organized by Asst. Prof. Elsaba Jacob and Asst. Prof Abin Oommen Philip	CSE	11/05/2019
Infosys Orientation session by Krishnaswamy A Team, Konfidence group, Vennala	CSE	18/06/2019
Webinar Session on Oracle Analytics Cloud by Prabhu, Paulson Oracle Academy	CSE	19/06/2019
Electronics Made EZ –Analog Electronics Workshop	ECE	29/03/2019
Talk on Bio-Sensors by Dr.Mamun Ibne Reaz, Professor, Centre of Advanced Electronic Communication Engineering, National University of Malaysia	ECE	27/04/2019
Workshop on Design Project by Dr. K S Mathew, RSET	CSE	24/07/2018
Workshop on Web Technologies (Web and PHP Training) by Mr. Isac Varghese, Infocom Software	CSE	23/02/2019
Technical talk on The Alternate path, Introduction to Deep	CSE	05/02/2019

Learning by Mr. Muhammed Ibrahim and Mr.Fariz Rahman,Minicog AI		
Motivational Talk on Entrepreneurship during ASAP and CSAT Inauguration by Mr. Saji Gopinath, CEO, Kerala Startup Mission	CSE	05/02/2019
Expert Talk on Next Generation Computing Systems by Mr. Abhijith Das, Phd Scholar, Dept. Of CSE, IIT Guwahati	CSE	07/02/2019
Alumni interation session with Jibin Jose (Flip Motion), Siddarth Prajosh, Saheen C Najeeb	CSE	23/02/2019
Talk on Software Testing and Career Opportunities by Ms. Missy Varghese, Athira R Pillai, Inferum	CSE	28/02/2019
GATE Orientaton session by Mr. Vicky Wilson, CLAS Centre for Learning Success	CSE	01/03/2019
Civil Service Awareness Session by Mr. Simon Tharakan, Chanakya IAS Academy	CSE	02/03/2019
Session on Women and Career by Arya Murali (Entrepreneur. Cofounder - Rethink Foundation GHCI Student Scholar)	CSE	08/03/2019
CSI National Level Technical Fest - TECHFOSS 2k19: Workshop on Python Django by Mr. K V Sreeram, Product Engineer, Entri Me, Kochi	CSE	22/03/2019
TECHFOSS 2k19: Block Chain Workshop by Mr. Jerin A Mathews, Data platform Engineer, Data chain INC. Chennai	CSE	22/03/2019
TECHFOSS 2k19: Designing Workshop by Mr. Yadev Jayachandran, Google DSc lead at TIST	CSE	22/03/2019
Hands on Session on Introduction to Web Technologies by Mr.	CSE	29/03/2019

Yashraj Nayak, Progate Bangalore		
GATE Orientation session by Ms. Priyanka G Das, TIME Pvt Ltd	CSE	29/03/2019
Orientation Session on Starting a career with Infosys by Mr. Sonu Jose, Senior Associate Lead, Talent Acquisition, Infosys	CSE	07/05/2019
Industrial Training program on Machine Learning – in association with Mie Robot by Mr Anirban Ghatak, Senior Director Mie Robot	CSE	18/07/2018
Internal Internship Training on "Cyber security, Web development and Networking" by Mr Grace Joseph, Mr. Merin CS, Mr. Akhil C Raj, Softnet talentz Softwares	CSE	25/07/2018
Placement Training by Internshala	CSE	18/06/2019
FDP on Innovation in Sustainable waste Management	CE	19/07/2018
Workshp on Construction Project Management	CE	23/05/2019
Workshop on Leaving No One Behind	CE	22/03/2019
FDP on Emerging Trends in Information Technology	IT	02/07/2018
FDP on Block Chain	IT	20/06/2019
IIT Bombay Python Workshop	IT	22/06/2019
R Programming Workshop	IT	13/05/2019
National Technology Day Celebration	IT	15/05/2019
Two day National Level Workshop on Robotics Mr. Mohammed Aslam, CEO, inqbe Innovation, Pvt., Ltd. Was the resource person.	EEE	20/03/2019
Two day National Level Workshop on PCB Designing	EEE	20/03/2019
2 day National Level Workshop on DJANGO	EEE	21/03/2019

A one day hands – on training programme on LATEX, for faculty, M. Tech students and research scholars	EEE	23/01/2019
Talk on Embedded Systems Softwares has made a paradigm shift in the modern life style by Transiot	ECE	12/03/2019
Electronics Made EZ –Analog Electronics Workshop	ECE	15/03/2019
Technical Symposium 'Eclectic 2k19'	ECE	22/03/2019
Workshop on finger print sensor authentication and programming by Mr. Abhi Krishna H,Torc Infotech	ECE	23/03/2019

3.2.2 – 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
Vulnerability Reward Program (VRP)	Rony Roy	Google Security Bot	23/10/2018	BUG
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3.2.3 – 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
IEDC	Ebin Byju	IEDC	Dr.Perfect	Mobile Application	18/05/2018
[View Uploaded File](#)					

3.3 – Research Publications and Awards

3.3.1 – Incentive to the teachers who receive recognition/awards

State	National	International
0	0	0

3.3.2 – Ph. Ds awarded during the year (applicable for PG College, Research Center)

