



SELF STUDY REPORT

FOR

3rd CYCLE OF ACCREDITATION

TOC H INSTITUTE OF SCIENCE AND TECHNOLOGY

**TOC H INSTITUTE OF SCIENCE AND TECHNOLOGY ARAKKUNNAM
682312**

www.tistcochin.edu.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Toc H Institute of Science and Technology (TIST) was established in the year 2002 by Toc H Public School Society as the silver jubilee project of Toc H Public School, Vyttila. TIST Management comprises of 13 service minded academicians with focus on education as their primary mission.

TIST is affiliated to APJ Abdul Kalam Technological University (KTU) and accredited by NAAC, NBA (5 programs), NIRF Innovation (Band 151-300), ISO 9001:2015, Band Performer in ARIIA and included in UGC 2(f) category

TIST Offers 9 UG programs: Computer Science & Engineering (CSE), Information Technology(IT), Electronics & Communication Engineering (ECE), Robotics & Automation(RA), Civil Engineering (CE), Mechanical Engineering(ME), Safety & Fire Engineering (SFE), Electrical & Electronics Engineering(EEE) and Electrical & Computer Engineering(EL) and 6 PG programmes: Wireless Engineering, Thermal Engineering, Power Electronics, Construction Engineering and Management, Data Science and Master of Business Administration. TIST is an approved research centre of KTU.

Institute follows Outcome Based Education (OBE) and pedagogy models like Revised Bloom's Taxonomy and Creative Learning in TL Process. Department of Applied Psychology and Counselling offers one to one counselling to students along with strong mentoring support by faculty members. Social commitment is met by offering scholarships to economically backward rural students.

Toc H MBA is the First Institute in Kerala to partner with University of Pozega, Croatia under the prestigious ERASMUS + Mobility programe. (European Community Action Scheme for the Mobility of University Students). TIST has an MoU with University of Kelaniya, Sri Lanka for academic, scientific, and cultural cooperation

TIST IEDC is recognised as TBI (Technology Business Incubator). TIST has centres of excellence including L&T Switchgear Lab, Telepresence lab, DAIKIN Industrial Lab in Air conditioning imparting training to students and society.

TIST has received funds/infrastructure from KTU CERD, UBA, AICTE, KSCSTE, MODROB, ACCAR, Kerala State IT infrastructure, DIC, Chalo India Start Up Drive etc.

Professional Associations include IEEE, IEEE-CSE, ISTE, CSI, IGBC, KBAIC, ASCE, IIWT, ASME, IIFE etc. TIST has signed MOU with ASAP, Kerala Government initiative to conduct certification courses like AI, ML, Coding skills, Business Analytics, Robotics Process Automation, Cloud Computing etc.

Vision

To become a globally recognized Institution that develops professionals with integrity who excel in their chosen domain making a positive impact in industry, research, business, and society

Mission

- To provide the ambience necessary to achieve professional and technological excellence at the global level.
- To undertake collaborative research that fosters new ideas for sustainable development.
- To instill in our graduate's ethical values and empathy for the needs of society.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

? Rich Legacy and Established Brand Name

? NAAC Accredited Institute

? 5 NBA Accredited programs with 3 programs having score above 650

? NIRF Innovation Ranking in 151-300 band

? Approved Research Center of KTU with KTU Recognized Research Supervisors

? TIST innovation Council (IIC) - one among the 14 governing members of MIC

(Ministry of Education's Innovation Cell).

? Well-built Leadership

Qualified, experienced, and dedicated faculty members

? Excellent Infrastructure

? Developed Effective Teaching-Learning Pedagogies

? MOUs with premier institutions and foreign universities

? Ranked among the first 20 colleges in aggregate results published by KTU

? Achieving University Ranks

? Close proximity to industries and R&D organizations

- ? Good placement statistics
- ? Funded research and consultancy services
- ? Student start-ups funded by Kerala Start up Mission
- ? Industry Institute Interactions at pace through MoUs, IIC, IEDC and professional associations.
- ? State/National/International Awards and Achievements for student projects/hackathons.
- ? ASAP Advanced Skill Development Centre offering futuristic courses.
- ? Active Student Community Learning Groups in Campus
- ? Mini IT company in campus
- ? NPTEL Local Chapter
- ? Faculty & Student Exchange programmes with foreign universities through ERASMUS
- ? In-house student counselling and mentoring system
- ? Committed Management with zero profit motive
- ? Transparency in Admission and Administration
- ? Scholarships, Fee Waivers and Book Bank Scheme
- ? Ensuring Gender Equity
- ? Well placed Alumni
- ? Strong PTA Support

Institutional Weakness

- ? Remote location of the institute
- ? TIST is offering programs in engineering and management streams only
- ? Lack of freedom to frame the syllabus and customize it according to the immediate requirements of the industry

Institutional Opportunity

- ? Autonomy status for the Institution.
- ? Research/Industry/Institute Collaborations
- ? Proximity to Industries/premier Institutes
- ? Ecosystem for Innovative Hub
- ? Large acreage of land available can be utilized effectively for infrastructure required for diversification in our education portfolio

Institutional Challenge

- ? Congestion of Engineering Institutes
- ? Quality of Admission
- ? Attrition
- ? Increase in the rate of migrations to foreign countries before/after the UG course.
- ? Procuring Government Funds
- ? Increase Core Placements
- ? NEP
- ? Deemed to be University

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The college academic calendar is framed in the lines of university academic calendar. Each department has an academic advisory board with expert members from industry, reputed institutions, college Management, Principal, Head of the department and senior faculty. Academic Advisory meetings held periodically to discuss progress in academics, participation in co-curricular, extra-curricular activities and to analyse curriculum gaps and suggest activities to bridge the gaps. Each faculty prepares course plan and is approved by the HOD and Principal. Certificate, diploma and add-on programs are offered to the students to enhance core skills. The programs offered include Elective courses, Environment and Sustainability, Human Values and Professional Ethics, Seminars, industrial visits, guest lectures, workshops, field projects, internships support course objectives. Additionally, different clubs in the campus organize activities focussing on sociocultural issues. Structured feedback is taken from all stakeholders, analysed and action taken

Teaching-learning and Evaluation

Admissions to the 9 under-graduate, 6 post-graduate and PhD programs are streamlined strictly according to the stipulations and norms of Kerala Technological University (KTU), as given in the college Prospectus, Brochure, and the web-site. Economically underprivileged but otherwise eligible candidates are ensured admission in various courses. This policy is integral as the avowed social commitment of the institute. Strict time schedule is followed in the conduct of classes and lab sessions as per the departmental time table.

Institute adopted Outcome Based Education and deploys student-centric approaches combining theoretical knowledge with practical application that fosters positive and inclusive learning environment providing

exposure to industry trends, promoting creativity and innovation. Student centric methods such as Experiential learning, participative learning and problem-solving methodologies creates dynamic learning environment.

. Being an affiliated college, the internal and external evaluation schemes followed are as prescribed by the university. The evaluation process is given in the college prospectus there. Proper conduct and Transparency are ensured by exams cell, observer appointed by university and CCTV camera.

Our institution follows pedagogical model based on Revised Bloom's Taxonomy . For Internal Exams, question papers set by each faculty based on RBT. 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. The committee also checks the distribution of the marks based on the difficulty level of the question with respect to the learning ability of the students. Disciplinary Action Committee (DAC) deals the exam related grievances.

The institution initiated to implement the outcome-based education. Every programme in the institution has formulated a set of PEOs, Pos and PSOs. Apart from this, a set of COs have been framed for each course. Systematic procedures have also been followed for assessing the attainment of these Outcomes.

Programme outcome attainment process has been done by taking, direct and indirect assessment tools. 80% of direct attainment and 20% of indirect attainment is considered for calculation of PO attainment. Direct attainment of programme outcomes and programme specific outcomes are based on the logical mapping of cognitive levels of course outcomes with programme outcomes and programme specific outcomes. This process is done by mapping the attained values of course outcomes with the programme outcomes and programme specific outcomes.

Research, Innovations and Extension

The institute became a KTU approved research centre in 2016 and has 11 recognized research

supervisors indicating the institution's commitment in advancing knowledge and contributing to scholarly endeavours. Currently, 11 Ph.D. scholars are pursuing doctoral studies under the institution's research supervisors and 4 scholars have completed and awarded PhDs. Faculty members are actively participating in conferences, workshops, and funded research projects, enhancing their expertise and contributing to the broader academic community. They are also engaged in funded research projects from various sources like UBA, CERD, AICTE, KSCSTE, and others which explains the quality and relevance of research being conducted at TIST.

In order to keep abreast of the latest developments in the technical field and foster research activities in the campus, the institution regularly organizes international and state-level conferences. TIST has attracted a substantial funding amount (over 41 Lacs) from various state and national agencies which is a testament to the quality and relevance of the research being conducted. Establishing collaborations with industries, training

institutions, and research institutions bridges the gap between academia and industry, facilitating knowledge transfer, and fostering opportunities for research collaborations and training programs. The granted and published patents, totalling 12, highlight the dedication and expertise of our researchers.

The publication of textbooks, book chapters, patents, and research articles by our faculty members not only contribute to the academic discourse but also enhances the reputation of our institution as a hub for scholarly activity and innovation. The presence of an IEDC Cell underscores our institution's commitment to nurturing entrepreneurship and innovation among students. Student participation in various IEDC summits prepares students for the challenges of the modern workforce and encourages them to pursue entrepreneurial ventures. The engagement of the NSS unit in various extension activities, including community service and awareness programs, reflects our institution's commitment to social responsibility and civic engagement.

Infrastructure and Learning Resources

Toc H has a campus that spans 26.08 acres and has a total built-up area of 36049m². The infrastructure includes 3 main blocks namely, Aryabhata, Einstein and Visvesvaraya. Each block comprises of Class rooms with ICT facilities, well equipped Seminar Halls and Department Libraries.

Additional facilities in each block:-

1. Aryabhata block: Administration wing, Exam cell, Prayer Hall, Solar Panels
2. Einstein: Telepresence Lab, Central Library, Solar Panels
3. Visvesvaraya: Indoor Stadium

Notable features of our campus are:

- 300Mbps leased connection and 500Mbps Broadband, Wi-Fi covered campus
- Central Library automated with modern web-based software “KOHA” with OPAC and WEB OPAC facilities. The e-resources are available for Off-Campus and Mobile access via the KNIMBUS Platform
- On-campus Boys and Girls Hostels.
- Solar powered green campus equipped with waste water treatment; recycling plant, Incinerator, Biogas plant, Rainwater harvesting tanks and Meteorological Centre
- 11 kV substation, 24/7 electric power supply with backup generators and additional 3-phase
- UPS backup.
- Canteens, Cafeterias, Co-operative Store, 2 Reprographic Facilities, Guest-lounge, ATM.
- 20 college buses for both staff and students, with in 50 km range.
- Designated parking space for staff and students
- CCTV enabled campus with more than 80 HD IP cameras
- Separate rooms for IQAC meetings, Board meetings, Examination control, Yoga, Gymnasium, Guidance /Counselling and Prayer Hall are provided in the campus.
- A well-arranged Digital Library with 25 systems and a projector with screen and speakers helps users to view NPTEL, access e-journals, and e-books from IEEE, Science Direct,
- Knimbus, EBSCO, DELNET, and NDLI. The Plagiarism checking software – TURNITIN is also

- accessible from any location. More than 9400 e-books are available in EBSCO International subscription and more than 750 e-books are available from DELNET.
- Adequate budgetary provision for infrastructure development, academic support facilities and maintenance of infrastructure.

Student Support and Progression

TIST offers Scholarships to academically eligible financially backward rural students in addition to the Government Scholarships like, SC/ST scholarship, AICTE fee waiver, Minority Scholarships etc.. College library provides text books for competitive examinations like GATE, GMAT, CAT etc. Expert coaching for GATE examination, conducts value added courses and workshops.

TIST has transparent grievance redressal mechanism. Student Grievance redressal cell, Internal Complaint cell, Student welfare committee, Student council, Anti ragging cell, OBC and minority cell etc for the redressal of students grievances

Students are members of various administrative bodies of the college such as Women's Grievance Redressal cell, Student Welfare Committee, Magazine Committee, Sports Committee, Student's council, Student chapters and branch wise association. The students are encouraged to seek guidance on academic, general, or psychological issues and participate in different technical and other co-curricular events held in and out of the campus. Sports events like Inter University tournaments and college annual sports meet are conducted. Institute is conducting Capacity and skill development program like soft skill training, life skills like yoga, physical fitness, language lab, computing skills etc for the holistic development of the students

More than 60% students placed and 20% progressed to higher studies and 10% for competitive examinations.

TIST has registered Alumni Association. Alumni meetings conducted annually works as a platform for the students to interact with their seniors, connecting them on a professional level. 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

Governance, Leadership and Management

Toc H Institute of Science and Technology is funded and managed by Toc H Public School Society, a nonprofit making educational trust. The Society presently consists of 13 members. A 5-member core management team, consisting of the Board of Directors (who are annually elected from among the members of the Society) looks after the management of a School and the Engineering College.

Tist policies and practices are centred around effective planning of human resources, recruitment, performance appraisal, fiscal management, decentralisation, and leadership. As a self-financed Institution, the resource mobilization is mainly through Students Tuition Fees, Training & Consultancy, Research Project grants, conferences, seminars Industry sponsored labs etc. The Governance of the institution is strictly in accordance with the Vision, Mission, and Quality policy and executive directions issued by regulating Government

agencies. Management takes a pro-active policy towards professional development of staff in our institution. The organizational structure decentralizes the power and responsibilities among the internal stakeholders. 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. The principal is responsible for the academic, general, and financial administration. Well defined Service rules and policies are clearly disseminated to stake holders.

