PEER TEAM REPORT ON
INSTITUTIONAL ACCREDITATION OF
COIMBATORE INSTITUTE OF TECHNOLOGY,

Place: Coimbatore Pin: 641014   State: Tamil Nadu

Section I: GENERAL	Information
1. Name & Address of the Institution:	COIMBATORE INSTITUTE OF TECHNOLOGY, Coimbatore -641014 TAMIL NADU
2. Year of Establishment:	1956
3. Current Academic Activities at the Institution (Numbers):	UG – 7 programmes PG – 13 Programmes Ph.D in 14 Disciplines
• Departments/ Centres:	Seven (07)
• Programmes/ Courses offered:	B.Tech -7, M.Tech/MCA/M.Sc. -13, Ph.D -14
• Permanent Faculty Members:	307
• Permanent Support Staff:	165
• Students:	UG-3054, PG-832 and Ph.D -166
4. Three major features in the institutional Context (As perceived by the Peer Team):	• Co-Educational, Government Aided Autonomous Institution located in an urban area • 62 Years Old Institute • NIRF ranking (Engineering) 51
5. Dates of visit of the Peer Team (A detailed visit schedule may be included as Annexure):	6th and 7th of September 2018.
6. Composition of the Peer Team which undertook the on- site visit:	
Chairman:	Prof. D.K. Saikia
Member Co-ordinator :	Prof. N. Alagumurthi
Member :	Prof. Nambakkat Lakshmi Radhakrishnan
NAAC Co-ordinator:	Dr. Ruchi Tirupathi

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)

**Criterion 1 – Curricular Aspects**	
**(Key Indicator and Qualitative Metrics (Q₁M) in Criterion I)**	
1.1.	**Curricular Planning and Implementation :**
1.1.1 **Q₁M**	The institution ensures effective curriculum delivery through a well planned and documented process
1.2	*Academic Flexibility:*
1.3	*Curriculum Enrichment:*
1.3.1 **Q₁M**	Institution integrates cross cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum
1.4	*Feedback System:*

Qualitative analysis of Criterion I (300 to 500 words)

Design and development of curriculum / syllabi is carried out by each department, in alignment with the Institute and Department Vision, Mission based on outcome based education (OBE) framework. The academic programs offered by the Institution are planned to meet the national and global requirements.

Flexibility to choose subjects through open electives, self-study courses, and special electives (including interdisciplinary) is ensured. Students are enabled to take up highly-valuable and versatile roles as creative designers, innovators, entrepreneurs, and leaders of change. The combined approaches equip the students with high-level strategic thinking, and enable them to translate problems and ideas to tangible, desirable solutions and problem solving skills.

Employability Enhancement courses are offered as a part of curriculum enrichment. Establishment of laboratory in collaboration with Industry for state of the art Learning Interdisciplinary and professional core courses. Presentation of research/technical papers in conferences, symposiums, workshops and seminars. Industrial training/internship/mini project – the students are persuaded to do mini projects in individual subjects as well as in pre-final year, which is a mandatory course.

Communication skills are imparted through Language laboratory in first and second year classes. Fast-track programme exists for advanced learners allowing them to opt for additional electives from the 5th to 7th semesters so that they can attend internships/projects in the final semester in higher learning institutions, R&D establishments, international universities and multi-national companies. Nomination of members to statutory bodies – Scientists, experts from industry and academia, alumni and faculty from nearby institutes. The students are involved in research/consultancy projects of the faculty members.

Suggestions offered by the stakeholders who are invited as members in various statutory bodies are deliberated in the program advisory board, board of studies and parents' interactions for incorporation in the curriculum/syllabi.

Criterion 2 – Teaching-Learning and Evaluation (Key Indicator and Qualitative Metrics (Q_lM) in Criterion II)	
2.1	**Student Enrolment and Profile:**
2.2	**Catering to Student Diversity:**
2.2.1 Q_lM	The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners
2.3	**Teaching-Learning Process:**
2.3.1 Q_lM	Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences
2.3.4 Q_lM	Innovation and creativity in teaching-learning
2.4	**Teacher Profile and Quality:**
2.5	**Evaluation Process and Reforms:**
2.5.1 Q_lM	Reforms in Continuous Internal Evaluation(CIE) system at the institutional level
2.5.2 Q_lM	Mechanism of internal assessment is transparent and robust in terms of frequency and variety
2.5.3 Q_lM	Mechanism to deal with examination related grievances is transparent, time-bound and efficient
2.5.4 Q_lM	The institution adheres to the academic calendar for the conduct of CIE
2.6	**Student Performance and Learning Outcomes:**
2.6.1 Q_lM	Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed on website and communicated to teachers and students
2.6.2 Q_lM	Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution
2.7	**Student Satisfaction Survey:**