Name of the Department	Number of PhD's Awarded
ECE	1
CSE	1

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

Type	Department	Number of Publication	Average Impact Factor (if any)
International	ECE	5	5.6
International	CSE	2	5.11
International	ME	1	1.67

| International | EEE | 4 | 5.82 |

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

Department	Number of Publication
CE	21
CSE	3
ECE	1

3.3.5 – 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
Trust –Distrust Protocol for Secure Routing in Self organising Networks	Dr.S.Perumal Sankar	2018 International Conference on Emerging Trends and Innovations In Engineering And Technological Research (ICETIETR), Ernakulam, 2018, Pages: 1 – 8,	2018	5	Toc H institute of Science Technology	5
Classification of Outer Retinal Layers Based on K NN-Classifier	Dr.S.Perumal Sankar	2018 International Conference on Emerging Trends and Innovations In Engineering And Technological Research (ICETIETR), Ernakulam, 2018, pp. 1-4. doi: 10.1109/IC ETIETR.201 8.8529098	2018	1	Toc H institute of Science Technology	1
Harmony Search-Fra	Asst.Prof.(Dr.)Vin	Studies in Informa	2018	2	Toc H institute	2

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
ctional order based Controller for Proton Exchange Membrane Fuel Cell powered Vehicles	u.R	tics and Control, 27(4) 469-480, December 2018				of Science Technology
A vision of Connected And Intelligent Transportation Systems	Mr. Abin Oommen Philip	International Journal of Civil Engineering and Technology	2018	1		School of Computing Science and Engineering,VIT, Vellore, Tamil Nadu, India	0
Genetic algorithm and random number generation for symmetric encryption	Ms. Ceira Sara Cherian, Dr. Rasmi P.S	International Journal of New Innovations in Engineering and Technology	2019	25		Toc H Institute of Science and Technology, Arakunnam, Kerala, India	0

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3.3.6 – 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
Harmony search Fractional order based Controller for Proton Exchange membrane fuel Cell powered Vehicles	Dr. Vinu.R	Studies in Informatics Control	2018	2	2	TocH institute of Science Technology
Tracking of manoeurving targets using fuzzy information fusion filter	Dr. Deepa Elizabeth George	International journal of Image data usion	2018	3	1	TocH institute of Science Technology

Algorithm for multiplier less multiple constant multiplication in online arithmetic	Dr.Georg inaBinoy Joseph	Circuits ,Systems 7 Signal Processing	2018	1	2	TocH institute of Science Technology
ELM Based Detection of Micro-C alcificati on in Mammogram using GLCM Features	Dr.Perumal Shankar	International Journal of Recent Technology and Engine ering (IJRTE) ISSN: 2277 -3878,Volu me-8, Issue-1	2018	4	21	TocH institute of Science Technology
A vision of Connected And Intell igent Tran sportation Systems	Mr. Abin Oommen Philip	International Journal of Civil Engi neering and Technology	2018	1	0	School of Computing Science and Engine ering, VIT, Vellore, Tamil Nadu, India
Genetic algorithm and random number generation for symmetric encryption Ceira	Ms. Ceira Sara Cherian, Dr. Rasmi P.S	International Journal of New Innova tions in E ngineering and Technology	2019	3	0	Toc H Institute of Science and Techno logy, Arakunnam, Kerala, India
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3.3.7 – Faculty participation in Seminars/Conferences and Symposia during the year :

Number of Faculty	International	National	State	Local
Attended/Semi nars/Workshops	17	31	48	32
Presented papers	12	4	3	0
Resource persons	1	4	16	5
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3.4 – Extension Activities

3.4.1 – 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
Leadership Training	Government Harijan Welfare L P School	7	59
Rebuild Kerala	NGO (Plan@earth)	7	59
Digital Village	UBA MHRD	2	10
Career Guidance	Dept of CSE,TIST	2	4
Technical Social Outreach	Little Kites, Veliyanad	2	3
Students flood relief activity	DTE/NSS	3	151
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3.4.2 – 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
Technical Events	Highest Committed Student Branch Award	CSI	250
Developer I/O	Google Developer Student Cloud Lead	Google I/O	1
Technical Community Development	Technology Innovation Fellow	Kerala Start up Mission	20
Kerala Flood Relief	Activity points	APJ Abdul Kalam Technological University	99
Flood relief and rehabilitation	Grace Marks	APJKTU	83
Rebuild Kerala –Flood Relief	Certificates and activity points	DTE/NSS	48
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3.4.3 – 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
Rebuild Kerala	Kerala State Govt.	Rebuild Kerala	7	59
Flood Relief	Kerala State Govt.	Flood relief	5	250
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3.5 – Collaborations

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

Nature of activity	Participant	Source of financial support	Duration
Faculty Development program	Both Internal & External	Funding from Kerala Technological University	3
Academic Project	Students	CERD	365
Technical Events	Students	ICFOSS	365
Industry sponsored Projects	Students	Higher Education Department, Kerala	365
International Conference	Faculty, Delegates from various countries	Kerala State Council for Science Technology and Environment (KSCSTE)	3
Erasmus Faculty Mobility Programme – Teaching Week	Dr.Hareesh N Ramanathan	Erasmus Programme funded by European Union	7
International Conference on Business and I nformation (ICBI)	Both Internal & External	University of Kelaniya, Srilanka	1

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3.5.2 – 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
Faculty Exchange	Erasmus Faculty Mobility Programme – Teaching Week	Veleuciliste U Pozegi, Croatia	09/03/2019	16/03/2019	Dr.Hareesh N Ramanathan