The Institution has NBA accreditation (5 Departments), ISO 9001:2015 and NAAC Accreditation from 2012. Continuous teaching learning evaluation and overall development ensured through is Internal Quality Assurance Cell providing Instructional methods teaching learning friendly approaches and operational aspects. Periodic reviews of teaching learning process methodologies and learning outcomes are done thorough IQAC. Corrective measures are taken to ensure continuous improvement

Institutional Values and Best Practices

The college is committed to the cause of gender equality, women empowerment awareness, environmental sustainability, green practices and communal harmony.

Anti-Sexual Harassment and Women's cell, women safety application, training programs and security surveillance ensure women's safety and security. Institution has framed **Gender Equity Policy** to accelerate gender equality in campus through fairness and justice in the distribution of benefits, power, resources, and responsibilities between women and men. The policy focuses mainly on women empowerment as critical aspect of achieving gender equality. Department of Applied Psychology and Counselling along with faculty of concerned department, supports student mentoring.

Solar panels, ENCON club, waste collection bins, sewage treatment plant, biogas plants and rainwater harvesting build ecofriendly campus. Green practices include tree plantation programs, intercoms and online communications. Lift and ramp in every block and scribe facility is extended to the needy. Many of the academic projects attracted attention as innovative solutions for differently abled. The institute has its own transport facility. Organization is rendering moral and vocational support through health camps, training and guidance classes for the society along with more job openings.

Human values and professional ethics are provided through courses in curriculum, activities organized by professional bodies and other service schemes. To enlighten the national obligations, national days are observed. Buildings and the seminar halls in the institute are named after the famous personalities in India. The best practices in the institute are Neighbourhood Society Connect and Empowering Innovation Initiatives. Social commitment program are conducted through NSS, KARMA etc. Promotion of Innovation is achieved through IEDC, IIC, and R&D.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	TOC H INSTITUTE OF SCIENCE AND TECHNOLOGY
Address	Toc H INSTITUTE OF SCIENCE AND TECHNOLOGY ARAKKUNNAM
City	ERNAKULAM
State	Kerala
Pin	682312
Website	www.tistcochin.edu.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Preethi Thekkath	0484-2748388	9946509900	0484-2748388	mail@tistcochin.edu.in
IQAC / CIQA coordinator	Deepa Elizabeth George	0484-2749600	9447820280	0484-2748388	deepaeg@tistcochin.edu.in

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	
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State	University name	Document
Kerala	A.P.J. Abdul Kalam Technological University	View Document

Details of UGC recognition		
Under Section	Date	View Document
2f of UGC	16-10-2020	View Document
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	10-06-2023	12	
AICTE	View Document	10-06-2023	12	

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Toc H INSTITUTE OF SCIENCE AND TECHNOLOGY ARAKKUNNAM	Rural	26.08	36049

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Electronics And Communication Engineering,	48	XII Std	English	60	46
UG	BTech,Computer Science And Engineering,	48	XII Std	English	120	120
UG	BTech,Information Technology,	48	XII Std	English	30	27
UG	BTech,Electrical And Electronics Engineering,	48	XII Std	English	30	15
UG	BTech,Civil Engineering,	48	XII Std	English	30	12
UG	BTech,Mechanical Engineering,	48	XII Std	English	60	27
UG	BTech,Safety And Fire Engineering,	48	XII Std	English	30	21
UG	BTech,Robotics And Automation,	48	XII Std	English	60	51
UG	BTech,Electrical And Computer Engineering,	48	XII Std	English	30	26
PG	Mtech,Electronics And Communication Engineering, Wireless Technology	24	B.TECH	English	12	2

PG	Mtech,Computer Science And Engineering,Data Science	24	B.TECH	English	12	2
PG	Mtech,Electrical And Electronics Engineering,Power Electronics	24	B.TECH	English	12	0
PG	Mtech,Civil Engineering, Construction Engineering and Management	24	B.TECH	English	18	3
PG	Mtech,Mechanical Engineering,Thermal Engineering	24	B.TECH	English	12	0
PG	MBA,Mba,	24	UG	English	60	60
Doctoral (Ph.D)	PhD or DPhil ,Electronics And Communication Engineering,	60	PG	English	14	1
Doctoral (Ph.D)	PhD or DPhil ,Computer Science And Engineering,	60	PG	English	16	0
Doctoral (Ph.D)	PhD or DPhil ,Electrical And Electronics Engineering,	60	PG	English	11	1
Doctoral (Ph.D)	PhD or DPhil,Civil Engineering,	60	PG	English	4	0

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	4				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	7				13				107			
Recruited	6	1	0	7	4	9	0	13	38	69	0	107
Yet to Recruit	0				0				0			

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				36
Recruited	20	16	0	36
Yet to Recruit				0

Technical Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				43
Recruited	24	19	0	43
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	3	1	0	4	9	0	0	6	0	23
M.Phil.	0	0	0	0	0	0	1	1	0	2
PG	0	0	0	0	0	0	32	51	0	83
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	3	0	0	0	0	0	1	0	0	4
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	4	11	0	15
UG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties					
Number of Visiting/Guest Faculty engaged with the college?	Male		Female		Total
	0	0	0	0	0

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	211	0	41	0	252
	Female	83	0	13	0	96
	Others	0	0	0	0	0
PG	Male	30	0	0	0	30
	Female	37	0	0	0	37
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years					
Category		Year 1	Year 2	Year 3	Year 4
SC	Male	2	2	1	3
	Female	3	0	2	3
	Others	0	0	0	0
ST	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
OBC	Male	144	131	163	154
	Female	96	59	84	88
	Others	0	0	0	0
General	Male	132	122	140	127
	Female	38	49	53	158
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		415	363	443	533

Institutional preparedness for NEP

<p>1. Multidisciplinary/interdisciplinary:</p>	<p>In the light of "Make in India", NISP @ TIST pushes forward all multidisciplinary research and developments in collaboration with IIC and IEDC. Multidisciplinary research projects on social issues and challenges like aquatic thrash collecting, well clearing robots are some of the initiatives. The institute promotes multidisciplinary courses in sciences, mathematics, humanities, social sciences, professional skills, soft skills, ethics, morality, human values and management studies with minors, honours and masters catering to integrated competencies development including intellectual, aesthetic, social, physical, emotional, and moral. Vide KTU Ordinance 7(s), students are permitted break in studies for</p>
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	<p>startups etc. encouraging multidisciplinary flexible curriculum. TIST research wing plans to join hands with nearby panchayats and special schools to sort out the problems raised by them through interdisciplinary applications.</p>
2. Academic bank of credits (ABC):	<p>Institute encouraged students to open accounts with Academic Bank of Credits. Choice based credit system adopted. KTU permit students to avail multiple entries and exits in a program. Collaboration with foreign and national institutions are active. Faculty members encouraged to participate in FDPs, STTPs and Workshops pertaining to curriculum. Students are encouraged to deposit their credits obtained from academics as well as skill based certification programs in the National Academic Depository.</p>
3. Skill development:	<p>TIST Advanced Skill Development Centre (ASDC) is started in 2021 by Additional Skill Acquisition Programme (ASAP) launched by Govt. of Kerala. Twenty-three students got successfully certified in ASAP -Artificial Intelligence and Machine Learning course (NSQF Level 7 certificate from Govt. of India) spanning 3 terms and 600 hours. Students have also taken up the following courses in either online/blended mode : UI Path – Robotic Process Automation (RPA) Google Associate Cloud Engineer Artificial Intelligence and Machine Learning by IBM Business Analytics by IBM Coding Skills by ICTAK Here Maps – Maps and Location Technology Course Amazon Web Services (AWS) along with their academics to enhance their skillset and obtained Page globally recognized certifications. Curriculum offers mandatory courses viz: Life Skills, Professional Communication, Sustainable Engineering, Constitution of India , Industrial Safety Engineering, Disaster Management and Professional Ethics. Students have enrolled in Young India (Yi) platform to participate in and contribute to by becoming an integral part of the Indian growth story, ENCON Club for practicing energy conservation and environment protection and National Service Scheme (NSS) and KARMA to reflect the essence of democratic living and to uphold the need for selfless service. Students have actively participated in Advay –National Level Inter-Collegiate Fest and MUDRA -the intra-collegiate arts & literary fest of TIST. All students have to earn a minimum of 100 activity</p>

	<p>points during their academic stay at the University covering extracurricular and co-curricular activities. Two credits are given for this on a pass/ fail basis and is mandatory for getting the B.Tech Degree. MoUs with various Industries enabled their veterans to provide expert talks/ workshops to students and faculty to train the students and thereby overcome the gaps. ASAP offers courses that are in line with the standardisation parameters laid out by National Skill Development Corporation and National Skill Development Agency. The tele-presence lab is a hi-Tech lab with audio-video support, touch screen television, speaker track camera, mics, and speakers utilized for virtual classrooms, interactive webinars and global delivery of content. Classrooms and seminar halls are equipped with projectors/LED TVs/Smart Boards</p>
<p>4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):</p>	<p>Curriculum offers mandatory non-credit course titled " Constitution of India" to explore the basic features and modalities about Indian constitution. Bilingual (English and Regional Language "Malayalam") is used in curriculum delivery inside classrooms and laboratory sessions. The learning materials provided includes the video tutorials in Malayalam and Hindi in addition to English language. Students can ask questions in Malayalam and teachers are responding to questions in English/ Malayalam depending on its difficulty level so that their first language literacy to be improved and thereby helps in learning Page foreign language. Bilingual learning helps to improve content based learning of science, engineering and mathematics courses. Faculty may be given sessions on how bilingual learning affects the learning capabilities. Institution encourages the conduct of extra curricular programs upholding Indian culture and traditions.</p>
<p>5. Focus on Outcome based education (OBE):</p>	<p>The faculty members of the institution are oriented towards Outcome Based Education (OBE) and are actively utilizing the OBE to satisfy the learning needs of students by innovative methods and techniques. Assessment of course outcomes are necessary to improve the quality of teaching learning process in Outcome Based Education (OBE). The affiliated university, KTU introduced 2015 curriculum initially and has revised in the year 2019. For 2015 scheme courses, faculty proposes the course outcomes and its mapping with POs and PSOs, which</p>

	<p>is then discussed in the Department Quality Assurance Cell (DQAC) for approval. For mapping with POs/PSOs the correlation levels are defined as 1 (low), 2(Medium) and 3(High.).For 2019 scheme courses, the course outcomes and its mapping are defined by the university and the faculty is privileged to propose their suggestions in DQAC if required. At the end of each course, the COs are assessed and evaluated to find its attainment. Trainings on Pedagogy is imparted to faculty for adopting OBE approach. Faculty members participate in Faculty development programmes to update their pedagogical skills and to acquire knowledge about current technological developments. Induction program for new faculty helps to recognize the importance of self-development and development of students. The list of RBT keywords that are followed by institute, vision, mission of institute and department, PEOS, POS and PSOs, CLP, Course Outcome Attainment Calculation details are conveyed in the meeting.</p>
6. Distance education/online education:	<p>Vocational Courses are availed by students from virtual centers at TIST , coursera, SWAYAM NPTEL, Google tools, virtual labs etc. For the pandemic period, the institution switched to a virtual teaching learning platform. Faculty members posted videos of the respective courses handled in the TIST youtube channel. Webex platform helped to track attendance and supported online polling to make sessions more interactive. Also, the whiteboards and live video sharing kept the teaching learning process very effective. Faculty handling courses also formed a whatsapp group for posting their videos and sharing other resource materials.Virtual laboratories of IITs along with online tools available are used for laboratory works. Assignments, internal assessment questions, class tests and quizzes and their timely submissions are done through college ERP. Parent teacher interactions and meetings were also conducted online and their feedback was recorded. Faculty members are trained to use online platforms effectively. Microsoft teams is been used to build a classroom approach by creating teams for each course. Along with offline classes , webinars and online meets are still encouraged for constant tracking and updations.</p>

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Initiated procedures for setting up Electoral Literacy Club. Request has been sent to District Election Officer in this regard.
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	The student coordinators and faculty coordinators are appointed by the college. The college has an active student council which is well educated on the functionalities of ELC. Sessions have been arranged to sensitise students on their electoral rights and familiarise them with the electoral process of registration and voting. Brain storming sessions were organized to stimulate and motivate students provoking them to think and ask questions. Class activities were arranged in connection with the course 'Constitution of India', which is a course in the curriculum of second year students.
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	ELC members have taken various initiatives inside college in view of the upcoming elections. They are involved in creating voter awareness campaigns in the college and conduct sessions on ethical voting. They also encourage and ensure that first- and second-year students enroll as voters in electoral roll.
4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.	Awareness drives have been conducted internally in the college to ensure that students avail their democratic rights. Faculty members of Humanities and Science department, who are mentors of ELC coordinate the activities of the club.
5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.	Students of first year and second years were encouraged and guided by ELC to enroll as voters in electoral roll. 210 students have been enrolled as voters in the electoral roll this time.