Qualitative analysis of Criterion II (300 to 500 words)

Induction program is organised for the newly admitted students. Students are assessed at the starting of the induction programme and necessary bridging classes are taken for the weaker students. Institute has adopted student centric methods that include self-learning, problem solving, project based and experimental learning. Faculty members adopt innovative methods to motivate the students.

Institute has good faculty-student ratio. E-learning – QEEE, NPTEL and MOOC – separate online interactive computing systems are made available. Under CBCS, students can register online for courses and choose the faculty member under whom they wish to study. The university has an effective UMS in place which makes most of the procedures transparent, leads to quick dissemination of information and has eliminated to a large extent the need for paper work. There is 100% automation of the examination system through implementation of Examination Management System. There are well stated Course/Program outcomes and an average pass percentage of 85%. Blooms taxonomy is followed and learning outcomes are measured.

Although there are a number of students from North-East states, there is need for enhancing the diversity by admitting students from other states and from other countries.

Student counselling system is in place. Each student is mentored by a faculty member called Tutor, who is available for consultation and advice on all matters, academic and social. Tutor ward meetings (TWM) are held every week.

	Criterion 3 – Research, Innovations and Extension (Key Indicator and Qualitative Metrics (Q_lM) in Criterion III)
3.1	*Resource Mobilization for Research*
3.2	*Innovation Ecosystem*
3.2.1 Q_lM	Institution has created an eco system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge
3.3	*Research Publications and Awards*
3.4	*Extension Activities*
3.4.1 Q_lM	Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years
3.5	*Collaborations:*

Qualitative analysis of Criterion III (300 to 500 words)

The institute has a research board with senior professors and experienced faculty members in various domains. Although the institute has a scheme for providing seed money for research, only few faculty members have been provided the same. All the departments are recognized as Research Centers by Anna University, Chennai. The management encourages faculty members to pursue Ph.D for their career growth and advancement. 191 research scholars have successfully completed their Ph.D programme from the institute. The faculty members and students are also motivated to publish papers in journals. However, there is scope for improvement in the quality of publications. Necessary hardware and software facilities to support the faculty and student community for research have been made available. Conferences, symposiums, seminars and workshops are regularly organized every year to promote the research culture among the faculty and students.

The institute has Virtualization center of Excellence in collaboration with Novell, OpenCL Technology, AMD and High Performance Computing with IBM. The institution has signed MoUs with academia, R&D establishments and industries for improving placement, and training. Students are motivated to be a member of any one of the social activity forums like Rotaract Club, Youth Red Cross, Space Club, Nature Club and other 16 Clubs. Student's self-development is enriched through Entrepreneur Development Cell and Women Empowerment Cell. There is scope for enhancing the activities through the MoUs.

	Criterion 4 – Infrastructure and Learning Resources (Key Indicator and Qualitative Metrics (Q_lM) in Criterion IV)
4.1	*Physical Facilities:*
4.1.1 Q_lM	The institution has adequate facilities for teaching - learning viz., classrooms, laboratories, computing equipment, etc
4.1.2 Q_lM	The institution has adequate facilities for sports, games (indoor, outdoor, gymnasium, yoga centre etc.,) and cultural activities
4.2	*Library as a Learning Resource:*
4.2.1 Q_lM	Library is automated using Integrated Library Management System (ILMS)
4.2.2 Q_lM	Collection of rare books, manuscripts, special reports or any other knowledge resource for library enrichment

4.3	**IT Infrastructure:**
4.3.1 Q_lM	Institution frequently updates its IT facilities including Wi-Fi
4.4	*Maintenance of Campus Infrastructure:*
4.4.2 Q_lM	There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

Qualitative analysis of Criterion IV (300 to 500 words)

The institute is situated on an area of sixty nine acres with a built-up area of more than 5 lakh sq.ft. Along with general infrastructure such as good roads and green and clean campus, the institute also has a bank with two ATMs within the campus. In addition there are adequate numbers of classrooms, laboratories, student/faculty rest rooms, ICT facilities etc. Other facilities that are available are an Auditorium, Open Air theatre, Transport Facility, Street Lights, good security, Vehicle Parking Facilities, 24 x 7 Power Backup, Canteen, Air Conditioned Seminar/Conference Halls and good quality furniture. Facility for physically challenged are available in all buildings.

