



# **INSTITUTIONAL ASSESSMENT AND ACCREDITATION** **(Effective from July 2017)**

**Accreditation - (Cycle - 2)**

## **PEER TEAM REPORT ON** **INSTITUTIONAL ACCREDITATION OF** **HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY** **C-37063**

**Coimbatore**  
**Tamil Nadu**  
**641032**

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**  
**An Autonomous Institution of the University Grants Commission**  
**P.O. Box No. 1075, Nagarbhavi, Bengaluru - 560 072, INDIA**

**Section I:GENERAL INFORMATION**

1.Name & Address of the institution:	HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY Coimbatore Tamil Nadu 641032	
2.Year of Establishment	2000	
3.Current Academic Activities at the Institution(Numbers):		
Faculties/Schools:	3	
Departments/Centres:	17	
Programmes/Course offered:	22	
Permanent Faculty Members:	366	
Permanent Support Staff:	211	
Students:	5479	
4.Three major features in the institutional Context (Asperceived by the Peer Team):	1. Infrastructure 2. Participative management 3. Industry promoted centres	
5.Dates of visit of the Peer Team (A detailed visit schedule may be included as Annexure):	From : 26-09-2023 To : 27-09-2023	
6.Composition of Peer Team which undertook the on site visit:		
	Name	Designation & Organisation Name
Chairperson	DR. RAKESH TRIVEDI	FormerProfessor,Harcourt Butler Technical University
Member Co-ordinator:	DR. ARSHAD NOOR SIDDIQUEE	Professor,JAMIA MILLIA ISLAMIA
Member:	DR. CHARU LATA MAHANTA	Professor,TEZPUR UNIVERSITY
NAAC Co - ordinator:	Dr. Sujata Shanbhag	

## Section II: CRITERION WISE ANALYSIS

Observations (Strengths and/or Weaknesses) on each qualitative metrics of the key Indicator under the respective criterion (This will be a qualitative analysis of descriptive nature aimed at critical analysis presenting strength and weakness of HEI under each criteria)

Criterion1 - Curricular Aspects (Key Indicator and Qualitative Metrics(QIM) in Criterion1)	
1.1	Curriculum Design and Development
1.1.1 QIM	<b>Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the Institution.</b>
1.2	Academic Flexibility
1.3	Curriculum Enrichment
1.3.1 QIM	<b>Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human Values ,Environment and Sustainability into the Curriculum</b>
1.4	Feedback System

### Qualitative analysis of Criterion 1

The Syllabii of the programmes of the institute have embedded PO, PSO and COs and are accessible online from its website. The curricula for the last seven years are uploaded and could be accessible. Institute also has a YouTube channel on which some content through more than 800 videos. A MSME incubation, SAE club, IBM software lab and some centres of excellence are also available. More than 25 clubs are also active in the institute encompassing activities that include, art, culture, technical, professional, hobby and numerous others. The MoM and the yearly report on the activities is also accessible online. Such an ecosystem appears to adequately equip the students for the local, national and global issues and challenges. The institute has also developed adequate infrastructure for the sport, physical and holistic development of the learners. Sufficient facilities and avenues for Co-curricular, Extra-curricular and outreach activities may adequately encourage students inculcate social responsibilities.

The institute through a number of clubs and committees along with some curriculum embedded courses inculcates values on environment, sustainability, ethics and similar cross cutting issues. The women empowerment cell are in place. The activities of the clubs are administered by a body with memberships from across diverse groups of students and is coordinated by faculty members. Indian Constitution, Intellectual Property Rights and Essence of Indian Traditional Knowledge are included into the UG curriculum. The topics on professional ethics are also covered through experts in the activities of different Associations / Clubs. There are elective courses such as Human Rights, Women Rights, and Gender Equity are offered with an objective to inculcate gender awareness and equality. These issues related to human values, sexual harassment at Workplace, Protection of Women from Domestic Violence are covered. The NSS and NCC etc. alongside several clubs are also active in the environment related activities such as Rain water harvesting, Tree planting, etc. Furthermore, the women empowerment cell also conducts events on Gender Equity and Gender etc.

Criterion2 - Teaching-learning and Evaluation (Key Indicator and Qualitative Metrics(QIM) in Criterion2)	
2.1	Student Enrollment and Profile
2.2	Catering to Student Diversity
2.2.1 QIM	<b>The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners</b>
2.3	Teaching- Learning Process
2.3.1 QIM	<b>Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences</b>
2.3.2 QIM	<b>Teachers use ICT enabled tools including online resources for effective teaching and learning process.</b>
2.3.4 QIM	<b>Preparation and adherence of Academic Calendar and Teaching plans by the institution</b>
2.4	Teacher Profile and Quality
2.5	Evaluation Process and Reforms
2.5.3 QIM	<b>IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in Examination Management System (EMS) of the Institution</b>
2.6	Student Performance and Learning Outcomes
2.6.1 QIM	<b>Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.</b>
2.6.2 QIM	<b>Attainment of programme outcomes and course outcomes are evaluated by the institution.</b>
2.7	Student Satisfaction Survey

