NATIONAL ENGINEERING COLLEGE

(An Autonomous Institution, Affiliated to Anna University Chennai)

K. R. Nagar, Kovilpatti – 628 503

INTERNAL QUALITY ASSURANCE CELL

ANNUAL QUALITY ASSURANCE REPORT
2018 - 2019

Submitted to

National Assessment and Accreditation Council
Bangalore, India

CERTIFICATE

This is to certify that the Annual Quality Assurance Report 2018 - 19 forwarded to the National Assessment and Accreditation Council, Bengaluru is compiled from the data collected from the official records and is true to the best of our knowledge and belief.

IQAC COORDINATOR
(Dr.V.Kalaivani)

PRINCIPAL
(Dr.K.Kalidasa Mugavel)

CONTENTS

The Annual Quality Assurance Report (AQAR) of the IQAC

(For Autonomous Colleges)

Part – A

1.	Name of the Institution	:	**NATIONAL ENGINEERING COLLEGE** K.R.Nagar, Kovilpatti – 628 503
	Name of the Head of the institution	:	Dr.K.Kalidasa Murugavel, M.E., Ph.D.
	Designation	:	Principal
	Does the institution function from own campus	:	Yes
	Phone no./Alternate phone no.	:	04632-227441 / 04632-222502
	Mobile no	:	9442280227
	Registered Email	:	principal@nec.edu.in
	Alternate Email	:	iqac.nec@gmail.com
	Address	:	K.R.Nagar, Kovilpatti – 628 503, Thoothukudi Dist., Tamil Nadu
	City/Town	:	Kovilpatti
	State / UT	:	Tamil Nadu
	Pin Code	:	628 503
2.	Institutional Status	:	
	Autonomous Status *(provide the date of Conformant of Autonomous Status)*	:	23-05-2011
	Type of Institution	:	**Co-education**
	Location	:	**Rural**/~~Semi-urban/Urban~~
	Financial Status (please specify)	:	~~Grants in aid~~/ **UGC 2f and 12 (B)/ Self financing**
	Name of the IQAC Co-ordinator / Director	:	Dr.V.Kalaivani
	Phone no. /Alternate phone no.	:	04632 – 222502 / 9842637770
	Mobile	:	7010669672
	IQAC e-mail address	:	iqac.nec@gmail.com
	Alternate Email address	:	vkcse@nec.edu.in
3.	Website address Web-link of the AQAR: (Previous Academic Year)	:	https://nec.edu.in/wp-content/uploads/2018/07/AQAR-2017-18.pdf

4.	Whether Academic Calendar prepared during the year? if yes, whether it is uploaded in the Institutional website		Yes. Weblink: https://nec.edu.in/wp-content/uploads/2018/06/TENTATIVE-ACADEMIC-CALENDER-2018-19.pdf
5.	Accreditation Details	:	

Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1st	B	2.5	2014	21.02.2014 – 20.02.2019
1st Cycle Reassessment	B++	2.83	2017	22.02.2017 – 21.02.2022

6.	Date of Establishment of IQAC	:	06/06/2013
7.	Internal Quality Assurance System	:	IQAC Cell
7.1	Quality initiatives by IQAC during the year for promoting quality culture	:	

Item /Title of the quality initiative by IQAC	Date & duration	Number of Participants / beneficiaries
15th IQAC Meeting	16.02.2019	31
14th IQAC Meeting	07.07.2018	27
Interaction of Principal with the second and third year students to get the feedback regarding academic performance and other facilities provided to the students	03.10.2018 & 05.01.2019	42
Interaction with the final year students to get the feedback regarding academic performance and other facilities provided to the students	12.02.2019	42
Established MHRD – Institution Innovation Council	21.11.2018	All the students & Faculty members
ISO Certification	--	--
NBA Audit	23.02.2019	Mechanical, EIE & IT
Academic Quality Audit	05.12.2018 27.03.2019	Mechanical, ECE, EEE, EIE, CSE, IT & Civil
	11.01.2019	S&H
UGC on the spot inspection for the extension of Autonomous Status	09.03.2019 & 10.03.2019	--
NIRF Ranking		Rank - 166
Participated in CII Survey		Bagged Platinum

Note: Some Quality Assurance initiatives of the institution are:
(Indicative list)
- *Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback from all stakeholders collected, analyzed and used for improvements*
- *Academic Administrative Audit (AAA) conducted and its follow up action*
- *Online Learning Management System*
- *Transparency in evaluation system*
- *Participation in NIRF & NBA*
- *Academic Quality Audit*

8.	Provide the list of Special Status conferred by Central/ State Government UGC / CSIR /DST / DBT / ICMR / TEQIP / World Bank / CPE of UGC etc.				

	Institution / Department / Faculty	Scheme	Funding agency	Year of award with duration	Amount
	National Engineering College	DST – FIST (Level 0)	DST	2018	Rs. 43 Lakhs
		New generation innovation and Entrepreneurship development centre (NewGen IEDC)	NSTEDB & DST, New Delhi	2017-22	Rs.60 Lakhs
		NEC – Business Incubator Cell	MSME, New Delhi	2016-17	Rs.29.39 Lakhs

9.	Whether composition of IQAC as per latest NAAC guidelines *upload latest notification of formation of IQAC	:	Yes Web link - https://nec.edu.in/iqac/#about-IQA-cell
10.	No. of IQAC meetings held during the year	:	2
	The minutes of IQAC meeting and compliance to the decisions have been uploaded on the institutional website	:	Yes. Web link - https://nec.edu.in/iqac/#meeting-minutes
11.	Whether IQAC received funding from any of the funding agency to support its activities during the year?	:	No

12.	Significant contributions made by IQAC during the current year (maximum five bullets)

- Motivational activities have been initiated for students' start-ups.
- Webinar programs have been conducted for the students and faculty members by the industrial experts through MHRD Institution Innovation Council.
- Faculty members have been motivated and facilitated to attend faculty development training programs and workshops in NITs/ IITs/IISC and other reputed institutions.
- Faculty members and students have been motivated to undergo industrial Trainings in reputed industries of their core areas with the funding from the management.
- Students are motivated to develop new products by providing fund through NewGen IEDC.

13.	Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year

		PLAN OF ACTION	ACHIEVEMENTS / OUTCOMES
	i.	More than 75 percentage of the students should be placed with medium salary of Rs Four lakhs per annum	60 percentages of the eligible students are placed with an average salary of Rs Two and half lakhs per annum.
	ii.	More than 20 % of the students should get eligible scores in competitive examinations like GATE, Tofel, CAT, MAT, etc.,	2.5 % of students have got eligible scores in GATE, CAT and MAT exams.

	iii.	More than 3 % of the students should be motivated / trained to become an entrepreneur.	1.5 % of students have been motivated and became entrepreneurs.
	iv.	The average pass % of passed out students should be more than 90%.	The average pass % of passed out students in 2018-19 is 90%
	v.	Each department should have ongoing R&D projects worth > 15 lakh.	50% of the departments have ongoing R&D projects worth more than 15 lakh.
	vi.	Each department should have ongoing industrial consultancy work worth Rs. 3 lakh.	Mechanical, EEE, IT and Civil departments have ongoing industrial consultancy work of worth more than Rs.5.67 lakh.
	vii.	Faculties should be motivated to publish the research articles in high impact factor journals.	Totally 66 papers have been published in International journals with the impact factor ranging from 0.2 to 5.5 in the academic year 2018-19.
	viii.	All the faculty members should be encouraged to participate / present articles in international conferences / workshops / FDPs organized by other leading institutions.	Totally 165 Conferences and workshops in International and national level have been attended by the faculty members in the academic year 2018-19.
	ix.	Each department should organize Conference / workshops / FDP in every academic year.	ECE, EEE, EIE, CSE and IT departments have organized Faculty Development Training programs.
	x.	Every department should sign MoU with minimum 2 companies per year.	All the departments have signed MoU with minimum 2 companies in the academic year 2018-19
	xi.	More number of students should be encouraged to undergo in-plant training / internship program / industrial projects.	No. of Students undergone In-plant training: 297 No.of Students undergone internship program : 366
	xii.	Every department has to develop at least one product every year.	15 products have been developed totally in the academic year 2017-18 with the fund sanctioned from NewGen IEDC.
	xiii.	Every year, it is proposed to initiate a start up through our alumni and faculty.	One start ups has been initiated in the academic year 2018-19.
14.	Whether the AQAR was placed before statutory body?	:	Yes
	Name of the Statutory body :		Management and before the IQAC Peer Review Team including IQAC internal members.
	Date of meeting(s)		03.08.2019
15.	Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning?	:	**Yes**. NBA & UGC Visited our college on 23.02.2019
16.	Whether institutional data submitted to AISHE	:	**No**
17.	Does the Institution have Management Information System? If yes, give a brief description and a list of modules currently operational. (Maximum 500 words)	:	Yes

To improve the productivity of our institution towards paperless administration, InsProPlus (Institution Productivity Plus) software serves as a perfect solution. At present, the modules in practice are as follows,

- Student Management
- Academic Management
- Online Learning Management System
- HR Management
- Hostel Management
- Central Library Management
- Finance Management
- COE Administration
- Certificate Issuing
- Automatic SMS delivery to the parents for absenteeism of their wards, their ward's performance in the Internal tests, e-circular notifications, etc.,
- Performance reports, Access reports, online Entries and Enquiries
- Online web portal for staff and students
- Online leave apply and approval
- Online faculty recruitment process
- Selection of faculty members and elective subjects under CBCS
- Students' attendance entry and report generation
- Result analysis for the internal tests.
- College Bus & Driver Details
- Fuel Maintenance
- Vehicle Maintenance
- Mess fee payment

The system helps the management, Director, Principal, HODs and faculty to view the academic details of the students. Also, parent/guardian can get assistance about their ward through mobile via SMS or web portal. InsproPlus for MIS has been installed and available at our college premises since august 2011.

PART – B

CRITERION I –CURRICULAR ASPECTS	
1.1	**Curriculum Design and Development**

1.1.1 Programmes for which syllabus revision was carried out during the Academic year

Name of programme	Dates of revision	
	Board of Studies Meetings	Academic Council Meeting
B.E. Mechanical Engineering	16.11.2018 25.05.2019	
B.E. Electronics and Communication Engg.	10.11.2018; 11.05.2019	
B.E. Computer Science and Engineering	17.11.2018; 18.05.2019	
B.E. Electrical and Electronics Engineering	10.11.2018; 18.05.2019	01.12.2018 29.06.2019
B.E. Electronics and Instrumentation Engg.	--	
B.E. Civil Engineering	03.05.2019	
B.Tech. Information Technology	27.10.2018; 04.05.2019	
Science and Humanities	23.11.2018	

1.1.2 Programmes / courses focused on employability/ entrepreneurship / skill development during the Academic year

Programme with Code	Course with Code	Date of Introduction
3 days Entrepreneurship Awareness Camp	Training programme	21 -23rd August 2018 24 -26th September 2018
Two weeks FDP on Entrepreneurship	Training programme	03 – 15th Dec 2018
Students Leadership Development Programme	Training programme	23.08.2018 – 08.12.2018
Summer Technical Training	Training programme	25.04.2018 – 11.05.2018
Employability Skill Enhancement Training	Training Program sponsored by Renault Nissan	04.03.2019 – 14.03.2019
Communication Assessment	Training programme for first year UG students	26.03.2019 – 29.03.2019
Group Discussion	Skill development programme for final year IT students	01.07.2018
Soft Skill training	Skill development programme for final year Mechanical students	11.07.2018 – 12.07.2018
20 students went for training at HR Steel Private Company	Skill development programme for final year Civil students	21.09.2018
Resume Writing & Body language	Skill development programme for final year EEE students	21.09.2018

	Skype Interview was conducted who have cleared first round for TCS -16 students got placed	Skill development programme for final year students	03.10.2018
	Communication Assessment	Training programme for first year UG students	27.03.2019 – 01.04.2019

1.2	**Academic Flexibility**

1.2.1	New programmes/courses introduced during the Academic year

Programme	Course	Date of Introduction
B.E. – ECE under Regulation 2015	15EC04E – 3D imaging and image set retrieval	10th Board of Studies meeting on 11.12.2018 3 credit Elective course
	15EC15E – Advanced wireless communication	
	15EC35E – Principles of operating system	
	15EC19L – Consumer Electronics	10th Board of Studies meeting on 11.12.2018 One credit Elective course
	15EC20L – Network troubleshooting and traffic analysis using wireshark	
	15EC21L – Secured network system with snort	
	15EC22L – Wireless communication system design using SDR	
	15EC23L – OFDM system design using SDR	
B.E. – CSE & B.Tech. – IT under Regulation 2015	15IT25L, 15CS25L - Introduction to Networks	11th Board of Studies meeting on 04.05.2019, 18.05.2019 One credit Elective course
	15IT26L, 15CS26L - Routing and Switching Essential	
	15IT27L, 15CS27L - Scaling Networks	
	15IT28L, 15CS28L - Connecting Networks	
B.E. – Mechanical Under R-2015	15ME23L – Design a Startup	11th BoS meeting on 25.05.2019 One credit Elective course
B.E. – EEE Under R-2015	15EE24L - High Voltage Testing Techniques	11th BoS meeting on 18.05.2019 One credit Elective course

Online Courses / Self Study Courses
Students may be permitted to earn credit through online courses (which are provided with certificate) with the approval of Head of the Department and Dean (Academic) subject to a maximum of 6 credits. The credit may be transferred with the due approval procedures as per Regulation – 2019:clause 15 (iv) for either programme elective or open elective course.

