

THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI-15

(A Govt. Aided Autonomous Institution affiliated to Anna University)



- where quality and ethics matter



Statutory and Regulatory Requirements

- > AICTE, COA
- > DoTE
- Anna University
- > NAAC
 - \Box IQAC
- > NBA

- Governing Council
- Academic Council

- > Awards and Ranking
 - NIRF
 - ☐ IMC RBNQA
 - □ RGNQA
 - ☐ CII
 - Magazines Ranking

...

Accreditation vs Ranking

NBA

- Evaluation of Processes and Results
- Programme Assessment & Accreditation

NAAC

- Evaluation of Processes and Results
- Institutional Assessment & Accreditation

NIRF

- Evaluation of Results
- Institutional Ranking

11/4/2020

IOAC

National Assessment and Accreditation Council (NAAC)

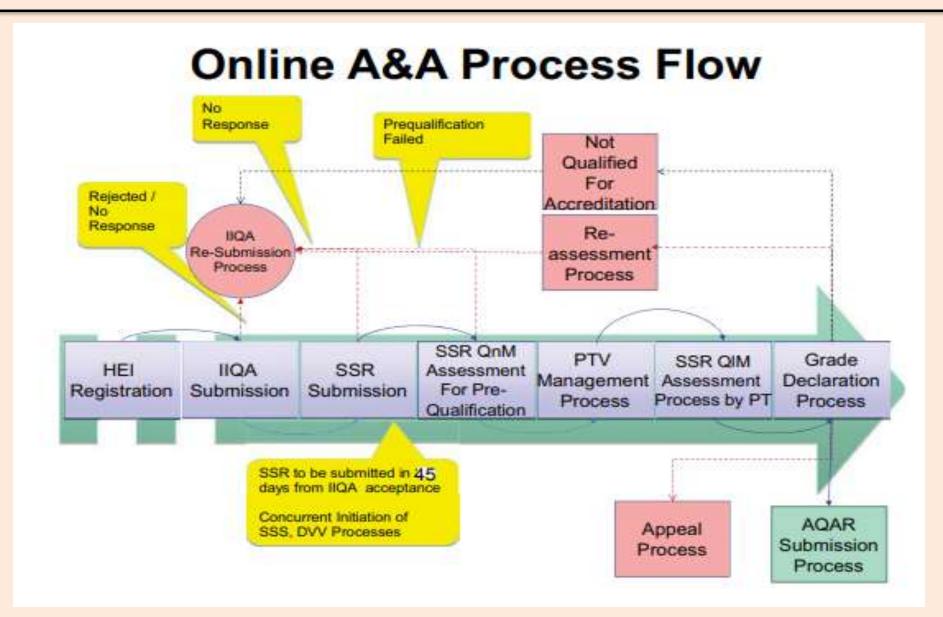
Advantages of NAAC Accreditation

- ✓ SWOT Analysis
- ✓ Resources Planning Physical, Human, Finance
- ✓ Funding Opportunities
- ✓ Process Improvement
- ✓ Recognition / Branding

NAAC Acronyms

	J	
■ A&A	Assessment and Accreditation	
AAA	Academic and Administrative Audit	
• HEI	Higher Education Institution	
IQAC	Internal Quality Assurance Cell	
IIQA	Institutional Information for Quality Assessment	
SSR	Self Study Report	
SSS	Student Satisfaction Survey	
DVV	Data Verification and Validation	
PTV	Peer Team Visit	
AQAR	Annual Quality Assurance Report	
 QnM, QlM 11/4/2020 	Quantitative Metrics, Qualitative Metrics	5

NAAC A&A Process



Present Status

TCE completed NAAC Cycle 1 A&A by **March 2019**

❖ Scored A+ Grade (3.47 in 4.0 Scale)

Valid upto 27-Mar-2024



National Assessment and Accreditation Council on the recommendation of the duly appointed Peer Jeam is pleased to declare the Thiagarajar College of Engineering Madurai, affiliated to Anna University, Jamil Xadu as Accredited with CSPI of 3.47 on seven point scale at A grade valid up to March 27, 2024