#### Qualitative analysis of Criterion 2

The institution enhances the learning ability of the students in the beginning through Student Induction Program and Orientation Program. The slow learners are supported with remedial classes and additional assignments and classroom tests. The advanced learners are motivated join industry for projects / internships. The advanced learners are also motivated to submit their ideas as projects, attending seminars, etc. and to prepare for the competitive examinations. Depending on the interest of the individual advanced learners they are also guided to participate in the co-curricular, extra-curricular activities, clubstudents etc.. Such students are also encouraged to enroll in the MOOCs. Adequate number of students participate in MOOC courses and few pass as position holders.

The Choice Based Credit System (CBCS) with Outcome Based Education (OBE) are in place in the HEI. The internship is also embedded in the curriculum which is a means of EXPERIENTIAL LEARNING. Sessions on Mock Interviews, Panel Discussions and Group Discussions are conducted with a view to improve communication and interpersonal skills. Facilities for sports are available. Industry Collaborative initiatives involving IBM, LabVIEW, Intel, are available in campus. Such facilities instil practical and hands-on training and real industry exposure. A number of clubs such as business skills Clubs, Professional Societies and Cells are also active. Seminars, Webinars, Guest Lectures and Training sessions by corporate are also in place. Students are also motivated to participate in Hackathons, Mapathon and Toycathon in order to create opportunities to work in small groups towards solving real world challenges In addition to these measures the activities from IIC, AICTE-IDEA Lab etc. are also in place which provide opportunity to design, fabricate and PoC the idea which can be taken to Incubation Center.

A digital library is in place and an access to e-resources from IEEE, DELNET, NPTEL Videos etc. is

available. A LMS is available in the HEI through which teaching and learning, attendance keeping process etc. is administered. The educational programmes from NPTEL, IITs etc. are also accessible through a high speed DTH. The HEI also has a Youtube channel with more than 800 videos and other e-content but its subscription need to be enhanced. ICT tools through Google Classroom, Kahoot, Hot Potato, Canva, Jamboard, and Google Forms are also employed some times. The platform “A-View” offered by IIT Bombay is also used. . The course materials and lecture content are available in LMS. The auditorium is digitally equipped with mic, projectors, cameras and computer system, smart and Interactive boards:

The HEI prepares and adheres to academic calendar. Apart from teaching plan, other supplementary academic processes are also planned and implemented in line with the academic calendar. An academic students handbook is prepared which contains rules and regulations such as rules for library, hostels and general rules are also given in the students handbook. The faculty members also prepare and maintain the course file.

The HEI has adopted a customized examination management systems through which the CIA and ESE process is administered. An examination committee headed by Principal and Controller of Examinations (COE) as Member Secretary and Dean Academics and Senior HoDs is in place. The course wise records in respect of every student are maintained through examination software. The process beginning from the enrolment till the examination and results is managed through an integrated information system. The examination software compiles both the Internal & External marks and compute the grade point calculations automatically. The COE communications are through mail and the student related services are made available on the institution website. Mark Statements are prepared through parchment papers with adequate security features.

The CO, PO, PSO and PEOs are defined, embedded in the syllabis and disseminated on on the HEIs website as well. A Department Advisory Committee (DAC) is in place which oversees the aspects of the definition of COs/POs/PSOs etc., mapping thereof and the process of attainment. The COs are mapped to POs and PSOs. The HEI has fixed the attainment targets by consulting and on the recommendations of OIMC. The COs are assessed by CIA/ESE questions mapped to COs. The result of CO attainment is used to evaluate the attainment of Programme Outcome. The attainment of POs and PSOs through CO marks and CO/PO/PSO matrix. The direct assessment of CO is done by all assessment instruments from CIA-I, CIA-II, mid-semester examination and assignments and end-semester examination. The indirect assessment of CO is done by Course Exit Survey. The direct assessment of attainment of PO is mainly done by CO-PO mapping. For the indirect assessment of attainment of PO, stakeholder’s survey and Graduate Exit Survey is used. The target attainment levels are fixed by the Course Coordinator based on the previous year results and quality of current batch students.