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3.5.3 – 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
Veleuciliste U Pozegi, Croatia	28/11/2018	Exchange of faculty and students	128

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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
63.89	56.71

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Campus Area	Existing
Seminar halls with ICT facilities	Newly Added
Laboratories	Existing
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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
Library Management System (LMS)	Partially	LMS 2018	2013

4.2.2 – Library Services

Library Service Type	Existing		Newly Added		Total	
Text Books	38785	16514986	1902	422749	40687	16937735
Reference Books	13945	6415784	817	597905	14762	7013689
Journals	1586	2452626	168	399879	1754	2852505
Digital Database	2052	0	267	0	2319	0
CD & Video	1547	0	32	0	1579	0
Library Automation	1	0	0	0	1	0
Weeding (hard & soft)	54	14613	4	1995	58	16608
Others(s pecify)	2000	0	0	0	2000	0
e-Books	3324	0	935	0	4259	0
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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	Date of launching e-

| | | | | | is developed | | content | |

<div align="center">**No Data Entered/Not Applicable !!!**</div>

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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	518	14	100	1	1	1	8	100	0
Added	26	0	20	0	0	0	0	20	0
Total	544	14	120	1	1	1	8	120	0

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

<div align="center">**120 MBPS/ GBPS**</div>

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

<div align="center">**No Data Entered/Not Applicable !!!**</div>

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
475.77	460	43	38.66

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)

Lab Maintenance : At the end of each semester, list of equipments for servicing is collected by the concerned lab staff. A communication is sent to the respective companies and their consent is taken for servicing the equipments. The companies give estimates regarding the amount for equipments. This estimate is submitted for the approval of the department HOD and Principal. Thereafter sent to the Management for final approval and the amount is settled with the company after servicing. Certain other equipments are under regular AMC. Library: Book Purchase procedure: Librarian collects the list of books required by each department through the HODs during the beginning of each semester and submits it for the approval of the Principal. On approval, at least 3 quotations are invited from leading book suppliers and librarian prepares a comparative statement duly signed comparative statement by Librarian and Principal is sent to the management for approval. For any immediate requirement of the books and journals in any department, the librarian is authorized to do the same with the sanction of HODs and Principal. Maintenance of books: The damaged books are maintained by binding at the end of each semester. Stock Verification: Annual stock verification is done by an external auditor and report is presented before the Library Advisory Committee, weeding out of missing books will be done after the approval by Principal on the

recommendation of the said Committee. Sports Complex: The department of Physical Education provides facilities for maintaining physical fitness and well-being of students. Regular maintenance is done to the non perishable infrastructure like, cutting and trimming the grass on the ground, cleaning of the indoor stadium, painting of the steel structures etc. Perishable items like, balls, bats and guards are purchased every year by inviting 3 quotations and a comparative statement is submitted to the Principal who scrutinizes and transmits it to the Management Purchase Committee for final disposal . Stock and an issue registers are maintained in the department, perishables are written off after due stock verification by internal auditor. Awards, Trophies and Certificates are issued to the individuals teams after the completion of the events and published in the annual college magazine. COMPUTER MAINTENANCE The computer maintenance section provides facilities for maintaining and repairing computers. According to the requirement of each department, quotations are sought from computer vendors, quotations with the lowest price and after sale service are accepted. Most vendors offer warranties and provide warranty assistance to their devices. There is no outsourcing of AMC in our college. The maintenance of computers and related components without warranty assistance is done in-house. Regular computer maintenance for each department is done by maintenance section. A stock register is maintained for laptops, desktops and related accessories by System Administrator and Break-down Register is maintained department-wise. Classrooms: Due care is given for, Proper upkeep of the building, lawns and surroundings, furniture repairs, Electrical and sanitary fittings. road, water tank and other services like security and safety requirements.

https://tistcochin.edu.in/wp-content/uploads/2020/12/Maintenance-of-all-equipments.pdf

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	TIST cum merit Scholarship	225	23544000
Financial Support from Other Sources			
a) National	SC/ST/OEC	221	11626000
b)International	0	0	0
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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
Bridge Course	01/08/2018	234	TIST faculty
Infosys specific training	21/09/2018	200	Konfidence
Aptitude Training	06/08/2018	425	Konfidence
GDPI Training	30/07/2018	425	Insight Job Guru
Soft skill training	02/08/2018	323	Insight Job Guru
Persnal	10/08/2018	1607	TIST Faculy/TIST

counselling Mentoring			psychology dept.
Technical interview training	26/09/2018	21	HEADSTART IT
Management develop	17/08/2018	119	Pragmatics Learning Resources SparXS
Language Lab	01/08/2018	99	TIST facutly
Remedial Training	25/09/2018	149	TIST faculty
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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
2018	Placement Training	425	320	320	255
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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
7	7	14

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
30	320	255	18	200	50
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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
2018	11	B.Tech	ME	Georgia, Sheridan, Cambrian etc. In Canada	MS
2018	16	B.Tech	CE	Lambton College, Canada,Swinburn	MS,M.Tech,PG Diploma,MBA

Year						
					e University ,United World Institute of Design,NIT,P SG,TIST	
2018	2	B.Tech	CS	1. Reva University, Bangalore,2. SRM Univeristy, Chennai	MS,M.Tech
2018	14	B.Tech	ECE	Australia, Technische Hochschule M ittelhessen, University of applied sciences Germany,ISI ,Quebec	MS,M.Tech, MBA,PGDM