1.2.2	Programmes in which Choice Based Credit System (CBCS) / Elective Course System implemented at the College level during the Academic year.

Name of Programmes adopting CBCS	UG	PG	Date of implementation of CBCS / Elective Course System	UG	PG
Already adopted (2015-16)				**June 2015**	**June 2015**

1.3	**Curriculum Enrichment**

1.3.1	Value-added courses imparting transferable and life skills offered during the year

Value added courses	**Date of introduction**	**Number of students enrolled**
Yoga for youth empowerment	**June 2015**	**209**

1.3.2	Field Projects / Internships undertaken during the year	
	Project / Programme Title	**No. of students enrolled for Field Projects / Internships**
	Yoga club and NSS Units of the college in association with Manavalakalai Mandram, Arunachalam Pettai, Kovilpatti envisaged a programme on "YOGA for ALL" on 21.06.2018	312
	NSS Special Camp was conducted at Villiseri Village, Kovilpatti Taluk by NSS volunteers from 20.02.2019 to 04.03.2019	100
	Blood Donation Camp was conducted by NSS units of our college in association with Dr.Devasana, Kovilpatti Government Hospital on 24.09.2018	101
	Internship / Inplant Training program –	Internship :366 In-plant Training :297

1.4	**Feedback System**
1.4.1	Whether structured feedback received from all the stakeholders

1) Students	2) Teachers	3) Employers	4) Alumni	5) Parents
Yes	**Yes**	**Yes**	**Yes**	**Yes**

1.4.2	How the feedback obtained is being analyzed and utilized for overall development of the Institution? (maximum 500 words)
	- Students' feedback about each course in a semester is obtained through online system using InsProPlus software at the end of the semester. - In addition, the feedback on teaching & learning is obtained through Course End Survey and Exit surveys from passed out students. - Both Course outcome evaluations and Staff Evaluation are being done through the students' feedback. - Staff Evaluation Reports, Students Feedback Report, Staff Self Appraisal and stakeholders feedback are discussed and corrective measures are planned during the IQAC meetings accordingly. - Parents feedback is obtained through the Parents' Teachers meeting, which is regularly conducted twice in a year.

	CRITERION II -TEACHING-LEARNING AND EVALUATION
2.1	**Student Enrolment and Profile**
2.1.1	Demand Ratio during the year

Name of the Programme	Number of seats available	Number of applications received	Students Enrolled
UG Degree Programmes	660	Filled through Anna University	557
PG Degree Programme	115	Chennai single window system	50

2.2	**Catering to Student Diversity**
2.2.1	Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of full time teachers available in the institution teaching only UG courses	Number of full time teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2018-19	2655	50	189	18	55

2.3	**Teaching - Learning Process**
2.3.1	Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)

Number of teachers on roll	Number of teachers using ICT *(LMS, e-Resources)*	ICT tools and resources available	Number of ICT enabled classrooms	Number of smart classrooms	E-resources and techniques used
207	207	Smart classroom with tools, Smart TV, Projectors	37	8	E-Journals and LMS(Google & Moodle Class)

2.3.2	Students mentoring system available in the institution? Give details. (maximum 500 words)

Yes.

Every student will be under the care and guidance of a faculty who is appointed as his/her Mentor/tutor. About 20 students will be assigned to each mentor/tutor who will also act as their local guardian and assist them in all matters of academic as well as other activities. Further, the tutor will also help the students in registering the courses, monitor their attendance and progress and council them periodically. If necessary, the tutor may also discuss with or inform the parents about the progress of the students through the concerned Head of the department. The mentor will maintain a record sheet for each of his/her 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.

Student mentoring plays a vital role in a student's life. Hence, the students are advised to meet their mentor frequently and discuss their problems freely with them. They should also take care to see that all information concerning their progress and achievements in the college are duly entered in the record sheet.

	Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio	
	2705	207	1:13	

2.4	**Teacher Profile and Quality**

2.4.1	Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
30	30	--	30	1

2.4.2	**Honors and recognitions received by teachers**

(received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year)

Year of award	*Name of full time teachers receiving awards from state level, national level, international level*	*Designation*	*Name of the award, fellowship, received from Government or recognized bodies*
2018-19	Dr.S.Tamil Selvi	Professor / ECE	Distinguished Women in Engineering by Venus International Foundation
	Dr.K.G.Srinivasagan	Professor / CSE	Infosys - Inspire Faculty Partnership Award

2.5	**Evaluation Process and Reforms**

2.5.1	Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester	Last date of the last semester-end / year-end examination	Date of declaration of results of semester - end / year- end examination
B.E./B.Tech.	2018-2019 Odd semester	VII, V & III	24.11.2018	18.01.2019
		I	11.01.2019	02.02.2019
M.E./M.Tech.	2018-2019 Odd semester	III	31.10.2018	18.01.2019
		I	10.01.2019	02.02.2019
B.E./B.Tech.	2018-2019 Even semester	VIII	11.04.2019	03.05.2019
		VI & IV	13.05.2019	12.07.2019
		II	12.06.2019	12.07.2019
M.E./M.Tech.	2018-2019 Even semester	IV	13.04.2019	03.05.2019
		II	06.06.2019	12.07.2019

2.5.2	Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year

Do not include re-evaluation/ re-totalling

Number of complaints or grievances about evaluation	Total number of students appeared in the examination	No. of student complaints / Grievances	Percentage
December'2018	2688	66	2.46
April'2019	2688	95	3.53

2.6	**Student Performance and Learning Outcomes**
2.6.1	Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

1.	B.E. Mech	**https://nec.edu.in/mechanical-engineering/**
2.	B.E. ECE	**https://nec.edu.in/electronics-and-communication-engineering/**
3.	B.E. CSE	**https://nec.edu.in/computer-science-and-engineering/**
4.	B.E. EEE	**https://nec.edu.in/electrical-and-electronics-engineering/**
5.	B.E. EIE	**https://nec.edu.in/electronics-and-instrumentation-engineering/**
6.	B.E Civil	**https://nec.edu.in/civil-engineering/**
7.	B.Tech. IT	**https://nec.edu.in/information-technology/**

2.6.2	Pass percentage of students

2018-2019 Even Semester – UG/PG Degree Final Year				
Programme Code	Programme name	No. of students appeared	No. of students passed	Pass Percentage
B.E.	Mechanical Engineering	143	138	96.50
B.E.	Electronics and Communication Engineering	121	120	99.17
B.E.	Computer Science and Engineering	118	118	100.00
B.E.	Electrical and Electronics Engineering	141	141	100.00
B.E.	Electronics and Instrumentation Engineering	56	56	100.00
B.Tech.	Information Technology	55	55	100.00
B.E.	Civil Engineering	66	66	100.00
M.E.	Energy Engineering	2	2	100.00
M.E.	Computer Science and Engineering	6	6	100.00
M.E.	High Voltage Engineering	5	5	100.00
M.E.	Embedded System Technologies	2	2	100.00
M.E.	Control and Instrumentation Engineering	2	2	100.00

2.7	**Student Satisfaction Survey**
2.7.1	Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as web link) Web link: http://l72.16.0.24/studentexitsurveysystem.php/

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.1	**Promotion of Research and Facilities**
3.1.1	The institution provides seed money to its teachers for research, if, yes give details **NO**

Name of the teacher getting seed money	The amount of seed money	Year of receiving grant	Duration of the grant
-	-	-	-

3.1.2	Teachers awarded National/International fellowship for advanced studies/ research during the year

	Name of the teacher awarded the fellowship	Name of the Award	Date of Award	Awarding Agency
National	-	-	-	-
International	-	-	-	-

3.2	**Resource Mobilization for Research**
3.2.1	**Research funds sanctioned and received from various agencies, industry and other organizations**

Nature of the Project	Duration	Name of the funding Agency	Total grant Sanctioned in lakh	Amount received during the year
Major Project (ECE)	2015-2018	DST (TDT)	24.4136	15.813
Major Project (ECE)	2016-2018	DRDO	9.85	9.85
Major Project (CSE)	2016-2018	DRDO	12.195	12.195
Major Project (S&H)	2015-2018	DST	44.25	41.07
Major Project (S&H)	2018-2021	DST	26.1932	9.452
Minor Project (EEE)	2017-2019	UGC	4.45	4.10
Students Research Projects *(other than compulsory by the College)*	2018 – 19	NewGen IEDC	25.00	25.00
Students Research Projects *(other than compulsory by the College)*	2018-19	IE (I)	0.60	0.60
		TNSCST	0.20	0.20
International Projects				
Any other (Specify)	2018 – 19	DST-FIST	90.00	43.00
	2018 – 19	Alumni Fund		0.95
TOTAL			**237.1518**	**162.23**

3.2.2	Number of ongoing research projects per teacher funded by government and non-government agencies during the years					

Dept.	Funding agency	Ongoing research project	Principal Investigator	Amount	Period
EEE	UGC	Real Time Implementation of PID Controller for Single Phase Buck-Boost Power Factor Correction Converter using Evolutionary Computation	Mr.M.P.E.Rajamani, Asst.Prof (SG)/EEE	4,10,000	2016 -2018
S&H	DST (SERB)	Designing of novel benzothiazole derivatives and their Cu(II), Fe(II/III) and Al(III) Complexes in Alzheimer's disease	Dr.S.Thalamuthu AP(SG) / S&H Dr.M.A.Neelakantan, Prof. & Head / S&H	26,19,320	2017 - 2020
NEC	DST-FIST	Fund for improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST)	Dr.S.Shanmugavel Principal Dr.M.A.Neelakantan Dean (R&D)	43,00,000	2018-2023
NEC		New Gen IEDC	Dr.S.Shanmugavel, Principal	60,00,000	2018-2019

3.3	**Innovation Ecosystem**
3.3.1	**Workshops/Seminars Conducted on Intellectual Property Rights (IPR)** and **Industry-Academia Innovative practices during the year**

Title of Workshop/Seminar	Resource person	Name of the Dept.	Date(s)
Student Leadership Development Programme	Dr.P.EsakkiMuthu, Chief Scientist, River Silca, Bengaluru	All I year UG students	Throughout the academic year
One day workshop on "Intellectual Property Rights(IPR)" from Institution Innovation Council	Dr.M.Kantha Babu, Director, Centre for Intellectual Property Right (CIPR), Anna University Chennai.	Interested students and faculty members from all the departments	29.12.2018
Research	Dr.M.Kantha Babu, Director, Centre for Intellectual Property Right (CIPR), Anna University Chennai.	Faculty members from all the departments	12.01.2019

3.3.2	Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of the Awardee	Awarding Agency	Date of Award	Category
AICTE – CII Survey	Industry Linked Technical Institutes 2018	Confederation of Indian Industry (CII) and All India Council for Technical Education (AICTE)	07.12.2018	Platinum Score: >30
CliqTrix Challenge' 19	S.Pradeep Kumar, M.Manoj Sabareesh	Zoho Corporation, Chennai	28.10.2018	1st prize with cash award Rs. 1,00,000/-