Extended Profile

1 Students

1.1

Number of students year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1472	1458	1457	1509	1609
File Description		Document		
Upload Supporting Document		View Document		
Institutional data in prescribed format		View Document		

2 Teachers

2.1

Number of teaching staff / full time teachers during the last five years (Without repeat count):

Response: 154

File Description	Document
Upload Supporting Document	View Document
Institutional data in prescribed format	View Document

2.2

Number of teaching staff / full time teachers year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
109	109	117	118	125

3 Institution

3.1

Expenditure excluding salary component year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
725.64	476.53	361.7	622.11	499.04

File Description	Document
Upload Supporting Document	View Document

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1

The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment

Response:

Curriculum Planning and Academic Calendar

- Each department has an academic advisory board with expert members from industry, reputed institutions, college Management, Principal, Head of the department and senior faculty. Academic Advisory meetings held periodically to discuss progress in academics, participation in co-curricular, extra-curricular activities and to analyse curriculum gaps and suggest activities to bridge the gaps. Prior to every semester, college academic calendar covering all academic, co-curricular, and extracurricular activities (w.r.t university academic calendar), prepared by a committee under Dean (Academics) is distributed to all departments. Calendar adherence is prepared and monitored.
- Courses are allocated to faculty members based on their expertise and subject preferences by HOD. Class-wise timetables are prepared by Timetable Committee. Each faculty prepares detailed course plan for lab and theory courses including text/reference books, mode of Instruction and ICT tools in accordance with academic calendar, along with topics to be covered beyond the curriculum and then uploaded in ERP. The library is informed of required text/reference books and e-journals for forthcoming semester.

Curriculum Delivery

- The planned curriculum is delivered to students through
- Chalk and board
- PPTs
- Illustrative models/ Format for Classroom Teaching (FCT)
- ICT tools: Interactive Boards, Telepresence Lab, Webex/MS Teams/ Google Meet/ ERP
- NPTEL videos, Case studies
- Role plays
- Guest lectures
- Invited talks, workshops
- Industrial visits
- Internships
- Peer Teaching, Peer Learning.

Internal Assessment Conduct

- Few weeks prior to internal assessment dates, Principal issues circular mentioning the common schedule under intimation to refer KTU and TIST guidelines for Question Paper pattern and framing questions. Following the circular, IA Cell Coordinators of different departments to prepare the IA timetable and to be circulated to students and staff. Common date and time are followed for the courses common to all branches. Question papers are scrutinized by Question Paper scrutiny committee to ensure usage of Revised Blooms Taxonomy and mapping of questions with relevant course outcomes. IA cell conducts two internal assessments and maintains all the associated files in this regard. Absentees are

provided re-tests based on university guidelines.

- IA marks, Assignments and Attendance are included in internal marks of each course. Continuous evaluation in labs comprises of Attendance, Continuous Evaluation, Continuous Assessment Test and Viva-voce.
- Periodical review on coverage of syllabus and regularity of students is taken by the HOD and submitted to Principal. Suggestions are invited for improvement of teaching-learning process through group advisory, class-committee, and parent-teacher meetings. Both internal and external audits done by KTU and ISO periodically.
- Each faculty prepares course file which includes time table, course plan, course outcomes, mapping of course outcomes to program outcomes & program specific outcomes with justifications, attainment levels and targets, identified curriculum gaps, details and analysis of internal exams, class test details, remedials, notes, previous question papers and questionbank. After completion of semester, it is updated with course end survey from students, attainment of COs, POs & PSOs and remedials for non-attainment of COs, POs, and PSOs (if any).

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

1.2 Academic Flexibility

1.2.1

Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

Response: 124

File Description	Document
List of students and the attendance sheet for the above mentioned programs	View Document
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	View Document
Institutional data in the prescribed format	View Document
Evidence of course completion, like course completion certificate etc. Apart from the above:	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Other Upload Files

1

[View Document](#)**1.2.2**

Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

Response: 56.06

1.2.2.1 Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1199	1119	995	420	474

File Description**Document**

Upload supporting document

[View Document](#)

Institutional data in the prescribed format

[View Document](#)**1.3 Curriculum Enrichment****1.3.1**

Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability in transacting the Curriculum

Response:

The institution meticulously integrated crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment, and Sustainability into the curriculum through a series of the following strategically planned courses that span across the four years of study and additional programs/activities.

Program Name	Regulation	Relevant Courses
B.Tech	2015	HS 210 Life Skills HS 200 Business Economics HS 300 Principles of Management BE103 Sustainable Engineering

	<p>CE405 Environmental Engineering I</p> <p>CE402 Environmental Engineering II</p> <p>CE374 Air Quality Management</p> <p>CE469 Environmental Impact Assessment</p> <p>CE474 Municipal Solid Waste Management</p> <p>FS404 Advanced Safety Engineering and Management</p> <p>FS409 Legal Aspects of HSE</p> <p>FS464 Environmental pollution and Control</p> <p>FS405 Disaster Management</p>
2019	<p>HUN 101 Life Skills</p> <p>HUN102 Professional Communication</p> <p>EST200 Design and Engineering</p> <p>HUT200 Professional Ethics</p> <p>HUT310 Management for Engineers</p> <p>MCN401 Industrial Safety Engineering</p> <p>MCN202 Constitution of India</p> <p>CET455 Environmental Health and Safety</p> <p>MCN201 Sustainable Engineering</p> <p>MCN301 Disaster Management</p>

		<p>CET304 Environmental Engineering</p> <p>CET362 Environmental Impact Assessment</p> <p>CST393 Cryptographic Algorithms</p> <p>CST394 Network Security</p> <p>CST423 Cloud Computing</p> <p>EET322 Renewable Energy Systems</p> <p>MET458 Advanced Energy Engineering</p> <p>FST 203 Principles of Safety Management</p> <p>FST415 Responsible Engineering</p> <p>FST312 Environmental Engineering and Management</p> <p>FST362 Industrial Ecology</p> <p>FST424 Food and Biosafety</p> <p>FST454 Environmental Pollution and Control</p>
MBA	2020	<p>20MBA113 Ethics Governance and Corporate Responsibility</p> <p>20MBA106 Human Resource Management</p> <p>20MBA115 Legal Systems for Business</p> <p>20MBA213 Discovery of Self & Others</p>

Besides academics, institute hosts many programs/activities, guest lectures/webinars relevant to cross-cutting issues throughout the academic year for holistic development of students. The programs are organized under department associations and clubs/cells. Student Associations are:

- Civil Engineering Association - RACHANA
- Computer Science & Engineering Association – CSAT

- Electrical & Electronics / Computer Engineering Association-BLITZ
- The Electronics and Communication Robotics and Automation Association (ELECTRAA)
- Information Technology Association- ignIT
- Mechanical Engineering Association- MACQUINAL
- Safety & Fire Engineering Association- ARISTA

Following are the cells and clubs focusing on professional ethics/ gender and human values/Environment and Sustainability

- Career Guidance and Placement Cell
- Women Development Cell
- Anti-Ragging Cell
- Student Grievance Redressal Committee
- Student Welfare Committee
- Internal Complaints Committee
- National Service Scheme
- Karma
- Young Indians
- ENCON club

Major Activities spanning from 2018-19 onwards includes:

- Flood relief support
- Blood Donation
- Stem Cell Donation
- Orphanage Visits
- Special School Visits
- Financial Support
- Donating groceries, stationery, food items, clothes, sanitary items, etc.
- Post covid support: Contributed a fumigation machine, sanitizer, gloves and masks worth ₹20000 to the Government Hospital Mulanthuruthy.
- Money collected by making chekkuty dolls was donated to Survivors of 2018 flood at Chennamangalam.
- College cleaning programme
- Financial support to kids whose education affected due to covid pandemic
- Conducted ENCON Fest 2020 bearing theme “Save Water, Save Life” to emphasize the importance of water for the planet earth.
- Workshop on “Emerging Trends in Sustainable and Resilient Infrastructure”
- JEEVAJALAM – Installation of Bird Water Feeder in TIST Campus
- Session on “Gender Equality”, ‘How to handle Stress and Depression’, Universal Human Values by AICTE, Overcoming stigma related to Mental Illness etc.
- Yoga sessions
- Self Defense Workshop
- KARMA received award of appreciation from the MLA of Ernakulum for the outstanding contribution.
- Applied Psychology & Counseling Department provides counseling services and psychological assistance

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

1.3.2

Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)

Response: 69.5

1.3.2.1 Number of students undertaking project work/field work / internships

Response: 1023

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

1.4 Feedback System

1.4.1

Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website

Response: A. Feedback collected, analysed, action taken& communicated to the relevant bodies and feedback hosted on the institutional website

File Description	Document
Feedback analysis report submitted to appropriate bodies	View Document
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	View Document
Action taken report on the feedback analysis	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1

Enrolment percentage

Response: 65.87

2.1.1.1 Number of seats filled year wise during last five years (Only first year admissions to be considered)

2022-23	2021-22	2020-21	2019-20	2018-19
422	415	432	409	389

2.1.1.2 Number of sanctioned seats year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
606	576	624	666	666

File Description

Document

Institutional data in the prescribed format

[View Document](#)

Final admission list as published by the HEI and endorsed by the competent authority

[View Document](#)

Document related to sanction of intake from affiliating University/ Government/statutory body for first year's students only.

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

2.1.2

Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years

Response: 74.82

2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)

2022-23	2021-22	2020-21	2019-20	2018-19
179	174	200	203	183

2.1.2.2 Number of seats earmarked for reserved category as per GOI/ State Govt rule year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
243	230	250	266	266

File Description	Document
Institutional data in the prescribed format	View Document
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	View Document
Copy of communication issued by state govt. or Central Government indicating the reserved categories(SC,ST,OBC,Divyangjan,etc.) to be considered as per the state rule (Translated copy in English to be provided as applicable)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.2 Student Teacher Ratio

2.2.1

Student – Full time Teacher Ratio
(Data for the latest completed academic year)

Response: 13.5

2.3 Teaching- Learning Process

2.3.1

Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences and teachers use ICT- enabled tools including online resources for effective teaching and learning process

Response:

Institute adopted Outcome Based Education and deploys student-centric approaches combining theoretical knowledge with practical application that fosters positive and inclusive learning environment providing exposure to industry trends, promoting creativity and innovation. Experiential learning, participative learning and problem-solving methodologies creates dynamic learning environment.

Experiential Learning:

Experiential Learning emphasizes hands-on experiences as a central element of learning process. Learners actively engage with real-world scenarios, allowing them to connect theoretical knowledge with practical applications.

The following are the activities done to facilitate experiential learning:

Internship: During semester breaks students are provided with the opportunity to gain practical, hands-on experience in a specific industry or field related to their academic studies.

Technical Fests and Competitions: TIST is actively fostering a vibrant technical and innovative environment by periodically organizing technical fests and encouraging student participation in various technology-focused events, including hackathons, techathons and similar spectrum of events.

Industrial Visits: Students undergo annual visits to nearby industries during their period of study. The university further facilitates visits to distant core industries allowing students to gain in-depth insights and exposure to real-world industrial practices.

Laboratory Courses: TIST conducts laboratory courses with additional and open-ended experiments enhances their practical skills and cultivates a mindset of inquiry and experimentation.

Skill Development Courses: TIST is actively involved in organizing long and short-term skill development courses as well as certification courses in hybrid mode as part of MoUs with reputed organizations and industries.

Workshops: Professional Societies, Professional Associations, IIC and IEDC at TIST regularly organizes various workshops for students and encourages participation in workshops organized by other reputed institutions inside and outside Kerala.

Student Exchange Programs: Memorandum of Understanding for Academic, Scientific and Cultural Cooperation between the University of Kelaniya (UoK) and MBA, Toc H Institute of Science and Technology (TIST), Kerala had progressed linearly with two international seminars and five student exchange programmes being organized.

Participative Learning-

This methodology promotes collaboration, engagement, and interaction among students. TIST promotes the participative learning through techniques such as:

conduct of workshops

- Seminars and Webinars
- Student Summits
- Paper Presentations and Publications
- Group Discussions
-
-
- Peer teaching
- Student Communities
- Project Expos
- Technical Fests by Departments
- Campus Fest-Advay, Mudra, De'Novo
- Community services through NSS, KARMA, Yi etc.
- Awareness Programs

Problem-Solving Methodologies-

Problem-solving methodologies are approaches that guide learners through systematic processes to analyze, understand, and resolve complex problems. These methodologies often involve defining the problem, generating potential solutions, evaluating options, and implementing the chosen solution. TIST incorporates this approach in students through

- Mini and Major
-
- Project/ Idea Competitions
- Funded projects
- Technical Assistance for solving societal problems

ICT enabled and e-learning resources: Interactive boards, smart classrooms, online-certification courses, virtual labs, koha powered libraries with e-Shiksha, ebooks, e-journals, learning management tools like ERP and online meeting platforms makes teaching-learning process at TIST more effective. TIST is a member of the National Digital Library of India Club (NDLI Club), which supports all e-resources.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

2.4 Teacher Profile and Quality

2.4.1

Percentage of full-time teachers against sanctioned posts during the last five years**Response:** 94.29**2.4.1.1 Number of sanctioned posts year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
114	113	116	133	137

File Description**Document**

Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts)

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)**2.4.2***Percentage of full time teachers with NET/SET/SLET/ Ph. D./D.Sc. / D.Litt./L.L.D. during the last five years (consider only highest degree for count)***Response:** 26.3**2.4.2.1 Number of full time teachers with NET/SET/SLET/Ph. D./ D.Sc. / D.Litt./L.L.D year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
35	29	29	29	30

File Description	Document
List of faculties having Ph. D. / D.Sc. / D.Litt./ L.L.D along with particulars of degree awarding university, subject and the year of award per academic year.	View Document
Institution data in the prescribed format	View Document
Copies of Ph.D./D.Sc / D.Litt./ L.L.D awarded by UGC recognized universities	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.5 Evaluation Process and Reforms

2.5.1

Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient

Response:

Internal Assessment

- Two internal examinations are conducted during a semester through Internal Assessment Examination Cell (IA cell).
- Schedule for IA is prepared based on academic calendar by the IA cell and circulated to the department.
- Question paper scrutiny committee ensures questions meet RBT, COs and Difficulty levels. Answer key and evaluation scheme of each question paper is prepared with question paper.
- Retest is provided as per university norms.
- Answer scripts evaluated strictly on scheme within a week and provides effective feedbacks.
- Registers for Time Table, Question Paper Collection, invigilators duty list, student attendance, answer booklet collection and malpractice details are maintained.
- During pandemic, internal assessments conducted online mode using ERP.
- Assessment for laboratory courses includes practical records/output, regular class viva and model lab examination.

