

Yearly Status Report - 2019-2020

Part A			
Data of the Institution			
1. Name of the Institution	NATIONAL ENGINEERING COLLEGE		
Name of the head of the Institution	Dr.K.KalidasaMurugavel, M.E., Ph.D.		
Designation	Principal		
Does the Institution function from own campus	Yes		
Phone no/Alternate Phone no.	04632227441		
Mobile no.	9442280227		
Registered Email	principal@nec.edu.in		
Alternate Email	iqac@nec.edu.in		
Address	K.R.Nagar, Kovilpatti		
City/Town	Kovilpatti		
State/UT	Tamil Nadu		
Pincode	628503		
2. Institutional Status			

Autonomous Status (Provide date of Conformant of Autonomous Status)	23-May-2011	
Type of Institution	Co-education	
Location	Rural	
Financial Status	Self financed	
Name of the IQAC co-ordinator/Director	Dr.V.Kalaivani	
Phone no/Alternate Phone no.	04632222502	
Mobile no.	9842637770	
Registered Email	iqac@nec.edu.in vkcse@nec.edu.in	
Alternate Email		
3. Website Address		
Web-link of the AQAR: (Previous Academic Year)	https://nec.edu.in/wp-content/upload s/2020/01/AQAR-2018-19.pdf	
4. Whether Academic Calendar prepared during the year	Yes	
if yes,whether it is uploaded in the institutional website: Weblink:	https://nec.edu.in/wp-content/uploads/2 020/09/IQAC-Academic- Calender-2019-2020.pdf	

5. Accrediation Details

Cycle	Grade	CGPA	Year of	Vali	dity
			Accrediation	Period From	Period To
1	В	2.5	2014	21-Feb-2014	20-Feb-2019
1	B++	2.83	2017	22-Feb-2017	21-Feb-2022

6. Date of Establishment of IQAC 06-Jun-2013

7. Internal Quality Assurance System

Quality initiatives by IQAC during the year for promoting quality culture			
	e quality initiative by QAC	Date & Duration	Number of participants/ beneficiaries

External Peer Review Meeting	03-Aug-2019 1	16	
17th IQAC Meeting	22-Feb-2020 1	27	
Established MHRD	21-Nov-2018 1	3950	
Academic Quality Audit - Odd Semeste	24-Dec-2019 4	50	
Academic Quality Audit - Odd Semester	27-Dec-2019 4	30	
Academic Quality Audit - Even Semester	24-Jun-2020 3	45	
Academic Quality Audit - Even Semester	26-Jun-2020 3	35	
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8. Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/IDBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/Departmen t/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
National Engineering College	New generation innovation and Entrepreneurshi p development Centre (NewGen IEDC)	NSTEDB & DST, New Delhi	2017 1825	6000000

9. Whether composition of IQAC as per latest NAAC guidelines:	Yes
Upload latest notification of formation of IQAC	<u>View File</u>
10. Number of IQAC meetings held during the year :	2
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	Yes
Upload the minutes of meeting and action taken report	<u>View File</u>
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)

Enhancement in TeachingLearning process through LMS (Learning Management Systems - Moodle platform)

Students are motivated to participate and explore their innovative ideas in various Hackathon and develop new products by providing fund through NewGen IEDC

Preparing moderation assessment report for continuous evaluation of quality as well as course outcome attainment for individual subjects

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 Training in reputed industries of their core areas with the funding from the management.

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

Plan of Action	Achivements/Outcomes	
Each department should have ongoing R&D projects worth > 15 lakh.	Faculty members are motivated to submit innovative project proposals to various funding agencies	
The average pass % of passed out students should be more than 90%	The average pass % of passed out students in 2019-2020 is 100%	
More than 3 % of the students should be motivated/trained to become an entrepreneur.	1.5 % of students have been motivated and became entrepreneurs.	
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.	
More than 75 percentage of the students should be placed with medium salary of Rs Four lakhs per annum	80 percentages of the eligible students are placed with an average salary of Rs Two and half lakhs per annum.	

14. Whether AQAR was placed before statutory body ?

Yes

Name of Statutory Body	Meeting Date
Management and before the IQAC Peer Review Team including IQAC internal members.	03-Aug-2019

15. Whether NAAC/or any other accredited	Yes
body(s) visited IQAC or interacted with it to assess the functioning?	
Date of Visit	23-Feb-2019
16. Whether institutional data submitted to AISHE:	Yes
Year of Submission	2020
Date of Submission	30-Jul-2020
17. Does the Institution have Management Information System ?	Yes
If yes, give a brief descripiton and a list of modules currently operational (maximum 500 words)	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, ecircular 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. InsproPlusfor MIS has been installed and available at our college premises since august 2011.

