# NATIONAL ENGINEERING COLLEGE, K.R. NAGAR, KOVILPATTI

(An Autonomous Institution – Affiliated to Anna University, Chennai)



STRATEGIC PLAN (2020-2025)

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# **Summary of the Institute**

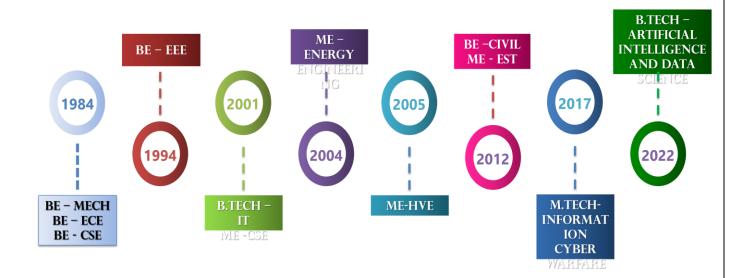
Technical education is crucial for the nation because it develops industrial production, creates jobs, and promotes technology—all of which enhance people's standard of living. After more than four decades of devoted service in the technical education sector, National Engineering College has made a reputation for itself as a provider of excellent professional education. Most of the objectives outlined in the college's first five-year (2015–20) strategic plan were accomplished through its development and effective implementation. The college planned to update the strategy plan for 2020–2025 in order to further achieve new heights in this fiercely competitive, dynamic global context and to satisfy the expectations of the stakeholders. After the first strategic plan was implemented, a thorough SWOT analysis was carried out. Following multiple discussions and an extensive study, the new strategic plan has been developed.

The COVID-19 pandemic and other unprecedented issues have been brought about by the shifting global landscape, which has also presented new prospects for higher education in the new millennium. In order to turn students into high quality professionals, teachers must showcase their abilities using a variety of innovative teaching strategies. Through innovative teaching, research, and innovation that has a quantifiable societal impact, professors and students are expected to make a significant contribution to the modern higher education system. Furthermore, partnerships with overseas universities, research institutions, and the industry are becoming more and more significant. Accordingly, the new strategic plan is to provide a broad range of facilities to address the present issues in every area, with a particular emphasis on research and development, teaching and learning, and cooperative activities on a national and worldwide scale.

It helps to prepare students for a career where they can apply scientific and technical principles to create solutions. Technical education focuses on providing industrial training and imparting knowledge for specific purposes that help to build or improve one's career. The institute perspective plan for 2020 - 2025 is designed to systematically evolve the academic, research and development, administration and infrastructure development plans for the institute.

### **Institute Path Travelled**

National Engineering College, the most prominent landmark of Kovilpatti, has been the crowning glory of this Matchless City of Matches. Its celebrated 'Son of the Soil' Thiru.K.Ramasamy transformed the entire social and cultural scenario in and around this small town by establishing the excellent educational institution popularly referred as "NEC". By wielding the magical wand of social commitment and munificence this foresighted philanthropist transformed a strip of barren land into a magnificent academic complex that has been consistently producing infallible engineers of high competence right from the day of its inception in 1984. This much-acclaimed temple of erudition was established under the self-financing scheme sanctioned by the Government of Tamilnadu G.O. No. 939 dated 20.07.1984 by the National Educational and Charitable Trust, Kovilpatti, Thoothukudi district.



### INSTITUTE HIGHLIGHTS

### University Grants Commission



- Granted Autonomy in 2011
- Recognized under 2f in 2010
- Recognized under 12B in 2015

### Anna University Affiliation & Recognitions



- Permanent Affiliation for 5 UG Programs
- All departments are recognized as Research Centre

### National Board of Accreditation



• 5 UG Programmes accredited under Tier - 1

### **NIRF Innovation Ranking**

- ARIIA 2020 Band A (Rank between 6-25)
- ARIIA 2021 Band Excellent (All India Rank – 10th)
- NIRF Innovation 2022 Rank Band - 101-150