There is a formalized system of in-charges with responsibilities of infrastructure along with a Dean for maintenance assisted by a team of engineers and supervisors to ensure appropriate maintenance and usage of the infrastructure. The institute appoints staff for maintenance and repair of infrastructure facilities, services and equipment. These activities are carried out under the supervision of qualified senior faculty members, campus manager / campus engineer along with the required manpower.

There are adequate numbers of computers for use of students. All necessary software and hardware for student laboratories are available and are also routinely maintained. A separate Computer Maintenance Cell (CMC) with two service engineers is available to attend to problems related to network and internet services. Wi-Fi facilities are provided to all students, faculty members and staff inside the campus.

Integrated Library Management System (ILMS) is in place using AutoLib Software Systems through which the library is fully automated and services including e-Gate register, circulation, biometric integration with circulation services, OPAC, Mobile OPAC, automated department library services, E-mail / SMS reminder etc. are available. An open access Language Laboratory equipped with audio interactive and multimedia enhanced learning packages is available for developing communication skills not only in English but also, French, German, Japanese, and Hindi.

A sound-proof recording theatre is also available in the laboratory to record voice messages and teaching materials. The institute has taken measures such as laying of tar roads for connecting all the academic and hostel blocks, construction of concrete gutters for drainage of water, concealed, underground systems for electrical cables, grass landscaping, wide plantation of trees, rainwater harvesting system with a large capacity, wall climbing creepers on stone buildings and a vehicle parking system.

Criterion 5 - Student Support and Progression (Key Indicator and Qualitative Metrics (Q_lM) in Criterion V)	
5.1	*Student Support*
5.2	*Student Progression*
5.3	*Student Participation and Activities:*

5.3.2 Q_tM	Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution
5.4	*Alumni Engagement:*
5.4.1 Q_tM	The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years

Qualitative analysis of Criterion V (300 to 500 words)

About 40% of the students enrolled in the institution are benefited by scholarships and freeships provided by the Government and about 2% of students by scholarships and freeships besides government schemes.

The institution has several capability enhancement and development schemes such as guidance for competitive examinations, Career Counselling, Soft skill development, Remedial coaching, Language lab, Bridge courses, personal counselling both academic, non academic and specific problems related to students staying in hostels. Additionally, on an average about 400 students every year are benefitting by employment oriented courses.

The institution has established a student counselling centre and has addressed the grievances submitted by students. The student placement record is good with a large number of students inducted into good companies with fair starting salaries. A small percentage of progress to higher degrees after graduation. Some students have qualified in state/ national/international level examinations. A good number of students have won awards and prizes in diverse extra curricular activities and sports/games at the state level. To improve the capabilities of the students in social activities, they are encouraged to contribute their ideas in institute magazines (Shristi, Ilamparavai and Department technical magazines).

A student union exists with office bearers nominated by the Principal based on consistent good academic performances. All Departments have their own associations which organize technical meetings, symposia, seminars and workshops in their respective disciplines. The students are also included in various academic and administrative bodies of the institution such as Class and Department Advisory Committee, Planning and Evaluation Committee, Student Welfare & Extra Curricular Activities Committee. Students also find representation on the Academic council, Hostel Committee and Anti-ragging Committee. There are also a large number of clubs of various sorts through which students participate in theme based social activities. Student's grievance redressal system includes committees like Examination & Disciplinary Committee, Appeals and Grievances Committee, Attendance Monitoring Committee and Ombudsman Committee.

The institution has a functional alumni association through which support is offered to students through different mentoring opportunities – either by being a part of on-campus lectures or motivation through an in-person or online commitment; provision of internships; recruitment of fresh graduates; etc. Every year the Best project award and Endowment Prizes are given by the alumni. They are also invited as expert members and advisors in various committees that support the welfare of the institution, provide scholarships and financial assistance. Regular Alumni meetings are held.