Criterion3 - Research, Innovations and Extension (Key Indicator and Qualitative Metrics(QIM) in Criterion3)	
3.1	Promotion of Research and Facilities
3.1.1 QIM	<b>The institution's Research facilities are frequently updated and there is a well defined policy for promotion of research which is uploaded on the institutional website and implemented</b>
3.2	Resource Mobilization for Research
3.3	Innovation Ecosystem
3.3.1 QIM	<b>Institution has created an eco system for innovations, creation and transfer of knowledge supported by dedicated centers for research, entrepreneurship, community orientation, Incubation etc.</b>
3.4	Research Publications and Awards
3.5	Consultancy
3.6	Extension Activities
3.6.1 QIM	<b>Extension activities are carried out in the neighbourhood community,-sensitising students to social issues, for their holistic development, and impact thereof during the last five years</b>
3.7	Collaboration

#### Qualitative analysis of Criterion 3

The HEI has constituted a Research Committee to promote research & Development. The HEI has a provision of Research Seed Money for the promotion of Interdisciplinary Research. The Research Policy has also been revised in 2022 and has an annual budgetary provision. The HEI has Anna University recognized research centres with 24 recognized supervisors and 104 scholars are pursuing PhD. The DSIR has recognized the HEI under SIRO scheme. The HEI has established IDEA Lab to promote innovation with grant from AICTE And an IPR Cell is also existing. There are some Centres of Excellence (CoE) and Competency Development Centres which are established in industrial collaboration. The CoEs include Virtual Instrumentation by LabVIEW Academy School, AICTE-IDEA Lab 3, Drone Technology, Embedded Systems and IoT, Programmable Logic Controllers (PLC) supported by SIEMENS The faculty members of the HEI have brought out more than 750 research papers in journals/proceedings and several patent applications have been filed and a number of design patents have been granted. The students participate in the professional society events and some have brought laurels as well. The incubation centre incubates start-up ventures.

The IIC is in place and under it a number of activities are organized. The HEI has established centres of excellence, MSME incubation centre and AICTE IDEA lab. The activities under umbrella of IIC/Incubation centre/Idea lab and Centres of Excellence have earned the HEI with the DSIR's recognition under its SIRO scheme. Through Anna university recognized research centres the HEI has enrolled some good number of scholars under PhD programme. The HEI also has a Drone training centre which is also recognized as a nodal centre by the DGCA's remote pilot training organization. The HEI is also an approved Nodal-Centre for conducting National-Level Smart India Hackathon Competition, Toycathon competitions and the ARIIA has recognized the HEI under the category of Band-Performer in all India. Few of the faculty member have earned recognition in the research

The HEI undertakes activities to make the students aware, sensitize and engage with the social issues through NSS, NCC and various Clubs. Under NSS the students have organized environmentally and socially important activities such as blood donation camps, tree plantation drive and awareness programmes on communicable diseases. Various national level initiatives such as Unnat Bharat Abhiyan (UBA), Swachha Bharat, Jal shakti Abhiyan etc. are taken up by the HEI. Under these scheme adoption of villages, Hygiene and Sanitation,

Plastic & Solid Waste Management, etc, have been conducted. Clubs such as Yoga club, Rotaract club, Women Empowerment Cell etc. are also active in the HEI. Programmes like Empowering women, Gender Equity, road safety, have been undertaken. The engagement of students in extension activities through clubs, programmes have brought about positive impact and have won laurels for the HEI.

Criterion4 - Infrastructure and Learning Resources (Key Indicator and Qualitative Metrics(QIM) in Criterion4)	
4.1	Physical Facilities
4.1.1 QIM	<b>The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.</b>
4.1.2 QIM	<b>The institution has adequate facilities for cultural activities, yoga, games and sports (indoor &amp; outdoor); (gymnasium, yoga centre, auditorium, etc.,)</b>
4.2	Library as a Learning Resource
4.2.1 QIM	<b>Library is automated using Integrated Library Management System (ILMS)</b>
4.3	IT Infrastructure
4.3.1 QIM	<b><i>Institution has an IT policy covering wi-fi, cyber security, etc., and allocated budget for updating its IT facilities</i></b>
4.4	Maintenance of Campus Infrastructure
4.4.2 QIM	<b>There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.</b>

#### Qualitative analysis of Criterion 4

The HEI has a sprawling and green campus. The HEI has created a built-up space comprising of seven academic blocks with disabled friendly facilities. Sufficient number of class rooms with ICT tools, adequately ventilated and well lighted are available. In addition to class rooms, sufficient laboratory space, administrative space, board room, training and placement cell, research and development laboratories, studio for recording lecture videos, space for clubs, etc. is also available. Sufficient numbers of airconditioned seminar halls with ICT and audio-visual facilities are also available. The HEI has also developed two auditoria and a number of Centres of Excellence and Competency Development Centers. The hostels for boys and girls with reading and recreation rooms with a capacity of 2500 and 600 members, respectively are available. The laboratories are well maintained and equipped with facilities are sufficient for the programme delivery. Sufficient numbers of computers with modern configurations and high speed internet are available. The hygiene and cleanliness in the campus, rest rooms is good, nice arrangement for the drinking water is available. The library is good and it is fully automated with sufficient numbers of books, journal subscriptions, e-content, data bases and Audio visual centre. The ATM facility, canteens, guest house, staff quarters, sports and games facility, etc. are available. Other physical infrastructure including solar photovoltaic power generation with a capacity of 65 kW (per month), rain water harvesting, indoor stadium, open-air theatre, halls for cultural activities, etc. are available. The HEI also operates a number of buses for commuting day-scholars and faculty and staff members in 50 km radius from the institution.