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	Programme Code	Programme Specialization	Date of Revision
BE	001	Mechanical Engineering	09/11/2019
BE	001	Mechanical Engineering	23/05/2020
BE	002	Electronics and Communication Engineering	02/11/2019
BE	002	Electronics and Communication Engineering	21/05/2020
BE	003	Computer Science and Engineering	23/11/2019
BE	003	Computer Science and Engineering	30/05/2020
BE	004	Electrical and Electronics Engineering	08/11/2019
BE	004	Electrical and Electronics Engineering	27/05/2020
BE			06/11/2019
BE			11/05/2020
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1.1.2 – Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year

	Programme with Code	Programme Specialization	Date of Introduction	Course with Code	Date of Introduction
	BE	CSE	26/08/2019	Skill Rack Orientation Programme	26/08/2019
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1.2 - Academic Flexibility

1.2.1 - New programmes/courses introduced during the Academic year

Programme/Course	Programme Specialization Dates of Introduction	
BE	15ME24L CDIO Approach in Product Design and Project Management 15ME25L Digital Manufacturing 15ME26L Codes and Standards	11/04/2020
ME	19GD17E Advanced Vibration Engineering	23/05/2020

BE	19GD18E Machinery Fault Diagnosis 19GD19E Rotor Dynamics 19GD20E Optimization Techniques 15EC22E-Embedded System Architecture 15EC23E- Embedded System Analysis and Risk Management 15EC25L-Python programming and it's applications. 15EC26L- Core Java fundamentals 15EC27L-Vulnerability assessment and penetration testing. 15EC28L-Malware analysis	02/11/2019
BE	and reverse engineering. 19CS51C-Java Programming 19CS52C -Theory of Computation 19CS53C-Professional Ethics and Human Values 19CS54C-Embedded Programming 19CS55C -	23/11/2019
	Cryptography and Network Security E1-Elective - I Constitution of India/ Essence of Indian Traditional Knowledge 19CS61C -Object Oriented Analysis and Design 19CS62C -Principles of	
	Compiler Design 19CS63C -Internet and Web Technology 19CS64C -Internet and Web Technology Laboratory 19CS65C - Comprehension 19CS66C -Product Development Laboratory	
	19CS56C -Java Programming Laboratory 19CS57C -Embedded Programming Laboratory 19CS58C -Cryptography and Network Security Laboratory 15CS30L -Business Analytics 15CS31L - Html5	
	and CSS3 Mobile Application Development 15CS32L - Web Services for Mobile Programming 15CS33L - E-learning Platform 15CS34 - SQL and Database Design 15CS35 - iPhone Operating System 15CS36L - Robotic Process	

	Automation 15CS37L - Practice on Robotic Automation 15CS38L - Cloud Infrastructure and Deployment			
BE	15EE26E - Embedded and Real-time systems	08/11/2019		
BE	15EE25L - Quality Practices for Safety critical instrumentation system	27/05/2020		
BE	15IT30L - Business Analytics 15IT31L - Html5 and CSS3 Mobile Application Development 15IT32L - Web Services for Mobile Programming 15IT33L - E-learning Platform	02/11/2019		
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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	Programme Specialization	Date of implementation of CBCS/Elective Course System
BE	Under Graduate Programmes	12/06/2019
ME	Postr Graduate Programmes	12/06/2019

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	15/07/2019	384	
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1.3.2 - Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships		
BE	Mechanical	370		
BE	ECE	262		
BE	CSE	109		
BE	EEE	237		
BE	EIE	55		
BTech	IT	90		
BE	CIVIL	70		
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1.4 - Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes

1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

Feedback Obtained

• Students' feedback about each course in a semester is obtained through online system using InsPro Plus 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 Appraisaland stakeholdersfeedback 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	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled	
ME	CSE	97	24	24	
BE	CSE, ECE	540	511	511	
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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 fulltime teachers available in the institution teaching only UG courses	institution	Number of teachers teaching both UG and PG courses
2019	2530	56	166	16	182

2.3 – Teaching - Learning Process

2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), Elearning 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	Numberof smart classrooms	E-resources and techniques used
194	194	10	37	21	10

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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
2586	182	1:14