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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
NET	1
GRE	2
Any Other	7

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

Activity	Level	Number of Participants
Sports	Intercollege	15
Sports	University	80
Sports	Insttutional	711
Advay	Univeristy	200
Mudra	Institution	350

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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	CSI Highest Committed Student Branch	National	0	1	TOC16CS059	Yadev Ja yachandran

		Activist Awar						
2018	4 Queen Internatio nal Fide Rate Chess tournament	Internat ional	1	0		TOC17CE056		Vishnu Bipin
2018	4 Queen Internatio nal Fide Rate Chess tournament	Internat ional	1	0		TOC16CE045		Naveen Giri

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

Student Council: Student Council acts as a liaison between the students and the management. It is a forum for the students to develop their attitude, leadership qualities, social skills, cultural talents and focuses on the overall development of the individual. Academic Bodies: The student chapters of the following professional bodies are active in the Institution. IETE,IEEE,CSI,IE(I),AeSI,IIE,IIW,IIPE,ICI,IGBC,ISTE, 1.Class Committee: The Meeting is held twice/thrice in each semester. These meetings serve as a platform for interaction between students and faculty. 2.Course Committee: This is for common courses offered to students admitted for the B. Tech program irrespective of their branch of study. Administrative Bodies 1.IQAC: Development and application of quality benchmarks/parameters for various academic and administrative activities of the institution. 2.IEDC: To Identify students with innovative ideas and create a platform for them to work with. 3.Hostel Committee: To provide healthy environment in the hostel for the overall development of the hostel inmates. 4.Library Committee: To provide for proper documentation service and to update the library collections. 5.Alumni Cell: This will strengthen our efforts in placement, project works and Industry-Institution Interaction. 6.Transport Committee: To promote healthy and safer transport to and from college. Public Service Programs National Service Scheme (NSS): Activities undertaken by the NSS unit of our Institute are :Used Book Circulation Library, Class on personality development, Energy Conservation,Blood Data Bank, Donors arranged in cases of emergencies, Anti-drug awareness program, Visit to orphanages and old age homes, Vegetable Garden, Free Health Check up, Free eye check up, Marathon Run for Peace, Road Safety program, Street Play. Young Indians (Yi): TIST Yi Net shows great enthusiasm in organizing and conducting Leadership and Social activities. Some of the events organized are-Awareness class by Experts from all walks of life to the students, Awareness on Anti Drug classes to school students, Awareness of Women Safety and Self Defense, Maintain cleanliness of our public surroundings like children's park, beach etc, Street play awareness show on water pollution, highlighting save water, Industrial visit for value based learning, Awareness class on Sexual Abuse to school students, No smoking Campaign in the city. ENCON Club: The main objective of the ENCON club is to drive home the message of Energy Conservation and Environment protection in the minds of students by planning and organizing regular activities, talks, seminars workshops, exhibitions and other awareness programs. KARMA : TIST started KARMA for extending support to poor people in the society by catering to five sectors, viz., Food, Health Care, Education, Volunteer and Shelter. Any student of TIST with an intention to help others can join this group.

5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?
No

5.4.2 – No. of enrolled Alumni:
512

5.4.3 – Alumni contribution during the year (in Rupees) :
155267

5.4.4 – Meetings/activities organized by Alumni Association :
ALUMNI ASSOCIATION One of the main objectives of our Alumni Association is Ensuring and facilitating the continual bonding of our alumni. It brings together a wealth of talented and capable professionals who share their expertise and experience, and brainstorm on the prospective avenues. Association provides good interaction between the former students and the college through periodical meetings, project consultancy, placement activities and guest lecturers/seminar thereby making the alumni to be a part of developmental activities, taking place in the department. Association strengthens the cooperation and coordination with industries, which helps the students to get exposed to many internship opportunities. It creates opportunities for training and special projects apart from guest lectures, industrial visits and seminars. An Academic Advisory Committee Meeting is held every year, where the alumni suggest modifications in upgradation and updating of curriculum to meet the industrial needs. This helps to enhance juniors for several Placement Opportunities. Activities like technical talk, career guidance, alumni meet etc. are arranged. Following are the list of activities for the academic year 2018-19. Alumini Activites Report (2018-19) No.of Alumni enrolled in this year 512. Department-wise Whatsapp groups have been very active. The total activities in this year is 26. Six alumni meets were conducted department-wise. Alumni Contributions: The material and equipments worth Rs.1.55Lakhs have been contributed for establishing a new seminar hall (Amrutham Hall) in department of Civii Engineering (in Viswesharya Block). World Palliative Care Day observed by EEE department in association with the department of Health Science on the special occasion of "Patient Bystander Interaction Program", by donating three wheel chairs to the disabled patients . On this day cultural program was hosted by Sajith C.S, Alumni of 2007-2011 batch. Career Guidance and Technical Sessions by Vishnu Prakash and Vysakh, student of Computer Science department. They provided carrier guidance to students of Computer Science engineering on 21.09.2018. Technical Session: Students of ECE,CSE EEE, ME and CE delivered technical talks on recent trends in the engineering field.