Present Status

- Completed AAA by Nov 2019
- ❖ Completed 2nd & 3rd IQAC Meetings by Feb 2020, Oct 2020
- Due for AQAR submission for the years 2018-19, 2019-20

- AQAR 2018-19 submission by Nov 30, 2020
- AQAR 2019-20 submission by Mar 31, 2021

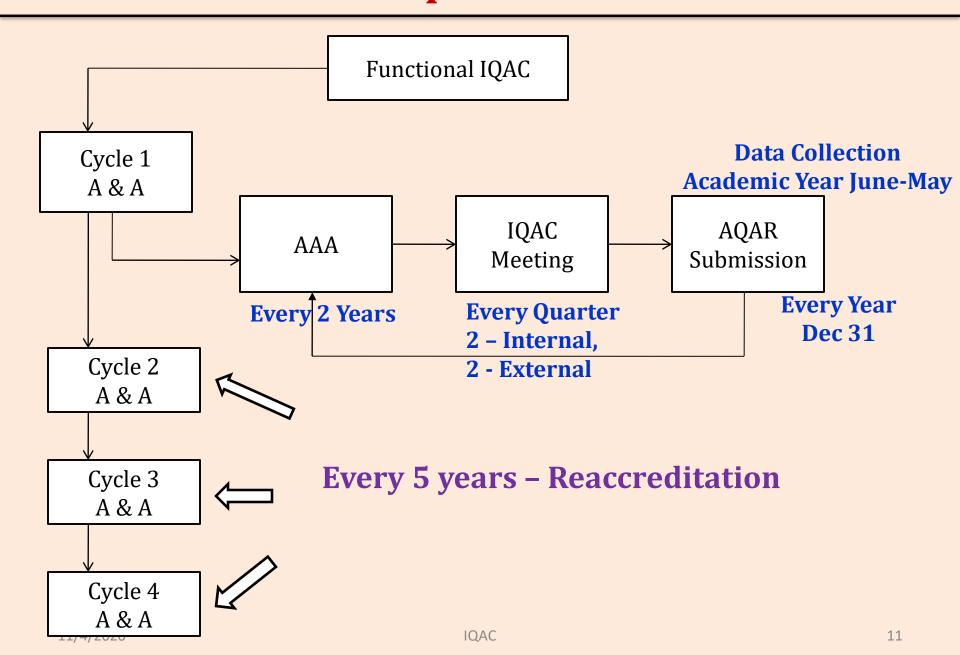
NAAC Criteria (Autonomous Colleges)

Criteria	Weights
Curricular Aspects	150
Teaching, Learning & Evaluation	300
Research, Innovations and Extensions	150
Infrastructure and Learning Resources	100
Student Support & Progression	100
Governance, Leadership and Management	100
Institutional Values and Best Practices	100

NAAC Criteria Score – Cycle 1 A&A

Criteria	Score (out of 4.0)
Curricular Aspects	3.8
Teaching, Learning & Evaluation	3.3
Research, Innovations and Extensions	3.78
Infrastructure and Learning Resources	3.47
Student Support & Progression	3.11
Governance, Leadership and Management	3.4
Institutional Values and Best Practices	3.16

NAAC Continuous Improvement Process



IQAC Objectives

 To develop a system for conscious, consistent and catalytic action to improve the academic and administrative performance of the institution

• To promote measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices

IQAC Committee Members

Dr. S.Mercy Shalinie,Principal, IQAC Chairman

Dr.M.Palaninatha Raja,Dean Planning and Development
IQAC Director

Dr.K.Chockalingam Registrar

Prof.S.Sivakumar,Controller of Examinations

Dr.G.Kumaraguruparan
Dr.S.Karthikeyan
Dr.N.Chithra
Dr.R.Medeswaran
Dr.A.M.Abirami
Quality Systems Group Members

Ms. C. Shanmugaselvi (18E099) Student Representative **Dr.D. Pandiaraja,** (Nominee – Management) Principal, Thaiagarajar Arts College

Prof. R.Mahadevan (Nominee – Stakeholder) Principal Advisor, Aassan Educare Foundation

Dr.S.RajaMohan, (Nominee – Local Society) Managing Director, EnviroCare

Mr.Satyanarayana, (Nominee – Employers) University Relationship Manager, Honeywell, Madurai

Mr.Deepak Jeyapal, (Nominee – Industry) Asst. General Manager, TVS SriChakra Ltd.