Under self financed technical institutes category

### **NIRF Ranking**



- 189th rank in 2020 191th rank in 2021
- 169th rank in 2022

## **Innovation Ecosystem**

- DST sponsored NewGen IEDC for Rs.2.85 Crores over 5 years (2017–2022)
- NEC has been recommended for DST support Inclusive Technology Business Incubator (iTBI) center under NIDHI i-TBI program for Rs.4.88 Crores in 2023
- Host Institute recognized by Ministry of MSME (9 products – Rs.77 Lakhs)
- K.R. Innovation Centre, a section company (17 Startups incubated & 2 Startups graduated)

### NAAC Accreditation



- B++ Grade in 2017
- A Grade in 2022

### **Institution Innovation Council**



- IIC 2.0 5 Star Rating
- IIC 3.0 4.5 Star Rating • IIC 4.0 – 3.5 Star Rating
- IIC 5.0 Submitted

### Other Achievements

- Platinum Rank in AICTE CII Survey
- DST FIST sponsorship to the tune of Rs.45 Lakhs

#### Research Achievements

- Ongoing Projects 2 (Rs. 57.67 Lakhs)
- H-Index of College 65
- Highest individual H-Index 30

- Highest Citation (single paper) 403
- Highest Total Citation(Faculty) 4500
   (As on 30.10.23)

### NPTEL Achievements (Last 3 Years)

- NPTEL Course Translation
- NPTEL Discipline Star
- NPTEL Believer
- NPTEL Topper
- NPTEL Elite + Gold
- NPTEL Elite + Silver
- NPTEL Elite

- 5 Courses
- 11 Faculties
- 1 Student
- -83 Candidates
- 15 Candidates
- 535 Candidates
- 1978 Candidates

38 funded projects has been completed worth of 6.36 crores

Innovation and Start-up Ecosystem

PRODUCTS DEVELOPED

PATENTS PUBLISHED

**PATENTS GRANTED** 

PRODUCTS COMMERCIALIZED

**FACULTY ENTREPRENEURS** 



### **Global Recognition**

Dr. K. KALIDASA MURUGAVEL, Principal, NEC – Top 2% Highly cited scientists – Field of Energy – Since 2021

- ☐ Dr. S. Tamil Selvi, Prof. & Head /ECE and Mr. B. Ganapathy Ram AP(SG)/ECE won first place in Entrepreneurship project contest at Indian Institute of Information Technology, Chittoor
- Dr. N. B. Prakash, Professor/EEE, awarded Innovative Technological Research and Dedicated, Excellent Professional Achievement award by the Society of Innovative Educationalist & Scientific Research Professional.
- Ms. B. Shanmugapriya, Asst. Professor/CSE got Appreciation for Idea Generation Challenge from BHEL
- Dr.S.Iyahraja Prof. & HoD/Mech, Mr.K.Sudalaiyandi, AP/Mech & Mr.R.Jaya Venkatesh, AP/Mech certified as Energy Auditor in the year 2022 and Mr.R.Vignesh Kumar AP(SG)/Mech certified in the year 2023 by Bureau of Energy Efficiency (BEE)



Mr.G.Pandiyarajan, Asst. Professor/IT, received Best coordinator, ICT ACADEMY TN State level in 2021



S. Rajesh Kumar, AP/CSE received Cash award of Rs. 25,000 along with ZOHO certified Trainer in the year 2022



- Dr. M. Vivekanandan, Adj. Faculty/Mech, Dr. V. R. S. Mani, Asso. Prof. (SG)/ECE and Mr. J.Karthikeyan, AP/CSE for "Design and development of virtual assistant with AI/ML and AR tools, deployed onboard ships/submarines to support maintenance crew for Radar System"
- Dr. F. Micheal Thomas Rex, AP(SG)/Mech, Mr. S. Rajesh Kumar, AP/CSE, Mr. A. Andrews, AP/Mech for "Al Based Condition Monitoring System for Yard Assets".



Mr. Guru Prasath (2020-24, ECE)

A Team from CSE and EEE has been Bihar Innovation Challenge'23 at Patna.