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 Institution practices decentralization and participate management. The Governing Body meets normally once a year to discuss the current performance levels of the institution in various aspects such as academics, administration and activities, and to set guidelines for the future course of action to be followed. Several bodies with well defined roles have been constituted to ensure proper functioning of the institution under the guidance of the Principal, who along with Dean (Academics) and Vice Principal are engaged in the overall development and day today governance. Principal chairs the meetings

of staff council (HOD meetings) and meetings of other committees which are convened regularly. The activities are planned in the HOD meetings, executed through various academic and administrative bodies constituted with the participation of staff and with the concurrence of management. IQAC, PTA, Students Council, Anti Ragging Cell, Students Welfare Committee, Discipline Committee, Grievance Redressal and Appeals Committee, NSS, Exam Cell, Transport Committee, Innovations and Entrepreneurship Development Centre etc. are some among the active cells for propelling this institution. Adequate representation of faculty, students and parents is ensured in all these committees. Adequate systematized autonomy to all the departments is provided. The Budget proposal for the academic year is prepared by the individual departments in participation with the staff. These individual department budgets are consolidated along with administration department budget. The budgets of all the departments will be consolidated by the Accounts Manager and will be presented to the Principal, and further presented before the Management for approval and sanction. All orders exceeding a sum of Rs.25,000/- must be processed after inviting minimum three quotations from different suppliers, manufacturers and a comparative statement to be prepared and sent to the Founder Director and Manager for approval with recommendation of the Principal. For orders exceeding Rs.5,000 and below 25,000, quotations with recommendation of the department head to be forwarded to the Founder Director and Manager along with the Principal's recommendation. For items less than Rs.5,000/- purchases may be made locally with the prior approval of the Principal. For department related purchases, HODs of concerned departments should submit justification for procurement and must recommend specifications for placing orders.

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

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	From the academic year From academic year 2017-18 onwards TIFERS is offered under TIST Income – cum – Merit Scholarship. TIST also offers other scholarship schemes mentioned below.Excellence Scholarship for Entrance,toppers Excellence Scholarship for XII Standard toppers, Excellence Scholarship for National / State level achievers in ARTS Excellence Scholarship for National / State level achievers in SPORTS Scholarships for B.Tech lateral entry, MTech and MBA students
Teaching and Learning	The Institution follows pedagogical model based on Revised Blooms Taxonomy (RBT) and Creative Learning Process (CLP) enabling the students to achieve the knowledge through all levels of learning.University academic calendar is strictly adhered to. In order to enable the planned coverage of syllabus, a detailed academic calendar

	including all important dates for curricular, co-curricular and extracurricular activities is prepared by a committee headed by Dean Academics and is implemented.Faculty prepares course plan for lab and subjects, learning materials, question bank. Faculty also using ICT facilities along with the conventional system
Industry Interaction / Collaboration	The Department of Management Studies entered into an MoU with the University of Kelaniya, Sri Lanka with the aforesaid objectives. This resulted in a series of associative programs like Seminars, Conferences and Workshops. Joint project-works are also happening, as an impact of this MoU. Another important milestone of this MoU is that the University of Kelaniya hosted an International Conferences on Business and Information (ICBI – 2018) at Toc H Institute of Science and Technology during the month of November 2018. The Department of Management Studies entered into an MoU with Veleuciliste U Pozegi, Croatia in November 2018 . This results in faculty and student exchange programs.

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

E-governace area	Details
Administration	Student data uploaded in ERP and university portal. Attendance and Study materials accessible to students through online. Login provided to parents and students for monitoring attendance and performance.
Finance and Accounts	Fee remittance only thorough online. College is using Tally for maintaining book of accounts.
Examination	Exam registration and payment of fee and admit card through online. Question paper generation is also done online.
Student Admission and Support	Student application process and selection is doing through online. University enrollment through online.

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

2018	Asst.Prof.Annie Sonia Xavier	National Workshop on Project Management using Candy	MACE, Kothamangalam	1000
2018	Asst. Prof. Dhanya.R	International Symposium for Antenna Wave propogation (APSYM 2018)	IEEE	1000
2018	Asst.Prof.Anju Kuriakose	FDP on Compiler Design	Viswajyothi College of Engineering and Technology	500
2018	Asst.Prof.Saira Varghese	FDP on Compiler Design	Rajagiri College of Engieering Technology	500
2018	Asst.Prof.Sah imol Eldhose	National Workshop on Project Management using Candy	MACE, Kothamangalam	1000
2019	Dr.Arunchand C.H	ICBI 2019	Univeristy of KELANIA	25000

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6.3.2 – Number of professional development / administrative training programmes organized by the College 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	National Seminar on Sustainable Technolo gies	NA	02/07/2018	06/07/2018	26	0
2019	FDP on Mobile Robotics Internet of Things	NA	16/01/2019	17/01/2019	14	2
2019	FDP on Machine Learning using Python	NA	21/05/2019	22/05/2019	18	0
2018	FDP on Emerging Trends	NA	02/07/2018	08/07/2018	8	2

2019	FDP on Block Chain	NA	20/06/2019	21/06/2019	8	2
2019	IIT Bombay Python Workshop	NA	22/06/2019	22/06/2019	8	2
2018	QIP in Innovations in Sustainable waste management	NA	19/07/2018	21/07/2018	15	0
2019	National Level workshop on eaving No One Behind	NA	22/03/2019	22/03/2019	16	5