Er.S.Ramachandran, (Nominee – Alumni) Managing Director, Renold Chain India Ltd.

NAAC Criteria Score – High / Low score

Mostly ALL sub-criteria scored >= 3

Criteria	Description	Score (out of 4)
2.1.2 (QN)	Demand Ratio	2
2.5.2, 2.5.3 (QN)	, 11	
3.1.3 (QN)	international fellowship for advanced studies/ research	2
3.4.6 (QN)	Books and chapters, National/international conference	1
	proceedings	
5.1.4 (QN)	Students benefited by Career Guidance cell	2
5.2.3 (QN)	5.2.3 (QN) Students qualified in Competitive examinations	
5.3.1 (QN)	National/International Sports/Culturals (Revised to inter-university/state/national/)	2
6.5.3 (QN)	Quality Initiatives taken	0
7.1.7 (QN)	Green Practices	2
7.1.9 (QN)	Differently abled (Divyangjan) Friendliness Resources	2
7.1.18 (QN) National festivals and birth / death anniversaries of the great Indian personalities		2

Key Process Areas (KPAs)

NAAC Criteria	TCE KPAs
Curricular Aspects	Academics
Teaching, Learning & Evaluation	Administration (Students, Faculty), Academics, CoE
Research, Innovations and Extensions	R&D, Industry Interface, Extra-Curricular Activities (NCC, NSS)
Infrastructure and Learning Resources	Infrastructure and Maintenance, Library, IT Infrastructure, Finance
Student Support & Progression	Scholarship, Placement, Career Guidance, Higher Studies, Sports, Cultural, Alumni
Governance, Leadership and Management	Strategic Planning, Faculty Development, Finance Utilization, IQAC functionalities, Quality Initiatives
Institutional Values and Best Practices	Gender Equity, Human values, Professional Ethics practices, Energy/Water conservation, Green

Practices, etc

NAAC - Criteria, Key Indicators, Metrics

Type of HEIs	Autonomous Colleges
Criteria	7
Key Indicators (Kis)	34
Qualitative Metrics (QlM)	35
Quantitative Metrics (QnM)	72
Total Metrics	107

TCE KPIs - Measures - Administration

S.N	Measures	Target
	Faculty Cader Ratio	
	Number of Faculty having degree PhD and above	
	Number of awards/recognitions from National Agencies	
Faculty	Number of FDPs orgsanised /Revenue Generated	
	Number of FDPs attended by faculty	
	Number of faculty awards/recognitions from international Agencies	
	Faculty Performance Appraisal	
	Number of Other State Students	
	Number of Economically Challenged Students	
	Number Socially Challenged Students	
	Number of Male/Female Students	
Students	Number of Students Admitted	
	Number of Lateral Entry Students Admitted	
	Number of Students getting TCs	
	Number of Students getting reAdmissions	
	Number of Students getting Scholarships (Govt, private, management)	
Finance	Utilised Amount for the Capital expenditure	
11/4/2020	Utilised Amount for the Operational Expenditure	17

TCE KPIs - Measures - Academics

S.N	Measures	Target
1	Number of Programme Core courses offered	
2	Number of Programme Elective Courses offered	
3	Number of Faculty using ICT Tools for the course	
4	Numberof Students participated in self learning	
5	Number of absentees in CAT	
6	Number of student Projects (Category-wise)	
7	Number of students getting pass % in CA	
8	Number of students passed in semester/year without any backlogs	
9	Number of students passed in semester/year with backlogs	
	Number of students appeared for the examinations (at the end of Third	
10	Semester)	
11	Number of students graduated in minimum stipulated time	
12	Number of Students benefited by Slow learners program	
1311	/Student Feedback	18