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
28	28	28	28	2

2.4.2 – Honours and recognition 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	
2020		Professor	Margdarshak,AICTE	
	Dr.A.Shenbagavalli			
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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/ year	Last date of the last semester-end/ year- end examination	Date of declaration of results of semesterend/ year- end examination
Mtech	2019-2020 Odd semester	I	01/01/2019	02/02/2019
ME	2019-2020 Odd semester	I	01/01/2019	02/02/2019
Mtech	2019-2020 Odd semester	III	30/11/2019	18/01/2020
ME	2019-2020 Odd semester	III	30/11/2019	18/01/2020
BTech	2019-2020 Odd semester	VII, V III	30/11/2019	18/01/2020
BE	2019-2020 Odd	VII, V III	30/11/2019	18/01/2020

	semester			
BE	2019-2020 Odd semester	I	11/01/2019	02/02/2019
BTech	2019-2020 Odd semester	I	11/01/2019	02/02/2019
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2.5.2 – Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year

Number of complaints or grievances about evaluation	Total number of students appeared in the examination	Percentage
129	5108	2.5

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)

https://nec.edu.in

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
UG	BE	Mechanical	141	141	100
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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 weblink)

erp.nec.edu.in/feedback

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

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

Туре	Name of the teacher awarded the fellowship	Name of the award	Date of award	Awarding agency
National	Nil	Nil	Nill	Nil
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3.2 - Resource Mobilization for Research

3.2.1 - Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Any Other	1	Alumni Fund	238000	238000

(Specify)				
Major Projects	4	DST(TDT)	60000	60000
Major Projects	3	DST (SERB)	2766948	2766948
Students Research Projects (Other than compulsory by the University)	2	NewGen IEDC	600000	4750000
Students Research Projects (Other than compulsory by the University)	1	The Institution of Engineers IE(I), Kolkata	30000	30000
Students Research Projects (Other than compulsory by the University)	2	IE(I)	20000	20000
Students Research Projects (Other than compulsory by the University)	2	TNSCST	7500	7500

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

3

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	Name of the Dept.	Date		
Carrier guidance programme on higher studies in abroad	Mr.A.Krishnan,Cloud Engineer, Amazon web service	09/08/2019		
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3.3.2 - Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
IIC Innovation Ambassador	Mr.M.Satheesh Kumar	Institution's Innovation Council of MHRD's Innovation Cell, AICTE	09/01/2020	IIC Innovation Ambassador

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

Incubation Center	Name	Sponsered By	Name of the Start-up	Nature of Start- up	Date of Commencement
NEC Business Incubator	Mr. V. Mani Sankar	Support for Entrepre neurial and Managerial Development of MSMEs through Incubators	NEC Business Incubator	student entrepreneur category	01/07/2019
NEC Business Incubator	Mr.P.Issac Nishanth Jefferson	ANIMATION HUT	ANIMATION HUT	student entrepreneur	01/07/2019

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3.4 - Research Publications and Awards

3.4.1 – Ph. Ds awarded during the year

Name of the Department	Number of PhD's Awarded
B.E Mechanical Engineering	2
B.E Electrical and Communication Engineering	3
B.EComputer Science Engineering	2
B.E Electrical and Electronics Engineering	5
B.E Electronics and Instrumentation Engineering	1
B.Tech Information Technology	2

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

Туре	Department	Number of Publication	Average Impact Factor (if any)
National	Mechanical Engineering	18	2.06
National	Electrical and Communication Engineering	11	1.92
National	Computer Science Engineering	5	0.93
National	Electrical and Electronics Engineering	13	1.67
National	Electronics and Instrumentation Engineering	3	1.89
National	Information Technology	6	2.46

National	Science and Humanities	4	2.63		
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3.4.3 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication			
B.E Mechanical Engineering	18			
B.E Electrical and Communication Engineering	30			
B.E Computer Science Engineering	45			
B.E Electrical and Electronics Engineering	32			
B.E Electronics and Instrumentation Engineering	10			
B.Tech Information Technology	27			
B.E - Civil Engineering	7			
Science and Humanities	7			
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3.4.4 - Patents published/awarded during the year

Patent Details	Patent status	Patent Number	Date of Award
A System for detecting zero-day and spear phishing attack, and method of working therof	Published	201941053278	01/03/2020
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3.4.5 – Bibliometrics of the publications during the last academic year based on average citation index in Scopus/Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
Performa nce analysis and energy metrics of grid - connected photovolta ic systems	Mr.P.Ram anan, Dr.K .Kalidasa Murugavel, A.Karthick	Energy for Sustai nable Deve lopment	2019	3.307	National Engineerin g College	11
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3.4.6 - h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

	Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self	Institutional affiliation as mentioned in
l						citation	the publication