External Assessment

All external examinations are conducted at colleges as per university guidelines. Institution has a Control Room under charge of the principal as Chief Superintendent. Two examination committee members frequently visits examination halls and an observer posted by university is present throughout. The

examination committee prepares seating plan and displays 30 minutes before the commencement of Examination. Sufficient space between the seating of two candidates of the same course are ensured to prevent possible malpractice.

An authorized person will log on to web portal to download question paper. Once examinations are over, invigilator counts and tally answer scripts and return them within 15 minutes after end of examination. In case of malpractice, answer scripts are packed along with confiscated incriminating material, report of the invigilator and Chief Superintendent to the university.

The schedules for practical Examinations are notified in department notice board at least three days in advance. The End Semester Lab Examinations are conducted before theory courses. The CoE will send list of all course mapped Faculty to the Chairman and examiners chosen. Marks shall be uploaded in university portal on last day of examination by external examiner in presence of internal examiner. All records pertaining to examinations including question paper, answer books etc. shall be confidentially kept under safe custody of the principal for six months. On publication of university results, failed/less scored can apply for reevaluation / copy of answer script. The transparency and robustness of assessment system is ensured through regular audits by internal audit cell and external audits by KTU and ISO.

Grievance Redressal System

Any act of indiscipline/unfair practices in internal exam is dealt at department level and external exams are referred to Disciplinary Action Committee (DAC). Based on the report and evidence submitted by the faculty, DAC initiate an enquiry giving the concerned student a chance to explain the case and committee recommends the action referring to guidelines of KTU. Students may appeal for Grievances and Appeal Committee of university to relook the matter.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

2.6 Student Performance and Learning Outcomes

2.6.1

Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website

Response:

The Institution is oriented towards Outcome Based Education (OBE) and are actively utilizing the OBE to satisfy the learning needs of students by innovative methods and techniques. Vision, mission of Institute and Department, Program Outcomes (POs), Program Educational Objectives (PEOs) and Program Specific Outcomes (PSOs) formulated by the Departments are available in the Institute Website. TIST has adopted the Revised Bloom's Taxonomy (RBT) pedagogical model to select observable and measurable action verbs to define Course Outcomes (COs). The affiliated university, KTU introduced 2015 curriculum initially and has revised in the year 2019. For 2015 scheme courses, faculty proposes the COs and its mapping with POs and PSOs, which is then discussed in the Department Quality Assurance Cell (DQAC) for approval. For 2019 scheme courses, the course outcomes and its mapping are defined by the university and the faculty is privileged to propose their suggestions in DQAC. For mapping with POs/PSOs the correlation levels are defined as 1 (low), 2(Medium) and 3(High). TIST adopted keywords of RBT levels

- L1: Remembering
- L2: Understanding
- L3: Applying
- L4: Analyzing
- L5: Evaluating
- L6: Creating

TIST incorporated guidelines for framing COs are:

- Each CO should start with a measurable action verb based on RBT.
- Remembering level (L1) COs are to be avoided.
- Use only one action verb of Bloom's Taxonomy for one CO.
- While writing COs write down its equivalent Blooms level for reference.

The reframed course outcomes are approved by DQAC and is uploaded by faculty to department specific links of Institute website and to course links provided in Institute ERP. Trainings on Pedagogy is imparted to faculty for adopting OBE approach. Faculty uses RBT for framing internal assessment and assignment questions, aligned with respective course outcomes, and are approved by Question paper scrutiny committee ensures that students are evaluated in alignment with intended learning outcomes. Feedback Forms of the Institute are prepared based on POs and PSOs.

Creative Learning Process (CLP) is one of the innovative methods by which teaching-learning process is undertaken in TIST. The CLP Model helps in logical analysis and synthesis of the whole learning process and to clearly understand the difficult concepts. Epistemology is the theory of knowledge, especially about its methods, validity, and scope. The epistemological framework used for CLP includes 14 elements. (Reference: V. Job Kuruvilla, B. Mukhopadhyay, "Epistemological Study to Evolve Creative Learning Process for Engineering Students", Journal of the Indian Academy of Applied Psychology, April 2008, Vol. 34, Special Issue, pp. 101-109.) Format for Classroom Teaching (FCTs) for topics of the courses are prepared based on RBT and CLP incorporating learning outcomes and assessment questions.

TIST's holistic approach to education, encompassing OBE principles, RBT, and CLP, reflects its commitment to nurturing proficient graduates. Through transparent communication on institution's

website, and innovative pedagogical strategies, TIST is providing a transformative learning experience.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

2.6.2

Attainment of POs and COs are evaluated.

Explain with evidence in a maximum of 500 words

Response:

Course Outcomes Attainment and Evaluation

Method of Attainment	Details of Assessment Tools	Assessment tools	Frequency of Assessment
Direct Attainment (80%)	Theory Courses (2015 and 2019 Schemes)	Assignments	Thrice in a semester
	Internal Assessment (40%)		

	Class tests Internal assessment exams	Occasional Twice in a semester
Laboratory (2015 and 2019 Schemes)	Continuous Evaluation and Vivas Voce	Throughout the semester
Design Project (2015 Scheme)/		
Mini Project (2019 Scheme)		
Comprehensive Examination (2015 Scheme)		
Seminar and Project Preliminary (2015 Scheme)/		
Seminar (2019 Scheme)		
Project Phase I (2019 Scheme)		
Project (2015 Scheme)/		
Project Phase II (2019 Scheme)		
Theory Courses (2015 and 2019 Schemes)	End Semester Examination	Once in a Semester

	University Assessment (60%)	Laboratory (2019 Scheme) Comprehensive Course Work (2019 Scheme) Project Phase II (2019 Scheme)	
Indirect Attainment (20%)	Course End Surveys		At the end of each course.

Details of Assessment tools in course outcome attainment

The direct attainment is measured based on the performance of the students in the internal and university assessments, with a weightage of 40:60, respectively. Faculty sets the weightage for each assessment tool in internal assessments based on the difficulty level of the courses. Attainment is quantified by considering the percentage of students achieving a set percentage of marks. University exam question papers are devised by examiners designated by the university. To calculate CO attainment through university exams, the total marks scored by each student are considered, with a uniform distribution across all course outcomes, as the distribution of marks for individual questions is not disclosed. Course End Surveys collected at the end of each course are included in the indirect attainment calculation and are assigned 20% weightage of the total attainment.

Program and Program Specific Outcomes Attainment and Evaluation

Program and Program specific Outcomes are attained through direct and indirect methods.

Method of Attainment	Assessment Process	Weightage	Details of Assessment Tools	Frequency
Direct Attainment	Course Outcome Attainment	80%	Assignments	Thrice in a Semester
			Class Tests	Occasional
			Internal Assessment Exams	Twice in a Semester
			Continuous Evaluation and Viva Voce for Laboratory and Projects	Throughout the Semester
			End Semester Examination	Once in a Semester
Indirect Attainment	Surveys	20%	Program Exit Survey	At end of each academic year
			Alumni Feedback	Occasional
			Event Exit Survey	Occasional

(feedback based on additional programs conducted)
--

1. Direct Attainment:

1. Determine the **Average Course Outcome (CO) attainment** for each course based on the attainment of its individual course outcomes.
2. COs are mapped against POs and PSOs with low/medium/high correlation.
3. Determine the average mapping of each course,

Average Correlation Level = [endif]-->

1. For each PO/PSO mapped, calculate direct attainment as follows:

$$\text{PO/PSO attainment} = \text{Average CO attainment} * (\text{Average CL} / 3)$$

1. Indirect Attainment

1. Calculate the average of Program Exit Survey, Alumni Feedback and Event Exit Survey.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

2.6.3**Pass percentage of Students during last five years (excluding backlog students)**

Response: 88.97

2.6.3.1 Number of final year students who passed the university examination year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
361	307	390	466	403

2.6.3.2 Number of final year students who appeared for the university examination year-wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
410	387	399	480	490

File Description	Document
Institutional data in the prescribed format	View Document
Certified report from Controller Examination of the affiliating university indicating pass percentage of students of the final year (final semester) eligible for the degree programwise / year-wise.	View Document
Annual report of controller of Examinations(COE) highlighting the pass percentage of final year students	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.7 Student Satisfaction Survey

<p>2.7.1</p> <p>Online student satisfaction survey regarding teaching learning process</p> <p>Response: 3.64</p>	
File Description	Document
Upload database of all students on roll as per data template	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1

Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

Response: 21

3.1.1.1 Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
4	7	4	4	2

File Description

Document

Upload supporting document

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

3.2 Innovation Ecosystem

3.2.1

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident

Response:

INNOVATIONS

TIST has an ecosystem for innovation, creation and transfer of knowledge.

1.IEDC

Realizing the need of our student community to convert innovative ideas into marketable products, the Kerala Startup Mission has accepted the proposal and significantly approved the Innovations and Entrepreneurship Development Centre (IEDC) of Toc H institute of Science and Technology as Technology Business Incubator (TBI) in March 2022, to scale up its operations with well-equipped Incubation space and other infrastructure facilities.

TIST IEDC is supported by the Kerala Startup Mission with a funding of Rs.11,08830 in the last five years fostering the promotion of technology entrepreneurship.

2.TBI

TIST-TBI focuses on promoting cutting edge entrepreneurship activities and setting up an organizational structure required to facilitate technology-based businesses. Telepresence lab helps to conduct regular coding classes by M/s Link your course.

Achievements includes

Second runner-up position in the “Top-Performer in District-Ernakulam” category in the Innovator’ Premier League 2021, hosted by Kerala Startup Mission.

The best innovation award of Rs.100000, at the ‘National Engineering Projects Exhibition’

3.Prototype development support

The Project PIPE-BOT, funded by UBA, is a pipe and sewer cleaning system which is one among other prototypes developed in TIST.

TIST facilitates the promotion of innovation ecosystem through MoUs with various reputed organizations like Technolodge, RedHat, CDAC, FACE, KBA, VSB University, etc., and through its research promotion and skill development schemes, supported by different funding agencies/organizations like AICTE, KSCSTE, KTU CERD, MODROB, ASAP, ICFOSS, etc.

4.Tinkering lab

TIST is the mentor for the functioning of the tinkering lab at the Fathima School since 2021. The department provides training sessions to students mainly in the areas of Embedded systems and Robotics.

5.Industry Interaction cell

All the departments in TIST have Industry interaction cells headed by the respective HODs which bridges the gap between academia and industry through workshops, talks and internships.

6.IIC

Tist IIC stands for the promotion of innovative culture and has received 4-star rating from the Ministry of Education, Govt. of India for the year 2021-22. IIC conducts workshops & seminars including project expos.

A joint internship program was organized for the students by the Department of Computer Science & Engineering and Toc H IIC, in partnership with Technolodge, (Kerala’s first Rural IT Park), Piravom. It was conducted by gooseBerry Media, an IT startup located in Technolodge, in partnership with Neuralux Foundation.

7.IPR CELL

Talks conducted by IPR cell includes

- World Intellectual Property Rights
- IP management for startups
- How to plan for startups and legal and ethical steps
- Innovation for rural development

8.New learning Culture

To equip students with modern technologies, Tist promotes online courses like NPTEL, Coursera and MOOC. The technical program FOSS enables the students to connect with self-learning communities like Tinkerhub, Google Developer Student Clubs etc and encourages participation in various hackathons, project competitions, Summits like PSS 2020 (Professional Student Summit), IEDC Summit etc.

9.Rankings/ Awards for the past five years**Patents**

Tist has 8 granted patents and 4 published patents.

Rankings

Authority	Rank/ Band
NIRF	151-300
ARIIA	Performer
IIC	4-star

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

3.2.2

Number of workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years

Response: 90

3.2.2.1 Total number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during

last five years

2022-23	2021-22	2020-21	2019-20	2018-19
35	20	22	8	5

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

3.3 Research Publications and Awards**3.3.1**

Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

Response: 1.3

3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
50	34	55	33	28

File Description	Document
Link to the uploaded papers, the first page/full paper(with author and affiliation details)on the institutional website	View Document
Link to re-directing to journal source-cite website in case of digital journals	View Document
Links to the papers published in journals listed in UGC CARE list or	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.3.2

Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

Response: 0.84

3.3.2.1 Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
67	18	21	15	8

File Description	Document
List of chapter/book along with the links redirecting to the source website	View Document
Institutional data in the prescribed format	View Document
Copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4 Extension Activities**3.4.1**

Outcomes of Extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues for their holistic development during the last five years.

Response:

The institution is not only focused on academic excellence but also on shaping socially responsible, empathetic individuals who are aware of societal needs and are willing to contribute meaningfully to their communities by involving them in various extension activities.

NSS

The National Service Scheme (NSS) unit at TOC H is crucial in promoting community engagement and social responsibility among its students. The unit organizes various initiatives and activities like cleanliness drives, health camps, etc., aimed at making a positive impact on the community.

UBA

Projects are undertaken by TIST in collaboration with UBA for the villages of Mulanthuruthy, Chottanikkara, Elanji, Edakkattuvayal, Vadavucode, and Puthencruz. TIST's involvement in UBA-funded projects, particularly those focusing on environmental sustainability, technology, and digital empowerment, reflects a dedication to holistic community development. These initiatives not only address immediate needs but also contribute to the long-term well-being and resilience of the villages. The two completed projects are the Replast Machine and Pipe-Bot.