TCE KPIs - Measures - CoE

<u>S.N</u>	Description	Target
1	Number of Students registered for the recent semester exam	
2	Number of absentee in the recent Semester exam	
3	Number of Revaluation applications received	
4	Number of students getting Changes in Results	
5	Number of students applied for A&G	
6	Total number of students registered for the exam <for past="" three="" years=""></for>	
7	Total number of students passed in minimum stipulated time <for past="" three="" years=""></for>	
8	Percentage of deviation in Exam calendar	
9	Number of Students registered for the supplementary exam	
10	Number of Students absent for the supplementary exam	
11	Number of students getting Pass in the Supplementary Exam	
12	Number of Private students registering for the Exam	
13	Number of Private students Passing in the Exam	

TCE KPIs - Measures - R&D

S.N	Measures	Target
1	Number of recognized doctoral research supervisors	
2	Number of PhD scholars registered	
3	Number of PhD scholars graduated	
4	Number of recognized conference publications (SCOPUS indexed)	
5	Number of Research publications collaborated with industry experts	
6	Number of recognized journal publications (SCOPUS, WoS, SEI indexed, etc)	
7	Number of Books/Chapter publications, editions	
8	Department h-index, Top Citations	
9	Number of reviewers in recongnized Journals	
10	Number of Project proposals submitted	
11	Number of Project proposals granted	
12	Number of Interdisciplinary Projects Applied/Granted	
13	Sanctioned Amount of Sponsored Projects from Industries/Govt Agencies	

TCE KPIs - Measures - III

S.N	Measures	Target
1	Number of Students registered for the Industry supported courses offered	
2	Number of MoUs signed	
3	Number of Industry Supported Laboratories	
4	Number of Industry experts involved	
5	Number of Industry Supported Events organized	
6	Number of students involved internship programmes	
7	Revenue generated from Testing	
8	Revenue generated from Consultancy Projects	
9	Number of Patents filed	
10	Number of Patents published	
11	Number of Patents granted	
12	Number of Programmes/Events organized by Professional Society Chapters	
13	Number of Entrepreneurs and incubatees	
14	Number of Programmes/Events organized by EDC	

TCE KPIs - Measures - Students

S.N	Measures	Target
1	Number of intra-department programme organized	02 p.s.
2	Number of inter-department programme organized	08 p.a.
3	Number of awards/prizes won in National events/programmes/hackathons	1 per SIG p.s.
1	Number of awards/prizes won in international events / programmes / hackathons	2 7 2
5		2 p.a.
6	Number of programmes organized by Career Guidance Cell Number of students appeared for Competititve examinations - GATE,GRE,IAS	6 p.a. GATE: 75% students; GRE: 10 % students; IAS/IES:20% students
7	Number of students qualified by Competititve examinations - GATE,GRE, IAS	GATE: 50% students; GRE: 5 % students; IAS/IES:10% students
8	Number of programmes organized by Women Development Cell	3 p.s.
9	Number of students counselled by Counselling Cell	3 p.s.
10	Number of students getting Lack of attendance or Condonation per course	0%
11	Number of students involved in malpractices and misbehaviours	0%
12	Number of Tutor-Ward Meetings, Class committee meetings	TW meeting: 3 p.s.; CC meeting: 2 p.s.
13	Number of students attended the Foregin language certification courses offered	TOEFL; BEC; IELTS & GERMAN : 20% of the students
14	Number of students qulaified in Forien languages	15% students
15	Number of students got admission for Higher studies abroad	10 % students
16	Number of students got higher studies in India	10% students

11/4/2020 IQAC 22

TCE KPIs - Measures - ECA

S.N	Measures	Target
1	Number of NCC events organized	
2	Number of NSS events organized	
3	Number of Sports events organized	
4	Number of Cultural events organized	
5	Number of students won national level prizes/awards	
6	Number of students won international level prizes/awards	
7	Number of Societal programmes organized (Unnath Abhiyan)	

TCE KPIs - Measures - PAD

Quality Systems

1	Percentage of Deviations in Calendar Activities	5%
2	Number of Quality Initiatives taken	2 per Functional Domain
3	Number of Quality Awards, Programme/Institute Accreditations	