	Performa nce analysis and energy metrics of grid - connected photovolta ic systems	Mr.P.Ram anan, Dr.K .KalidasaM urugavel, A.Karthick	for Sustai	2019	24	11	National Engineerin g College
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3.4.7 - Faculty participation in Seminars/Conferences and Symposia during the year

Number of Faculty	International	National	State	Local
Attended/Semi nars/Workshops	164	178	48	96
Presented papers	36	10	Nill	Nill
Resource persons	Nill	4	34	16

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3.5 - Consultancy

3.5.1 – Revenue generated from Consultancy during the year

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	Name of the Consultan(s) department	Name of consultancy project	Consulting/Sponsoring Agency	Revenue generated (amount in rupees)	
	Mechanical Engineering	Preparation of 3D model for NTPC - kudgi 800 MW	M/s.TryCAE Industrial Engineering Pvt. Ltd., Trichy	50000	
	Electrical and Electronics Engineering	Breakdown Voltage test	P.S.R. Engineering, College, Sivakasi	2000	
	Electrical and Electronics Engineering	Reduction of energy cost (per unit) by study and analyzing the loss of power and optimizing utilization	Kayaar Exports (P) Ltd	48750	
	Electrical and Electronics Engineering	Windmill energy utilization, breakdown and maintenance	Kayaar Exports (P) Ltd	50000	
	Electrical and Consultancy Electronics Service towards Engineering power purchase from OPG Group Captive		Kayaar Exports (P) Ltd	44750	
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3.5.2 - Revenue generated from Corporate Training by the institution during the year

Name of the	Title of the	Agency seeking /	Revenue generated	Number of trainees
Consultan(s)	programme	training	(amount in rupees)	

department						
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3.6 - Extension Activities

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

		<u> </u>			
Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities		
Eye Camp (10.02.2020)	Dr.Agarwal Eye Hospital, Tirunelveli	4	50		
DBT Sponsored Three Days Popular lecture Series on "Energy Conservation, Solid Waste Management and Health Remedies (Exclusively for women) will be held at National Engineering College on 02.01.2020 to 04.01.2020.	Department of Biotechnology Sponsored in association with Electronics and Instrumentation Engineering Department of National Engineering College, K.R.Nagar.	6	100		
A Mega Free Eye Camp (24.09.2019)	Aravindh Eye Hospitals, Tirunelveli	4	60		
Medical Camp (10.02.2020)	_		50		
			35		
Electors Verification programme (05.10.2019)	Mr.Manikandan , Theshildhar, Tamilnadu Election Department, Kovilpatti, Thoothukudi District	8	500		
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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	Number of students

			Benefited		
Dr.S.TamilSelvi - Yoga	Vethathri Maharishi Thathuva Gnani Gnanasiriur Award	World Community Service Centre	75		
ISTE students chapter Convention18th December 2019	Best Student Award	19th ISTE Tamilnadu Pondicherry Section Annual Convention	1		
Experimental study on Bio- concrete by partialreplacement of FineAggregate using Medical Vial Waste	Innovative Student Project	Indian National Academy of Engineering (INAE)	4		
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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/Agen cy/collaborating agency	Name of the activity	Number of teachers participated in such activites	Number of students participated in such activites
Swachh Hi seva (Fit India Plogging Run)	Kovilpatti Municipality office	Fit India Plogging Run and Swachh Hi Seva (Collecting the wastes from the	2	50
One Day Entre preneurship Development Programme (30.08.2020) (11.02.2020)	NEC	Hands on training is given to the females of the adopted villages	2	30
COVID-19 Service	Tamilnadu Police Department	Insisting the people to wear the mask Helping the people during the lock down period to implement the law	2	25
One Student One Tree (22.08.2020)	Tamilnadu Agriculture Research Station	100 tree saplings were planted	4	100
NSS Special camp (07.02.2020 to 14.02.2020)	Tamilnadu Medical Department Tamilnadu Veterinary Department	Awareness creation in various aspects Cleaning Computer Teaching etc!	2	100

Tamilnadu					
Election					
Department					
Tamilnadu					
Agriculture					
Department					
Tamilnadu					
Science Forum					
Tamilnadu Food					
Safety					
Department					
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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	46	0	365		
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3.7.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
Placement cum training	Training	M/S. Jilaba Software Services Pri vateLimited, Chennai-600 125	23/12/2019	03/01/2020	2
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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/Activities	Number of students/teachers participated under MoUs	
Bharu Technologies Private Limited, Chennai	24/08/2019	• Internship training for students. • Industry Know How for Faculties • Industrial projects for students	7	
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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	
72200000	102070316	