	Innovative product idea of Breaking the Wall of Power Generation	C. Ganeshlingam & U. Ramar (EIE)	Falling Walls Lab, Visakhapatnam	10.10.2018	Eighteen finalist from India
	India International Science Fest'18	S. Manivannan (EIE)	SATHI IISF 2K18, Lucknow	05.10.2018 - 08.10.2018	Participated
	Aero Engineers World	Isaimuhil. H, Sivaram. B, Thanga Selvam.S, Ajith Kumar.K, Raakesh. I.V & Ganapathy Raman.I	Aeronautical Society of India, Bangalore	18.01.2019 - 19.01.2019	First prize
	Infinity and Beyond, Grand Finale	A.Varatharajan, R.A.Jivesh, B.Ganapathy Ram, M.Vignesh, S.Muthu Balaji, J.Jesindha	MHRD - Smart India Hackathon 2018	18.06.2018 – 22.06.2018	Participating project presentation in Automatic Railroad Cleanbot
	Mentor Institute - Margdarshak	NEC	AICTE	07.12.2018	Mentor institution
	MSMETHON	B.Arunraj, K.P.Sivasankaran, T.Yuvaraja, T.vigneshwaran, III MECH	MSME	2019	First prize

3.3.3	No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Centre	Name
NECE-Nanolitho Design Centre	Nanolitho Technologies Pvt. Ltd., Bengaluru
BizPlus Services Incubation Centre	BizPlus Services Pvt. Ltd., Chennai
Adroit Innovation Centre	Adroit Soft India Pvt. Ltd., Chennai
Startup	Autowelkin Pvt.Ltd supported by NEC BI

3.4	**RESEARCH PUBLICATIONS AND AWARDS**
3.4.1	Ph. Ds awarded during the year

Name of the Department	**No. of Ph. Ds Awarded**
B.E. – Mechanical Engineering	7
B.E. – Electrical and Communication Engineering	3
B.E. – Electrical and Electronics Engineering	5
B.E. – Electronics and Instrumentation Engineering	4
B.Tech. – Information Technology	6
Science and Humanities	1

3.4.2	Research Publications in the Journals notified on UGC website during the year

	Department	No. of Publication	Average Impact Factor, if any
National & International	Mechanical Engg.,	13	Average – 1.2 Range - 0.2 to 5.5
	ECE	12	
	S&H	05	
	CSE	10	
	IT	10	
	EIE	04	
	EEE	12	

3.4.3	Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	No. of Publication in Conference proceedings
BE. Electrical and Electronics Engineering	4
B.Tech. Information Technology	15
BE. Electrical and Communications Engineering	12
BE. Electrical and Instrumentation Engineering	08
BE. Mechanical Engineering	7
BE. Computer Science and Engineering	10
Science and Humanities	8

3.4.4	Patents published/awarded during the year

Patent Details	Patent status Published/ Filed	Patent Number / C.B.R. No	Date of Award
Solid waste collecting system for open sewage	Published	285447	09/04/2019
Automated Approach to Tune PID Time Delay Compensated Controller for Gain Margin Specification	Filed	201841025025	-
Light Weight High Strength Brick with Mechanical Interlocking	Filed	201841037689	-
Water Tank Cleaning Device	Filed	201841037676	-
Multipurpose Domestic Cleaner	Filed	201841037690	-
Smart Device for Blind	Filed	201841037693	-

| 3.4.5 | Bibliometrics of the publications during the last Academic year based on average citation index in Scopus / Web of Science or Pub Med/ Indian Citation Index |

Title of the paper	Name of the Author	Title of the Journal	Year of Publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citations
Single basin double slope solar still with minimum basin depth and energy storing materials	Murugavel, K.K., Sivakumar, S., Ahamed, J.R., Chockalingam, Kn.K.S.K., Srithar, K.	Applied Energy	2010	125	National Engineering College	125
Performance study on basin type double slope solar still with different wick materials and minimum mass of water	Kalidasa Murugavel, K., Srithar, K.	Renewable Energy	2011	119	National Engineering College	119
Spectral characterization, cyclic voltammetry, morphology, biological activities and DNA cleaving studies of amino acid Schiff base metal(II) complexes	Neelakantan, M.A., Rusalraj, F., Dharmaraja, J., Johnsonraja, S., Jeyakumar, T., Sankaranarayana Pillai, M.	Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy	2008	110	National Engineering College	110
Computer-aided detection of breast cancer on mammograms: A swarm intelligence optimized wavelet neural network approach	Dheeba, J., Albert Singh, N., Tamil Selvi, S.	Journal of Biomedical Informatics	2014	106	National Engineering College	106
Application of factorial techniques to study the wear of Al hybrid composites with graphite addition	Ravindran, P., Manisekar, K., Narayanasamy, P., Selvakumar, N., Narayanasamy, R.	Materials and Design	2012	98	National Engineering College	98
Progresses in improving the effectiveness of the single basin passive solar still	Kalidasa Murugavel, K., Chockalingam, Kn.K.S.K., Srithar, K.	Desalination	2008	93	National Engineering College	93
Microstructural, physico-chemical and mechanical characterisation of Sansevieria cylindrica fibres - An exploratory investigation	Sreenivasan, V.S., Somasundaram, S., Ravindran, D., Manikandan, V., Narayanasamy, R.	Materials and Design	2011	82	National Engineering College	82

	Title	Authors	Journal	Year		Institution	
	Tribological properties of powder metallurgy - Processed aluminium self lubricating hybrid composites with SiC additions	Ravindran, P., Manisekar, K., Rathika, P., Narayanasamy, P.	Materials and Design	2013	81	National Engineering College	81
	Spectral, XRD, SEM and biological activities of transition metal complexes of polydentate ligands containing thiazole moiety	Neelakantan, M.A., Marriappan, S.S., Dharmaraja, J., Jeyakumar, T., Muthukumaran, K.	Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy	2008	76	National Engineering College	76
	Tribological behaviour of powder metallurgy- processed aluminium hybrid composites with the addition of graphite solid lubricant	Ravindran, P., Manisekar, K., Narayanasamy, R., Narayanasamy, P.	Ceramics International	2013	75	National Engineering College	75
	Histogram modified local contrast enhancement for mammogram images	Sundaram, M., Ramar, K., Arumugam, N., Prabin, G.	Applied Soft Computing Journal	2011	75	National Engineering College	75
	An experimental study on single basin double slope simulation solar still with thin layer of water in the basin	Kalidasa Murugavel, K., Chockalingam, Kn.K.S.K., Srithar, K.	Desalination	2008	68	National Engineering College	68
	N-o -Vanillylidene- l -histidine: Experimental charge density analysis of a double zwitterionic amino acid schiff- base compound	DraÅ¡koviÄ‡, B.M., BogdanoviÄ‡, G.A., Neelakantan, M.A., Chamayou, A.-C., Thalamuthu, S., Avadhut, Y.S., Schmedt Auf Der GÃ¼nne, J., Banerjee, S., Janiak, C.	Crystal Growth and Design	2010	66	National Engineering College	66
	Multi-objective robust PID controller tuning using two lbests multi- objective particle swarm optimization	Zhao, S.-Z., Iruthayarajan, M.W., Baskar, S., Suganthan, P.N.	Information Sciences	2011	66	National Engineering College	66
	Synthesis, characterization and biocidal activities of some schiff base metal complexes	Neelakantan, M.A., Esakkiammal, M., Mariappan, S.S., Dharmaraja, J., Jeyakumar, T.	Indian Journal of Pharmaceutical Sciences	2010	65	National Engineering College	65

A review of different methods to enhance the productivity of the multi-effect solar still	Rajaseenivasan, T., Murugavel, K.K., Elango, T., Hansen, R.S.	Renewable and Sustainable Energy Reviews	2013	61	National Engineering College	61
An experimental analysis of upset forging of aluminium cylindrical billets considering the dissimilar frictional conditions at flat die surfaces	Malayappan, S., Narayanasamy, R.	International Journal of Advanced Manufacturing Technology	2004	60	National Engineering College	60
Mechanical properties of randomly oriented short Sansevieria cylindrica fibre/polyester composites	Sreenivasan, V.S., Ravindran, D., Manikandan, V., Narayanasamy, R.	Materials and Design	2011	57	National Engineering College	57
The first vitamin B$_6$ zinc complex, pyridoxinato-zinc acetate: A 1D coordination polymer with polar packing through strong inter-chain hydrogen bonding	Chamayou, A.-C., Neelakantan, M.A., Thalamuthu, S., Janiak, C.	Inorganica Chimica Acta	2011	57	National Engineering College	57
Multilevel thresholding for segmentation of medical brain images using real coded genetic algorithm	Manikandan, S., Ramar, K., Willjuice Iruthayarajan, M., Srinivasagan, K.G.	Measurement: Journal of the International Measurement Confederation	2014	52	National Engineering College	52
Different parameters affecting the rate of evaporation and condensation on passive solar still - A review	Muthu Manokar, A., Kalidasa Murugavel, K., Esakkimuthu, G.	Renewable and Sustainable Energy Reviews	2014	51	National Engineering College	51
Intelligent approaches using support vector machine and extreme learning machine for transmission line protection	Malathi, V., Marimuthu, N.S., Baskar, S.	Neurocomputing	2010	50	National Engineering College	50
Flow shop scheduling with multiple objective of minimizing makespan and total flow time	Ravindran, D., Selvakumar, S.J., Sivaraman, R., Haq, A.N.	International Journal of Advanced Manufacturing Technology	2005	49	National Engineering College	49

Application of extreme learning machine for series compensated transmission line protection	Malathi, V., Marimuthu, N.S., Baskar, S., Ramar, K.	Engineering Applications of Artificial Intelligence	2011	48	National Engineering College	48
Review on Schiff bases and their metal complexes as organic photovoltaic materials	Wesley Jeevadason, A., Kalidasa Murugavel, K., Neelakantan, M.A.	Renewable and Sustainable Energy Reviews	2014	46	National Engineering College	46
Theoretical and experimental investigation on double basin double slope solar still	Rajaseenivasan, T., Kalidasa Murugavel, K.	Desalination	2013	43	National Engineering College	43
Comparative study of double basin and single basin solar stills	Rajaseenivasan, T., Elango, T., Kalidasa Murugavel, K.	Desalination	2013	43	National Engineering College	43
Investigation of microstructure and mechanical properties of aluminum hybrid nano-composites with the additions of solid lubricant	Ravindran, P., Manisekar, K., Vinoth Kumar, S., Rathika, P.	Materials and Design	2013	43	National Engineering College	43
Influence of fibre treatments on mechanical properties of short Sansevieria cylindrica/polyester composites	Sreenivasan, V.S., Ravindran, D., Manikandan, V., Narayanasamy, R.	Materials and Design	2012	42	National Engineering College	42
Performance analysis on inclined solar still with different new wick materials and wire mesh	Hansen, R.S., Narayanan, C.S., Murugavel, K.K.	Desalination	2015	40	National Engineering College	40
Thermal creep properties of alloy D9 stainless steel and 316 stainless steel fuel clad tubes	Latha, S., Mathew, M.D., Parameswaran, P., Bhanu Sankara Rao, K., Mannan, S.L.	International Journal of Pressure Vessels and Piping	2008	40	National Engineering College	40
Effect of nano/micro B_4C particles on the mechanical properties of aluminium metal matrix composites fabricated by ultrasonic cavitation-assisted solidification process	Harichandran, R., Selvakumar, N.	Archives of Civil and Mechanical Engineering	2016	39	National Engineering College	39

Effect of axial force on microstructure and tensile properties of friction stir welded AZ61A magnesium alloy	Razal Rose, A., Manisekar, K., Balasubramanian, V.	Transactions of Nonferrous Metals Society of China (English Edition)	2011	39	National Engineering College	39
Local Oppugnant Color Texture Pattern for image retrieval system	Jeena Jacob, I., Srinivasagan, K.G., Jayapriya, K.	Pattern Recognition Letters	2014	38	National Engineering College	38
Enhancing the critical characteristics of natural esters with antioxidants for power transformer applications	Raymon, A., Pakianathan, P., E. Rajamani, M.P., Karthik, R.	IEEE Transactions on Dielectrics and Electrical Insulation	2013	38	National Engineering College	38
Optimum manufacturing tolerance to selective assembly technique for different assembly specifications by using genetic algorithm	Kumar, M.S., Kannan, S.	International Journal of Advanced Manufacturing Technology	2007	37	National Engineering College	37
Performance evaluation of handoff detection schemes	Marichamy, P., Chakrabarti, S., Maskara, S.L.	IEEE Region 10 Annual International Conference, Proceedings/TENCON	2003	37	National Engineering College	37

