

NATIONAL ENGINEERING COLLEGE, K.R.NAGAR, KOVILPATTI
(An Autonomous Institution – Affiliated to Anna University Chennai)

INTERNAL QUALITY ASSURANCE CELL – REVIEW MEETING

Date: 03/08/2019

Time: 11.00 A.M

Venue: Conference Hall of the Administrative Block

AGENDA

- ☞ WELCOME ADDRESS
- ☞ Confirmation of Minutes of 15th IQAC Meet
- ☞ QUALITY BENCH MARKS
 - ✓ ACADEMIC PERFORMANCE
 - ✓ 100% CAREER SETTLEMENT
 - ✓ HIGH QUALITY RESEARCH
 - ✓ INDUSTRY ENGAGEMENT
 - ✓ OUTREACH PROGRAMMES
 - ✓ STUDENT POTENTIAL TRANSFORMATION
 - ✓ INFRASTRUCTURE
- ☞ ANY OTHER MATTER
- ☞ VOTE OF THANKS

NATIONAL ENGINEERING COLLEGE, K.R.NAGAR, KOVILPATTI - 628 503

(An Autonomous Institution Affiliated to Anna University, Chennai)

INTERNAL QUALITY ASSURANCE CELL (IQAC)

Minutes of External Peer Review Meeting

Date: 03.08.2019

The External Peer Review meeting for Internal Quality Assurance Cell (IQAC) was held on 03.08.2019, 11.00 AM at Conference Hall. Recently, the IQAC has constituted an external peer review team with the following members to assess the performance of the college. The review members visited our college on 03-08-2019 and has conducted peer review on 03-08-2019.

1. Prof. Dr. K. Narashiman Ph.D
Director
AU TVS Centre for Quality Management
Anna University,
Chennai – 600 025.
2. Mr. R. Mahadevan
Principal Advisor,
Aassaan Educare Foundation,
Chennai

The IQAC has formulated the following quality enhancement strategies and external peer review team has evaluated the quality enhancement strategies.

1. **Academic Performance**
2. **100% career settlement**
3. **Higher quality research**
4. **Industry engagement**
5. **Outreach programmes**
6. **Students potential transformation**

Principal welcomed the external review members, and Internal IQAC members and pointed out that, NEC Benchmarks has been formulated for the enhancement of quality of the institution. The IQAC coordinator presented the Quality Enhancement Benchmarks for academic departments: Academic Performance, Career settlement, High quality research and industry engagement, Student Potential Transformation and Students Achievements.

1. ACADEMIC PERFORMANCE

1.1 PASS PERCENTAGE OF GRADUATING STUDENTS FOR 2018-19

Sl.No	Name of Department	No. of students enrolled	No. of students passed	Target	Attained
1.	Mechanical	145	116	90%	80.00 %
2.	ECE	121	109	90%	90.08 %
3.	CSE	118	106	90%	89.33 %
4.	EEE	141	127	90%	90.07 %
5.	EIE	56	51	90%	91.07 %
6.	CIVIL	66	63	90%	95.45 %
7.	IT	55	52	90%	94.54 %

1.2 PASS PERCENTAGE OF PASSED OUT STUDENTS FOR LAST 3 YEARS

Sl.No	Name of Department	Pass Percentage of Passed out students (2018-19) (%)	Pass Percentage of Passed out students (2017-18) (%)	Pass Percentage of Passed out students (2016-17) (%)
1.	Mechanical	80.00	78.62	76.43
2.	ECE	90.08	79.70	82.14
3.	CSE	89.33	76.86	86.00
4.	EEE	90.07	86.33	81.34
5.	EIE	91.07	90.74	90.62
6.	CIVIL	95.45	92.65	86.56
7.	IT	94.54	89.29	90.00
AVERAGE		90.07%	84.88%	84.73%

1.3 PERCENTAGE OF ADMISSION FOR LAST 3 YEARS

Sl. No	Name of Department	% of Admission (2018-19) (%)	% of Admission (2017-18) (%)	% of Admission (2016-17) (%)
1.	Mechanical	91.67	100	100
2.	ECE	93.33	100	94.44
3.	CSE	95	100	87.50
4.	EEE	72.50	99.17	100
5.	EIE	45	85	81.94
6.	CIVIL	95	93.33	95.83
7.	IT	83.33	100	80.56
AVERAGE		82.26 (%)	96.79 (%)	91.47(%)

2. 100% CAREER SETTLEMENT

SHORT TERM GOALS

S.G.1: 80% STUDENTS' PLACEMENTS WITH MEDIAN SALARY PER ANNUM RS.2-3 (LAKHS).