4.1.2 - Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added	
Campus Area	Existing	
Class rooms	Newly Added	
Laboratories	Newly Added	
Seminar Halls	Newly Added	
Classrooms with LCD facilities	Newly Added	
Seminar halls with ICT facilities	Existing	
Video Centre	Existing	
Value of the equipment purchased during the year (rs. in lakhs)	Newly Added	
Others	Existing	
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Newly Added	
Classrooms with Wi-Fi OR LAN	Existing	
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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 patially)	Version	Year of automation
InsproPlus	Fully	6.1	2013

4.2.2 - Library Services

Library Service Type	Exis	ting	Newly	Added	To	tal
Text Books	60070	18782094	1168	579816	61238	19361910
Reference Books	1074	Nill	2	Nill	1076	Nill
e-Books	2143	Nill	Nill	Nill	2143	Nill
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4.2.3 – 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	01/06/2020	
No file uploaded.				

4.3 - IT Infrastructure

4.3.1 – Technology Upgradation (overall)

Туре	Total Co mputers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departme nts	Available Bandwidt h (MBPS/ GBPS)	Others
Existin g	1618	1227	1618	88	144	45	68	282	46
Added	62	54	62	0	4	0	4	155	0
Total	1680	1281	1680	88	148	45	72	437	46

4.3.2 - Bandwidth available of internet connection in the Institution (Leased line)

155 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
R D portal	https://nec.edu.in/research/
ERP	erp.nec.edu.in\erp
Student portal	erp.nec.edu.in\std
Staff portal	erp.nec.edu.in\erp
Feedback for Teaching - Learning	erp.nec.edu.in\feedback
Faculty Recruitment	https://nec.edu.in/faculty/
Faculty Appraisal	css.nec.edu.in/fpas
Grievances	css.nec.edu.in/grievance
Choice Based Credit System (CBCS)	css.nec.edu.in/cbcs

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 incurredon maintenance of physical facilites
46700000	50355116	25500000	51715200

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) (information to be available in institutional Website)

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 then onteaching 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

utilitysoftwares 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 libraryis 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. 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 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 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 and maintenance of facilities.

www.nec.edu.in

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	135000	
Financial Support from Other Sources				
a) National	Tamil Nadu Government Scholarship and others	822	11632200	
b)International	0	Nill	0	
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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 Date of implementation	on Number of students	Agencies involved
-----------------------------------------------	-----------------------	-------------------

enhancement scheme		enrolled		
Placement Training Programme	30/11/2019	511	Placement and Training Cell, NEC	
Orientation Programme "Towards Technology Learning"	22/11/2019	180	President co. Founder Doyensys	
BEC Orientation Programme	14/10/2019	511	Cambridge University Chennai	
Skill Rack Orientation Programme	26/08/2019	511	Skill Rack Orientation Programme 26.08.2019 511 PEECEE Castle Software Pvt .Ltd	
<u> View File</u>				

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

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passedin the comp. exam	Number of studentsp placed
2019	Gate Forum Career Guidance Program	53	94	Nill	88
2019	competitive examinations coaching	5	Nill	Nill	Nill
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5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
Nill	Nill	Nill

5.2 - Student Progression

5.2.1 - Details of campus placement during the year

	On campus			Off campus	
Nameof organizations visited	Number of students participated	Number of stduents placed	Nameof organizations visited	Number of students participated	Number of stduents placed
M/s.TATA CONSULTANCY SERVICES,CHE NNAI	358	55	M/s.COGNIZ ANT TECHNOLOGY S OLUTIONS,CHE NNAI	275	24

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

Year	Number of students enrolling into higher education	Programme graduated from	Depratment graduated from	Name of institution joined	Name of programme admitted to
2020	32	B.E / B.TECH	MECHANICAL, ECE, CSE, EEE, EIE, IT, CIVIL	Higher Education	M.E. MBA, M.Tech , PGDM and others
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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	Number of students selected/ qualifying			
CAT	5			
Any Other	19			
No file uploaded.				

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

Activity	Level	Number of Participants		
Weight Lifting Competition for Men Women 19	National Level	300		
Vidhya Bharathi Hockey championship for U-14 U-17 19	National Level	120		
Inter Polytechnic Sports Games for Boys and Girls 19	Divisional State Level	700		
NEC Chess Competition for Boys Girls 19	State Level	550		
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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/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2019	1st prize in pencil sketching event	National	1	Nill	1711054	Maria Lavanya. K
			<u>View File</u>			

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 counsel 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 interact with their fellow friends and asks them to present their grievances in a collective manner. 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, and computer centre and recreation activities.