MITHRAM

TIST has undertaken a Project named “SparsH” at Mithram School & Rehabilitation Centre, Arakkunnam which comprises a sensory garden and a sensory room. It has been designed specifically for the benefit of students with special needs and creates a positive impact on their learning experience. The sensory garden is a peaceful and serene space that provides an opportunity for students to connect with nature. The sensory room is a multi-sensory environment that caters to students' different learning needs.

KARMA is a voluntary group of students of Toc H, who joined hands together to extend support to poor people in the society to bring happiness to them.

CIVIL DEPARTMENT, in collaboration with the Water Resource Department has prepared an actionable DPR (detailed project report) for the pollution abatement of the Periyar River.

TINKERING LAB

Toc H is the tie-up institute for setting up, the ATAL Tinkering Lab at Fathima Central School, Piravom, Sree Saraswathy School, and Toc H School which will help to promote innovation spirit among students. DoE, Toc H will be the mentor department for Fathima School, the IT department for Saraswathy School, and the CS department for Toc H School.

HAND SANITIZER

TIST students developed an Automatic Hand Sanitizer at a low cost to avoid the human effort for temperature checking.

Yi

The TIST Yi unit has contributed

- A fumigating machine and other items worth Rs12,000 to the Government Hospital, Mulanthuruthy.
- donated books and stationaries worth Rs.20,000 to needy students
- donated a smartphone to the Edakkattuvayal Panchayath to be given to a student for attending online classes.

Energy Safety Survey

An Electrical Safety Survey was conducted by the National Safety Council-Kerala Chapter (NSCKC) in collaboration with the Electrical Inspectorate to assess the electrical safety in the houses of Edakkattuvayal Panchayat. The survey was conducted by the SFE, EEE, and EL students in February 2022.

Outcomes of extension activities include:

- Awareness of Society’s needs
- Choice of Neuro related projects
- Development of Empathy
- Involvement in socially committed activities
- Awareness of water conservation and energy conservation

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

3.4.2

Awards and recognitions received for extension activities from government / government recognised bodies

Response:

Karma

- KARMA is a voluntary group of students of Toc H, joined hands together for extending support to poor people in the society with an aim to bring happiness in them.
- Karma received voluntary blood donor award in 2018 offered by IMA blood bank, Kaloor, Cochin for arranging multiple blood donation drives in Toc H. The award was handed over by Justice Shivarajan, Former Justice, High Court of Kerala.
- Karma received the best institution partner award in 2022, for the outstanding contribution and efforts made in association with JCI, Kochi Infopark Chapter. JCI Cochin (Estd. 1965) is among the oldest standing chapters of Junior Chamber International India. TIST Karma received award from the honourable MP of Ernakulam, Mr. Hibi Eden on 18th April, 2022.

National Service Scheme

- NSS TIST unit received appreciation from Kerala State AIDS Control Society for organizing blood donation camp on 19th April 2023.

- A number of students participated in the 2018 flood relief works/ rehabilitation programme, and received certificates from the District Collector

Others

- Twenty-two students were conferred a certificate of appreciation in recognition to their outstanding contribution by associating with the “Project Management Unit-Rebuild Kerala Initiative, Local Self Government Department during December 2019 to February 2020, and successfully completing the Field studies, Survey and Data Collection of designated roads of Ernakulam district in connection with the “Rebuild Kerala” Initiative for rebuilding the flood affected roads of Kerala.
- The departments of Civil and Electronics Engineering have received appreciation for the support and guidance extended for setting up a sensory garden and sensory room at Mithram school and Rehabilitation Centre.
- Received appreciation from Fathima Central School, Piravom for the support and guidance provided by the DoE in setting up of the Tinkering Lab.
- National Safety Council, Kerala Chapter appreciated our students for their wholehearted participation in the Electrical Safety Survey conducted to assess the electrical safety in identified houses in the Edakkattuvayal panchayath, Ernakulam.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

3.4.3

Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the last five years.

Response: 24

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
8	6	3	2	5

File Description	Document
Photographs and any other supporting document of relevance should have proper captions and dates.	View Document
Institutional data in the prescribed format	View Document
Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.5 Collaboration

3.5.1

Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

Response: 39

File Description	Document
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc.	View Document
List of year wise activities and exchange should be provided	View Document
List and Copies of documents indicating the functional MoUs/linkage/collaborations activity-wise and year-wise	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1

The Institution has adequate infrastructure and other facilities for,

- teaching – learning, viz., classrooms, laboratories, computing equipment etc
- ICT – enabled facilities such as smart class, LMS etc.

Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)

Response:

Response:The institute has adequate infrastructure and physical facility for effective teaching-learning..

The institution has the policy of replacing or upgrading the existing equipment to meet the changes in the syllabus made by the university from time to time. The campus is spread over 26.08 Acres of land.

Infrastructure: The Aryabhata Block accommodates Principal, Board room, Administrative office, Examination cell, Seminar hall, Training and Placement cell and the departments of Electronics and Communication engineering, Management Studies (MBA), admission cell, Prayer Room, Yoga Room, etc..

The Einstein Block houses departments of Electrical and Electronics engineering, Computer Science engineering, Science & Humanities, Information Technology, common Computer Centre, Central library, Science & Humanities and Mathematics.

Visvesvaraya Block accommodates departments of Mechanical engineering, Civil Engineering & Safety and Fire Engineering.

All the 3 blocks are fully equipped with the necessary infrastructure, adequate class rooms, seminar halls, tutorial halls, laboratories, space for academic activities and individual departmental libraries.

Class Rooms: Well-furnished, ventilated, spacious class rooms for conducting theory classes. Lighting is provided with good acoustics. All the class rooms of individual departments are at close proximity in order to have better access for the students. Each department is also being provided with tutorial classroom.

ICT facilities: Multimedia facilities providing audio-visual equipment and Webinar center which facilitates video conference for effective learning process. In the departments of the institution are equipped with latest projectors for effective teaching through video lectures. Also the students are supported by the faculty to present their seminar topics using the ICT facilities. Each room has a seating capacity of 60 and all departments are provided with sufficient number of LCD projectors, Wi-Fi and LAN enabled internet connectivity.

The institute continuously keeps upgrading the internet bandwidth as latest teaching methods demand the usage of NPTEL/Webinars etc. A separate server with HDD is being maintained exclusively for NPTEL video streaming within the campus.

Common Computer Facility/Language Lab/Telepresence Lab: A common computing room measuring 305 sq.m with 71 computers and LAN and internet facility is available for faculty and students.

Seminar Hall: The College has modern, well equipped seminar halls for organizing workshops and seminars.

Laboratories: All laboratories are well equipped, and well maintained not only for carrying out curriculum-oriented practicals, but also to carry out experiments beyond curriculum.

Specialized facilities and equipment for teaching learning and research: The College has an English communication skills lab where the students practice and test their communication skills. Apart from the central library, each department is having separate department library with a good collection. For self learning, reference books for all the subjects are available in the central library.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

4.1.2

Percentage of expenditure for infrastructure development and augmentation excluding salary during the last five years

Response: 14.62

4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
104.13	61.21	71.78	104.52	50.83

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.2 Library as a Learning Resource

4.2.1

Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students

Response:

The Institute has a well-equipped centrally located Library on the Campus, automated with modern web-based software "KOHA" with OPAC and WEB OPAC facilities. It provides excellent learning resources catering to the ever-growing intellectual requirements of the students, faculty, and researchers. At the entrance of the library, a barcode reader is used as a gate register for students and staff. Through this, web-based library software users can log in with their user's name, and password and know their library holdings, overdue details, issues, returns, renewal details, etc. Users are allowed to renew their books online also. Library users can get E-mail notifications at the time of issue, return, renewal, or overdue if any. Bar-coded Identity Card is issued to all its users. KOHA helps to generate various reports.

A well-arranged Digital Library with 25 systems and a projector with screen and speakers helps users to view NPTEL, access e-journals, and e-books from IEEE, Science Direct, Knimbus, EBSCO, DELNET, and NDLI. The e-resources are available for Off-Campus and Mobile access via the KNIMBUS Platform from any location. The Plagiarism checking software – TURNITIN is also accessible from any location.

More than 9425 e-books are available in EBSCO International subscription and more than 750 e-books are available from DELNET. Previous year question papers, seminar & project reports, NPTEL Videos, etc are also available anywhere in the campus. E-Journals and E-books are also accessed via off-campus, remote, and mobile facilities. The library procures and ensures effective use of the latest hard/soft copies of books (subject, general, rare, spiritual, etc.), journals, reports, and other learning resources regularly. Besides the Main Library, there are separate M B A and other 10 department libraries. More than 11706 Titles and 43005 volumes of hard copy books like subject, pedagogical science, Literature, Spiritual, Rare books, Psychology, encyclopedias, Dictionaries, Yearbooks, Current affairs, Competitive exam books, etc are available in the library,

The book Purchase procedure is as follows:- 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 the librarian prepares a comparative statement. A duly signed comparative statement by the Principal and Librarian 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 the Principal. Hard-copy Journals and e-journals are subscribed yearly. The Institute has formed an NDLI Club under the National Digital Library of India. The Library Advisory Committee meets once a year. Principal, Vice Principal, Deans, HOD.s of all Department, Librarians and Student Representatives are its members.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

4.3 IT Infrastructure

4.3.1

Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection

Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words

Response:

ICT facilities: Multimedia facilities provide audio-visual equipment and a webinar center that facilitates video conferences for an effective learning process. The institution's departments are equipped with the latest projectors for effective teaching through video lectures. Also, the faculty supports the students in presenting their seminar topics using the ICT facilities. Each room has a seating capacity of 60, and all departments are provided with sufficient LCD projectors, Wi-Fi, and LAN-enabled internet connectivity.

The institute continuously keeps upgrading the internet bandwidth as the latest teaching methods demand the usage of NPTEL, webinars, etc. A separate server with HDD is being maintained exclusively for NPTEL video streaming within the campus.

Maintains internet connectivity across the entire campus. All computer systems—labs, offices, libraries, staff rooms, and hostels—are networked and connected (100/1000 Mbps speed) to the server room. A local area network is available in all computer labs. The management office, principal's office, administrative section, placement cell, staff rooms, and senior faculty member's cabin are equipped with internet connections.

Wi-Fi facility covers the entire institution: classrooms, hostels, libraries, and labs. It enables students to

access the internet on their laptops. The maximum number connected to Wi-Fi at a time is 200–300; 2 outdoor access points and 34 indoor access points are used for Internet access is provided in labs, classrooms, libraries, and offices of all departments.

Connections to Wi-Fi networks are authenticated by Mac authentication. Wi-Fi network protected with a Mac address. A Sophos XG 210 firewall is used for internet connectivity.

The names of the internet providers are Asianet, Kerala Vision, and BSNL. Available bandwidth speed - Asianet-300Mbps (1:1 connection), Kerala Vision-500Mbps (Broadband), BSNL-10Mbps(NMEICT-MHRD)

INTERNET BANDWIDTH DETAILS

Year	Primary Connection	Bandwidth	Backup connection	Bandwidth	Total
2019	BSNL	100 Mbps	Asianet	20 Mbps	120 Mbps
2020	BSNL	100 Mbps	Asianet	30 Mbps	130 Mbps
2021	Asianet	200 Mbps	JIO	100 Mbps	300 mbps
2022	Asianet	300 Mbps	Kerala Vision	500 Mbps	800 Mbps
2023	Asianet	300 Mbps	Kerala Vision	500 Mbps	800 Mbps
2024	Asianet	300 Mbps	Kerala Vision	500 Mbps	800 Mbps

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

4.3.2

Student – Computer ratio (Data for the latest completed academic year)

Response: 3.04

4.3.2.1 Number of computers available for students usage during the latest completed academic year:

Response: 485

File Description	Document
Purchased Bills/Copies highlighting the number of computers purchased	View Document
Extracts stock register/ highlighting the computers issued to respective departments for student's usage.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1

Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years (INR in Lakhs)

Response: 15.72

4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
167.97343	66.01746	23.95138	84.22306	79.99638

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for maintenance of infrastructure should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1

Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years

Response: 37.59

5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
572	586	609	544	510

File Description

Document

Year-wise list of beneficiary students in each scheme duly signed by the competent authority.

[View Document](#)

Upload Sanction letter of scholarship and free ships (along with English translated version if it is in regional language).

[View Document](#)

Upload policy document of the HEI for award of scholarship and freeships.

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

5.1.2

Following capacity development and skills enhancement activities are organised for improving students' capability

- 1. Soft skills*
- 2. Language and communication skills*
- 3. Life skills (Yoga, physical fitness, health and hygiene)*
- 4. ICT/computing skills*

Response: A. All of the above

File Description	Document
Report with photographs on Programmes /activities conducted to enhance soft skills, Language and communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)	View Document
Report with photographs on ICT/computing skills enhancement programs	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.1.3

Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years

Response: 44.25

5.1.3.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
830	612	521	809	549

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

5.1.4

The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases

- 1.Implementation of guidelines of statutory/regulatory bodies**
- 2.Organisation wide awareness and undertakings on policies with zero tolerance**
- 3.Mechanisms for submission of online/offline students' grievances**
- 4.Timely redressal of the grievances through appropriate committees**

Response: A. All of the above

File Description	Document
Proof w.r.t Organisation wide awareness and undertakings on policies with zero tolerance	View Document
Proof related to Mechanisms for submission of online/offline students' grievances	View Document
Proof for Implementation of guidelines of statutory/regulatory bodies	View Document
Details of statutory/regulatory Committees (to be notified in institutional website also)	View Document
Annual report of the committee motioning the activities and number of grievances redressed to prove timely redressal of the grievances	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.2 Student Progression

5.2.1

Percentage of placement of outgoing students and students progressing to higher education during the last five years

Response: 64.87

5.2.1.1 Number of outgoing students placed and / or progressed to higher education year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
273	254	296	323	259

5.2.1.2 Number of outgoing students year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
410	387	399	480	490

File Description	Document
Number and List of students placed along with placement details such as name of the company, compensation, etc and links to Placement order(the above list should be available on institutional website)	View Document
List of students progressing for Higher Education, with details of program and institution that they are/have enrolled along with links to proof of continuation in higher education.(the above list should be available on institutional website)	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.2.2

Percentage of students qualifying in state/national/ international level examinations during the last five years

Response: 9.86

5.2.2.1 Number of students qualifying in state/ national/ international level examinations year wise during last five years (eg: IIT/JAM/NET/SLET/GATE/GMAT/GPAT/CLAT/CAT/ GRE/TOEFL/ IELTS/Civil Services/State government examinations etc.)