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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 professional development programme	Number of teachers who attended	From Date	To date	Duration
FDP on Product Design	2	10/12/2018	14/12/2018	5
FDP on Mechanobiology	1	22/10/2018	26/10/2018	5
FDP on Non Linear Structural Analysis Using FEM	1	21/01/2019	25/01/2019	5
FDP on Student Induction	1	13/06/2019	15/06/2019	3
FDP on Applied Impact Mechanics at IIT Madras	1	31/10/2018	05/11/2018	6
National Seminar on Sustainable Technologies	26	02/07/2018	06/07/2018	5
FDP on Innovations in Sustainable Waste Management	15	19/07/2018	21/07/2018	3
National	16	22/03/2019	23/03/2019	2

Workshop on Leaving No One Behind				

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

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
1	1	6	6

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
1.LIC, 2. Provident Fund,3.Maternity Leave with Salary, 4. Additional Increment for additional Qualification, 5. Financial support to attend Conferences/Workshops 6. Free Medical Aid	1.Provident Fund, 2. ESI, 3.Mediclaim,4. Free Medical Aid	1.Students safety Insurance, 2. Students counsellor available for their academic and personal related problems 3.Free Medical Aid.

6.4 – Financial Management and Resource Mobilization

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

The Budget proposal for the academic year is prepared by the individual departments in participation with the staff. These individual department budgets are consolidated along with administration department budget. The budgets of all the departments will be consolidated by the Accounts Manager and will be presented to the Principal, and further presented before the Management for approval and sanction.the Institution has a mechanism for internal and external audits. Our Management has a full-time Treasurer to oversee the financial activities of the Institution. All the books of accounts are audited regularly by Chartered Accountants. Both Internal and External Audits are conducted annually. Hence all financial transactions are transparent. The audited financial statements of the academic years are available in the website- http://tistcochin.edu.in.

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
PWD/shri consultancy services/ TATA consultancy	440617	Consultancy

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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 | Yes | KTU,ISO,NAAC | Yes | ISO,IQAC |
| Administrative | Yes | ISO, KTU,NAAC | Yes | ISO,Management Board |

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

1.Involvement in college cultural/ technical/social programes 2.Providing suggestion for further improvements 3. Support in placement activities

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

1. Fire extinguisher training imparted 2.Additional Quality enhancement facility provided 3. Stress relief programes conducted

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

1. NBA accreditation extension process initiated 2.Expediting Student Project to funding agency 3.Promoting social activities of students

6.5.5 – Internal Quality Assurance System Details

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

6.5.6 – 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
2018	International Collabaration	28/11/2018	28/11/2018	29/11/2018	32
2018	NAAC External Audit	21/11/2018	21/11/2018	21/11/2018	3
2019	IEEE/EBSCO Training Program	19/03/2019	19/03/2019	19/03/2019	189
2018	KTU Internal Audit	19/10/2018	22/10/2018	24/10/2019	10
2019	NAAC MOCK Audit	30/01/2019	30/01/2019	02/02/2019	12
2018	ISO External AUdit	17/09/2018	17/09/2018	17/09/2018	2
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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	Period from	Period To	Number of Participants

programme				
			Female	Male
Prayaana – 2 Day fellowship workshop	21/09/2018	22/09/2018	6	0
Prayaana Summit	08/03/2019	08/03/2019	3	0
Computer Training for Housewives	18/06/2018	29/06/2018	25	0
Session on 'Women and Career' by Arya Murali (Entrepreneur. Cofounder - Rethink Foundation & GHCI Student Scholar)	08/03/2019	08/03/2019	85	0

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
1.Percentage of power met from renewable energy 2.65 2. Bio gas plant 3.Rainwater Harvesting 4.Water Treatment plant 5.Labeling trees with their Botanical Names 6.Kichen garden

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Provision for lift	Yes	1
Ramp/Rails	Yes	1
Rest Rooms	Yes	1

7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadva ntages	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	1	1	18/06/2 018	10	Computer Literacy for Women	Remote location	25
2018	1	1	04/08/2 018	1	Anti- Drug Awareness Program	Use of Drugs	200
2018	1	1	07/09/2 018	1	Interac tion with	Addressed	52

2018	1	1	08/09/2018	1	Rebuild Kerala Initiative	Flood Relief Activities - Students took part in flood relief activities, mobile app based survey at Velloor Grama Panchayath and data entry support in various camps	45

| | | | | | special Students | use of ICT Based education model | |

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7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

Title	Date of publication	Follow up(max 100 words)
No Data Entered/Not Applicable !!!		

7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
Independence DaY	15/08/2018	15/08/2018	50
World Water Day	22/03/2019	23/03/2019	200
Womens Day	08/03/2019	08/03/2019	100
Technical talk on Professional ethics	20/02/2019	20/02/2019	58
National Energy conservation Day	14/12/2019	14/12/2019	50

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

1.Save water campaign on world water day 2.Tree plantation on Environmental day 3.Plastic Free campus 4.Rainwater Harvesting 5.Paperless office