3.4.6	H-index of the Institutional Publications during the year. (based on Scopus/ Web of science) **Institution H – Index – 36; Faculty H-Index ranges from 2 to 17**

3.4.7	Faculty participation in Seminars/Conferences and Symposia during the year

No. of Faculty	International level	National level	State level	Local level
Attended Seminars / Workshops	35	80	20	20
Presented papers	49	17	--	--
Resource Persons	--	33	11	--

3.5	**CONSULTANCY**
3.5.1	Revenue generated from Consultancy during the year

Name of the Consultant (s) department	Name of Consultancy project	Consulting / Sponsoring Agency	Revenue generated (amount in Rs)
Mechanical Engineering	Apex Design Centre, Coimbatore	Design and analysis of dust test chamber	1,25,000
Information Technology	Tata Power strategic Engineering Division, Bangalore	Services in the area of Intelligence	3,60,000
Electrical and	Mepco Schlenk Engineering College, Sivakasi	Breakdown Voltage test	1,500

		Kamaraj College of Engineering and Technology, Virudhunagar	Breakdown Voltage test	1,000
	Electronics Engineering	Apex Design Centre	Design and development of filter shaker	50,000
		Apex Design Centre	Analysis of output torque of gear reduction and VFD	25,000
	Civil Engineering	A.Suthahar & Shanthi	Concrete Testing	1,000
		The Ramco Cements Limited	Concrete Testing	4,000

3.5.2	Revenue generated from Corporate Training by the institution during the year

Name of the Consultant(s) & Department	Title of the Programme	Agency seeking training	Revenue generated (amount in rupees)	Number of trainees
--	--	--	--	--

3.6	**Extension Activities**

3.6.1	Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the Activities	Organising unit/ agency/ collaborating agency	Number of teachers **co-ordinated** in such activities	Number of students participated in such activities
NSS Special Camp	NSS	2	100
Eye Medical Camp at Aravind Eye Hospital, Tirunelveli	NSS	2	65
Blood Donation Camp	NSS	1	101
CATC camp @ Kovilpatti	NCC	2	7
CATC-CUM Camp @ NTA, Idayappatti, Madurai	NCC	2	5
AAC @ 4 ENGRS REGMT, Secunderabad	NCC	2	4
Swachh Bharath Awareness @ NEC & KPT Village	NCC	2	51
Indhradhanush Awareness Program @ Ettayapuram	NCC	2	30
Medical Awareness Camp @ Kovilpatti	NCC	2	25
NIC-II @ SILCHAR	NCC	2	6
RDC TRG-II Camp @ New Delhi	NCC	2	1
RDC Training Camp @ New Delhi	NCC	2	1
Youth Day Celbration - Outdoor Skill Practice Camp @ Manimuthar	NCC	2	61

	NCC C-Certificate Exam @ St.John's College, Tirunelveli	NCC	2	11
	NCC Cycle Rally – "Clean India & Water Conservation" – 150 Kms	NCC	2	40
	Blood Donation camp at Kovilpatti Government Hospital	YRC	1	30+170

3.6.2 Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the Activity	Award/recognition	Awarding bodies	No. of Students benefited
CliqTrix Challenge'19	I prize with cash amount of Rs. 1,00,000/-	Zoho Corporation, Chennai	2 (III Year CSE)
MSMETHON 2019	I prize in Design	MSME	4

3.6.3 Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/ agency/ collaborating agency	Name of the activity	Number of teachers co-ordinated such activities	Number of students participated in such activities
Swachh Bharat	NSS Club, National Engineering College, Kovilpatti	Cleaning work in Temple, School, Play ground premises of Villiseri village	2	100

3.7 **Collaborations**

3.7.1 Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of Activity	Participant	Source of financial support	Duration
Paper Publications	66	–	1 Year

3.7.2 Linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the year (Industry – Institute Interaction)

Nature of linkage	Date of the linkage	Name of the partnering Institution / industry / research lab with details	Duration	Participant
Internship Training	14.01.2019 – 19.01.2019	India Cements Limited at Tirunelveli	One week	V.Prabath, A.Tony Kingsly (1st yr Civil)
Internship Practical Training on making of Rover Kit	18.01.2019 – 20.01.2019	Aero Engineers at Bangalore	3 days	N.Prasanna, J.Sudhakar, M.B.Aachif Mohamed, G. Dinakar Vignesh (1st year ECE)

Summer Project	02.05.2018 - 31.05.2018	Wipro Infrastructure Engineering, Kancheepuram	One month	R.Anbazhagan P.Nagarajan P.Rajadurai N.Saravana Suresh	
Project Work	07.05.2018 - 04.07.2018	ISRO Propulsion Complex	Two months	P.S.Sudarsanan S.Vetrivel Pandi R.J.Vignesh P.Vibin Maharaj	
Summer Project	28.05.2018 - 27.06.2018	Titan Company Limited, Hosur	One month	A.Sribalaji	
Project Training with stipend (Rs.6000/-)	17.05.2018 - 16.06.2018	Sudarasanam Textile Industries. Virudhunagar	One month	S.Saravanan	
Internship Training with stipend (Rs.5000/- p.m)	07.01.2019 - 15.06.2019	Tessolve semiconductor pvt ltd, Bangalore	6 months	Arunadevi.P Chermakani G, Mathumathi R	
Internship Training with stipend (Rs.15000/- p.m)	May 2018- July 2018	Zoho Corporation Private Limited	3 Months	Abirama Sundari. V Javeeth Asraf.M	
Internship Training with stipend (Rs.10000/- p.m)	May 2018- July 2018	Smackcoders Technologies Private Limited, Tirunelveli	3 Months	Malagowri. S Malathi.C, Abirami. N, Gowsalya. R	
Internship Training with stipend (Rs.8000/- p.m)	May 2018- July 2018	Sumtwo (Fiorisoft Private Limited)	3 Months	Neela Poornima. E Soorya.M, Sobhana.T, Manikanda Prabu.P Kiruthikameenakshi. G, Jaya Surya. L Joshua Israel Muthu.S, Haripriya. K, Bhuvaveswari. M	
Internship Training with stipend (Rs.8000/- p.m)	May 2018- July 2018	KRYPC	3 Months	Rajagopal.R Nancy. K Bhava Tharani.M	
Internship Training with stipend (Rs.5000/- p.m)	May 2018- July 2018	Centizen Inc, Tirunelveli	3 Months	Nivetha.G Prakati.D Beno Solomon.E	
Internship Training with stipend (Rs.8000/- p.m)	May 2018- July 2018	IIT Madras	3 Months	R.Anushri, P.Gomathi Naayagi C.Gawari, P.Sushmitha	
Internship Training with stipend (Rs. 10,500/-)	Dec 2018 – May 2019	Brakes India Pvt. Ltd., Melmaruvathur, Chennai	6 Months	40 students	
Internship Training with stipend (Rs. 10,000/-)	Dec 2018 – May 2019	H & R Steels Detailing, Madippakkam, Chennai.	6 Months	8 students	

| 3.7.3 | MoUs signed with institutions of national, international importance, other institutions, industries, corporate houses etc. during the year |

Organisation	Date of MoU signed	Purpose and Activities	Number of students/teachers participated under MoUs
M/s. Shree Abirami Engineering Works, Chennai	06.06.2018	Internship and In-plant training for Student, Industry Know How for Faculties, Placement	04 / 02
AdroitSoft India Pvt. Ltd., Chennai	06.07.2018	To jointly setup an Innovation Center. To provide training for students and faculties in Blockchain Technology, Big Data Management and Internet of Things (IoT). To provide internships for eligible students. To conduct seminars for students and faculties in latest technologies.	13 / 02
M/s. Nanolitho Technologies Pvt. Ltd., Bengaluru	27.09.2018	Student training and placement in Analog IC Layout Design	11/2
M/s. AJ & J Tech Solutions Pvt. Ltd., Bengaluru	05.11. 2018	Internship cum Placement	04 / 02
M/s. QASSURE Technologies, Singapore	07.12.2018	Student training and placement	10 / 02
M/s. CADD Technologies	04.01.2019	Training programme and placement	35 / 03

CRITERION IV - INFRASTRUCTURE AND LEARNING RESOURCES

4.1	**Physical Facilities**

4.1.1	Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
Rs. 271 Lakhs	Rs. 237 Lakhs

4.1.2	Details of augmentation in infrastructure facilities during the year

Facilities	Existing	Newly added
Campus area	**163 acres**	-
Class rooms	96 (78697.65 sq.ft.)	-
Laboratories	66 (95657.91 sq.ft.)	-
Seminar Halls	6 (12604.86 sq.ft.)	-
Classrooms with LCD facilities	6 (7103.54 sq. ft.)	-
Classrooms with Wi-Fi/ LAN	All class rooms	-
Seminar halls with ICT facilities	6	-
Video Centre	10	4
No. of important equipments purchased (≥ 1- 0 lakh) during the Current year.	190	15
Value of the equipment purchased during the year (Rs. in Lakhs)	-	Rs.58,98,183
Others		

4.2	**Library as a Learning Resource**

4.2.1	**Library is automated {Integrated Library Management System (ILMS)}**

Name of the ILMS software	Nature of automation (fully or partially)	Version	Year of automation
InsproPlus	Fully	6.1	2013

Library Services

		Existing		Newly Added		Total	
		No.	Value	No.	Value	No.	Value
Books	Text Books	59100	1,83,80,760.75	970	4,01,333.00	60070	1,87,82,093.75
	Reference Books	1067	-	7	-	1074	-
e-Books		875	-	1268	-	2143	-
Journals		125	3,73,473.00	134	3,34,095.00	134	3,34,095.00
e-Journals	IEEE	152	5,45,433.00	152	5,44,965.00	152	5,44,965.00
	Science Direct	275	6,92,412.00	338	7,09,846.00	338	7,09,846.00
	ASME	30	2,28,483.00	-	-	-	-
	DELNET	-	13,570.00	-	13,570.00	-	13,570.00
Digital Database	Question Bank	Since 2012					

	CD & Video	NPTEL Video	14 TB	-	-	-	14 TB	-
		Spoken Tutorial CDs	6 nos.	-	-	-	6 nos.	-
		Text Book CDs	3410	-	76		3486	
	Others (specify)	DELNET Since 2009 (Inter Library Loan & Document Delivery Services)						
		FOSS Courses through Spoken Tutorials, IIT Bombay						

4.2.2	E-content developed by teachers such as: e-PG-Pathshala, CEC (under e-PG-Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the teacher	Name of the module	Platform on which module is developed	Date of launching e - content
All faculty	Google class room/ Moodle	LMS	Every Semester

4.3	**IT Infrastructure**

4.3.1	Technology Upgradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	1603	1222	320 Mbps	83	139	45	68	46
Added	15	5	-38	5	5	--	--	--
Total	**1618**	**1227**	**282 Mbps**	**88**	**144**	**45**	**68**	**46**

4.3.2	Bandwidth available of internet connection in the Institution (Leased line) 282 MBPS /GBPS

4.3.3	Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
ERP	https://erp.nec.edu.in/std/
Feedback for Teaching - Learning	172.16.11.11/feedback
R & D portal	https://nec.edu.in/research/
Faculty Recruitment	https://nec.edu.in/faculty/
Faculty Appraisal	172.16.11.11/FPAS
NECAMS	http://nec.edu.in/college_automation/index.php
Grievances	http://css.nec.edu.in/grievance/
Choice Based Credit System (CBCS)	https://nec.edu.in/wp-content/uploads/2019/07/UG-R-2015-amended-11th-AC-meet.pdf

4.4	**Maintenance of Campus Infrastructure**

4.4.1	Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

	Assigned budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
Building			1,60,00,000	4,63,12,321
Equipment	1,40,00,000	1,30,69,954	-	-
Books	10,00,000	4,01,333	-	-
Journals including E-journals	20,00,000	16,48,107	-	-
Research & Development	20,00,000	30,12,344	-	-
Building Maintenance	-	-	80,00,000	30,57,495
Other Maintenance	-	-	15,00,000	23,45,384
Bus Maintenance	1,50,00,000	1,55,19,832	-	-
Internet	25,00,000	24,29,296	-	-
Software Expenses	15,00,000	39,87,915	-	-
Sports & Games	15,00,000	17,64,712	-	-
Professional Society membership	10,00,000	9,51,033		
Staff Development Expenses	20,00,000	21,25,076	-	-
Student Project Expenses	2,00,000	3,54,377		
Seminar Expenses	12,00,000	11,30,100		
Special course Expenses	7,00,000	2,17,832		
BEC Course Expenses	4,00,000	13,15,500		
Scholarship expenses	2,00,000	1,68,802		
Lab Maintenance	15,00,000	22,58,903		
TOTAL				

4.4.2	Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms, etc. (maximum 500 words)

Physical facilities

The comprehensive infrastructure facility of the College is constituted by elementary features like buildings, classrooms and playgrounds, Administrative office, Auditorium, and advanced attributes like ICT-enabled classrooms and laboratory facilities, etc. The physical facilities are made available for the students those

who are admitted in the college. Sometimes it is also made available for the other governmental and the non-governmental organizations for conducting the exams and training based on the availability. The maintenance and the cleaning of all the blocks including classrooms, laboratories, and garden are done with the efforts of the non-teaching staff appointed for the above-said purpose. A separate wing headed by a Maintenance engineer will supervise the work.