The facilities such as playground with 200 m track for athletic events and facilities for sports and in/out-door games are available. There is a separate Department of Physical Education headed by a Physical Director and under him is Assistant Physical Director. An indoor stadium is available for indoor sports like Table Tennis, Carrom, Chess, etc., Additionally, facilities for cricket, basketball, football, tennis, shuttle, volleyball, kabaddi and ball badminton are available in the out door games facilities. An air-conditioned Gymnasium centre is also



available. Separate timing is available for men and women. The HEI has several clubs through which the students and faculty are engaged in extra-curricular activities and making social awareness. Exclusive yoga halls are available for students and faculty members. Annual Day, Graduation Day, First year orientation and Inter-collegiate competitions are organized in the auditorium.

An automated Library with sufficient capacity is available. Sufficient number of book in sufficient volumes, sufficient journals& magazines, and back volumes are available. Electronic and digital resources are available in a digital library which also has with multi-media streaming. Access to e-resources such as IEEE (ASPP), NDLI, N-LIST, ProQuest and DELNET is also available. A reprographic facility for copying and printing is available. An integrated Library Management System (ILMS) is in place for effective use of the library. The ILMS is administered to the users through Lips iNet Nature of automation. The Digital Library also contains encyclopedias, dictionaries, and videos that support the syllabus and content beyond syllabus.

The HEI has an IT policy which specifies standards for IT service & management, Information Security, Network Security, Internet Network of the campus is connected using fiber optic cables and the systems are connected to the network through LAN. A high speed leased is available in the campus. Entire campus including hostels and office are Wi-Fi enabled.

The policies, procedures and a system for monitoring thereof in respect of physical, academic and support facilities is available. The Institution is differently abled friendly with ramps, lifts, special toilets, etc. The maintenance of the computers. The laboratories of different departments are maintained by the respective laboratory staff under the supervision of Heads of the Department. Annual Maintenance is functional in the campus which monitors the stock and functioning of the equipment and other instruments. A team of wardens, deputy wardens and residential wardens take care of the administrative and general matters related to their hostels, The Principal of the HEI is the chief warden for all the Hostels.

#### Criterion5 - Student Support and Progression (Key Indicator and Qualitative Metrics(QIM) in Criterion5)

5.1	Student Support
5.2	Student Progression
5.3	Student Participation and Activities
5.3.2 QIM	<b>Presence of an active Student Council &amp; representation of students on academic &amp; administrative bodies/committees of the institution</b>
5.4	Alumni Engagement
5.4.1 QIM	<b>The Alumni Association / Chapters (registered and functional) contributes significantly to the development of the institution through financial and other support services.</b>

#### Qualitative analysis of Criterion 5

The HEI has a student council, which comprises up of representatives from each class in the UG and PG programmes. The student council members are included as members in various committees to provide feedback on the curriculum, syllabus, evaluation methods and teaching methodology. The HEI's main objective in respect of the Student Council, however, is to encourage students to participate in various events and activities that promote institutional development. The council's objectives also include enabling the students to share their grievances for remedial action. The representation of students through student council in Academic Bodies/Board of Studies is limited to provide feedback and inputs for curriculum and syllabi. The involvement in the the Department Advisory Committee is to give participation in the decision making process with regards to course structure, detailed syllabus, value-added course, professional and open electives, mandatory courses offered by the department. The involvement in the class committee is limited to



provide feedback on the teaching learning process, internal assessment, co-curricular and extra-curricular activities, student support services, mentoring , etc. The representation of the students is given in Administrative Bodies Anti-Ragging Committee, in the Sexual Harassment / Internal Compliance Committee, Students Grievance Redressal Committee, Sports , Entrepreneurship Development Cell, Library Committee.

The Alumni Association of the HEI is is registered as Hindusthan College of Engineering and Technology Alumni Association (HICETAA) under the Tamil Nadu Registration of Societies Act 27 of 1975 with Registration no. 276 of 2016 dated 30th November 2016. Presently, there are more than 16700 registered alumni members in India and other countries. There are three national level alumni chapters active in Bangalore, Chennai and Cochin. The HICETAA contributes to the HEI by way of alumni endowments for granting scholarships and awards to the students showing high proficiency in their academics, co-curricular and extra-curricular activities. The members of the HICETAA participate in statutory and non-statutory bodies like the Board of Studies and the Internal Quality Assurance Cell (IQAC). The supports is extended in the Career Guidance, Higher Studies and Competitive Examinations, internship and placement opportunities for students. Alumni Scholarship HICETAA awards alumni scholarships to economically downtrodden students based on their merits.