5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

Office Bearers: Mr Rajendran - President, Mr.M.V.Sundar - Vice President, Mr.S.Sridhar - Secretary, Mr.Adaikappan - Join Secretary, Mr.Pugazhenthi - R, Treasurer, Mr.Arul Manikandan - Joint Treasurer ? 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 seat capacity in the campus on 03-08-14. Alumni members regularly connect and share their experiences with 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 the industry. ? Financially assisting in innovative projects. ? Provides job opportunity through our Alumni.

5.4.2 – No. of registered Alumni:

13694

5.4.3 – Alumni contribution during the year (in Rupees) :

238000

5.4.4 – Meetings/activities organized by Alumni Association :

Meetings/activities organized by Alumni Association S.No Date Branch Batch Event 1. 04.04.2019 EIE 2005 "Mobile App Development" 2. 12.05.2019 ALUMNIES ANNUAL GENERAL BODY MEETING AT BANGALORE 3. 13.06.2019 ECE 1996 Beyond Books 4. 26.06.2019 ALL BRANCH 1994 Silver Jubilee Reunion 5. 16.08.2019 CSE 1999 Motivation Programme 6. 16.08.2019 IT 2012 TCS Technical Training Programme 7. 04.11.2019 Mech 2002 FUTURE OF WORK PLACE 8. 30.11.2019 Mech 2004 Mechanical Industries, field of studies and Opportunity 9. 30.11.2019 Mech 2002 Mechanical

Industries, field of studies and Opportunity 10. 30.11.2019 ECE 1996 Opportunity in Electronics (Video Conference) 11. 15.12.2019 ALUMNIES Alumni APP INAGURAL AT CHENNAI 12. 28.02.2020 EIE 2010 Students Motivation Program 13. 13.03.2020 EIE 1994 Industrial Automation, Chennai 14. 01.05.2020 Online Meeting Alumni General Body Meeting 15. 02.06.2020 ECE 1996 NEC ALUMNI APP-Overview 16. 06.06.2020 ECE 1996 NEC ALUMNI APP- Overview 17. 07.06.2020 Online Meeting Alumni Meeting Webinars conducted during Covid 19 Lockdown. 1. Unnal Matdum Mudium 2.5.2020 11.00.AM Ms.Vijay Banu Muruli Shankar (M/s.Thing Future CORPORATE 02. RESUEM BUILDING (Career Development session. 4.5.2020 10.00 A.M Mr. Vimal (VEI4 Innovative) Mechanical -2014 (Batch) 03. Artificial Intelligence or AI is making inpect on every walk of life 8.5.2020 11.00 A.M Mr.Ramesh Balaji (Senior Data Scientist at TCS) CORPORATE 04. Interview Readiness 14.5.2020 10.00 A.M Dr.MariappanVaithilingam(Amazewit) CORPORATE 05. C Programming 3.4.2020 to 15.4.2020 10.00 A.M Innovative Soultions CORPORATE 06. NEC ALUMNI APP- OVERVIEW 02.06.2020 10.00 A.M to 12.00 PM Dr.Esakki Muthu ECE -1996 Batch 07. NEC ALUMNI APP- OVERVIEW 06.06.2020 10.00 A.M to 12.00 PM Dr. Esakki Muthu ECE - 1996 Batch

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-centred practices: Heads of the departments are empowered to prepare a 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 equipment 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 a 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-centred practices: Through Choice Based Credit System, Students are given the freedom to choose the elective courses as well the faculty members for any course. Students can have the freedom to transfer credits earned through online courses like NPTEL, Coursers, 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):

Strategy Type	Details	
Admission of Students	The students are admitted according to the Anna University / Tamil Nadu	

	Government/ AICTE Norms.
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. ? Sum Two Software Private Limited, Madurai
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.
Library, ICT and Physical Infrastructure / Instrumentation	i. Every department has individual smart class room that worth Rs. 2 Lakh ii. Books exhibition is arranged every year thro' vendors at campus to identify the quality books iii. Special books have been exclusively purchased for Entrepreneurship Development of worth nearer to Rs. 1 lakh. iv. Central library and department libraries are equipped with Air-conditioner v. Every department has individual air-conditioned seminar hall with LCD projector, smart TV and computer system with internet connection
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
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. iv.