7.2 – Best Practices

7.2.1 – Describe at least two institutional best practices

BEST PRACTICE:1 1. Title of the Practice: Neighborhood Society Connect: Phase I 2. Objectives of the Practice i) Anti-drug awareness program ii) Interaction with special school students iii) Women Empowerment iv) Interaction with Panchayats (UBA) v) Awareness about need, importance and conservation of water

aiming house wives in the neighborhood vi) Safety and health at work place vii) Portable multimedia rapid Malaria diagnosis device viii) Flood relief activities 3. The Context In view of the vision and mission of the institute it becomes imperative to cater to the social, economical, environmental, occupational and ethical needs of the under privileged and marginalized students and people in the surrounding area. We need to address drug addiction among youth, cater to the handicapped, empowerment of women, promotion of awareness among house wives about water conservation, spread of communicable diseases, safety and health at work place and energy conservation. 4. The Practice As part of the Flood Relief activities, the college formed a group of 30 (voluntarily from each batch of the PG Diploma in Counseling and Psychotherapy) under the guidance of Dr. Alex Mathew, President, Toc H Public School Society. They provided crisis counseling in the flood affected areas including schools. The group had already undergone training in Crisis Counseling. Students and faculty interacted with MITHRAM special school on 7th September 2018. The college offered free computer training program for House-wives for a fortnight. Organized Anti- drug awareness program and "RUN for Safety" in connection with National Safety Day on 28th April 2019 for the promotion of safety and health at work place. 5. Evidence of Success • Anti-drug awareness program yielded positive results as no disciplinary action was taken against students and no such case registered in any of the police stations. • Interacted with MITHRAM special school students, motivating and entertaining them, extending financial support and computer training. • About 25 women from the neighborhood were imparted computer training and were issued certificates. • Participated in rural digitalizing program under Velloor Grama Panchayat familiarizing them with IT Enabled Services (ITES) and internet banking. • Interacted with 5 Panchayats and identified their problems and spelt out remedies. • As many as twenty house-wives attended awareness program on conservation of water. • Portable Malaria Rapid Diagnostic Device (PMRDD), which does not need lab facilities, was used by primary health workers in remote areas with minimum training. This project As part of flood relief, NSS unit and 50 college students participated for a fortnight and built two houses along with Rapid Action Force, collected materials, including packing, loading, visiting relief camps, volunteering etc. The timely coordination kept the volunteers inspired and motivated to extend all possible help to the victims. 6. Problems encountered and resources required As the Institute is situated 30 km. away from Kochi city, majority of students and faculty members find it difficult to spare time for immediate society connect. To overcome this, a separate academic calendar is prepared which includes all academic activities as per university calendar along with Co curricular and extracurricular activities. Additionally, all Saturdays, excluding second and fourth Saturdays, are made working days to make up for academic loss BEST PRACTICE: 2 1. Title of the Practice: Skill Development (SPAN, IEDC, ASAP-ASDC) Futuristic training programs designed and executed to cater to diverse needs and demands of students 2. Objectives of the Practice Objectives of SPAN (Skill Planning and Acquisition Cell) o Improve employability of students by exposing them to relevant industry standard platforms o Foster in students and staff the ability to design and implement projects catering to the needs of society o Facilitate students and staff to keep up with rapidly changing technologies o Make learning effective and enjoyable Objectives of IEDC • Create a startup ecosystem by providing value added trainings • Identify students with innovative ideas and create a platform • Enhance student entrepreneurial skills • Enhance awareness about modern tools, software and designs • Acquire knowledge about current technological developments in industries • Impart professional technical mentoring by experts of various domains • Channelize idea to product by mentoring, prototyping, and networking Objectives of ASAP-ASDC • Student Mobilization • Course Transaction • Offer courses based on Industry Skill Requirements 3. The Context i) SPAN The Department of

Electronics and Communication Engineering recognized the need for upgrading the skills of students and faculty to keep up with the rapidly changing requirements of the technology for industry. Various workshops have been conducted keeping in mind technological requirements. In order to bridge the gap between industry and academics, the department launched SPAN- Skill Planning and Acquisition Cell that identifies and plans skill development programs according to current industrial requirements. ii) IEDC An Entrepreneurship Development Club started in 2013 consisted of a team of students that represented India and won Black Berry Jam Asia Pacific Hackathon. The cell paved to generate genuine interest in participating in similar national/international competitions. With a view to have a recognized platform TIST IEDC entered into MoU with Startup Village and several initiatives taken up. iii) ASAP-ASDC Realizing the gap between the skill sets required by the industry and the knowledge level of the students, ASAP set up its Advanced Skill Development Centers in Engineering Colleges and Polytechnics across Kerala. The ASDCs are envisioned to equip students with futuristic and advanced skill sets required for 4.0 Industrial Revolution. The training conducted through ASDCs will be in sync with industry requirements, regularly updated to meet emerging market needs and transacted through competent professionals thereby equipping students with the skills and competencies required to be globally competitive and tap the emerging opportunities. 4. The Practice i) SPAN: SPAN conducted workshops to promote the culture of inter disciplinary projects. As a part of social outreach program in fostering an interest in technology in our neighborhood, conducted workshops for school students. It is an effort to bridge the gap between school education and engineering education enabling them to undertake interesting technical projects. ii) IEDC As per the guidelines of Kerala Startup Mission IEDC is governed by an executive committee with a pool of exceptional students who are selected based on the recommendations of respective student members to coordinate different programs. Participation in various workshops and in national/international level competitions is promoted. Students are motivated and supported for setting up startups. It provided platform to interact with entrepreneurs constantly empowering budding entrepreneurs. Technological developments are familiarized through various programs in association with concerned departments. Residential workshops are also organized for creative and high potential aspiring entrepreneur-students. Members equipped to participate in government supported projects like Map my Home project, funded and organized by Google in association with Kerala Land Records and Survey Department. IEDC also promoted social outreach programs, intercollegiate technical events like programs on FOSS promoting virtues of free software. ii)ASAP: ASAP-ASDCs were launched across the state as an initiative to develop skill sets in students for the next-generation-jobs requiring Industry 4.0 skill sets. AI ML launched as the first course under this initiative, which is of 600 hours duration along with internships and aims at making the students industry-ready in the respective domain. 24 students at TIST are currently undergoing the course leading to award of certificates from IIT Madras 5. EVIDENCE OF SUCCESS i) SPAN: Electronics made EZ – analog electronics workshop: the objective of the workshop provided a thorough base in the fundamentals of analog electronics through learning by application and exploration. Workshop on virtual instrumentation using lab view: enabled participants to use lab view for virtual instrumentation. Workshop on analog custom IC design flow using cadence tools: conducted work-shop for familiarizing students with cadence ASIC design tools. Participants were given practical training on various aspects of custom analog IC design flow. Workshop on antenna design and analysis made aware the participants about the progress of research, development in innovative antenna technology. ii) IEDC TIST IEDC organized visits to Startup village. Fab-lab visits helped to experience the technical prototyping platform enabling the students to launch innovative products and to prototype the new models