Criterion6 - Governance, Leadership and Management (Key Indicator and Qualitative Metrics(QIM) in Criterion6)	
6.1	Institutional Vision and Leadership
6.1.1 QIM	<b>The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the Institution</b>
6.1.2 QIM	<b>The effective leadership is reflected in various institutional practices such as decentralization and participative management.</b>
6.2	Strategy Development and Deployment
6.2.1 QIM	<b>The institutional Strategic / Perspective plan is effectively deployed</b>
6.2.2 QIM	<b>The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules and procedures, etc.</b>
6.3	Faculty Empowerment Strategies
6.3.1 QIM	<b>The institution has effective welfare measures for teaching and non-teaching staff and avenues for career development/ progression</b>
6.4	Financial Management and Resource Mobilization
6.4.1 QIM	<b>Institution conducts internal and external financial audits regularly</b>
6.4.3 QIM	<b>Institutional strategies for mobilisation of funds and the optimal utilisation of resources</b>
6.5	Internal Quality Assurance System
6.5.1 QIM	<b>Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes visible in terms of – Incremental improvements made for the preceding five years with regard to quality (in case of first cycle)</b>  <b>Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles)</b>
6.5.2 QIM	<b>The institution reviews its teaching learning process, structures &amp; methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities</b>  <b>( For first cycle - Incremental improvements made for the preceding five years with regard to quality</b>  <b>For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives )</b>

#### Qualitative analysis of Criterion 6

The HEI is headed by a Principal and is managed by Hindusthan Educational and Charitable Trust, with office bearers as Chairman, Managing Trustee, Trustee and Executive Trustee & Secretary. A CEO is also appointed as a HEI's interface with the management. The HEI has sufficiently focussed on the academics, research, innovation, extension activities and infrastructure development. The administrative structure and hierarchy consists of Principal, Dean and HoDs. The Principal is adequately qualified and has sufficient exposure required for the administration of HEIs. The Governing Body (GB) of the HEI is headed by Managing Trustee with Principal as its Member Secretary and takes decisions on budgeting, establishments, academics and R&D. Academic Council (AC) has members from industry and alumni and is chaired by the Principal

encompassing academic experts, industry experts, alumni and chairman of all Board of Studies (BoS). It meets twice in year to address to the routine and emergent need of regulations, curriculum and teaching-learning process. There is a Curriculum Development Cell (CDC) which is headed by Dean (Academics) and is responsible for the curricular aspects including assessment of need for restructuring the curriculum periodically. An IQAC is in place and is responsible to ensure quality sustenance in all academic activities through systematic planning. Other bodies include Finance Committee, Planning and Evaluation Committee, Academic Audit Committee and a number of clubs. All these bodies have created a participatory ecosystem for the progress of the institution. The HEI has taken initiatives to implement NEP 2020.

The HEI has established and delegated functional and academic responsibilities to various committees, statutory bodies. The BoG, AC, BoS, FC are the statutory bodies. The representation of alumni and industry could be found in the AC and a little in the BoG. The BoS has sufficient representation of the students and parents. The FC is very compact body with small number of niche people and usually works with very limited one liner monotonous agenda. There are several non-statutory bodies which include and not limited to admissions committee, examinations committee, Grievances redressal committee (GRC) and CDC etc. In some of the meetings recommended the exemptions to the students from paying the hostel fees and deferred the fee payment beyond deadline. Final disposal of this matter can be assessed only after a competent body approves it and the decision is finally implemented.

The HEI chalks out the strategic plan by collecting inputs from internal & external stakeholders; and its implementation is entrusted to the IQAC. The HEI prepares an annual strategic plan with a focus on aspects such as Academics, Research, Placements, Entrepreneurship, Outreach, infrastructure etc. A strategic planning for Entrepreneurship and Innovation was set for the 2017-2018. As part of this the HEI established Entrepreneurship Development Cell (EDC). Under the aegis of EDC ED workshops, programmes are organized and an MSME approved incubation centre was also established. The EDC embarked on innovation and entrepreneurship aspect and has continued contributing to the innovation ecosystem of the HEI.

The institution has a well-defined organizational structure and governance. The HEI delivers quality education by involving all stakeholders through statutory and non-statutory bodies. Governing Body is the authority of planning and monitoring the functioning of the HEI. The GC meets regularly and the minutes are prepared timely and the same are also available on the website. The meetings of AC and BoS are also held periodically and the minutes of the meeting are also posted on the website. The FC has a small shell of niche people and holds meeting periodically, but the agenda is more or less monotonous. The Principal is entrusted with the day-to-day administration of the institution. The Dean, CoE, Heads of the Departments, IQAC coordinator and Administrative Department assist the Principal in discharging of duties. Policies and Procedures are adequately defined.

There is a provision of seed money for the faculty members. The HEI provides avenues for the career development through organizing Faculty Development Programmes and Orientation Programmes. Training Programmes are arranged to teaching, technical and non-teaching staff through centres of excellence available in the campus to upgrade their technical excellence. The HEI has subscribed to the Employee Provident Fund for teaching and non-teaching staff and the ESI Benefits are in place for non-teaching staff. Group Insurance facility available to teaching and non-teaching staff. Financial support to attend conferences, workshops, filing patent, etc. There is a provision for the concession in the admission and tuition fees for the wards of faculty and staff. Medical Concession is also given at the HEI's Hospital in Coimbatore. The Festival Advance for administrative and supporting staff, Diwali Bonus for non-teaching staff are given. The branches of banks, ATMs are available in the campus. Yoga, Sports and Gymnasium facilities have been created for the physical and emotional well-being of faculty and staff Wi-Fi facility is available in campus. Transport Facility is

extended for the teaching, non-teaching and staff and Staff Quarters for needy teaching and non-teaching staff is available.