	Criterion 6 – Governance, Leadership and Management (Key Indicator and Qualitative Metrics (Q₁M) in Criterion VI)
6.1	**Institutional Vision and Leadership:**
6.1.1 Q₁M	The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the Institution
6.1.2 Q₁M	The institution practices decentralization and participative management
6.2	**Strategy Development and Deployment:**
6.2.1 Q₁M	Perspective/Strategic plan and deployment documents are available in the institution
6.2.2 Q₁M	Organizational structure of the Institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism
6.2.4 Q₁M	Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions
6.3	**Faculty Empowerment Strategies:**
6.3.1 Q₁M	The institution has effective welfare measures for teaching and non-teaching staff
6.3.5 Q₁M	Institution has Performance Appraisal System for teaching and non-teaching staff
6.4	**Financial Management and Resource Mobilization:**
6.4.1 Q₁M	Institution conducts internal and external financial audits regularly
6.4.3 Q₁M	Institutional strategies for mobilisation of funds and the optimal utilisation of resources
6.5	**Internal Quality Assurance System:**
6.5.1 Q₁M	Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes
6.5.2 Q₁M	The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms
6.5.5 Q₁M	Incremental improvements made during the preceding five years (in case of first cycle) Post accreditation quality initiatives (second and subsequent cycles)

Qualitative analysis of Criterion VI (300 to 500 words)

The institute has a Governing Council fully committed to the progress of the institute. The Governing Council is responsible for determining the future direction, overseeing the Institutional activities and fostering an environment in which the mission and vision of the Institution can be achieved by considering and approving the strategic plan of the Institute.

The strategic plans set out the academic aims and objectives of the Institution and identify the financial, physical and staffing requirements to achieve these objectives. At the Institute level, a team with Head of the Institution, Heads of the departments and senior faculty members formulate a draft strategic plan which is discussed and approved by the governing council with suitable modifications.

The strategic plan is reviewed from time to time. The Governing Council ensures the presence of a clear and well established audit procedure for all financial aspects of the Institution. It is also responsible for monitoring the performance of the Institution against plans and approved key performance indicators. Accordingly, in addition to the positions of Heads of the departments, the posts of Deans such as Dean-Student Affairs, Estate Maintenance and Alumni association activities, Dean-Planning, Dean-Academic, Dean-R&D and Industry Collaboration, Dean-Extracurricular and Inter college activities, Dean- Placement and Training (Placement Officer), Dean - Academic & research resource assistance (Librarian)

and Dean, Exams have been created. The Principal is assisted by the Heads of departments and the Deans in managing the activities of the Institute.

The institute has various incentives such as reimbursement of fees to be paid to the university by faculty members who have registered for Ph.D through the Institute through Technical Education Quality Improvement Programme (TEQIP) fund. Bearing the entire cost for travel/registration fee etc. for presenting research papers in conferences within India, and partial reimbursement on going abroad. The Institution also runs certain totally self financed programmes.

Recruitment of faculty is done through a board including Government Nominee, AICTE Nominee, and University Nominee in accordance with rules of the Tamil Nadu Government. There is an Ombudsman Committee functioning in the Institute to attend to the grievances of faculty members and staff. Facilities such as loans, food in the canteen at subsidized rates etc. are made available to staff. API scores based on PBAS are applied for faculty promotions. The institute receives funds from various trusts and alumni association. Funds have also been generated through consultancy works, testing of material in Institute Laboratories for Government agencies and private industries.

The institute has a functional IQAC which works through various committees resulting in overall academic improvement and transparency.

	Criterion 7 – Institutional Values and Best Practices (Key Indicator and Qualitative Metrics (Q$_l$M) in Criterion VII)
7.1	**Institutional Values and Social Responsibilities:**
	Gender Equity
7.1.2 Q$_l$M	Institution shows gender sensitivity in providing facilities such as: a) Safety and Security b) Counselling c) Common Room
	Environmental Consciousness and Sustainability
7.1.5 Q$_l$M	Waste Management steps including: • Solid waste management • Liquid waste management • E-waste management
7.1.6 Q$_l$M	Rain water harvesting structures and utilization in the campus

7.1.7 Q$_l$M	Green Practices
	 • Students, staff using
	    a) Bicycles
	    b) Public Transport
	    c) Pedestrian Friendly roads
	 • Plastic-free campus
	 • Paperless office
	 • Green landscaping with trees and plants.