2022-23	2021-22	2020-21	2019-20	2018-19
48	14	5	8	0

File Description	Document
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.3 Student Participation and Activities

5.3.1

Number of awards/medals for outstanding performance in sports/ cultural activities at University / state/ national / international level (award for a team event should be counted as one) during the last five years

Response: 14

5.3.1.1 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 wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
7	1	1	4	1

File Description**Document**

Upload supporting document

[View Document](#)

list and links to e-copies of award letters and certificates

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

5.3.2

Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)

Response: 15

5.3.2.1 Number of sports and cultural programs in which students of the Institution participated year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
22	12	14	17	10

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

5.4 Alumni Engagement

5.4.1

There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Response:

TOC H INSTITUTE OF SCIENCE AND TECHNOLOGY ALUMNI ASSOCIATION registration is initiated under The Travancore Cochin Literacy and Scientific and Charitable Societies Registration Act 1955. The alumni association of TIST was started in the year 2008, with the sole aim of setting up an excellent network amongst our students and our College. All the former students, faculty and final year students constitute the alumni association. This strengthens our efforts in placement, project works and Industry Institution Inter-action and quality education with Entrepreneurship. 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 up gradation and updating of curriculum to meet the industrial needs. This helps to enhance juniors for several Placement Opportunities and helps to maintain continuing and life long relationship among the students, faculty and institution.

EXECUTIVE COMMITTEE

The Alumni Association is managed by Executive Committee, consisting of 22 office bearers

Sl.No	Name	Designation
1	Prof(Dr.) Preethi Thekkath	President
2	Dr. Deepa Elizabeth George	Vice President
3	Mr. Pramod Chandran	Former Student Vice President
4	Dr. Resmi R	Secretary
5	Mr. Jose J Pulikkunnel	Former Student Secretary
6	Mr. Kurian Thampy	Treasurer
7	Ms. Devika Nair	Members
8	Mr. Naveen George	”
9	Mr. Vishnu V Menon	”
10	Mr. Yadev Jayachandran	

11	Mr Joseph Kuriakose K	
12	Mr. Jithin Arakatt Shaji	
13	Ms. Mubheena Kabeer	
14	Ms. Shwetha Ann Ajith	
15	Ms. Neomi Nelin Nicholas	
16	Ms. Elba Helen George	
17	Ms. Deepa P L	
18	Mr Lovin K John	
19	Ms. Sonu Kuriakose	
20	Ms. Mima Manuel	
21	Mr. Renju Raj	
22	Mr Nishanth	

Duties and Responsibilities of the Executive Committee:

- To prepare and execute detailed plans and programmes for the Association in furtherance of its objectives
- To delegate through a resolution either to a sub- committee or to the Secretaries such of its powers for the conduct of its business.
- To institute and award scholarships to eligible students.
- The executive committee shall have the power to form byelaws which are not inconsistent with these rules. All byelaws framed by the executive committee shall be placed before the General Body for approval at the next Annual Body Meeting.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1

The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.

Response:

Yes, the institution's governance reflects strong leadership in line with its Mission, Vision, And Quality policy of the organisation.

VISION

To become a globally recognized Institution that develops professionals with integrity who excel in their chosen domain making a positive impact in industry, research, business, and society.

MISSION

- To provide the ambiance necessary to achieve professional and technological excellence at the global level.
- To undertake collaborative research that fosters new ideas for sustainable development.
- To instil in our graduate ethical values and empathy for the needs of society.

QUALITY POLICY

TIST is committed to create professional and skilled engineers through a value based exemplary education system by way of innovative teaching based on advanced pedagogy with global perspectives, job-oriented industry-based training using high quality resources, manpower, infrastructure, and continuous research which facilitates professional growth and personal development with empathy for the need of society for removal of social and economic disparity.

Management

11-member board of directors with 4-office bearers, look after the overall management of the Institute.

Governance at TIST

The effective leadership of TIST is demonstrated by its clearly defined organisational structure and mechanisms.

Governing Body

The institutions' affairs are managed by a Governing Body that is nominated by the Managing Committee and established in compliance with AICTE guidelines; meets once a year.

College Council

This statutory group advises and supports the Principal in academic and administrative issues; meets twice in a year.

IQAC

Creates learner-centric atmosphere promoting adoption and dissemination of best practices.

Grievance Redressal Mechanism

The major grievance redressal committee are given below.

(i) Anti-Ragging Cell

Ragging in any form is strictly prohibited inside and outside the institution. Any violation of anti-ragging rules should be urgently brought to the notice of the Principal and action initiated in the light of the provisions of AICTE regulations.

(ii) Internal Complaint Committee

The functions of the cell are purely to safeguard the rights of students, faculty and staff members and also to provide a platform for listening to their grievances.

(iii) Student Grievance Redressal Committee (SGRC)

Address the grievances of the students with respect to their academic and administrative problems.

(iv) Grievance Redressal Cell for Faculty/ Staff

Provides opportunities for redressal of grievances of faculty/staff

(v) Women's Development Cell (WDC)

Sensitization and prevention of sexual harassment of women at work place.

Decentralization and participative management

Open and Interactive strategy fosters co-operation guarantee further progress. A decentralised system used to efficiently handle the administration. This open and interactive strategy fosters co-operation and respect for one another.

- The overarching policies are created by Management Committee.
- Everyday activities and policy implementation supervised by College Council.
- Department heads granted functional autonomy to oversee daily operations of departments with

faculty members.

- Through committees and general staff council meetings, faculty participate in decision-making.

Areas for NEP Implementation

- Optimum use of technology resources for teaching – learning
- Promotion of ethics, constitutional values, scientific temper, courtesy, equality, justice etc.
- Imparting life skills
- Promotion of conceptual understanding
- Encouraging innovation, research, out-of-the box ideas
- Periodic assessment of stake holders

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

6.2 Strategy Development and Deployment

6.2.1

The institutional perspective plan is effectively deployed and functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc

Response:

The comprehensive strategic/ perspective plan of TIST encompasses various facets including policies, administrative setups, appointments, service rules, and procedures, ultimately aiming to enhance organizational performance and efficacy. By establishing clear hierarchies and communication channels, administrative setups facilitate efficient coordination and collaboration among various departments. Several bodies with well-defined roles have been constituted to ensure proper functioning of the institution under the guidance of the principal. The administration of the college is vested with the principal subject to the general direction and control of the Board of directors of Toc H Public School Society. College Council is a statutory body to advice and to assist the principal in all academic matter. The Council secretary issues notices of council meetings in consultation with the principal. Two days' prior notice is given for usual meetings and urgent meetings are convened at short notice. IQAC facilitates the creation of a learner-centric environment conducive to quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process. Other major bodies include Planning and Monitoring Committee, Executive Committee of College Union, Parent Teacher Association, and Alumni Association, College Sports Council, Student

Grievance Redressal Committee, Grievance Redressal Cell for Faculty / Staff, College Anti- Ragging Committee, Internal Complaints Committee, Anti-Sexual Harassment and Women's Cell, Career Guidance and Placement Unit, Industry Institute Cell.

The appointment process within institutional bodies holds significant importance in ensuring competence and diversity. Service rules and policies regarding Recruitment, Promotion, Performance Appraisal, Termination of Service/Resignation, Retirement, Conduct and Discipline and Leave are clearly disseminated to stake-holders. Through transparent and merit-based selection procedures, institution attracts and retain qualified individuals who possess the requisite skills and competencies. Recruitment of faculty with distinguished academic background takes place throughout the year as per requirement to ensure smooth functioning of the organization. Recruitment procedures are well defined to ensure recruitment of the best candidates for the position. The selection is strictly based on merit and performance in the interview.

Well-defined service rules provide clarity on operational protocols, performance expectations, and disciplinary measures. By adhering to established procedures, TIST streamline the operations, thereby enhancing efficiency and responsiveness. Moreover, periodic review and refinement of service rules ensure adaptability to evolving contexts and enabling institutions to remain agile and resilient in dynamic environments. Effective deployment of the institutional perspective plan is possible with a concerted effort to foster a culture of continuous improvement.

The Governing Body meets normally once a year to discuss 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. The quality of overall learning environment at TIST got recognized when the college was accredited by NAAC. Currently five B. Tech programs for TIST have NBA Accreditation a coveted achievement for Departments of Computer Science & Engineering, Civil Engineering, Mechanical Engineering and Safety & Fire Engineering. This accredited status makes it possible to grab more grants, B. Tech (Hons.) for eligible students and other academic progresses.

File Description	Document
Upload Additional information	View Document
Institutional perspective Plan and deployment documents on the website	View Document
Provide Link for Additional information	View Document

6.2.2

Institution implements e-governance in its operations

- 1. Administration**
- 2. Finance and Accounts**
- 3. Student Admission and Support**
- 4. Examination**

Response: A. All of the above

File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	View Document
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	View Document
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.3 Faculty Empowerment Strategies

6.3.1

The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression

Response:

Faculty Performance Appraisal

The Performance Evaluation Report for Faculty (Self-Appraisal) and Annual Confidential Report to be submitted by each faculty member to Head of the Department (HoD). HoD will evaluate the filled reports, add the remarks, and forwards it to the principal. The evaluation is based on the 13 criterions mentioned in the table given below. In recognition of overall excellence in the current academic year, the institution bestows honors to the best teachers from each department. The department encourages the faculty to seek promotion based on qualification, experience, and performance.

Criterion No	Criterion Name	Marks
Criterion I	Result Pass Percentage	40
Criterion II	Student Feedback	15
Criterion III	M Tech / B Tech Project Guidance	5
Criterion IV	Research Publications	10
Criterion V	Short term Courses / FDPs Attended	5
Criterion VI	Certified MOOC Course Attended	10
Criterion VII	External Industrial Training attended	5
Criterion VIII	Research Project	5
Criterion IX	Student Project	10
Criterion X	Short term Courses / FDP	5

	/Conferences Organized	
Criterion XI	PhD Awarded/ Guided	5
Criterion XII	Additional Responsibility	10
Criterion XIII	Self-appraisal	5
Total Marks		130

Evaluation Criteria points

Performance Appraisal of Non-Teaching staff

Promotion of non-teaching staff is based on the performance appraisal by the Principal and HOD with the main criteria of evaluation being experience and qualification.

Welfare Measures:

Employee Provident Fund, Employee State Insurance schemes and gratuity are implemented for confirmed technical/non-teaching staff. The Management has provided a life insurance scheme for confirmed technical/non-teaching staff. **Medical Insurance** coverage is provided for confirmed technical/non-teaching staff with a coverage of 1 lakh.

Academic Staff can avail a maximum of 12 **casual leaves** a year. All confirmed full-time employees are eligible for **sick leave** of 15 days. Eligibility for **compensatory leave** is in the ratio of one day of leave against every day of duty performed on Sundays or Holidays. All women employees except those on contract/daily wages, with one year experience are eligible for **Maternity Leave** for a period of 3 months with 50% of basic pay. **Earned Leave** is for a non-vacation employee based on his/her length of service. **Health centre** with a full-time nurse and part-time doctor available in campus. **Transport system** connecting the campus to all major destinations and special conveyance to the mosque on all Friday afternoons. **Free accommodation and food** for faculty members who engage on **hostel duty**.

Festival allowance is given to all the employees once in a year. Six months **leave to pursue Phd.** and **financial support** to attend Faculty Development Programs, conferences and professional membership. TIST supports **patent applications** and organize workshops and seminars on **Intellectual Property Rights awareness** for teachers, research scholars, and students. Institute has organized various training programmes, workshops, seminars and FDPs for faculty members and students.

Co-operative Society registered under the Kerala Co-operative societies Act is functioning in the campus operating stationery and confectionaries store and the society also offers Emergency Loans, Recurring Deposit schemes and personal loans.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

6.3.2

Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

Response: 3.29

6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
6	2	3	3	5

File Description	Document
Policy document on providing financial support to teachers	View Document
Institutional data in the prescribed format	View Document
Copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head.	View Document
Audited statement of account highlighting the financial support to teachers to attend conferences / workshops and towards membership fee for professional bodies	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.3.3

Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years

Response: 56.81

6.3.3.1 Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
90	95	115	68	24

6.3.3.2 Number of non-teaching staff year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
26	25	20	19	22

File Description	Document
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	View Document
Institutional data in the prescribed format	View Document
Copy of the certificates of the program attended by teachers.	View Document
Annual reports highlighting the programmes undertaken by the teachers	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.4 Financial Management and Resource Mobilization

6.4.1

Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)

Response:

The institution has well defined strategies and procedures for financial management. Before the commencement of the financial year, **budget** requirements under recurring and non - recurring heads proposed by individual Departments and Administrative Department will be reviewed by the Principal and is submitted to the Management for approval and sanction. Department Heads are informed about the extent of funds approved by the management against the budget proposals submitted by them at the beginning of the financial year. **Planning and Monitoring committee** plans for the improvement of infrastructure of the Institute, modernization of the laboratory, Research & Development and Institute Industry Interaction etc. Budget allocation for infrastructural developments /labs of the institute and its

management is carried through this committee along with the accounts department. Major recurring expenses including salary, conduct of seminars/workshops, and administrative services are met through **tuition fee** collected from students.