The IA is headed by Principal and the Dean Academics is the coordinator. The IA is entrusted with the stock-taking on the academic, curricular and teaching learning process aspects mainly. The minutes of the meeting and proceedings of the IA are available on the HEI's website. The recorded outcomes are subjective and general. The external audit for the ISO is conducted and its report is available on the HEI's website. The EA has critically assessed and recorded the various aspects of the HEI. Each department presents the budget to the Principal which are consolidated by the administration and forwarded to finance committee for perusal and approval.

The Finance & Accounts department and Finance Committee prepare an annual budget estimate and a master budget is prepared. The main source of funds is the tuition fees which includes fees collected from enrolled students and hostel fees collected from hostel inmates. In addition to the above, the grants received from funding agencies such as CSIR, AICTE, UGC, DBT, DST, TNSCST, etc. are also the source of funds. From the incomes from consultancy/interest received on fixed deposits for Scholarship from the Government, institution, individuals, Alumni Contribution / Donations / Endowments towards development of the institution Funds generated from the above are primarily used for the development and maintenance of the institution. The accrued funds are utilized in Staff salary Staff and student welfare expenditure, procurement of lab equipment etc. The expenditure in the Conduct of Seminars, FDPs, Workshops and Conferences, for Seed money, Scholarships, Maintenance, Awards for students and staff members are also meted out from the income.

IQAC works in concurrence with various statutory and non-statutory bodies to enhance the teaching-learning, research, innovation, outreach and other processes. The institution also has ISO 9001:2015 certification for quality maintenance which has Developed benchmarks for maintaining quality in Curricular Aspects, Research, Innovations, Extension, Student Support, etc. Two practices institutionalized as a result of IQAC initiatives are i) Establishment of Competency Development Centers: The IQAC has initiated the establishment of Competency Development Centers to improve the technical competency of the teachers and students. The HEI has established several skill based Competency Development Centers (CDC), (ii) IPR and Patent centre: the IQAC has established the Tamilnadu State Council for Science and Technology approved IPR center.

HEI works with a focus on improvement in the TL practices, infrastructure, facilities etc. Few improvement in the TLP include the quality initiatives of IQAC. 1. Value-Added Course (VAC) designed for 30 hour and introduced. The credits earned through VAC are over and above the total credit requirement prescribed in the regular curriculum. Students who passed the evaluation are eligible for VAC certification. 2. A process "Course Information Sheet (CIS)" is introduced in which a CIS is prepared prior to the start of the course. Under CIS the weightage for each unit's contents is analyzed and the faculty adhere to the CIS for effective teaching-learning process.

Criterion7 - Institutional Values and Best Practices (Key Indicator and Qualitative Metrics(QIM) in Criterion7)	
7.1	Institutional Values and Social Responsibilities
7.1.1 QIM	<b>Measures initiated by the Institution for the promotion of gender equity during the last five years.</b>
7.1.3 QIM	<b>Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)</b> <ul style="list-style-type: none"> <li>• Solid waste management</li> <li>• Liquid waste management</li> <li>• Biomedical waste management</li> <li>• E-waste management</li> <li>• Waste recycling system</li> <li>• Hazardous chemicals and radioactive waste management</li> </ul>
7.1.8 QIM	<b>Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).</b>
7.1.9 QIM	<b>Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).</b>
7.1.11 QIM	<b>Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).</b>
7.2	Best Practices
7.2.1 QIM	<b>Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.</b>
7.3	Institutional Distinctiveness
7.3.1 QIM	<b>Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words</b>

#### Qualitative analysis of Criterion 7

The campus life in the HEI is rich in facilities for the conduct of curricular, co-curricular and extra-curricular activities which involve the students cutting across gender, safety and security. Adequate representations to women in academic and administrative responsibilities committee and clubs Is available. The Student Induction Programme includes sessions to sensitize the students on gender equity. Gender equity based activities are organized by the Women Empowerment Cell, Course on Human Rights is also aligned to the gender sensitization. Observation of International Women's Day is followed annually Yoga programs promote Mental Well-being of both genders. The Women Empowerment Cell also functions to Offer personalized guidance and counselling by women counsellors. Entire is campus is covered under the CCTV to monitoring and maintain the safety and security. Anti-Ragging and Women Harassment helpline numbers are displayed in the institution website and various places across the campus. Women staff escorts are deputed to accompany girl students during field visits, study tours, etc. Exclusive and separate Gym timings for both genders Common facilities, girls Common rooms are available for girls Medical / Sick rooms with a 24x7 ambulance facility.