S.G.2: 10% OF STUDENTS PURSUING HIGHER STUDIES.

S.G.3: 5% OF ENTREPRENEURSHIP.

2.1.1 STUDENTS' PLACEMENTS IN 2018-19

S. No.	Name of Department	Total No. students	No. of students Placed	Target	Attained
1.	MECH	144	99	80%	69%
2	ECE	145	114	80%	79%
3.	CSE	121	93	80%	77%
4.	EEE	118	96	80%	81%
5.	EIE	55	44	80%	80%
6.	IT	56	48	80%	85%
7.	CIVIL	66	42	80%	64%

2.1.2 MEDIAN SALARY IN 2018-19

S. No.	Name of Department	Target (In Lakhs)	Attained (In Lakhs)
1.	MECH	2.5	1
2	ECE	3	3.3
3.	CSE	3	2.69
4.	EEE	3	2.4
5.	EIE	2.5	1.8
6.	IT	2	1.86
7.	CIVIL	2	1.32

2.2 PERCENTAGE OF STUDENTS PURSUING HIGHER STUDIES

S. No.	Name of Department	Total No. of students	Number of students enrolling into higher education	Target	Attained
1.	MECH	144	17	10%	12%
2	ECE	145	8	10%	6%
3.	CSE	121	4	10%	3%
4.	EEE	118	9	10%	8%
5.	EIE	55	6	10%	11%
6.	IT	56	5	10%	9%
7.	CIVIL	66	17	10%	26%

2.3 Entrepreneurship

S. No.	Name of Department	Total No. of students	No. of Students became Entrepreneurs	Target	Attained
1.	MECH	144	9	5%	6 %
2	ECE	145	4	5%	3
3.	CSE	121	1	5%	1%
4.	EEE	118	1	5%	1%
5.	EIE	55	2	5%	4
6.	CIVIL	66	2	5%	3 %

3. HIGHER QUALITY RESEARCH

SHORT TERM GOALS

S.G.1: Qualification – At least 25% of faculty to be with Ph.D. and recognized as supervisors.

S.G.2: Academic Research – 40% of the faculty with High IF Journal publication; at least 2 Full time Ph.D. Scholars with fellowship / JRF/SRF

S.G.3. Ongoing R&D projects worth Rs.15 Lakhs

3.1 Percentage of faculty with Ph.D

S. No.	Name of Department	Total No. of faculty	No. of faculty with Ph.D.	Target	Attained
1.	Mechanical	34	11	25%	33%
2	ECE	30	08	25%	27%
3.	CSE	30	07	25%	23%
4.	EEE	32	10	25%	31%
5.	EIE	17	07	25%	41%
6.	IT	17	06	25%	35%
7.	CIVIL	13	01	25%	8%
8.	S & H	36	10	25%	28%

Percentage of Supervisors

S. No.	Name of Department	No. of faculty with Ph.D.	No. of Supervisors	Target	Attained
1.	Mechanical	11	09	100%	82 %
2	ECE	08	05	100%	63%
3.	CSE	07	03	100%	43%
4.	EEE	10	07	100%	70%
5.	EIE	07	05	100%	71%
6.	IT	06	04	100%	67%
7.	CIVIL	01	01	100%	100%
8.	S & H	10	6	100%	60%

3.2 % of faculty having high quality publications

S. No	Name of Department	No of High quality Publications	No. of faculty having high quality publications	Total No. of faculty	Target	Attained
1.	Mechanical	10	10	34	40%	29 %
2	ECE	13	4	30	40%	13%
3.	CSE	8	8	30	40%	27%
4.	EEE	12	10	32	40%	31%
5.	EIE	3	4	17	40%	24%
6.	IT	9	5	17	40%	29%
7.	S & H	2	2	36	40%	6%

3.3 Full Time Ph.D Scholars with Fellowship

S. No.	Name of Department	Target	Attained	With Fellowship/ JRF/SRF
1.	Mechanical	2	2	Fellowship- 1
2.	ECE	2	2	-
3.	CSE	2	4	Institutional Research Fellow (IRF) -2
4.	EEE	2	1	--
5.	IT	2	3	Fellowship- 2

Institution H – Index – 36; Faculty H-Index ranges from 2 To 17

4. INDUSTRY ENGAGEMENT

SHORT TERM GOALS

S.G.1: Setting up of industry supported facilities in each department.