	Online evaluation of assessment done by students for individual course
Teaching and Learning	i. Product development laboratories are introduced in every department. ii. Live lectures, recorder video by own and animations are included in teaching process by our faculties. iii. Moodle classroom has been followed for teaching of evaluation of co assessment for all courses. iv. Innovative teaching tools and assessment tools are used based on knowledge levels of course v. Online courses like NPTEL, Courser etc., are insisted to do by all the faculty members every year.
Curriculum Development	i. Efforts have been taken to develop new curriculum for Regulation 2019 by giving special importance for 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. iii. One credit elective course shall be offered by the department itself or in collaboration with the industry/research organizations / higher learning institutions

6.2.2 – Implementation of e-governance in areas of operations:

E-governace area	Details
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/	Name of the	Amount of support
		workshop attended	professional body for	
		for which financial	which membership	
		support provided	fee is provided	

2019	Dr.M.Kathires an, Dr.F.Michael Thomas Rex, Mr.A.Andrews	Design and analysis of Mechanical Systems (DAMS)	National Institute of Technology, Trichy	15600
<u>View File</u>				

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

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2020	Training program on 'Product D evelopment ' for HODs and Senior faculties of all the department s	Re-Engin eering of attitude, skills and knowledge	16/05/2019	16/05/2019	30	40
	<u>View File</u>					

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

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
Numerical investigation of swirl flow on heat transfer enhancement in a stepped pipe	1	03/06/2019	02/07/2019	30
		<u> View File</u>		

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

Teac	hing	Non-teaching		
Permanent	Full Time	Permanent	Full Time	
28	28	20	20	

6.3.5 - Welfare schemes for

ilities • Scholarships like rs • SC/ST, first graduate etc., • Medical Insurance diclaim Policy for students and
2

policy • Group gratuity	policy • Group gratuity	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 (with in 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/ Grnats received in Rs.	Purpose
National Engineering College	40000	CDIO - Product development Activities
	<u>View File</u>	

6.4.3 - Total corpus fund generated

0

6.5 – Internal Quality Assurance System

6.5.1 - Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		External Internal	
	Yes/No	Yes/No Agency		Authority
Academic	Yes	IQAC Peer Review Team	Yes	IQAC Peer Review Team
Administrative	Yes	TQM team	No	NA

6.5.2 – Activities and support from the Parent – Teacher Association (at least three)

The General Body Meeting of Parent Teachers Association is held twice in an academic year. Information Sharing The quality of education offered in the institution being shared to the parents by highlighting • NIRF ranking, NBA NAAC accreditation, MHRD's approval of NEC's Institution Innovation council with '1-star' status, status of "Margdarshan" granted to our college by AICTE to act as a guide for other colleges that are striving for excellence. • 'Platinum' status awarded to the Institution in AICTE-CII survey of Industry Linked Technical Institutes 2018, Outcome Based Education and Choice Based Credit System, Importance of industry-institute interaction and internship • the importance of online teaching-learning and significance given to product development and incubation activities Placement and Training The details of the below listed are discussed • intensive training programs given to the students, particulars of the companies came for campus placement to our college and the annual salary package • importance of Skill rack and "Dream Job" which will facilitate the students to take up more than one job offer • objective of 100 percent career settle settlement and advantages of undergoing internship programs Stake holder's views • Appreciation of the tutor/mentor system followed in the college and efforts taken towards campus placement • Bringing

awareness among the students regarding the apprentice system. • Creation of positive attitude among students for their upliftment and career settlement by faculty members and parents. • Training for GATE exam so as to facilitate students for taking job opportunities in public sectors in addition to TOEFL and GRE exam. • Appropriate usage of mobile phone for online blended teaching-learning.

6.5.3 – Development programmes for support staff (at least three)

? "Re-Engineering of attitude, skills and knowledge": HR Training-07.12.2019,14.12.2019 04.01.2020

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 - Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
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

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2019	External Peer Review Meeting	03/08/2019	03/08/2019	03/08/2019	16
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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	Period To	Number of I	Participants
			Female	Male
Women Empowerment programme -Health and Fitness	22/01/2020	22/01/2020	64	Nill

7.1.2 - Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources

About 5 percentage of power utilization through Solar Energy and Energy Conservation

7.1.3 - Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries

Physical facilities	No	Nill
Provision for lift	No	Nill
Ramp/Rails	Yes	Nill
Braille Software/facilities	Yes	Nill
Rest Rooms	No	Nill
Scribes for examination	Yes	Nill
Special skill development for differently abled students	No	Nill

7.1.4 – Inclusion and Situatedness

Year Number of initiatives to address locational advantages and disadva ntages Nill 20/09/2 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019 019		on and ondated						
2019 Nill 7 21/01/2 1 Idea Su Address 99 bmission ing the solutions India to social Hackathon issues and problems related to public and private sectors	Year	initiatives to address locational advantages and disadva	initiatives taken to engage with and contribute to local	Date	Duration			participating students
bmission ing the solutions India to social Hackathon issues and problems related to public and private sectors	2019	5	Nill		3	Startup E ntreprene urship Summit (NECSES)	of entrep reneurial	820
	2019	Nill	7	020		bmission in Smart India	ing the solutions to social issues and problems related to public and private	99