Mobilization of Funds and Resources:

Mobilization of financial resources includes raising funds through

- **RESEARCH GRANTS**

Encourages students and faculty to apply for grants and have received from **AICTE RPS, UBA, ISTE, ISHRAE, KTU-CERD, KSCSTE** (Kerala State Council for Science, Technology and Environment), **DIC** (District Industries Centre Innovation & Entrepreneurship Development Centre), **IEDC** and **Jilla Panchayat Local Economic Development Scheme**).

Institute supports partnerships for organizing major events and have received funds from **AICTE, KTU, KSCSTE, ISTE, Professional Societies and Industries** to organize skill development programs, technical and non- technical events.

- **CONSULTANCY FEES**

Serves as platform for consultancy services and have raised funds from **Public Works Department, Local Self Government Bodies, premier Institutions etc.**

Mobilization of physical resources includes **MODROB FUNDS** and utilizing **RESEARCH FUNDS** for laboratory development. To mobilize human resources, **institution sponsors** and organizes academic, co-curricular and other training /welfare activities that help faculty, staff and students to reach their full potential.

The financial documents are checked by principal and department heads concerned. The accounts of the institution are **audited internally and externally by chartered accountants** and verifies all the receipts, expenses bills, payments of the institute for each financial year. The auditor ensures that all payments are duly authorized and the report submitted to the management for review. Based on the report of the auditor, Planning and Monitoring committee make suggestions to higher authorities about further facilities/amenities/laboratories to be included in the forthcoming semester/year. The Governing Body meets 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.

Optimal Utilization of Resources:

- Serves as KTU approved research center with KTU recognized supervisors of the Institute and admits PhD scholars.
- Provides financial support to faculty for professional memberships, attending FDP and other travel expenses incurred for institution.
- Institute hosts government / non-government competitive examinations and makes effective utilization of computer laboratories and staff.
- Computerized Accounting and Fee collection by skilled employees.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

6.5 Internal Quality Assurance System

6.5.1

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

Response:

TIST QUALITY POLICY

TIST is committed to create professional and skilled engineering through a value based exemplary education system by way of innovative teaching based on advanced pedagogy with global perspectives, job oriented industry based training using high quality resources, manpower, infrastructure and continuous research which facilitates professional growth and personal development with empathy for the need of society for removal of social and economic disparity.

QUALITY Initiatives

- **Academic Calendar For Effective Curriculum Delivery**

Before the beginning of the semester a detailed academic calendar detailing important dates for curricular, co-curricular and extra curricular activities displayed by a committee headed by Dean academics and strictly implemented

- **Academic and Administrative Audit**

In order to ensure the effectiveness of the teaching learning process, IQAC conducts academic audit through KTU and ISO internal audit cell every semester. The academic auditing covers course delivery, syllabus covered, adherence to course plan, timely conduct of internal exam and publishing of internal marks, course and class committee meeting minutes, students grievances and allied committees with their minutes. Internal audits members evaluate documents from the department and an audit reports submitted to IQAC, which reviews and action taken thereof.

External academic auditors physically verify all internal audit records

- **Participation in recognised rankings**

Institute is participates in NIRF and NIRF innovation raking and positioned in 151-300 ranking in the innovation category

Accreditations and Road map for autonomy status

Four departments (CE,CSE,ECE and ME) NBA accredited 2017and reaccredited in 2023. Safety and Fire Engineering accredited in 2023.

Institute have qualified for autonomy as three branches with NBA score above 675, due for autonomy status.

- **Training for Teaching/Non-Teaching staff**

FDPs/training programs organized by each department every year. Also encourage faculty members to attend other institutes

- **Collaboration with industry internship and training**

Institute takes the initiatives for collaboration with industry like L&T, APTIV connections, IROV Technologies, Shrishti Robotics Technologies etc for internship and trainings

- **Student/Faculty Exchange Program with foreign university**

Through ERASMUS+ faculty visited Croatia and International conferences organized

- **Research Promotion**

IEDC, IIC, Tinkering lab, TIST-TBI, IMPaCT lab organises workshops, training programs motivating students and faculty to participate in national and international programs. Project funds from Government/Non-government agencies, Patents and prizes in student project competitions are the highlights.

- **Library Orientation Program**

- Library orientation programs organized to familiarise the digital platform. TIST NDLI club organizes periodic webinars.

- **National Events/Days/Festivals**

All national events and festivals celebrated to promote harmony

- **Training and Placement cell**

Training programs arranged for students from first year onwards, monitored by IQAC

-

Feedback from students, faculty, parents, employers, infrastructure feedback, alumni feedback etc. are taken every semester/year. Feedbacks analysis is reviewed during internal audit conducted by KTU and ISO and ATR taken.

- **Games & Sports**

A good play ground, basket-ball and tennis court etc provided. Physical Instructor monitors sports activities. Students received prizes in sports at university level.

- **Social Outreach Programs**

To maintain link between the institution and the community, all extension activities are promoted and regulated by TIST IQAC, namely NSS, ENCON, KARMA, and department social activities

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

6.5.2

Quality assurance initiatives of the institution include:

- 1.Regular meeting of Internal Quality Assurance Cell (IQAC); quality improvement initiatives identified and implemented**
- 2.Academic and Administrative Audit (AAA) and follow-up action taken**
- 3.Collaborative quality initiatives with other institution(s)**
- 4.Participation in NIRF and other recognized rankings**
- 5.Any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA etc.**

Response: A. Any 4 or more of the above

File Description	Document
Quality audit reports/certificate as applicable and valid for the assessment period.	View Document
NIRF report, AAA report and details on follow up actions	View Document
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date.	View Document
Link to Minute of IQAC meetings, hosted on HEI website	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1

Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.

Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words

Response:

Institution has framed **Gender Equity Policy** to accelerate gender equality in campus through fairness and justice in the distribution of benefits, power, resources, and responsibilities between women and men. The policy focus mainly on women empowerment as critical aspect of achieving gender equality. IQAC conducts **gender audit** periodically to observe gender balance among staff and students of the institute and **gender surveys** to collect the opinions of gender equity and sensitization in facilities and organizational activities.

Institute **measures for promoting gender equity includes formation of cells with gender parity, mentoring system by faculty and counselling headed by permanent lady staff** of Department of Applied Psychology and Counselling. The cells and committees formulated in the institute with gender parity are listed below:

- **Anti Sexual Harassment Cell and Women's Cell** was functioning in the institute since 2014 and has conducted several awareness programs for women inside and outside campus. Based on UGC directive, cell was renamed as **Women's Development Cell** and **Internal Complaint Committee** was constituted in 2021. The cells works hand in hand to include gender sensitization programs and to disseminate anti sexual harassment policies in campus and Redressal of Grievances in Institution.
- **College Council**
- **Executive Committee of the College Union**
- **College Sports Council**
- **Student Grievance Redressal Committee**
- **Anti Ragging Committee**
- **Committee for SC/ST**

Curriculum courses like 'Professional Ethics', 'Constitution of India' for B.Tech and 'Ethics Governance and Corporate Responsibility', 'Legal Systems for Business, Human Resource Management', 'Discovery of self & others' for MBA and co-curricular activities like hackathons, awareness sessions, workshops, and social outreach programs contributes to **gender equity and sensitization in campus**. 'Tink-Her-Hack 2022'- a women's hackathon, 'TinkerTalks' session, 'Immunity Building in Covid Times' event, 'WiES - Women in Engineering Summit,' 'Workshop for women entrepreneurs by WING.' 'Self Defense Techniques' workshop, motivational talks by successful women professionals, 'Nirbhayam' women safety app launch and conducting sessions on personal health and mental health underscores the Institution's dedication to addressing women's safety and mental

health. The provision of computer training for housewives over the years indicates a commitment to extending educational opportunities to women beyond the student community, contributing to empowering women in the local community through enhanced digital literacy skills.

Facilities for women in campus include **women's hostels, cctvs, security guides, health clinic, gymnasium, play area, common rooms, sanitary napkin incinerator and transportation facility** for creating a supportive and secure environment. Notably, key positions in the Institution are held by accomplished women professionals, emphasizing TIST's commitment to gender equity in leadership roles. This balanced distribution reflects the Institution's dedication to fostering an inclusive and diverse work environment, inspiring students by showcasing that leadership positions are attainable regardless of gender.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

7.1.2

The Institution has facilities and initiatives for

- 1. Alternate sources of energy and energy conservation measures**
- 2. Management of the various types of degradable and nondegradable waste**
- 3. Water conservation**
- 4. Green campus initiatives**
- 5. Disabled-friendly, barrier free environment**

Response: A. 4 or All of the above

File Description	Document
Policy document on the green campus/plastic free campus.	View Document
Geo-tagged photographs/videos of the facilities.	View Document
Circulars and report of activities for the implementation of the initiatives document	View Document
Bills for the purchase of equipment's for the facilities created under this metric	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.3

Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following

- 1.Green audit / Environment audit**
- 2.Energy audit**
- 3.Clean and green campus initiatives**
- 4.Beyond the campus environmental promotion activities**

Response: A. All of the above

File Description	Document
Report on Environmental Promotional activities conducted beyond the campus with geo tagged photographs with caption and date	View Document
Policy document on environment and energy usage Certificate from the auditing agency	View Document
Green audit/environmental audit report from recognized bodies	View Document
Certificates of the awards received from recognized agency (if any).	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.4

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

Response:

TIST is always at forefront of providing inclusive environment through cultural, societal and communal programs along with Curriculum courses like “Constitution of India”, “Disaster Management” for B.Tech and “Ethics Governance and Corporate Responsibility”, “Legal Systems for Business, Human Resource Management”, “Discovery of self & others” for MBA. Brief details of the institutional efforts apart from curriculum include:

Student and Faculty Exchange Programs

- **MoU with**
- University of Kelaniya (UoK) since 2014 has progressed linearly with two international seminars

and five student exchange programs.

- Veleuciliste U Pozegi, Croatia, in 2018. for the Erasmus+ Teaching Mobility for Academic Staff.
- Polytechnic in Pozega (Croatia) for Erasmus+ KA1-Learning Mobility of Individuals (students)

Cultural and Religious Festivals

Irrespective of the community, all the students and staff join in celebrating

- Festivals like Onam, Christmas
- Women's Day
- Independence Day and Republic Day
- National and International commemorative days like World Environment Day, Water Day, Engineer's Day, and Safety Day

Value-Based Education (Universal Human Values)

Faculty members from all departments were successful in completing AICTE "Universal Human Value (UHV) course and all first-year students underwent a session on UHV during their induction program.

Conducting Fests

Two National level intercollegiate cultural fests Advay and Mudra are organized every year. De'Nova-management fest has participants from Management Institutes across South India. Onam Trade Fair is organized by the students of the Department of Management Studies which improves their entrepreneurial skills.

Sports & Fitness

Facilities provided include multi-purpose playground on campus to conduct outdoor games such as Soccer, Basketball, Volleyball, Tennis, Cricket, Track & Field activities, and In-door games like Table Tennis, Badminton, Chess, and Carom. Sports Day is organised every year to showcase the sports talent of students. Intramural and extramural activities are planned to ensure regular participation of students in games and sports throughout the year including Inter-Collegiate tournaments of CUSAT & KTU. The fitness centre has facility of 12 station Multi Gym for male students and Treadmill in ladies hostel.

Blood Donation Camps

TIST organises Blood Donation Camps and stem cell donation as part of imbining empathy and concern for fellow human beings.

Professional Associations

TIST opens broad avenues to students, to get acquainted with the current pace of technological advancements through elegant Professional Associations like IEEE, CSI, ISTE, IEDC, Yi, NSS, etc.

Scholarships and Fee Waiver scheme:

Scholarships and Fee Waiver scheme are available for meritorious candidates for BTech, MTech and MBA students of poor financial background.

To ensure the welfare of the employees, the TIST cooperative society was formed.

Social Outreach Programme

Institute conducts awareness sessions for remote and nearby schools. Empowering women in computer education organised at TIST was one among the outreach programmes to empower women.

Institute provides conveyance to Muslim students for attending Friday Prayer. Institute provides facilities for the public for drinking water testing, solid testing, material testing and concrete testing, consultancy for structural design and traffic survey. Institute put active efforts in rural development through many UBA approved projects and programs as part of the institute's social commitment to build inclusiveness and sustainability.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

7.2 Best Practices

7.2.1

Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual

Response:

BEST PRACTICE: 1

• **Title of the Practice:**

Neighborhood Society Connect

• **Objectives**

- Interaction with special school students
- Women Empowerment
- Awareness and conservation of water
- Workplace safety and health practices
- Introduce portable multimedia Rapid Malaria Diagnosis Devices (PMRDD)
- Engagement with local bodies
- Flood relief
- Anti-drug awareness

• **Context :**

Catering to social, economic, environmental, occupational, and ethical needs of under privileged, marginalized students and local people.

Addressing drug addiction, catering to the handicapped, women empowerment, upliftment of housewives about water conservation, awareness about communicable diseases, health hazards at work place and energy conservation.