S.G.2: Signing of MoU with Industries and Mutual benefits.

S.G.3: Providing consultancy services for industrial problems

There are 4 Incubation Center are initiated in this year, 14 MOUs are signed and 6 consultancy works are underging and through, this revenue generated is Rs.6,95,000. The incubation centre is established for the students for undergoing in-house internships by providing infrastructure, computing facilities and internet facility etc.

4.1 TECHNOBATION CENTRES IN EACH DEPARTMENT IN 2018-19

S. No.	Name of Department	Target	Attained
1.	Mechanical	1	1
2.	ECE	1	1
3.	CSE	1	1
4.	IT	1	1

DETAILS OF TECHNOBATION CENTRES in 2018-19

Sl. No	Specialization	Facility Created	Name of Industry	STUDENTs BENEFITED
1	Mechanical	CDIO Lab	Apex Design Centre, Coimbatore	69
2	CSE	AJ & J Tech Product Development Lab	AJ & J Tech Solutions Pvt., Ltd, Bangalore	04
		Sum Two Technologies Innovation Centre	Sum Two Technologies Pvt. Ltd., Chennai	66
		Adroit Innovation Centre	Adroit Soft India Pvt. Ltd., Chennai	13
3	ECE	NECE-Nanolitho Design Centre	Nanolitho Technologies Pvt. Ltd., Bengaluru	11
		Qassure Technologies Incubation Centre	Qassure Technologies, Singapore	10
4	IT	Bizplus Product Development Lab	Bizplus Services, Chennai	12

4.2 MoU SIGNED IN EACH DEPARTMENT IN 2018-19

S. No.	Name of Department	Target (No.of MoUs)	Attained (No.of MoUs)
1.	Mechanical	2	2
2.	ECE	2	5
3.	CSE	2	3
4.	EEE	2	1
5.	EIE	2	1
6.	IT	2	1
7.	CIVIL	2	1

DETAILS OF MOU SIGNED IN 2018-19

Sl. No	INDUSTRY	DATE OF MoU SIGNED	MoU Period	PURPOSE
1.	M/s. Bizplus Services, Chennai, Taminadu	04.12.2016	3 YEARS	To provide training to incubates and to support R&D activities in the area of cloud, IoT and artificial intelligence
2.	M/s. IELEC Systems, Tirunelveli	02.02.2017	2 YEARS	Conducting workshop Embedded System using ARM
3.	M/s. Tessolve Semiconductors Pvt. Ltd., Bengaluru	17.03.2017	2 YEARS	Student training and placement in Semiconductor Chip Testing
4.	M/s. Mitrah Soft Software Solutions, Kovilpatti, Tamilnadu	01.08.2017	2 YEARS	To support startups on software development in the area of web services and web technology
5.	M/s. BS Tecknology Pvt. Ltd., Madurai, Tamilnadu	07.09.2017	2 YEARS	To create entrepreneurs and to develop innovative solutions through web development and software development
6.	M/s. JiJi Technologies Pvt. Ltd, Tirunelveli	04.09.2017	2 YEARS	Academic Interaction and collaboration
7.	M/s. Nanolitho Technologies Pvt. Ltd., Bengaluru	27.09.2018		Student training and placement in Analog IC Layout Design
8.	M/s. Recodem Software Solutions, Chennai	21.02.2018	2 YEARS	Internship cum Placement
9.	M/s. Digital Shark Technologies, Bengaluru	28.03.2018	1 YEAR	Student Internship and Faculty Training
10.	M/s. Shree Abirami Engineering Works, Chennai	06.06.2018	1 YEAR	Internship and In-plant training for Student, Industry Know How for Faculties, Placement
11.	M/s. AJ & J Tech Solutions Pvt. Ltd., Bengaluru	05.11. 2018	1 YEAR	Internship cum Placement
12.	M/s. QASSURE Technologies, Singapore	07.12.2018	1 YEAR	Student training and placement
13.	M/s. CADD Technologies	04.01.2019	2 YEARS	Training programme and placement
14.	M/s Siemens Center of Excellence in Manufacturing, NIT,Trichy	19.03.2019	2 YEARS	Internship cum Placement