The college has an adequate number of computers with internet connections, and UPS support and utility softwares are distributed in different locales like office, laboratories, library, departments, etc. All the stakeholders have equal opportunity to use those facilities as per the rules and the policies of the institution. The college also provides uninterrupted power supply throughout the campus. The maintenance of UPS and the Generators are regularly done by separate wing headed by Senior Engineer Electrical.

Academic and Support Facilities

The academic support facilities like library, the sports and the other platforms supporting the overall development of the students like NSS or Competitive examination cell, etc. is open to the students by 24x7. Accession to the library is permitted for both students and faculties by producing id proofs. A provision of the budget for library maintenance is made by the college management.

The department of physical education has adequate infrastructure consisting of the indoor Hall, 400 meter running track and various play grounds including Hockey which can be used by student, staff and the local community. The physical education department of our Institution is facilitated by the physical director, directress and coaches to engage the students in physical activities. The cost of maintenance is done by the Management of the college. A multistage gym has been established on behalf of the physical education department and two single station Gyms were established and both ladies and men hostels.

Academic facilities

Each department is provided with separate block which accommodates class rooms, laboratories, research laboratories , smart class rooms and seminar halls. The Heads of the respective Departments superintend the research, PG and UG laboratories. Each of the curricular, co-curricular and extra-curricular facilities available in the Departments are maintained and managed in such a way that they are freely accessible to all the students but strictly monitored by a member of the faculty, who is in charge of the facility. The major funds which aid in the enrichment and maintenance of infrastructural facilities are from the Management and project funds. The institution avidly insists on credibility and transparency in all transactions. As a manifestation of this ideal, a Purchase Committee is constituted to administer all the purchases made in the campus. There are ample guidelines legislated for the Committee to exercise its powers judiciously. The Principal and a Convener, nominated by the College Council, head the Committee.

The College ensures the availability of the latest equipment and up-to-date infrastructure on the campus. There is a systematic procedure for the purchase as well as maintenance of these infrastructural facilities including all sorts of equipments which is as follows:

1. Submission of the requirement in the form of a proposal
2. Evaluation by Purchase Committee and Maintenance Committee

3. Approval by the Principal

4. Call for quotations and verification of prices and availability of the items

5. Approval from the Management

6. At the end of financial year, stock verification is undertaken for various departments, and a detailed report is compiled. Based on this policy the perspective plan for the maintenance, repair, writing off and purchase of relevant infrastructure facilities is formulated (refer web site)

7. The College maintenance team regularly monitors and supervises the available infrastructure and ensures its upkeep, repair and other maintenance of the infrastructure.

8. Round the clock Security of the College aids in keeping the College infrastructure secure.

9. Fire Extinguishers have been installed at identified locations.

10. Safe and Clean Drinking Water is ensured through ROs and Water Coolers.

CRITERION V - STUDENT SUPPORT AND PROGRESSION

5.1	**Student Support**

5.1.1	Scholarships and Financial Support

	Name / Title of the scheme	Number of students	Amount in Rupees
Financial support from institution	Meritorious Scholarship	3	1,35,000
Financial support from other sources			
a) National	TamilNadu Government Scholarship	800	1,14,88,200
	Other Sources	22	1,44,000
b) International	-	-	-

5.1.2	Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Soft skill Development	2011	All students	College Placement Cell
BEC Course	2011	287	British Council & Ebek, Trichy
Personal Counseling	2013-14	10	Mrs.V.Vasantha Lakshmi, Personal Counsellor
Yoga	2013-14	418	Sky, Alya
Mentoring	2011-2012	All the students	Faculty members

5.1.3	Students benefited by guidance for competitive examinations and career counseling offered by the institution during the year

Year	Name of the scheme	Number of benefited students by Guidance for Competitive examination	Number of benefited students by Career Counseling activities	Number of students who have passed in the competitive exam	Number of students placed
2018-19	Gate Forum & Career Guidance Cell	1406	1320	15	311

| 5.1.4 | Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year |

The students redressal forum is established.

Total grievances received	No. of grievances redressed	Average number of days for grievance redressal
-	-	
-	-	

| 5.2 | **Student Progression** |

| 5.2.1 | Details of campus placement during the year |

On campus			Off Campus
Name of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
75	536	296	15

| 5.2.2 | Student progression to higher education in percentage during the year |

Branch	Total student	Placement	Higher studies	Entrepreneurship	Competitive Exam
MECH	144	99	17	9	19
EEE	145	114	8	4	19
ECE	121	93	4	1	23
CSE	118	96	9	1	12
IT	55	44	6	2	3
EIE	56	48	5	--	3
CIVIL	66	42	17	2	5
TOTAL	705	536	66	19	84

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of Programme admitted to
2018-19	17	B.E	Mechanical	Higher Education	M.E. MBA, PGDM and others
	4	B.E.	ECE		
	8	B.E.	EEE		
	9	B.E.	CSE		
	8	B.E.	EEE		
	5	B.E.	EIE		
	17	B.E.	Civil		
	6	B.Tech.	IT		

| 5.2.3 | Students qualifying in state/ national/ international level examinations during the year (eg: NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services) |

Items	No. of Students selected / qualifying	Registration number/roll number for the exam
NET	--	--
SET	--	--
SLET	--	--

GATE	3	--	
GMAT	--	--	
CAT/MAT	6	--	
GRE	--	--	
TOFEL	--	--	
Civil Services	--	--	
State Government Services	--	--	
Any Other(TANCET)	1	--	

5.2.4	Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Participants
Ball Badminton (Women)	Inter Zone	07
Table Tennis (Women)	Inter Zone	08
Throw Ball (Women)	State Level	12
Badminton team (Men)	Anna University, Chennai Zone -18	6
Basketball team (Men)	Anna University, Chennai Zone -18	12
Chess team (Men)	Anna University, Chennai Zone -18	5
Hockey team (Men)	Anna University, Chennai Zone -18	18
Yufonec 2019 (Cultural fest)	Intra – collegiate level	206

5.3	**Student Participation and Activities**

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

Year	Name of the award / medal	National / International	Sports	Cultural	Student ID number	Name of the student
2018-19	-	-	-	-	-	-

5.3.2	Activity of Student Council & representation of students on academic & administrative bodies / committees of the institution (maximum 500 words)

In our college, there is no separate student's council; however students have been given enough space without gender bias to represent their views in the college decision making bodies, such as Academic Council, Board of studies and IQAC. In all the bodies' including IQAC, student representatives from each program are included. Students can directly interact with the members of the council and give their opinion. This forum also suggests the student members to interact with their fellow friends and asks them to present their grievances in a collective manner. The Individual student's views are also recorded in the minutes of the meeting. Before taking any final decision on important issues, the Principal, experts and the members from the management with the concern of the students give their approval.

Further, Students give their representation in the Class committee which includes faculty members, students with good academic and slow learners. The class committee gives full freedom and wisdom for the students to define and plan their teaching learning process including defining evaluation procedure for the continuous assessment. In addition to that students have been given full autonomy to elect members for the association, Technical Chapters and club activities such as Rotract,

	Red Cross and so on. Through these clubs more than 132 activities have been conducted every year to enhance various skills of the students. Students act as organizers and volunteer many programmes	
	In addition to all, students play important role in hostels also in the development facilities as well as day to day activities. The student committees have been formed to monitor mess, maintenance, hostel library, computer centre and recreation activities.	
5.3	**Alumni Engagement**	
5.3.1	Whether the institution has registered Alumni Association? Yes/No, if yes give details (maximum 500 words): **Yes** - NEC Alumni association was started in the year 1991. - The Alumni Association was registered with Tamil Nadu society on 01.06.2006, Society Registration No: 54/2006. - Alumni Chamber is established with world class audio/video conference facility with 200 seats capacity in the campus on 03-08-14. Alumni members regularly connect and share their experiences to the Students/ Faculty through this chamber. - The association has various chapters at Chennai, Bangalore, UAE, Kuwait, Singapore and the general body meet is conducted once in a year in which all members present and discuss the activities and progress of the association. - Silver Jubilee Reunion is organized and celebrated every year (5 Batches completed). - Conducts Seminar on latest trends in industry. - Financially assisting in innovative projects. - Provides job opportunity through our Alumni.	
5.3.2	No. of registered Alumni: 13**000 Nos**	
5.3.3	Alumni contribution during the year (in Rupees) **: Rs. 1,16,000/-**	

Date	Alumni Name, Batch	Amount Rs.
13/06/2018	Mr.S.Gopalakrishnan ECE 1991	50,000
30/07/2018	1999 Batch ECE Alumni Members Contribute	45,000
15/05/2019	Mr.Somu Chokkalingam	21,000

5.3.4	Meetings/activities organized by Alumni Association	

S. No	Date	Branch	Batch	Event
1.	10.06.2018			Annual General Body Meeting (AGM) which is scheduled at MCC School auditorium, Chetpet, Chennai
2.	06.07.2018			1993 batch Reunion
3.	06.07.2018			Office Bearers Meeting
4.	27.07.2018	ECE	2002	Interaction with ECE & EIE students.
5.	27.07.2018	EIE	2002	Interaction with ECE & EIE students.
6.	02.08.2018	CSE	2002	Delivering lecture on the topic Infrastructure and storage management for final year IT and CSE students
7.	12.12.2018	CSE	1989	interaction with ECE ,EEE,CSE 180students @ CSE Seminar hall topic: machine learning
8.	12.05.2019			Annual General Body Meeting (AGM) which is scheduled at Bangalore

CRITERION VI -GOVERNANCE, LEADERSHIP AND MANAGEMENT	
6.1	**Institutional Vision and Leadership**
6.1.1	Mention two practices of decentralization and participative management during the last year (maximum 500 words) **Empowering faculty-centered practices:** Heads of the departments are empowered to prepare budget for their department with the consultation of senior faculty and lab in-charges. Further to guide the HODs, a departmental level committee has been constituted to review the requirement of purchasing of equipments for laboratories, Research and for regular maintenance activities. Faculty members are given authority in various committees/cells and allowed to conduct various programs. They are encouraged to develop leadership skills by being in charge of various academic, co-curricular, and extracurricular activities. They are given full rights to conduct industrial tours relevant to their courses and to have tie-up with industrial experts and appointed as coordinator and convener for organizing seminars/workshops/conferences/FDPs. Faculty members are given authority to do their Research works in their area of interest; in addition to that, it is also given rights to set up Research centers with the support of Research funding or the management funding. **Empowering students-centered practices:** Through Choice Based Credit System, Students are given freedom to choose the elective courses as well the faculty members for any course. Students can have freedom to transfer credits earned through online courses like NPTEL, Coursera, etc., Further, they have been provided with adequate support to choose their career as Entrepreneur / Higher studies / placement / preparing for competitive examinations. Students have been given enough representation in the highest decision making bodies like Academic council, Internal Quality Assurance Cell and Board of Studies. Students are also empowered to play an active role as a coordinator of co-curricular and extra-curricular activities, social service group coordinator.
6.1.2	Does the institution have a Management Information System (MIS)? **YES**
6.2	**Strategy Development and Deployment**
6.2.1	Quality improvement strategies adopted by the institution for each of the following (with in 100 words each)