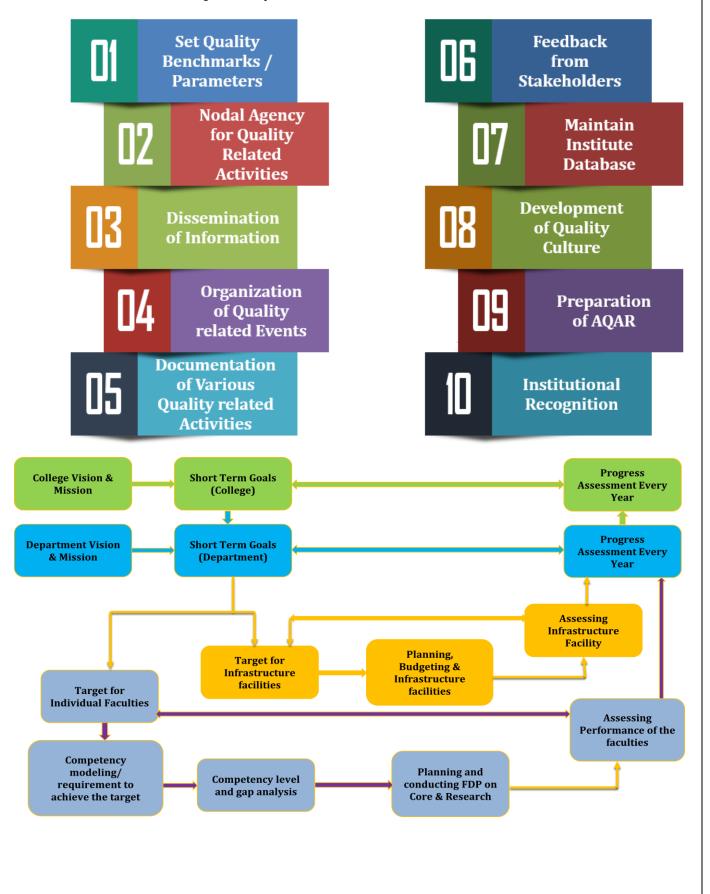
Mr. S. Ganapathy (2020-24 Batch, ECE) Mr. S. Ganapathy (2020-24 Batch, ECE) I Prize in Circuit Design Contest I Prize in Circuit Rix competition PSG Coll. of Tech., Coimbatore Anna University, Tirunelveli





A Team from Mechanical Engineering was shortlisted for prototyping in BHARATH CYCLE DESIGN CHALLENGE organized by AICTE and received Rs.40,000

# **IQAC Objectives and Activities**



### **Timed vision:**

To become a most preferred academic institution in Tamil Nadu for high quality technical education, research and innovation.

# Short term goals for 2022-2023:

#### 100% Career Settlement Students Potential Transformation Placement 85% Salary Level Median Salary 5 L Achievements and participation Academic Performance • > 10 lakhs 20% 5 - 10 lakhs 40% Students' participation 100% 2 - 5 lakhs 5% < 2 lakhs 15%</li> · Achievements 20 **Industry Nature** Admission • In other states 20 Core 50% Software • In other countries 1 Pass percentage Technical contests -Hackathons 70 Level of Industries Without backlog 80% Students' publications Public sector 1% UG Admission 100% SCI indexed journal 30 With backlog 100% 60% MNCs Round 1 25% Other pyt. Industries 39% Scopus indexed journal 120 Grades Round 2 65% 10% Higher Education IEEE International conferences 60 Round 3 10% • CAT, MAT, GATE etc. 7.5% CGPA - above 9 15% Funded projects Cutoff Marks (> 140) TANCET 2.5% No. of projects 30 CGPA 8-9 50% Level of Institutions PG Admission 50% Worth of project 65 lakhs • CGPA 7-8 35% Foreign Universities Regional distribution Quality of internships 5% IITs, NITs & IIMs Public sector undertakings10 South TN 70% Govt./Govt. aided inst. 2% • MNCs 60 NorthTN 25% Reputed institutions 2% Other private industries 30 Other states 5% Internships leading to placement 20 Entrepreneurship 5%

### **Timed vision:**

To become a most preferred academic institution in Tamil Nadu for high quality technical education, research and innovation.