4.3 CONSULTANCY PROJECTS IN EACH DEPARTMENT IN 2018-19

S. No.	Name of Department	Target	Attained
1.	Mechanical	3 Lakhs	2.75 Lakhs
2.	CSE	3 Lakhs	3.6 Lakhs
3.	EEE	3 Lakhs	0.76 Lakhs
4.	CIVIL	3 Lakhs	0.3 Lakhs

DETAILS OF CONSULTANCY PROJECTS in 2018-19

Sl. No	Name of the Consultant (s) department	Name of Consultancy project	Consulting / Sponsoring Agency	Revenue generated (amount in Rs)
1.	Mechanical Engineering	Solution for Design issues in the dust test chamber	CM EnviroSystems Pvt Ltd., Bangalore	Rs.2,50,000/-
		Hot air seiling methodologies for woven sack	Veubro polymers, Erode	Rs.25,000/-
2.	CSE	Services in the area of Intelligence	TATA Power Strategic Engineering Division	Rs. 3,60,000/-
3.	Electrical and Electronics Engg.	Design and Development of Filter Shaker	Apex Design Center, Coimbatore	Rs. 50,000.00
		Analysis of Output Torque of Gear Reduction and VFD	Apex Design Center, Coimbatore	Rs. 25,000.00
		Excel Hydro Pneumatics (India), Nanguneri, Tirunelveli and others	Electrical with stand test and megger	Rs. 6,000 /-
4.	Civil Engineering	Ramco Cements Ltd & Air voice Telesystems and Infrastructure Private Limited	To determine Soil bearing capacity, Compressive Strength Test-Concrete cube	Rs.30,550/-

5. OUTREACH PROGRAMMES

SHORT TERM GOALS

S.G.1. One National Level participation by faculty in GIAN / NIT / IIT / IISC / Anna University / GOVT Institutions

S.G.2. Undergoing Industrial Training Once in two Years

In this academic year, 102 faculty members have attended GIAN courses/ FDP/STTP in IITs / NITs / IISc / AU /Govt / Other colleges and 98 faculty have undergone the “Industry know how” program in various industries in 2017-18 & in 2018-19. Institution has adopted 5 villages under “Unnat Bharat Abhiyan” scheme; through this scheme, students are taking surveys for finding out their social relevancy problems in day-to-day life and trying to provide the solutions for them;

5.1 GIAN / NIT / IIT / IISC / ANNA UNIVERSITY / FDP / STTP ATTENDED BY FACULTY

S. No.	Name of Department	No. of Faculty Attended the Courses			
		GIAN / IIT / NIT / IIS	AU / Govt. Colleges	Other Colleges	Industrial Training (2017-18 & 2018-19)
1.	Mech	5	2	4	19
2	ECE	10	2	0	17
3.	CSE	15	5	2	20
4.	EEE	15	1	5	28
5.	EIE	4	9	--	07
6.	CIVIL	2	--	4	--
7.	IT	9	1	2	7
8.	S & H	2	1	6	--

FDP / STTP ATTENDED BY FACULTY IN 2018-2019

S. No.	Name of Department	Total No. of faculty	No. of faculty Attended FDP	Target	Attained
1.	Mechanical	34	11	100%	33%
2	ECE	30	12	100%	40%

3.	CSE	30	22	100%	73%
4.	EEE	32	21	100%	66%
5.	EIE	17	13	100%	76%
6.	IT	17	12	100%	71%
7.	CIVIL	13	6	100%	46%
8.	S & H	36	9	100%	25%

INDUSTRIAL TRAINING ATTENDED BY FACULTY IN 2018-2019

S. No.	Name of Department	Total No. of faculty	No. of faculty Attended Industrial training	Target	Attained
1.	Mechanical	34	19	100%	56%
2.	ECE	30	17	100%	57%
3.	CSE	30	20	100%	67%
4.	EEE	32	28	100%	88%
5.	EIE	17	7	100%	41%
6.	IT	17	7	100%	41%

6. STUDENT POTENTIAL TRANSFORMATION

SHORT TERM GOALS

S.G.1. Student's participation in IIT's/NIT's, Government Institutions and Private institutions.