developed. Maker Expo, attempted to map and to empower a community of educators and creative People. Organized a workshop on entrepreneurship "Unlock the entrepreneur in YOU" iii) ASAP: The Artificial Intelligence and Machine Learning course, certified by IIT Chennai, is of one-year duration with 600 hours of course content covering relevant theory, practical and project. The faculty members from the selected institutes were trained in the domain of Artificial Intelligence and Machine Learning, who in turn delivered the course to the students. ASAP assists the students through Internship and placements as part of course completion. 6. Problems Encountered As the Institute is situated 30 km away from Kochi city, majority of students and faculty find it difficult to find spare time. Majority students do not respond as per our expectations. Lack of adequate funding is a major constraint in moving ahead with innovations and additional skill acquisitions.

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

https://tistcochin.edu.in/wp-content/uploads/2020/12/Best-Practice-2018-19.pdf

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

INSTITUTIONAL DISTINCTIVENESS 1. Merit cum Income Scholarship In pursuance of TIST has well defined 4 reasons for its existence: value based education to serve the weaker sections of society, spark innovation among the young, nurture job creators rather than job seekers and make leaning an enjoyable process. TIFERS makes special efforts to remove disparities and equalize educational opportunities for all students. Another striking feature of this scheme is the Book Bank, providing deserving students with text books free of cost. This section includes 4619 books. Academic progress of every beneficiary is strictly monitored. Scholarship offered by TIFERS falls under the following categories: • Waving of Full Tuition fees and free hostel accommodation. • Waving of Full Tuition fees. • Partial Waving of Tuition fees • Book Bank Scheme Selection is based on the following criteria: • Students residing in rural area and their parents' annual income not exceeding Page • Having no regular income. • Having good academic records, but unable to pursue higher studies. • Written test and interview by the Institute. Selection Procedure 1.Due publicity given in dailies through detailed advertisement. 2.Candidates applying for should fill the application form which includes the personal and academic details and location of residence. Applicants should also enclose copies of mark list concerned and income certificate issued by the village office. 3. Applicants will be issued hall tickets to appear in the written test of 1hr 30 minutes duration, carrying 100 marks covering Mathematics, Physics and Chemistry. 4.Rank list is prepared on the basis of marks obtained in the written test, State Entrance Examination and HSSE (Physics, Chemistry,Maths.) at the ratio of 40:30:30. 5.A report is obtained on the spot inspection of the living premises of the candidates by a team from the institute. 6.Interview conducted by an interview board consisting of representatives of management and the Principal, resulting in the final identification of financially backward and academically brilliant rural candidates. 7.Offer letters stating thescheme offered, terms and conditions to be met for the annual renewal of the scholarship duly signed by the authority will be sent to the parents of the selected candidates. Confirmation of acceptance is to be signed by the ward and the parent or the final approval and admission. TIST also offers fee concession for students who are already undergoing the course in case of unexpected financial crisis or if the family is suffering from any critical illness. TIFERS is offered under TIST Income – cum – Merit Scholarship. TIST also offers other scholarship schemes mentioned below. • Excellence Scholarship for Entrance toppers • Excellence

Scholarship for XII Standard toppers • Excellence Scholarship for National / State level achievers in ARTS • Excellence Scholarship for National / State level achievers in SPORTS • Scholarships for B.Tech lateral entry, M.Tech and MBA students Nature and criteria of all the above mentioned schemes are available at institution website. Upon completion of course many of the beneficiaries of the above mentioned schemes are provided job opportunities in the institution itself.

Provide the weblink of the institution
https://tistcochin.edu.in/wp-content/uploads/2020/12/Distinctiveness-2018-19.pdf

8.Future Plans of Actions for Next Academic Year

1. To start New -gen program program B.Tech in Robotics Automation 2. Faculty Exchange program at International Level 3. To strengthen and extent E-governance in diverse areas 4. To encourage the faculty for obtaining higher qualification 5. To extend the social out reach program to neighbourhood society 6. Initiative to make the campus Eco-friendly 7. To encourage the faculty/students for obtaining funding projects 8. To conduct seminars, symposium and conferences in all the disciplines at International/National level 9. Establishing Tele presents Lab under Kerala Start Up mission 10. To Increase the number of publications in UGC approved Journals