Adequate steps are taken by the HEI towards collecting and disposing the solid waste inside the campus. The liquid waste generated is treated and reused for gardening. A biogas plant convert the liquid waste to biogas in place. Rain water with sufficient recharge stations is available. Programs/Practice Awareness programs on waste management including pledge taking, rally, speech to public, placards, notices and banners distribution

are observed through Swachh Bharat Mission programs.

The HEI observes a 3-week Student Induction Program (SIP) to facilitate a smooth transition of the students from home and school environment. The students from various states of the country are admitted which provides the quality of opportunity for diverse groups of learners and promotes regional cooperation. Inter department and inter institute cultural events are celebrated, NSS and NCC instil leadership qualities, Nationalistic spirit, Patriotism and Basic Cultural Values. The Teachers' Day, Youth Day, Farmers Day, Women's Day, Unity Day, Yoga Day and Handloom Day etc. are celebrated. The HEI promote societal programs for underprivileged school children, Orphanages, Old Age Homes etc.

The NCC and NSS are active and instil values, virtues, patriotism, responsibility and patriotism. Fundamentals of Yoga and Human Values are also offered to Engineering students under Regulations 2019. Similarly, socially inclined courses relevant to the discipline are also introduced in the different branches. The HEI also organizes technical, medical, cultural, and social events with an aim to gender-sensitization under the Women Empowerment Cell. Awareness on Consumer rights and Protection is furthered through consumer club. Civic, social, and cultural activities are conducted under the Rotract club. There are several other societal, professional and hobby clubs through which sufficient programmes and activities are conducted for the overall development of the students.

International Women's Day is celebrated annually on March 8th as a focal point in women's rights movement, bringing attention to issues such as gender equality, reproductive rights, violence and abuse against women. Swachha Bharat, Jal Shakti Abhiyan, Earth day etc. are celebrated to to raise awareness among students environment, ecology, environment protection and sustainability. World Environmental Day is celebrated on June 5th every year to raise awareness about environment issues, climate changes, etc. and create a more sustainable world. Various programs like tree saplings planting, cleaning, etc. are organized. International Yoga Day is celebrated on June 21st every year to make everyone aware of how Yoga embodies unity of mind and body; restraint and fulfilment. Engineer's Day is observed every year on September 15th to pay tribute to Visvesvaraya and also to commemorate the contributions of the engineers in the nation building. Gandhi Jayanti is celebrated every year on October 2nd to understand the philosophy of the great leader Mahatma Gandhi, and students and faculty participate by taking a pledge. Non-Violence Day is observed on October 2nd, the birthday of Mahatma Gandhi, father of the Nation and pioneer of the philosophy and strategy of non-violence. Unity Day is celebrated on October 31st every year to commemorate the birth anniversary of Sardar Vallabhbhai Patel. Constitution Day is celebrated in the country on November 26th every year to commemorate the adoption of the Constitution of India. Human Rights Day is celebrated on December 10th every year to commemorate the Universal Declaration of Human Rights. Multi Cultural Festival Pongal, Onam (Kalaash), Annual day (Hinspire) are being celebrated every year in a grand manner.

**BEST PRACTICE - I : Digital Learning-1.** Through this best practice the HEI creates opportunities, awareness and motivate the students towards self-learning practices. Online platforms are provided and equips the students to face challenges exposes the students to the professional environment of the industry. The HEI considers that the digital learning is one of the best practices in order to facilitate the students to show interest for acquiring knowledge through self-learning practice via online courses through ICT Academy, WAYAM, Coursera, edX, IBM, Wipro, FDPs/STTPs, CTS, Nann Mudhalvan, NITTTR, UHV, VM Ware, Honeywell, DXC, AICTE and AICTE KARMA. This practice is facilitated by the HEI via NPTEL courses, HEI has Received 5000 licenses from COURSERA (free during COVID), encouraged students to take up ICT Academy Learnathon courses Obtained 1000 licenses from eDX to learn free online courses To enhance Digital Learning the Institution has framed a system with credit transfer from MOOC.

## BEST PRACTICE - II: Scholarships for

The HEI provide financial support to the students with supports from the institution management, Government and NGOs. This practice aims at extending a helping hand to the students from the weaker section of the society and bridge the gap of inequality. Typically, the children from orphanages like AGARAM, YAVARUMKELEER, CORA, MATRAM are given 100% free education. The merit cum means scholarship not only provide financial support but the encourages the students to excel. The institution offers financial assistance to class toppers and meritorious students as well. In addition to the institution scholarships, all the eligible students of the economically weaker section and OBC/SC/ST category are encouraged and assisted to receive scholarships from the Government. The provision of scholarship for girl students having ia sister sibling studying in the institutions is available. There is also a Wards of Employees Government Scholarships: AICTE Pragati Scholarship Scheme for Girl Students Prime Minister's Scholarship schemes State Government BC/MBC/SC/ST Scholarships State Government First Graduate Scholarships State Government Tamil Medium students from Government Schools Non-Governmental Organizations Scholarships: Scholarships from NGOs like Agaram Foundation, Shanthi Social Services, Sitaram Jindal Foundation, Moovar Nattukottai Cettiyar Association, Tamilnadu Police Centenary Association, Unorganized Workers Welfare Board, etc. are available. Overall, scholarships can have a transformative impact on students' lives, helping them achieve their full potential and make a positive impact on their communities and the world.