	Differently abled (Divyangjan) friendliness
	Inclusion and Situatedness
	Human Values and Professional Ethics
7.1.18 Q$_l$M	Institution organizes national festivals and birth / death anniversaries of the great Indian personalities.
7.1.19 Q$_l$M	The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions

7.2	**Best Practices:**
7.2.1 Q₁M	Describe at least two institutional best practices (as per NAAC format)
7.3	**Institutional Distinctiveness:**
7.3.1 Q₁M	Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

Qualitative analysis of Criterion VII (300 to 500 words)

The Institute has implemented gender equity program, installation of waste management technology, planting and preserving trees and student counseling centres.

The institute is situated in one of the arterial roads of Coimbatore and the facilities of the Institute are used by school children and walkers club members. The institution provides space to conduct various government/non-government competitive examinations. Various awareness programs are conducted for the students as well as local people. Facilities for differently abled people are also in respective places.

Research promotion remains one of the best practices identified by the institute. Several MoUs have been signed with International Universities, have obtained National and International grants and have several exchange programs, especially at the research level in place. The second best practice identified is Career Prospects aimed at employment of students by inviting prospective industries, making students industry-ready and motivating students to become technopreneurs.

The institute meets a part of its power requirements from solar energy. Solid waste are collected daily in dustbins and dumped in pits. Organic wastes from hostel and canteen are collected separately and used as compost for plants. Sewage water treatment plant is installed in the campus. The water is reused for gardening and in restrooms. Rain water harvesting facility also exists.

A distinctive aspect of the institute is that the alumni network is large, successful and actively contribute to the welfare of the institute through donations, scholarships, job recruitment, sharing of expertise etc.

Section III: OVERALL ANALYSIS based on *Institutional Strengths, Weaknesses, Opportunities & Challenges (SWOC)* (300 to 500 words)

Strength

1. Forward looking management, strong academic team and quality education

2. Good infrastructural facilities.

3. Good rapport with external stake holders.

4. Healthy academic environment.

5. Committed faculty and good work culture.

Weakness	
	1. Entrepreneurship and technology incubation activities are limited.
	2. College lacks visibility outside the state in India and abroad.
	3. The placement percentage and transition rate need to be improved.
	4. No students from abroad or states other than from the North East region of the country.
	5. Lacking in faculty diversity.
Opportunities	
	1. Introduction of more industry oriented Interdisciplinary programmes / courses.
	2. Fetching extra mural funding for research and development.
	3. Establishment of technology business incubator for entrepreneurial development.
	4. The college can use the goodwill of alumni and other stakeholders to increase the resource generation.
	5. Attracting high quality faculty to fill up the vacant posts and enhance the research environment
Challenges	
	1. To reverse the trend of drop in demand in post graduate admissions.
	2. To enhance good quality placements.
	3. Focus on professional development of talent
	4. To achieve excellence in academic and sponsored research
	5. To incubate successful start-ups creating innovative products and business models through Business Incubation centre established in CIT.

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)

- Dedicated consultancy cell needs to be established to develop and publicize creditable consultancy
- Activities of Alumni Association and Placement & Training Cell need to be strengthened.
- An Institutional vision document needs to be prepared.
- More MoUs to be signed with reputed organisations and existing ones need to be made fully functional.
- Vacant position of teaching and nonteaching staff be filled in and mechanisms for timely promotions of non-teaching staff to be implemented
- Career guidance and coaching for competitive examination to be strengthened
- Teachers from other states may be hired to add to teacher diversity
- Admission may be opened for students from states in addition to those from the North East and also from other countries.
- Faculty may be motivated and supported for writing research projects of societal importance to enhance their career and competence
- Day care centre and residential facilities for staff may be created

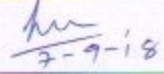I have gone through the observations of the Peer Team as mentioned in this report.

Signature of the Head of the Institution
Seal of the Institution

Dr. V. SELLADURAI M.E., Ph.D.,
FIE., FIIE., FIPE., FORSI
PRINCIPAL
COIMBATORE INSTITUTE OF TECHNOLOGY
COIMBATORE - 641 014 INDIA.

Signatures of the Peer Team Members:

Sl. No	Name		Signature with date
1	Prof. D. K. Saikia	Chairperson	
2	Prof. N. Alagumurthi	Member Co-ordinator	
3	Prof. Nambakkat Lakshmi Radhakrishnan	Member	
4	Dr. Ruchi Tirupathi	NAAC Co-ordinator	

Place: Coimbatore

Date: 07.09.2018