S.G.2. Prize achievements by students in various events.

742 students have attended workshops, seminars and symposiums in IITs/NITs, GOVT/Aided Institutions. There are 297 students have attended in plant Training and 366 students have undergone Internship Training. Also, 132 academic activities, 41 co-curricular activities and 61 social awareness are conducted in this year.

6.1 Student's participation in IIT's/NIT's, Government Institutions and other

S. No.	Name of the Institution	No of students attended
1.	IIT/NIT, Trichy/MHRD and Dept of Higher Education/PMO-IEDP	476
2.	GOVT/Aided Institutions	75
3.	Other Institutes	191
Total		742

Prize achievements by students in various events.

1. EIE student represented India in **Falling Walls 2018, Germany** organized by DAAD – German Academic Exchange Service and German House for Research & Innovation.
2. 6 UG students of ECE Participated in Final round of **Smart India Hackathon 2018** & Recognized as Hardworking Team
3. 4 Students of **Mechanical Engineering** have participated in **MSMETHON 2019** & Secured **First Prize** in design.
4. Isaimuhil.H, Sivaram.B, Thanga Selvam.S, Ajith Kumar.K, Raakesh.I.V, Ganapathy Raman.I of III Year EIE have participated and won the first prize in Aero Engineers World at **Aeronautical Society of India, Bangalore** during 18.01.2019 & 19.01.2019.
5. B.Arunraj, K.P.Sivasankaran, T.Yuvaraja and T.Vigneshwaran (Third year students) have participated in **MSMETHON'19** from 30.01.2019 to 02.02.2019 and secured **FIRST RANK** in design (Portable solar water purifier).

Social awareness activities conducted in 2018-19

Sl. No	Title of the Activities	Organizing unit	Number of teachers coordinated in such activities	Number of students participated in such activities
1.	NSS Special Camp	NSS	2	100
2.	Eye Medical Camp at Aravind Eye Hospital, Tirunelveli	NSS	2	65
3.	Blood Donation Camp	NSS	1	101
4.	CATC camp @ Kovilpatti	NCC	2	7
5.	CATC-CUM Camp @ NTA, Idayappatti, Madurai	NCC	2	5
6.	AAC @ 4 ENGRS REGMT, Secunderabad	NCC	2	4
7.	Swachh Bharath Awareness @ NEC & KPT Village	NCC	2	51

8.	Indhradhanush Awareness Program @ Ettayapuram	NCC	2	30
9.	Medical Awareness Camp @ Kovilpatti	NCC	2	25
10.	NIC-II @ SILCHAR	NCC	2	6
11.	RDC TRG-II Camp @ New Delhi	NCC	2	1
12.	RDC Training Camp @ New Delhi	NCC	2	1
13.	Youth Day Celbration - Outdoor Skill Practice Camp @ Manimuthar	NCC	2	61
14.	NCC C-Certificate Exam @ St.John's College, Tirunelveli	NCC	2	11
15.	NCC Cycle Rally – “Clean India & Water Conservation” – 150 Kms	NCC	2	40
16.	Blood Donation camp at Kovilpatti Government Hospital	YRC	1	30+170

The review members appreciated NEC Benchmarks and they have given suggestions in the benchmarks towards the long term achievement. The following points are discussed in the meeting.