Curriculum Development	i. Efforts have been taken to develop new curriculum for Regulation 2019 by giving special importance for Artificial Intelligence, basic courses and science courses. ii. The entire curriculum for Regulation 2019 has been planned with comprising 65% of theory courses and 35% of the practical courses.
Teaching and Learning	i. Product development laboratories are introduced in every department.

			ii. Live demos and animations are included in teaching process. iii. Google class room teaching has been insisted to adapt for all the courses. iv. Online courses like NPTEL, Coursera etc., are insisted to do by all the faculty members every year.
		Examination and Evaluation	i. Evaluation of marks encompasses internal marks through continuous assessment and external marks scored in End Semester Examination. ii. Automation of the examination cell to ensure timely declaration of results to keep the academic calendar on schedule. iii. Dummy number system has been followed in Semester exam valuation to keep the honesty in valuation.
		Research and Development	i. Every program has separate research centre approved by Anna University except Civil Engineering. ii. Incentives for research publications and research projects are provided iii. To promote R & D activities, progress review is conducted for faculty members having Ph.D degree and research scholars

		Library, ICT and Physical Infrastructure / Instrumentation	i. In the academic year 2017-18, Central library is added with
			   a. 1703 books are newly added that worth Rs. 8,21,677/-.
			   b. 125 Journals subscriptions that worth Rs. 3,73,473/-
			   c. E-Journals to the worth of Rs. 14,79,898/-
			ii. Every department has individual smart class room that worth Rs. 2 Lakh
			iii. Books exhibition is arranged every year thro' vendors at campus to identify the quality books
			iv. Special books have been exclusively purchased for Entrepreneurship Development of worth nearer to Rs. 1 lakh.
			v. Central library and department libraries are equipped with Air-conditioner
			vi. Every department has individual air-conditioned seminar hall with LCD projector, smart TV and computer system with internet connection.

		Human Resource Management	i. Recruitment of faculty and staff are based on the guidelines provided by Anna University and AICTE, New Delhi. ii. There are many staff welfare schemes namely EPF, Group insurance and Accidental policy iii. Sponsorship of Higher Studies for Faculties iv. Organizing Developmental training programme and workshops/seminars for enhancing the multi-skills of faculties. v. Effective appraisal system has been followed to assess the performance of faculties. vi. Faculty members are promoted to higher positions based on their experience, skills and achievements.

Industry Interaction / Collaboration	The Institute has collaboration with the following industries of repute at both national and International level, ▪ Apex Design Centre, Coimbatore ▪ CM Enviro systems, Bangalore. ▪ SumTwo Software Private Limited, Madurai	
Admission of Students	The students are admitted according to the Anna University / Tamil Nadu Government/ AICTE Norms.	

6.2.2	Implementation of e-governance in areas of operations	
	Planning and Development	▪ HR Management ▪ Online faculty recruitment process
	Administration	▪ Academic Management ▪ Hostel Management ▪ Performance reports, Access reports, online Entries and Enquiries ▪ Online leave apply and approval
	Finance and Accounts	▪ Finance Management
	Student Admission and Support	▪ Central Library Management ▪ Student Management ▪ Automatic SMS for absentee, e-circular notifications ▪ Online web portal for staff and students
	Examination	▪ COE Administration ▪ Certificate Issue

6.3	**Faculty Empowerment Strategies**
6.3.1	Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support Rs.
03.05.2018 - 05.05.2018	Mr.T.Devakumar	Image processing and Machine Learning	Workshop at MIT, Chennai	1500
14.05.2018 - 18.05.2018	Mr.V.Sivakumar Mr.A.Shenbagaraman Mr.K.Maharajan	GIAN Course on Cyber Security Trends and Technologies	IIT Patna	11000
23.5.2018 - 26.5.2018	Mr.R.Ganesh	Industrial Training – Zolt Energy Pvt. Ltd. Solar Energy Panel	Industry Know How	2500
28.05.2018 - 01.06.2018	Ms.J.Abisha, Mr.B.Ganapathy Ram	Communications System Design for Teaching & Research using NI USRP SDR platform	Coimbatore Institute of Technology in association with National Instruments	13000
13.6.2018 - 17.6.2018	Mrs. S.D.Jayavathi, Ms.S.Karthika, Mr.I.Vivek Anand	Analog IC Design & Layout Design using Cadence	Industry know how - Entuple Technologies, Bangalore	22494
22.07.2018 - 24.07.2018	Dr.A.Shenbagavalli, Ms.P.Vijayalakshmi Mr.N.Arumugam, Mr.A.Saravana Selvan	International Test Conference, India 2018	ALTRAN Technologies, Bangalore	28000

23.7.2018 - 27.7.2018	Mrs.R.Manjula Devi, Mr.R.Ganesh	Medical Image Computing – Machine Learning methods & Advanced MRI applications	GIAN Course at IIT Bombay	30000
25.07.2018 - 28.07.2018	Mr.L.Jerart Julus	mmWavw MIMO & Filter Bank Multi-Carrier Technologies for 5G Networks	Gian Course at IIT Kanpur	10600
30.07.2018 - 10.08.2018	Dr. I.Sankar	Innovation & Technology Enterprise: Idea to entrepreneurship	GIAN Course at NIT, Silchar	28500
30.07.2018 – 03.08.2018	Mrs. S.D.Jayavathi, Ms.S.Karthika	FDP on Xilinx SoC: FPGA Based Design	NIT, Trichy	11630
30.07.2018 - 10.08.2018	Dr.K.Shankar	GIAN Course on Innovation to Technology Enterprise : Idea to Entrepreneurship	NIT, Silchar	10400
13.08.2018 - 17.08.2018	Dr.S.Iyahraja	AICTE sponsored course on Computational Fluid Dynamics	Short Term Course IISC, Bangalore	4500
Aug – Sep 2018	Mr.M.Bakrutheen Ms.A.M.Diffni Gomez	Recent Advances in Transmission Insulators	FDP NPTEL	2200
19.09.2018 - 20.09.2018	Dr. V.R.S.Mani, Mr. T.Vijayanandh	Machine Learning Basics using Python	Hands on Training Program at MIT, Chennai	10000
08.10.2018 - 12.10.2018	Dr.V.Suresh	GIAN course on PID Controller	MIT campus, Anna University, Chennai	3950
28.10.2019 - 31.10.2019	Dr.A.Shenbagavalli	IEEE International Conference TENCON 2018	JEJU Island, South Korea	
26.11.2018 - 30.11.2018	Dr.A.Karthick	Novel Solar Energy Applications for the Built environment	GIAN Course at NIT, Bhopal	13080
26.11.2018 - 30.11.2018	Dr.S.Sankar Ganesh	FDP on Artificial Intelligence using Deep Learning & Machine Learning	FDP at National Institute of Technology, Tiruchirappalli	7840
10.12.2018 - 14.12.2018	Dr.K.Manisekar, Dr.M.Kathiresan, Mr.P.Hari Hara Sakthi Sudhan	Dynamic Response of Advanced Composites	GIAN course on NITK, Surathkal	30000

		17.12.2018 - 22.12.2018	Dr.D.Santhi, Ms.R.Rajakumari	GIAN Course on Biomedical Imaging – Advance FLIM-FRET Microscopic Technic for Cancer Cellular Imaging"	Anna University, Chennai	9400
		18.12.2018 - 21.12.2018	Mrs.K.Sangeetha Ananthamani, Mrs.C.Asha Beaula	Control Systems Engineering Theory & Lab with MATLAB / SIMULINK	Workshop at Indian Institute of Space Science Technology, Tiruvandram	5000
		7.01.2019 - 9.01.2019	Mr.S.Cammillus, Mr.K.Subramanian	2nd International Conference on Signals, Systems and Communication	Anna university, Chennai	11000
		21.1.2019 - 25.1.2019	Dr.Arun samuvel, Mr.I.Vivek Anand	Modeling and Simulation of Nano Transistors	Short term course	7400
		24.01.2019 - 25.01.2019	Dr. V.R.S.Mani	FDP on Health care Technology & Devices	Curious Program at IITM research park, Chennai	4062
		08.02.2019 - 09.02.2019	Ms.B.Siva Nandini	Brain Computer Interface (BCI): Signals And Applications	Workshop at Anna University, CEG Campus, Chennai	2000
		08.02.2019 - 9.02.2019	Mr.G.Pandiya Rajan	Workshop on Machine Learning & Deep Learning	College of Engineering, Anna University, Chennai	3950

6.3.2	Number of professional development / administrative training programmes organized by the Colleges for teaching and non teaching staff during the year

Dates	Programme	Title	Experts	Participants	Nos.
01.06.2018	Workshop	Attainment of short term goals for the current academic year, set targets for the next academic year and strategic planning to achieve the targets and goals	Dr.K.Kaildasa Murugavel Dean/FD NEC	All senior Faculties from all Engg departments	80
04.06.2018	Workshop	One day workshop on Attaining the targets	Dr.K.Kaildasa Murugavel Dean/FD, NEC	All Faculties from all Engg departments	70
05.06.2018	Training programme	Faculties Core course and delivering basic concepts	Dr J.Prakash, Professor & Head Department of IE, Madras Institute of Technology	EEE /EIE Department Staff members	60
06.06.2018	Workshop	One day workshop on Technology enabled learning	Prof.V.Sivakumar NITTR, Bangalore	All Faculties from all Engg departments	45
07.06.2018	Training programme	Writing project Proposals & Converting Research Writing to Publication	Dr.R.Velraj Director, Institute for Energy Studies Anna university Chennai	All Faculties from Engg Departments	150
07.06.2018	Training programme	OBE and its implementation in NEC	Dr.K.Kaildasa Murugavel Dean/FD, NEC	Newly joined faculties of all Engg departments	15
08.06.2018	Training programme	Faculties Core course and delivering basic concepts	Dr.A . Arockiarajan, Professor , Department of Applied	Mechanical Department staff members	40

			Mechanics, Indian Institute of Technology Madras,		
08.06.2018	Training programme	Faculties Core course and delivering basic concepts	Dr. S. Arul Jayachandran, Associate Professor, Department of Civil Engineering, Indian Institute of Technology Madras	Civil Department staff members	15
11.06.2018	Training programme	Faculties Core course and delivering basic concepts	Charles DRDO scientis'E' Chennai	EEE /ECE/EIE Department staff members	80
12.06.2018	Training programme	Faculties Core course and delivering basic concepts	Dr.S.Raghavan, Professor, Department of ECE, NIT Trichy	ECE Department staff members	35
12.06.2018	Training programme	Faculties Core course and delivering basic concepts	Dr.S.Thamarai Selvi, Professor, Department of Computer Technology Anna University Chennai	CSE/IT Department staff members	50
13.11.2018	Training programme	NIRF requirements	Mr.Sivakumar Natarajan, Chief Executive Officer, Accendere Knowledge Management Services	All faculty members	215
03.12.2018	Training programme	SMART "smart action planning"	Dr.K.Kaildasa Murugavel Dean/FD, NEC	All Ph.D Holders of all department	58
03.12.2018	Training programme	SMART smart action planning	Dr.K.Kaildasa Murugavel Dean/FD, NEC	Ph.D Pursuing & AP(SG)	80
04.12.2018	Training programme	SMART "smart action planning"	Dr.K.Kaildasa Murugavel Dean/FD, NEC	All Asst. prof of all department	90
05.12.2018	Academic Accreditation Management Software Product (AAMP) Demo	OBE SOFTWARE	Mr.Balaguru CEO, GITS Chennai	MECH,EEE,IT, CIVIL	115
05.12.2018	Academic Accreditation Management Software Product (AAMP) Demo	OBE SOFTWARE	Mr.Balaguru CEO GITS Chennai	CSE,ECE,EIE, S&H	100
05.02.2019 - 06.02.2019	Training programme	Management Development programme on "Manage Life creatively"	Mr.M.Sriram Athri Prasanna Trust Bangalore	All ph.D holders	
16.02.2019	Training programme	Management Development programme on "Manage Life creatively"	Mr.M.Sriram Athri Prasanna Trust Bangalore	Middle level faculty members	