•

- Constituted coordination committee with State Excise Department.
- Visits to MITHRAM Special School; planned and designed new block
- Free computer training given to housewives.
- Interactive Sessions conducted for "Improving Mental Health"
- NSS and women cell conducted self-defense workshop for women
- Free water testing camp for neighborhood
- "RUN for Safety" on National Safety Day
- Training imparted to primary health workers to operate PMRDD
- Digitalizing Rural India in IT enabled services and Internet banking
- Crisis counseling and cleaning in the flood affected areas including schools

• **Evidence of Success:**

- Anti-drug awareness program yielded positive results as no disciplinary action was taken against students and no such case emerged.
- Appreciation letter from MITHRAM school, on approval of "Thanal" building project by Cochin Shipyard
- Several housewives availed free certified computer training program and placed
- Session conducted on "Improving Mental Health" for women benefitting 30 participants.
- A workshop conducted on "Self Defense Techniques" for year girls 50 students participated.
- Technical assistance to Kerala Government's "", promoted water testing. Water testing unit is functioning under R & D.
- 20 housewives participated in the awareness program on water conservation.
- Organized Anti- drug awareness program and "RUN for Safety" in connection with National Safety Day for the promotion of safety and health at work place.
- Developed and supplied Portable Malaria Rapid Diagnostic Device (PMRDD), for primary health workers
- Participated in rural digitalizing program under Velloor Grama Panchayat familiarizing them with IT Enabled Services and internet banking.
- As part of the Flood Relief activities, the college formed a group of 30 volunteers under the guidance of Dr. Alex Mathew, President, Toc H. They provided crisis counseling in the flood affected areas, provided Crisis Counseling.
- 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.

- **Problems Encountered:**

As TIST is located 30 km away from Kochi city, students and faculty members fail to dedicate time for society connect. So, a specialized academic calendar accommodating academic activities is prepared. To compensate for academic shortfall, Saturdays designated as working days. Overcoming obstacles such as resource acquisition and ensuring widespread participation, Facebook, Instagram, WhatsApp, and online meetups have been adequately used for widespread participation.

BEST PRACTICE: 2

- **Title of the Practice:**

Empowering Innovation Initiatives

- **Objectives of the Practice:**

- Envisages a legitimate method that propels young minds in innovation explorations.
- Transformational change in rural development processes for sustainability
- Streamline and strengthen innovation and start-up ecosystem

- **Context**

In the lines of vision and mission of the institute, attention diverted to engage faculty and students in innovation and entrepreneurship research activities, collaborative research fostering sustainable

development to make an impact in industry, research, business, and society.

a) IEDC

IEDC organizes and conducts workshops, competitions, supports setting up start-up, visits to startup villages and promotion of social outreach program. Provides platform to interact with entrepreneurs empowering budding entrepreneurs. Organizes Fab-lab visits to experience technical prototyping platform. Members participate in government supported projects like Map my Home project, funded and organized by Google in association with Kerala Land Records and Survey department and intercollegiate technical events like FOSS.

b) SPAN

Supports skill development through industry based projects; identifies students for undertaking such projects through industry specific technical tests, interacting with industry for project selection, preparation technical tests, interviews, providing technical support.

c) IMPaCT Lab (Innovative Methods, Projects and Community Technologies)

Focuses on innovation making beneficial impacts on society, innovations in embedded systems, IoT and other communication technologies, image processing and vision-based techniques to support agriculture, weather and disaster management, medical electronic devices, robotics and automation technologies.

d) Tinkering Lab

Establish and mentor Tinkering lab at nearby three schools, providing trainings sessions on Embedded systems and Robotics.

e) Industry Interaction Cell

Interaction Cell headed by the respective HODs bridge the gap between academia and industry through workshops/internships/visits

f) IIC

Innovation Promotion through multitudinous modes of eco-system and organizing Hackathons, idea

competition etc., involving industries

g) R &D

Promotion of funded projects, leveraging research activities. Toc H is registered with DSIR and approved as SIRO.

g) IPR Cell

Promotes awareness among stakeholders' thorough research work.

v) Evidence of Success:

- TIST IEDC recognised by Kerala startup mission as TBI
- Availed Kerala Startup Mission funding of Rs.11,08830 for technology entrepreneurship promotion.
- Second runner-up in the “Top-Performer in District-Ernakulam” Innovator Category
- Best innovation award of Rs.1lakh, at ‘National Engineering Projects Exhibition’
- Team Demeter comprising 3 students selected from among the top 10 teams at the National Level Samsung Solve for Tomorrow 2023 competition.
- The coverage of the project by CNN-News18 -

<https://youtu.be/w8FKCFwI0gY?si=oelpkQbxegNk2CeE>

- AICTE acknowledges SPANS's efforts and funded activities for the year 2021-22 under the SPICES
- **Three industry projects resulted in prestigious job offers for 8 students under the guidance of SPAN**
- Implemented four Rural Projects funded by UBA
- **Patents:** TIST has 7 granted patents and 2 published patents.

Rankings

Authority	Rank
NIRF Innovation Ranking	151-300
ARIIA	Band Performer
IIC	4 Star rating

vi) Problems Encountered

- Governmental funds for training and research from state/central agencies restricted, being self-financing institute.
- Due to COVID 19 impact, SIRO activities suffered and efforts on to revive it
- Plenty of generated ideas but few takers in the market

File Description	Document
Best practices as hosted on the Institutional website	View Document
Any other relevant information	View Document

7.3 Institutional Distinctiveness

7.3.1

Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Response:

Skill Enhancement:

TIST focuses on programs combining best practices on education, psychology, social work, placement trainings and technology application.

?) Virtual Teaching-learning platform. Webex platform with attendance tracking, live video sharing with WhatsApp groups. Virtus labs provided by IITs, videos made by teachers and, online tools shared with student to carry out lab works. ERP supports evaluation and monitoring.

ii) Holistic Approach towards Prognostic Excellence serves as entrepreneurs active growth driver for innovations and entrepreneurs. IIC & IEDC strengthen innovation and startup ecosystem enabling critical thinking and design innovation and entrepreneurship. Professional associations like IEEE, CSI, ISTE, ISHRAE, IETE, ASCE, IIWT, KBAIC, SAE, IGBC. ASDC functions under ASAP providing Hands on training.

iii) Telepresence Lab: Links all Engineering Colleges in Kerala with IT parks delivering skills training. Google Cloud Ace Program implemented through ASDC. The Computer Society of India (CSI) Student Branch at Toc H Institute of Science and Technology (TIST) has consistently excelled, winning the 'Best Accredited Student Branch Award' in Region VII for seven consecutive years. This success is complemented by individual student awards for activism and multiple recognitions of Asst. Prof. Elsaba Jacob for her contributions. Notable initiatives include a proposed telepresence lab sponsored by Kerala State IT Infrastructure Limited to connect engineering colleges with IT parks, providing training to 50,000 students annually. The Advanced Skill Development Centre (ASDC) established under ASAP has seen students complete various programs, including the Google Cloud Ace Program. TIST has been recognized as a Scientific and Industrial Research Organization (SIRO) by DSIR since 2012 and has a KTU approved research center with prominent faculty. Furthermore, TIST has an international partnership with Veleuciliste U Pozegi, Croatia, under the ERASMUS Mobility Programme, facilitating faculty and student exchanges since 2018. These accomplishments underscore TIST's dedication to

student excellence, skill development, and international collaboration.

iv) Toc H Institute of Science and Technology (TIST) offers the Merit cum Income Scholarship under the TIST Income-cum-Merit Scholarship (TIFERS) scheme, aimed at providing value-based education to underprivileged students, fostering innovation, nurturing job creators, and making learning enjoyable. The scholarship includes full tuition fee waivers, free hostel accommodation, partial tuition fee waivers, and a Book Bank Scheme with 4619 books. Selection criteria focus on rural residency, low family income, good academic records, and performance in a written test and interview. The selection process involves public advertisements, applications, a written test covering Mathematics, Physics, and Chemistry, and interviews. TIST also offers fee concessions for current students facing financial crises. Additional scholarships include those for entrance toppers, XII standard toppers, national/state achievers in arts and sports, and B.Tech lateral entry, M.Tech, and MBA students. Detailed criteria for these schemes are available on the institution's website. Many scholarship recipients are offered job opportunities at TIST upon graduation.

File Description	Document
Appropriate web in the Institutional website	View Document
Any other relevant information	View Document

5. CONCLUSION

Additional Information :

- TIST is recognised as TBI
- NAAC Accredited institute with ISO 9001:2015 Certification from 2012
- NBA accredited Five UG (CE, CS, EC, ME, SF)
- TIST recognized under Section 2 (f) of the UGC Act
- Institute has been recognized as the Third-party Quality Assurance Unit for Rebuild Kerala Projects of Government of Kerala
- 8 Granted Patents and 4 Published Patents
- Toc H MBA became the first Institute in Kerala partner with Veleuceiliste U Pozegi, Croatia under the prestigious ERASMUS+ mobility program
- Toc H Team Selected in National Level ISRO Robotic Challenge-URSC 2024 for next level
- Recognized as Scientific and Industrial Research Organization (SIRO) by the Department of Scientific & Industrial Research (DSIR), Government of India.
- Received total grand of Rs.2.5 cr. From Government/Non government agencies
- Received the National level “Best Accredited Student Branch Award- 2017 ”, consecutively for the sixth year from Computer Society of India (CSI)
- “Highest Committed Student Branch Activist Award-2017? from Computer Society of India (CSI)
- TIST Rated as “Excellent” by the NIT Calicut Alumni Association (NITCAA)
 - Ranked as one among the “Top 40 colleges in India” by the ‘Electronics For You’ magazine
 - Bestowed with the title of “College with Maximum Variety of Programs” by ISTE Kerala Chapter
- The Kerala State Energy Conservation Award and Commendation Certificates.
- TISTians represented INDIA twice in the Annual CANSAT competition organized by American Astronautical Society (AAS), American Institute of Aeronautics and Astronautics (AIAA) in association with NASA at Texas, USA
 - TISTians won a cash prize of Rs.50000 at State Level Techathlon by ICTAK.

Concluding Remarks :

TIST is managed by Toc H Public School Society, a charitable trust. It has a clear organizational structure with proper demarcation of duties and responsibilities, duly decentralized with transparent and participatory governance. It also takes special care in welfare measures for staff like insurance scheme, employee's provident fund and medi-claim. The college provides scholarships for students from economically vulnerable segments.

The institute's Internal Quality Assurance Cell (IQAC) plans and monitors all activities strictly adhering to KTU/AICTE/Government norms along with vital segments, students, parents teachers and technical experts. Best practices, namely Neighbourhood Society Connect and Empowering Innovation Initiatives are being successfully implemented. Five departments are NBA accredited, TIST IEDC recognised as TBI (Technology Business Incubator) opening avenues, NIRF Innovation (band 151-300) ISO9001:2015, Band Performer in ARIIA and have UGC 2(f) status.

We have a clearcut roadmap for getting autonomy status and setting up of an independent research centre producing research publications with impact factor in indexed journals, NBA for all branches.

NIRF ranking in the first 100.

We also look forward to the establishment of an integrated campus and Special block for Management Studies endeavouring to achieve quality technical and management education of global standards

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																				
1.3.2	<p>Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)</p> <p>1.3.2.1. Number of students undertaking project work/field work / internships Answer before DVV Verification : 1032 Answer after DVV Verification: 1023</p> <p>Remark : DVV has made the changes basis the supporting shared by the HEI, DVV has not considered the repetitive count</p>																				
3.1.1	<p><i>Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)</i></p> <p>3.1.1.1. Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs) Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>11</td> <td>14</td> <td>4</td> <td>10</td> <td>2</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>7</td> <td>4</td> <td>4</td> <td>2</td> </tr> </tbody> </table> <p>Remark : DVV has made the changes basis the supporting shared by the HEI</p>	2022-23	2021-22	2020-21	2019-20	2018-19	11	14	4	10	2	2022-23	2021-22	2020-21	2019-20	2018-19	4	7	4	4	2
2022-23	2021-22	2020-21	2019-20	2018-19																	
11	14	4	10	2																	
2022-23	2021-22	2020-21	2019-20	2018-19																	
4	7	4	4	2																	
3.2.2	<p><i>Number of workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years</i></p> <p>3.2.2.1. Total number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>83</td> <td>34</td> <td>36</td> <td>25</td> <td>11</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>35</td> <td>20</td> <td>22</td> <td>8</td> <td>5</td> </tr> </tbody> </table>	2022-23	2021-22	2020-21	2019-20	2018-19	83	34	36	25	11	2022-23	2021-22	2020-21	2019-20	2018-19	35	20	22	8	5
2022-23	2021-22	2020-21	2019-20	2018-19																	
83	34	36	25	11																	
2022-23	2021-22	2020-21	2019-20	2018-19																	
35	20	22	8	5																	

Remark : DVV has made the changes basis the supporting shared by the HEI

3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

3.3.1.1. Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
50	34	56	33	28

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
50	34	55	33	28

Remark : DVV has made the necessary changes as per the data shared by the HEI, the one with no ISN no is not considered.

3.4.3 *Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the last five years.*

3.4.3.1. Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
22	17	11	8	7

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
8	6	3	2	5

Remark : DVV has made the necessary changes as per the data shared by the HEI, the day specific events have not been considered while calculating the same.

5.3.1 Number of awards/medals for outstanding performance in sports/ cultural activities at University / state/ national / international level (award for a team event should be counted as one) during the last five years

5.3.1.1. *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 wise during the last five years*

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
8	1	1	8	1

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
7	1	1	4	1

Remark : DVV has made the changes basis the supporting shared by the HEI.

5.3.2

Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)

5.3.2.1. Number of sports and cultural programs in which students of the Institution participated year wise during last five years

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
59	30	22	89	56

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
22	12	14	17	10

Remark : DVV has made the changes basis the supporting shared by the HEI

6.3.2

Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

6.3.2.1. Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
7	2	4	4	7

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
6	2	3	3	5

Remark : DVV has made the necessary changes as per the data shared by the HEI, we have not

considered the one in which the amount is less than 2000

2. Extended Profile Deviations

Extended Profile Deviations

No Deviations