**CENTRES OF EXCELLENCE / COMPETENCY DEVELOPMENT CENTRES / INDUSTRY-PARTNERED CENTRES CENTRES OF EXCELLENCE:** The HEI has established CoEs with industry partnership to provide advanced education, hands-on training and research opportunities in a specific area. Eight such Centres of Excellence are established with the support of Industry-Partners. The Centre of Excellence include Virtual Instrumentation by LabVIEW Academy School AICTE-IDEA Lab Centre of Excellence in Drone Technology supported by Planet-X Aerospace Centre of Excellence in Robotics Centre of Excellence in Embedded Systems and IoT by Intel Centre of Excellence in Electric Vehicles Centre of Excellence in Programmable Logic Controllers (PLC) powered by SIEMENS HONEYWELL Centre of Excellence for Youth Empowerment.

**COMPETENCY DEVELOPMENT CENTRES / SCHEMES:** Such centre aim to instill the development of skills and knowledge in specific fields. The following Competency Development Centres are established : Volvo Eicher Competency Development Centre Royal Enfield Competency Development Centre Ford India Training Centre DGCA Remote Pilot Training Organization (RPTO) MSME supported Incubation Centre / Hindusthan Innovative Product Development Centre MoE's Institution's Innovation Council (IIC) Centre for Skill Development in Association with Rubber, Chemical, Petrochemical Skill Development Council (RCPSDC) AICTE Skilled and Personality Development Centre (SPDC) AICTE PRERANA Scheme AICTE LITE Scheme AICTE KARMA Scheme AICTE KAPILA Scheme AICTE SPICES Scheme Cobot Advanced Manufacturing Centre FoSTaC – Centre for Food Safety Training and Certification Centre for Women Empowerment by DXC Technology Centre for Skill Development by Hero Tessolve Semiconductor Entrepreneurship Development Cell Centre for Thermal Cutting powered by Messer Cutting Systems NITTTR Chandigarh Nodal Centre for Training and Skill Development ISRO IIRS centre The HEI has also established several Industry-Partnered Centres in addition to Centres of Excellence and Competency Development Centres.

## **Section III:OVERALL ANALYSIS**based on Institutional strengths.Weaknesses,Opportunities & Challenges(SWOC)(up to 500 words)

### Overall Analysis



**Strength:**

Spacious and lush green campus with sufficient built up area.

Proactive management with a focus on quality and progressive education.

Qualified, experienced and dedicated faculty.

Very good enrolment ratio

Initiative to digital means for education/training are good.

Diversity of student/faculty with diverse clubs create positive campus environment.

**Weaknesses:**

Funded research, consultancy from Industry is low.

The MoUs and collaborative programmes with Global Institutions are less

The faculty with industry experience is less

Low enrolment in the full-time PhD.

Enrolment of girl students in the core engineering programmes is less

**Opportunities:**

Better engagement of students in lab classes and effective continuous evaluation.

Avenues for collaborations with the National Centres of Research and Excellence

Avenues of better engagement with a large number of locally available industries.

Alumni engagement and philanthropic support.

Higher good quality publications and IPRs with technology transfer by a good number of available PhD faculty

**Challenges:**

Placement of the students in the frontline core industries.

Competetion from existing Institutions.

Attract and retain faculty with potential to contribute to R&D.

Benchmarking of the outreach and exploration of potential of clubs for better societal engagements.

#### **Section IV:Recommendations for Quality Enhancement of the Institution**

(Please limit to **ten major ones** and use telegraphic language) (It is not necessary to indicate all the ten bullets)

- The HEI can make better contribution by attracting faculty and engaging them with research and outreach.
- A reach-out by HEI to the national centres of research & innovation, and frontline core industries for functional collaboration
- The HEI can embark on the real application based product development with prototype patents, technology transfer and commercialization
- The HEI may focus on the upgradation and modernization of existing lab facilities for better exposure to the students
- HEI may strengthen student body and their involvement of faculty in the statutory and decision making bodies

**I have gone through the observations of the Peer Team as mentioned in this report**

**Signature of the Head of the Institution**

**Seal of the Institution**

Sl.No	Name		Signature with date
1	DR. RAKESH TRIVEDI	Chairperson	
2	DR. ARSHAD NOOR SIDDIQUEE	Member Co-ordinator	
3	DR. CHARU LATA MAHANTA	Member	
4	Dr. Sujata Shanbhag	NAAC Co - ordinator	

Place

Date