7.1.5 – Human Values and Professional Ethics

Title	Date of publication	Follow up(max 100 words)
NEC Bulletin	10/06/2019	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	Duration To	Number of participants		
Mangament Development Training programme on "manage Life creatively"	05/02/2019	06/02/2019	182		
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7.1.7 - Initiatives taken by the institution to make the campus eco-friendly (at least five)

NEC ECO club was started in the year 2015-16 with an objective to create consciousness among the students and public regarding water conservation, energy conservation, clean and green awareness through various activities. • Eco Club students involve in open-orientation programmes (skit, dance, mime show etc.) on afforestation, saving nature and agriculture, energy and water conservation every semester in the campus and public areas. • Every year it organizes "ECOFEST" on the theme for our students and conducts events related to the environment such as Echo of ECO, Eco Hunt, Mime, Puppet show etc. • As a part of World Environment Day celebrations, motivational talk on the theme "Save Nature Wholistic waste management", drawing and elocution competitions on the theme 'Beat Air pollution' was organized for the students. • Environmental dustbins are provided in the campus and the club members regularly ensure the proper disposal. • As per the Tamil Nadu Government's initiative on 'Plastic Pollution Free Tamil Nadu', the club joined hand with NSS and conducted various campaigns. • As per the campaign One Student, One Tree, launched by honourable Minister of HRD, various tree plantation sessions being organized frequently in the campus and the club members take care of the planted tree saplings. About 32 varieties of more than 1500 trees are available in the campus. • The club had displayed the slogans related to creating awareness on Environment, Water, Energy conservation and waste management through the campus. • A startup regarding 'Digitization of trees' in our campus has been established through the Business Incubator of NEC with Flora KYC, Chennai which involves capturing the image of trees, for the purpose of identification, digitization, storage and analysis using Machine Learning Algorithm

7.2 - Best Practices

7.2.1 – Describe at least two institutional best practices

1. Online Teaching Learning Process and Online assessment are done for all courses through moodle classroom with dedicated moodle server Now, more than 2000 users are visiting moodle platform. 2. 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. 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.

http://nec.edu.in/academic/UG%20R-2015%20(amended%209th%20meet).pdf

7.3 – Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust 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 inculcate 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. National Engineering College Secured 189thRank in the National Institutional Ranking Framework Rankings - 2020. 2. Our institution got ARIIA ranking in the band A (between6th to 25th) position. 3. The institution has developed more than 10-15 products with Government agencies.

Provide the weblink of the institution

https://nec.edu.in/

8. Future Plans of Actions for Next Academic Year

Various steps have been taken for the purpose of improving the quality of both the students and faculty members. Different platforms are created to bring learning environment among the students. The following plans will be carried out in the next academic year 2020 - 2021. ? Being mandatory for all faculty members to attend Faculty Development Programs in reputed institutions in the upcoming years ? The faculty members are motivated by the Research and Development Review Committee to publish their research finding in SCI journals and apply research

funding in various agencies. ? Providing various Placement oriented training programs such as BEC, CODE IT, communication skill training, C programming and Python for the students ? All the faculty members are encouraged to attend industrial training in every year. ? To develop products through students projects and to get patents through innovative products ? Students are encourage to became entrepreneur with pioneering ideas through NEC-Business Incubator Cell K.R. Innovation Center ? To get consultancy projects through industrial knowhow program by faculty members ? To Publish research papers in SCI Journal by PG students and Scopus journals by UG students ? To get globally accepted certification by students to faculty in their domain area. ? NPTEL Certification by Students Faculty Members. Co - Curricular and Extra Curricular Activities The following co - curricular and extra - curricular activities enable the students to acquire soft skills and interpersonal skills. ? Conducting awareness programs and programs related to Entrepreneurship for the students ? Conducting various Guest lectures and alumni interaction on current topic ? Organizing Industrial Visit based on their discipline ? Planned to conduct workshop to enhance the skills among the students in the Odd Saturdays Social Activities The following social activities will be carried out to give humanitarian Perspective and values of life to our college students and to give knowledge and technological exposure to the students of rural area. ? Conducting laboratory practical sessions for rural area school students ? Implementation of e - learning for school students in villages ? Conducting various soft skills training program for both school teachers and students of rural area ? Arranging orphanage visit for our students

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