15.02.2019	Orientation program	Healthy Mind for Youth	Mr.M.Sriram Athri Mr.Pottumari V Lakshminarayana Prasanna Trust Bangalore	First year	
27.03.2019 - 30.03.2019	FPAS	Verification/Validation for the Faculty performance appraisal marks	FD Section	All faculties	
15.05.2019	Training Programme	One day workshop on 'Practicing Moodle Class Room' for HODs and Senior faculties of all the departments	Dr.D.Venkat Kumar Associate Professor/Mech.	HODs and all PHD holders	
16.05.2019	Training Programme	Training program on 'Product Development' for HODs and Senior faculties of all the departments	Dr.K.Kaildasa Murugavel Dean/FD	HODs and all PHD holders	
16.05.2019 – 17.05.2019	Training Programme	One day workshop on 'Practicing Moodle Class Room'	Dr.D.Venkat Kumar Associate Prof./Mech.	All faculty members (2 batches)	
17.05.2019	Training Programme	Training program on 'Collaborative activity – Siemens Centre of Excellence for HODs and Senior faculties of all the departments	Dr.-Ing. M. Duraiselvam, Professor / Production Engineering NIT, Trichy	HODs and all PHD holders	
18.05.2019	Training Programme	Training program on 'Product Development' for remaining faculty members	Dr.I.Sankar, AP (SG)/Mech.	All remaining Faculty members	
20.05.2019	Training Programme	One day workshop on 'New product development - Industry perspective' for all the faculty members	Aravindaraj A, Project Manager-CIS Wipro Technologies, Chennai	All the faculty members	
23.05.2019	Training Programme	One day workshop on 'Question paper setting'	Dr.N.Arunachalam Manufacturing Engineering IITM, Chennai	Mechanical and Civil Engineering	
24.05.2019	Training Programme	Training program on "Writing project proposal" for all Ph.D. holders			
27.05.2019	Training Programme	Core Competency – Power Electronics	Dr. N .C. Shivaprakash Department of Instrumentation and Applied Physics IISc, Bangalore	Circuit Branches	
28.05.2019 - 29.05.2019	Training Programme	Training programme on Control Systems and recent research development for faculties of EEE,EIE and ECE	Dr. Rajesh Joseph Abraham Asso. Prof., / Avionics, Indian Institute of Space Science & Tech, Thiruvananthapuram	Circuit Branches	

29.05.2019	Training Programme	Domain Training programme for faculties of Mechanical engineering	Dr.S.Suresh, Asso. Prof. /Mechanical National Institute of Technology, Trichy	Mechanical Engineering	
29.05.2019	Training Programme	Domain Training programme for faculties of Civil Engineering	Dr.S.Nagan Professor / Civil Engg., Thiagarajar College of Engineering,Madurai	Civil Engineering	
30.052019	Training Programme	Core Competency - Big Data Analytics,Data Mining	Dr. S.P. Syed Ibrahim Assistant Director - International Relations VIT University, Chennai	CSE, IT	
01.06.2019	Training Programme	Core Competency - Machine Learning, Deep Learning	Dr. C.Chandra Sekhar Professor / CSE IITM, Chennai	CSE, IT	
01.06.2019	Training Programme	Domain Training programme for faculties of Mechanical engineering	Dr. N. Siva Shanmugam, Asso. Prof. / Mechanical Engg. NIT Trichy	Mechanical Engineering	
01.06.2019	Training Programme	Domain Training programme for faculties of ECE	Dr. M. Ganesh Madhan, Professor / ECE Madras Institute of Technology, Chennai.	ECE	
01.06.2019	Training Programme	Training program on 'Preparing quality documents'	Focus TQM Consultants Coimbatore	HODs, Deans, CoE and other administrative staffs of different sections	
07.06.2019	Training Programme	One day workshop on 'Question paper setting' for all faculty members	Dr. Ganesh Kumar.N. Asso. Prof. / Mechanical Engg., PSG College of Tech., Coimbatore.	IT & CSE	

Non-Teaching Faculty:

- "Re-Engineering of attitude, skills and knowledge" : HR Training – 22.12.2018 & 05.01.2019

6.3.3	No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

S. No.	Title of the professional development programme	Number of teachers who attended	Date and Duration (from – to)
1.	FDP on Entrepreneurship Development Programme at AUT, Tirunelveli	1	27.08.2018 - 29.08.2018
2.	Short Term Course on Computational Fluid Dynamics at IIS, Bangalore	1	13.08.2018 - 17.08.2018
3.	4th World Summit on Accreditation on Challenges and Opportunities in Outcome Based Accreditation Conference at Dr. Ambedkar Intl. Centre, Janpath, New Delhi (Paper Presented)	2	07.09.2018 - 09.09.2018
4.	FDP on Called Sox Nox 2018 at IIT, Kanchipuram	2	20.09.2018 - 21.09.2018

5.	International Test Conference India 2018 at Bangalore	4	22.07.2018 - 24.07.2018
6.	IEEE International Conference TENCON 2018 at JEJU Island, South Korea	2	28.10.2019 - 31.10.2019
7.	Hands on Training Program Machine Learning Basics using Python at MIT, Chennai	2	19.09.2018 - 20.09.2018
8.	FDP on Health care Technology and Devices at IITM research park, Chennai Curious Program	3	24.01.2019 - 25.01.2019
9.	FDP on Xilinx SoC: FPGA Based Design at NIT, Trichy	3	30.07.2018 –03.08.2018
10.	5 days course on Analog IC Design & Layout Design using Cadence at Entuple Technologies, Bangalore	4	13.06.2018 - 17.06.2018
11.	International Test Conference cum Workshop – ITC 2018 at ALTRAN Technologies, Bangalore	2	22.07.2018 –24.07.2018
12.	2nd International Conference on Signals, Systems and Communication at Anna university, Chennai	3	07.01.2019 - 09.01.2019
13.	Short term Course on Modeling and Simulation of Nano Transistors at IIT, Kanpur	2	21.01.2019 - 25.01.2019
14.	FDP on Internet of Things (IoT) at National Institute of Technology, Warangal	3	18.06.2018 - 22.06.2018
15.	GIAN course Cyber Security Trends and Technologies at IIT Patna	3	14.05.2018 - 18.05.2018
16.	AICTE funded FDP201x Pedagogy for Online and Blended Teaching Learning Process at IIT Bombay (Online course)	4	03.05.2018 - 30.05.2018
17.	GIAN Course Towards: Smart and Safe Cities: A Mobile and Social Networking Approach at B.M.S.College of Engineering, Bangalore	2	01.06.2018 - 06.06.2018
18.	FDP on System Design aspects in IoT at NIT Warangal	2	26.06.2018 –02.07.2018
19.	FDP on Cyber Security at National Cyber Safety and Security Standards	2	28.09.2018 - 29.09.2018
20.	TEQIP Workshop on AI and Machine Learning at Thiagarajar College of Engg., Madurai	3	01.10.2018 - 06.10.2018
21.	Industrial Visit at Latent View Ramanujan IT City at SEZ, Chennai	3	09.10.2018
22.	FDP on Teaching Learning Process at Indian Institute of Technology, Madras	2	03.12.2018 - 05.12.2018
23.	GIAN course on Biomedical Imaging: Advanced FLIM-FRET Microscopy Techniques for Cancer Cellular Imaging at AU, Chennai	2	17.12.2018 –22.12.2018
24.	IEEE CIS Workshop on Implementation of Soft Computing Techniques	1	24.01.2019 - 25.01.2019
25.	GIAN Course on AI & Deep Learning at Bennett University, Noida	2	28.12.2018 - 30.12.2018

26.	GIAN course on Practical PID Control at AU, Chennai	2	08.10.2018 - 12.10.2018
27.	Short Term Course Neural Networks and Deep Learning	1	30.10.2018
28.	FDP on Pedagogy for online and Blended Teaching – Learning Process at IIT Bombay	3	03.05.2018 -30.05.2018
29.	FDP on Advanced Condition Monitoring Methods for Power Equipment at National Institute of Technology, Calicut	3	09.07.2018 - 14.07.2018
30.	Short Term Course on Power Semiconductor Devices for Power Electronic Converters at IISC Bangalore	3	23.07.2018 - 27.07.2018
31.	Short Term Course on Energy Management and Audit at NIT, Trichy	4	20.08.2018 - 24.08.2018
32.	FDP on Free/Open Source for AI and Machine Learning at Thiagarajar College of Engineering, Madurai	3	01.10.2018 -06.10.2018
33.	FDP on Xilinx SoC : FPGA Based Design at NIT, Trichy	4	30.07.2018 - 03.08.2018
34.	Short term course on Introduction to Smart Material With Energy Harvesting Application at IIT, Madras	1	02.09.2018 - 07.09.2018
35.	Short term course on Introduction to Power Electronics at University of Colorado	1	20.12.2018
36.	FDP on Advanced Condition Monitoring Methods for Power Equipment at NIT, Calicut	2	09.07.2018 - 14.07.2018
37.	International Conference on Trends in Electronics & Informatics at SCAD College of Engg. & Tech	4	11.05.2018 - 12.05.2018
38.	Short term course on Analog Integrated Circuits : Fabrication Process and Applications at IISC, Bangalore	2	13.08.2018 - 17.08.2018
39.	Short term course on Mathematical Optimization Methods for Power Systems at IISC, Bangalore	2	18.06.2018 - 22.06.2018
40.	Quality Improvement Programme on Internet of Things at NITTTR	2	03.12.2018 - 07.12.2018
41.	Short term course on Recent Trends in Electric Vehicles at Thiagarajar College of Engineering, Madurai	2	06.12.2018 - 08.12.2018
42.	GIAN Course on "Biomedical Imaging – Advance FLIM-FRET Microscopic Technic for Cancer Cellular Imaging" at Anna University, Chennai	2	17.12.2018 - 22.12.2018
43.	GIAN Course on "Innovation to Technology Enterprise : Idea to Entrepreneurship at NIT, Silchar	1	30.07.2018 - 10.08.2018
44.	GIAN course on "PID Controller" at MIT campus, Anna University, Chennai	2	08.10.2018 - 12.10.2018
45.	FDP on "Artificial Intelligence using Deep Learning and Machine Learning" at NIT, Trichy	2	26.11.2018 - 30.11.2018
46.	FDP on ARM Based Embedded System Development at NIT, Calicut	3	18.06.2018 - 24.06.2018

47.	Faculty Development Programme on Teaching Learning Centre at IIT, Madras	3	03.12.2018 - 05.12.2018
48.	QIP program on Applied Optimal Control and State Estimation at IISC, Bangalore	2	02.07.2018 - 07.07.2018
49.	Improving the sustainability of E-Waste Management / Plastic Waste Management at Vel Tech, Chennai	3	17.07.2018
50.	FDTP on GE8151- Problem Solving And Python Programming at NEC	4	04.06.2018 - 11.06.2018
51.	FDP on Artificial Intelligence using Deep Learning & Machine Learning at National Institute of Technology, Tiruchirappalli	1	26.11.2018 - 30.11.2018
52.	FDP on Internet of Things at National Institute of Technology, Warangal	1	18.06.2018 - 22.06.2018
53.	Infosys Training Programme on Agile Methodologies at Mahindra Engineering College, Tiruchengode	1	22.11.2018 - 24.11.2018
54.	FDP on Machine Learning and its Applications at Indian Institute of Technology, Roorkee	1	09.07.2018 - 13.07.2018
55.	QIP Short Term Course Machine Learning methods & Advanced-MRI applications at Indian Institute of Technology, Bombay	2	23.07.2018 - 27.07.2018
56.	FDP201x on Pedagogy for Online and Blended Teaching-Learning Process	2	12.06.2018 - 18.07.2018
57.	GIAN Course on MIMO & Filter Bank Multi-Carrier Technologies for 5G Networks at Indian Institute of Technology, Kanpur	1	25.07.2018 - 28.07.2018
58.	FDP on Teaching Learning Pedagogy at Indian Institute of Technology Madras	2	03.12.2018 - 05.12.2018
59.	Faculty Development Program for Student Induction at Francies Xavier College, Tirunelveli.	2	26.07.2018 - 28.07.2018

| 6.3.4 | Faculty and Staff recruitment (no. for permanent recruitment): |

Teaching		Non-teaching	
Permanent	Fulltime	Permanent	Fulltime
30	30	20	20

| 6.3.5 | Welfare schemes for |

Teaching	• Transport facilities
Non teaching	• Staff Quarters
	• Medical and Maternity Leave
	• EPF
	• Mediclaim policy &
	• Group gratuity
Students	• Scholarships like SC/ST, first graduate etc.,
	• Medical Insurance Policy for students and parents.
	• Prof.S.Kannappan Memorial Scholarship for academically excellent and poor student.
	• Alumni scholarship for poor student
	• Alumni award for best project