1. In the presentation, the coordinator mentioned that our institution is an Mentor institute under AICTE Margdarshan scheme. The review members asked about the role of the mentor institution. Principal stated that AICTE recognized our institute as mentor institute and our faculty members have undergone training under this scheme.
2. In the action taken report for the previous academic year of IQAC meeting, the review members suggested to include quantitative data about the action taken which includes the date, faculty involved, and outcome/number of the students benefited.
3. The review members pointed out that the vision and mission of the department may be displayed inside the conference hall.
4. The review members appreciated the student mentoring system followed in our institution. Principal explained about student mentoring system that each faculty member is allotted with 20 students to monitor their, academic as well as personal activities. The mentor will maintain a record sheet for each ward. The record sheet contains all information concerning the students 'attendance, marks obtained in the university examinations, monthly tests, achievements if any in curricular, co-curricular and extra-curricular activities and disciplinary proceedings if any taken against the student.
5. The coordinator presented about the current status of the NAAC accreditation is B++. The review members pointed out that the institution is having all the facilities with funded projects, High impact factor publications, excellent infrastructure, high potential faculty members and students. So, they recommended to apply for NAAC reaccreditation.

6. The review members appreciated the credit transfer system through online one credit courses. In this system, one three credit elective course is replaced by three one credit courses.
7. The review members suggested to apply DST and CSIR funding for department research centers.
8. Dean R&D explained the faculty incentive schemes to the review members. He pointed out that, faculty who published their research findings in the reputed journal with impact factor of, $>1.5/ 0.5$ to $1.5/$ and < 0.5 are eligible for the incentive of Rs.10,000/, Rs.5000/ and Rs.2000 respectively.
9. The review members suggested that, periodical review meetings are to be conducted in all departments, to monitor the attainment towards their NEC Benchmarks.
10. The review members suggested that IQAC should be acted as nodal agency for coordinating the departmental quality activities and in each department, Quality Assurance team is to be established to monitor the activities.
11. The review members recommended to include quantitative data to highlight the attainment of activities
12. The review members suggested that, a manual should be clearly prepared and circulated among the faculty members and students regarding the Inplant training and Internship program.
13. The review members suggested the coordinator to compare the activities of the current academic year 2018 – 19 with the previous academic year to analyze the improvement of quality with quantitative data.

Principal expressed our hearty gratitude to external review members of IQAC for their valuable suggestions to improve the quality of our college in all the aspects. Director thanked review members and all the IQAC members for their effective involvement in the discussion session.

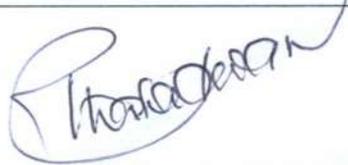
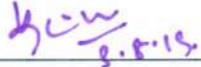
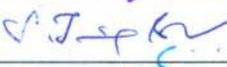
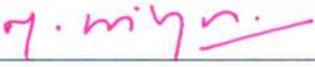
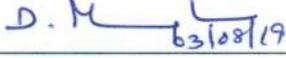
All the points discussed in the meeting were recorded. IQAC will inform and guide all the departments with the suggestions given by the members to achieve the short term goals. The progress in the achievement of each short term goal will be measured quarterly for every department by the IQAC team.

V. Kalish
03/8/19
Coordinator - IQAC
BP


3/8
PRINCIPAL


3/8/19
DIRECTOR

The following members attended the meeting

Members	Signature
<i>CHAIR PERSON</i>	
Dr.K.Kalaidasa Murugavel, Principal	
<i>Members from Management</i>	
Dr.S.Shanmugavel, Director	
<i>External Members</i>	
Dr.K.Narashiman, Director, AU TVS Centre for Quality Management, Anna University, Chennai	
Prof. R. Mahadevan Principal Advisor, Aasaan Educare Foundation, Chennai	
<i>Senior Teachers</i>	
Dr.V.Seenivasagam, Controller of Examinations	
Dr.S.Tamil Selvi, Prof. & Dean (Academics)	
Dr.K.G.Srinivasagan, Prof. & Dean (TCP)	
Dr.K.Manisekar, HOD / Mechanical	
Dr.A.Shenbagavalli, HOD / ECE	
Dr.V.Gomathi, HOD / CSE	
Dr.M.Willjuice Iruthayarajan, HOD / EEE	
Dr.D.Manimegalai, HOD / IT	
Dr.C.Puthiya Sekar, HOD / Civil	
Dr.I.Jackson Daniel, HOD / E&I	
Dr.M.A.Neelakantan, HOD / S&H	
<i>IQAC Coordinator</i>	
Dr.V.Kalaivani, Prof. / CSE	