Alumni Interaction

S.N	Measures	Target
1	Number of Alumni doing Higher studies in reputed Universities	5% p.a.
2	Number of Alumni Interactions Programmes organized	40
3	Scholarship Amount and the beneficiary	Rs. 10 Crore / 500 Students

National and International Relations

S.N	Measures	Target
1	Number of National Level Exchange programmes (Students)	0
2	Number of National Level Exchange programmes (Faculty)	One program per department
3	Number of international Level Exchange programmes (Students)	per year
4	Number of International Level Exchange programmes (Faculty)	

NAAC vs NBA

NAAC	NBA
Institutional Accreditation	Programme Accreditation
IIQA Submission	Pre-Qualifier Submission
Part A – Institute Information	Part A – Institute Information
C1 – Curricular Aspects	C1 – Vision, Mission and PEOs
C1 – Curricular Aspects	C2 – Programme Curriculum, Teaching and Learning Process
C2 - Teaching, Learning & Evaluation	C2 – Programme Curriculum, Teaching and Learning Process C4 – Student Performance C8 – First Year Academics
C2 - Teaching, Learning & Evaluation => C 2.6, C 2.7	C3 – Course Outcomes and Programme Outcomes
C3 - Research, Innovations and Extensions	C5 – Faculty Information and Contributions

NAAC vs NBA

NAAC	NBA
C4 - Infrastructure and Learning Resources	C6 – Facilities and Technical Support
C5 - Student Support & Progression	C4 - Student Performance C9 - Student Support Systems
C6 - Governance, Leadership and Management	C10 – Governance, Institutional Support and Financial Resources C5 – Faculty Information and Contributions
C7 - Institutional Values and Best Practices	
	C7 – Continuous Improvement

Benchmarking - Autonomous Colleges (Engg)

- B.M.S.COLLEGE OF ENGINEERING Bengaluru, (Second Cycle) 3.83
- Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology, Nizampet, Hyderabad (Second Cycle) 3.73
- Bansilal Ramnath Agarwal Charitable Trust's Vishwakarma Institute of Technology, Pune (Second Cycle) 3.53
- Dr. Mahalingam College of Engineering and Technology, Udumalai Road, Makkinaickenpatti Post, Pollachi (Second Cycle) – 3.53

Benchmarking - Universities

- •Koneru Lakshmaiah Education Foundation, Guntur (Second Cycle) 3.57
- •Jawaharlal Nehru University, Delhi (Second Cycle) 3.77
- •Jawaharlal Nehru Centre for Advanced Scientific Research Bengaluru (First Cycle) 3.76
- •Indian Institute of Science, Bengaluru (First Cycle) 3.67
- •Lakshmibai National Institute of Physical, Gwalior (Second Cycle) 3.79
- •Institute of Chemical Technology, Mumbai (First Cycle) 3.77
- •BANASTHALI VIDYAPITH, Rajasthan (THIRD CYCLE) 3.63
- •SRM Institute of Science and Technology, Kancheepuram (Third Cycle) 3.55
- •RAMAKRISHNA MISSION VIVEKANANDA EDUCATIONAL AND RESEARCH INSTITUTE, Howrah, (First Cycle) 3.66

The Way Forward

- Structuring IQAC Activities by Benchmarking with A++ Institutes/Universities
- Strengthening the Measurement System (Metrics Analysis)
- TCE Quality Indicators Dashboard
- Improvement in NIRF Ranking
- NBA Site visit expected for BTech IT & BE Mechatronics NBA SAR Submissions by Civil, Mechanical, EEE, ECE (2021)

NAAC Grading System

Institute CGPA	Letter Grade	Status
3.51 – 4.00	A++	Accredited
3.26 – 3.50	A+	Accredited
3.01 – 3.25	A	Accredited
2.76 – 3.00	B++	Accredited
2.51 – 2.75	B+	Accredited
2.01 – 2.50	В	Accredited
1.51 – 2.00	С	Accredited
<=1.50	D	Not Accredited



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WHERE QUALITY AND ETHICS MATTER