6.4	**Financial Management and Resource Mobilization**
6.4.1	Institution conducts internal and external financial audits regularly (within 100 words each) A financial committee has been constituted once in two years to allocate funds for various activities and it was placed before the Governing council for getting approval. At the end of the financial year, the overall account details are audited by a charted audited accountant.
6.4.2	Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year (not covered in Criterion III)

Name of the non government funding agencies / individuals	Funds / Grants received in Rs.	Purpose
Alumni Fund	95,000	Students' best Project award, Students' Scholarship
Prof. Kannappan Memorial Award	1,35,000	Academically strong and economically poor students' scholarship for 3 years
Research fund	20,00,000	Fund allotted from the institution for research
CSR Fund	10,00,000	Fund allotted from the Kayaar Exports Private Limited, K.R.Nagar

6.4.3	Total corpus fund generated
6.5	**Internal Quality Assurance System**
6.5.1	Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes / No	Agency	Yes / No	Authority
Academic	Yes	IQAC Peer Review Team	Yes	Faculty Development Section
Administrative	yes	TQM Team	No	--

6.5.2	Activities and support from the Parent – Teacher Association (at least three) ▪ General Body Meeting of Parent Teachers Association was held on 29.07.18 at 11.30 am ▪ General Body Meeting of Parent Teachers Association was held on 03.02.19 at 11.30 am ▪ Executive committee members meetings was held on 29.07.2018 & 03.02.2019 at 10 am ▪ Parents are informed about CBCS, OBE, Gate coaching and Aptitude training etc.,
6.5.3	Development programmes for support staff ▪ "Re-Engineering of attitude, skills and knowledge" : HR Training – 22.12.2018 & 05.01.2019
6.5.4	Post Accreditation initiative(s) (mention at least three) ▪ Procedure for Credit Transfer is defined ▪ Student Leadership development programme is organized to enhance the employment skills ▪ Procedure has been defined to identify slow learners ▪ Entrepreneurship activities are motivated for self employment.

6.5.5	a. Submission of Data for AISHE portal : **No**
	b. Participation in NIRF : **Yes**
	c. ISO Certification : **No**
	d. NBA or any other quality audit : **Yes**

6.5.6	Number of Quality Initiatives undertaken during the year

Name of quality initiative by IQAC	Date of conducting activity	Number of participants
External Peer Review Meeting	03.08.2019	16
15th IQAC Meeting	16.02.2019	31
14th IQAC Meeting	07.07.2018	27
Interaction of Principal with the 2nd and 3rd year students to get the feedback regarding academic performance and other facilities provided to the students	03.10.2018 & 05.01.2019	42
Interaction with the final year students to get the feedback regarding academic performance and other facilities provided to the students	12.02.2019	42
Participation in NIRF	17.01.2018	---
NBA visit	23.02.2019	Mechanical, EIE & IT
Academic Quality Audit	05.12.2018 **27.03.2019**	Mechanical, ECE, EEE, EIE, CSE, IT & Civil
	11.01.2019	S&H
UGC on the spot inspection for the extension of Autonomous Status	09.03.2019 & 10.03.2019	--
NIRF Ranking		Rank -150-200
Participated in CII Survey		Bagged Platinum

<u>*Note*</u>*: Some Quality Assurance initiatives of the institution are: (Indicative list)*

- *Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback from all stakeholders collected, analysed and used for improvements*
- *Academic Administrative Audit (AAA) conducted and its follow up action*
- *Participation in NIRF*
- *NBA*
- *Academic Quality Audit, etc*

CRITERION VII - INSTITUTIONAL VALUES AND BEST PRACTICES

7.1	**Institutional Values and Social Responsibilities**

7.1.1	Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period (from-to)	Participants	
		Female	Male
Womens' Day Celebration	08.03.2019	✓	--

7.1.2	Environmental Consciousness and Sustainability/Alternate Energy initiatives such as: Percentage of power requirement of the College met by the renewable energy sources: **About 5% of power utilization through Solar Energy and Energy Conservation**

7.1.3	Differently abled (Divyangjan) friendliness		

Items Facilities	Yes / No	No. of Beneficiaries
Physical facilities	No	--
Provision for lift	No	--
Ramp/ Rails	Yes	--
Braille Software/facilities	Yes (Under development)	--
Rest Rooms	No	--

Scribes for examination	Yes (Provision is available)	--
Special skill development for differently abled students	No	--
Any other similar facility	No	--

7.1.4	Inclusion and Situatedness

Enlist most important initiatives taken to address locational advantages and disadvantages during the year

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date and duration of the initiative	Name of the initiative	Issues addressed	Number of participating students and staff
2018-19	1	1	November 2018 to March 2019	MHRD – Institution Innovation Council	For Economic Development	All students and Faculty members
2018-19	1	1	May-June 2019	Live-In lab (Swichh Bharat Abhiyan Scheme)	For the welfare of rural people (for village adoption scheme)	25
2018-19	1	1	June'18 – April'19	NewGen IEDC	For development of products	40

7.1.5	Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

Title	Date of Publication	Follow up (maximum 100 words each)
NEC Bulletin	10.06.2018	Students are generally following the code of conduct correctly and if any misconduct, students are advised through the mentor. If any violation, discipline committee do the enquiry and necessary actions will be taken.

7.1.6	Activities conducted for promotion of universal Values and Ethics		

Activity	Duration (from-------to-------)	Number of participants
Mangament Development Training programme on "manage Life creatively"	05.02.19 - 06.02.19	All Faculty Members

7.1.7	Initiatives taken by the institution to make the campus eco-friendly (at least five)
	- Campus landscape has been carried out for the worth of Rs. 60 lakhs. - One Day Colectate Meeting on Antiplastic Campaign Meeting was conducted on 05th June 2018 - Teachers day celebration (Healthy relation) on 05th September 2018. - Toilet Awareness Programme on (Clean Environment) on 27th September 2018. - Tree Plantation Camp (Promote Green) Awareness on 23rd September 2018. - Genetically modified Plants {Modern agriculture} on 02nd January 2019 - Plastic Awareness camp on Antiplastic was conducted on 02nd January 2019 - ECO-FEST was conducted from 18th – 22nd February 2019. - An awareness program on BanPlastic (Plastic Awareness Campaign) was conducted on 06th March 2019.
7.2	**Best Practices** - Implementation of Choice Based Credit System for International recognition of students and job opportunities - Transparency in Evaluation System - Online one credit courses transfer system.
	Describe at least two institutional best practices Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link. Link: http://nec.edu.in/academic/UG%20R-2015%20(amended%209th%20meet).pdf 1. The Curriculum and Syllabi under Regulations 2015 is designed keeping in mind the Outcome Based Education (OBE) and Choice Based Credit System (CBCS). The CBCS enables the students to earn credits across programmes and provides flexibility for slow and fast learners in registering the required number of credits in a semester. The CBCS facilitates transfer of credits earned in different departments / Centers of other recognized / accredited universities or institutions of higher education in India and abroad either by studying directly or by online method. 2. Before the publication of End Semester results, the students are allowed to verify the answer scripts of all subjects. This practice depicts the transparency of evaluation process. 3. Students can study one credit elective courses offered by the department itself or online course like NPTEL, MOOC, swayam etc., or in collaboration with the industry. Three elective courses of 1 credit shall replace a 3 credit elective course. Through this system, students can complete their courses early and the students can able to undergo internship/industrial training in 8th semester. While completion of course, students can get industrial exposure, campus placement along with the degree.

7.3	Institutional Distinctiveness	
	Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust. Provide the weblink of the institution in not more than 500 words	

Product Development and Entrepreneurship is one of the distinctive characteristic programs in our Institution. As a part of vision and mission of our college to produce industry-ready students, we have introduced **Product Development and Entrepreneurship** activity as a part of curriculum. A systematic plan has been formulated for the implementation of this program. Further, to build these traits, the following courses have been included in the curriculum.

1. *Product Development Laboratory*: This course is designed for students to identify, design and fabricate a product which is more useful to the rural society
2. *Live - in-Lab*: This course is designed to support rural societies under the Scheme of swatchh Bharath. The batch of 5 to 6 students can go to a village adopted by the Institution and stay there for few days and they can interact with the village people. After that they have to identify a problem and then the solution to the problem may be given as report. Based on the nature of the work proper credit can be claimed by the students from the institution form the Institution
3. *Product Design and Development* : This course is designed to inculate product development skill for the students
4. *Critical and Creative Thinking Course*: This non credit course is designed both for the students and faculty. This Course will provide skill and knowledge to the students and faculty to motivate them to develop a product.

Further, to motivate the students community, the college has taken the following initiatives:

1. Established the entrepreneurship development cell (EDC) in the Year 2013.
2. The college has been approved as Business Incubator/Host institution by MSME, New Delhi during 2015. Through this forum, our college is currently supporting five alumni to develop five products to the worth of 29.39 Lakhs.
3. The college has been approved as NEWGEN IDEC, Supported by NSTEDB and DST, Government of India, New Delhi. Through this scheme, college can support students to develop 85 projects to the worth of Rs. 2.5 Lakhs each over a period of five years.
4. Funding of Innovative projects through Alumni association and presenting innovative project awards through alumni association
5. Established CDIO laboratory to develop products
6. Steps have been taken to establish product development laboratory in each department with the support of Institution.

In addition to that, the college has signed MOU with the following alumni entrepreneurs to establish incubation centers for Product development at the campus

1. M/s Apex Design, Coimbatore
2. M/s Bizplus services, Chennai
3. M/s. River silica, Bangalore
4. M/s Sum TWO software Pvt Ltd, Madurai

Outcome:

1. The institution has developed more than 10-15 products with financial support from various Government funding Agencies.
2. **Two of our students (Mr.S.Pradeep Kumar, Mr.M.Manoj Sabareesh) Third Year CSE participated in the CliqTrix Challenge' 19 organized by Zoho Corporation, Chennai 1st prize with cash award Rs. 1,00,000/-**

8.	**Future Plans of action for next academic year (500 words)**

S. No.	Parameters	Action plan
1.	Students' performance	1. More than 85 % of the students should be placed with medium salary of 4 lakhs per annum 2. More than 20 % of the students should get eligible scores in competitive examinations like GATE, Tofel, CAT, MAT, etc., 3. More than 3 % of the students should be motivated / trained to become an entrepreneur.

2.	Research & Development	1. Each department should have ongoing R&D projects worth > 15 lakh. 2. Each department should have ongoing industrial consultancy work worth Rs. 3 lakh. 3. Faculties should be motivated to publish the research articles in high impact factor journals. 4. All the faculty members should be encouraged to participate / present articles in international conferences / workshops / FDPs organized by other leading institutions. 5. Each department should organize Conference / workshops / FDP in every academic year.	
3.	Institute – Industry interaction	1. Every department should sign MoU with minimum 2 companies per year. 2. More number of students should be encouraged to undergo in-plant training / internship program / industrial projects 3. Every department has to develop at least one product every year. 4. Every year, it is proposed to initiate a start up through our alumni and faculty.	

Name: *Dr.V.Kalaivani*

Signature of the coordinator, IQAC

Name: **Dr.K.Kalidasa Murugavel**

Signature of the chairperson, IQAC

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Annexure I

Abbreviations:

CAS	-	Career Advancement Scheme
CAT	-	Common Admission Test
CBCS	-	Choice Based Credit System
CE	-	Centre for Excellence
COP	-	Career Oriented Programme
CPE	-	College with Potential for Excellence
DPE	-	Department with Potential for Excellence
GATE	-	Graduate Aptitude Test
NET	-	National Eligibility Test
PEI	-	Physical Education Institution
SAP	-	Special Assistance Programme
SF	-	Self Financing
SLET	-	State Level Eligibility Test
TEI	-	Teacher Education Institution
UPE	-	University with Potential Excellence

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