# Short term goals for 2022-2023:

# Strengthening Knowledge

- Online Courses 70%Attending FDP prog 100%Ind. Know-how 100%
- Training programs organized
- With funding 10
  Self supporting 20
  Intra college Prog 10
  Intra dept Prog 20

### Research & Development activities

- PhD holders 70%
- Supervisorship 70%
- SCI journals 150
- Full time scholars 20
- No. of project proposals 150
- Worth of on-going projects 1C
- Consultancy 20
- Worth of consultancy 15 L

# Product Development and related activities

- Product devt activities 30
- No. of patents filed 30
- No. of. Special Lab/ Centre of Excellence/research facility 7
- No. of MoUs signed

20

40

No. of Multi disciplinary activities

### OUTREACH PROGRAMMES

- Delivering expert lecture/session chair/judges
- International Events 10
- National Events
- International collaboration
- International 1
- Inter-institutional 10
- Awards/ Recognitions received from Government/Recognized body 7
- Books/chapter authored 7
- Foreign trip for collaborative work 7

20

Social Related activities

# **ACTION PLAN**

Sl.	Strategy	Action Plan	Implementation
No. 1.	Attracting high	Offering asholarshing at different levels	PD & FS
1.	Attracting high cutoff students	Offering scholarships at different levels	PD & FS
	cuton students	Supporting financially to convert their idea into	PD & F3
		product as startups	PD & FS
		Supporting financially to present their product	PD & F3
		in national/international level	DD 0 FC
		Supporting financially their research/ project	PD & FS
		work to be published in reputed journals	DD 0 FG
		Providing higher level training	PD & FS
		Industry institute cell may be established to	PD & FS
		enhance consultancy services	
		Planning for student exchange programs	PD & FS
		Fulfilling the dream job/higher level placements	Direct
		Flexibility in Teaching Learning process	Direct
		Motivating the students for self-learning during	Direct
		college hours	
		Motivating the students to undergo internships	Direct
		in IITs/IISc.	
2.	Facilities	Buddy system may be established in all	PD & FS
	provided to the	departments	
	students	Reducing the number of working hours	PD
		Bus facility may be started from 4.30 PM itself	PD
		Allowing mobile usage for academic process	PD
		Saturday classes may be conducted through only	PD
		online	
		Supplementary exams may be conducted	PD
		Setting flexible educational process for different	Direct
		level of students	
		Equal opportunities may be given to all	Direct
		department students for placement. Non IT	
		students should be trained for IT jobs	
		Core company placements may be improved.	Direct
		Developing Independent NEC-App	Direct
3.	Amenities	Luxurious environment may be facilitated in	PD & FS
	provided to the	hostels (AC rooms, washing machines, maximum	
	F		

Students  2 numbers/ rooms in hostels I, etc.). Room size may be increased in hostel II.  Stalls for Juices at minimum cost - Hostel in and around colleges  Guest rooms may be provided to parents  Bus facility can be extended up to Madurai  Indoor stadium may be built to facilitate the sports events  Modernizing the first-year class rooms  FS  Transportation facility to Kovilpatti may be provided to the hostellers during Friday evening and week end days.  Hostel canteen may be available up to 11 PM.  Availability of all the goods at 24/7 hours  All government holidays may be declared as holidays  Hostel library and computer centers should be functioned with student committee	FS FS
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4. Perception Brand building PD & 1	FS
Public relation cell may be established PD & 1	FS
Conducting state level science and technology PD &	FS
exhibition to school students	
Providing career guidance programme for +2 PD &	FS
students by experts	
Honoring the parents, school teachers and PD &	FS
students who got higher level placements	
State level sport competition may be conducted PD &	FS
Adopting schools PD &	FS
Help desks for public PD &	FS
Honoring entrepreneurs PD &	FS
Attractive and informative College Website FS	
Popularizing our college name in local news FS	
channel and district newspaper in and around	
our district	
Facilitating Community Radio in college FS	
Effective dissemination through social media FS	
network	
Keeping display boards to disseminate the FS	
college events	

		Conducting a greater number of social	FS		
		awareness programs			
		Conducting at least one national level technical	FS		
		contest			
		Call letter day may be conducted to placed	PD		
		students			
		Effective Counseling may be provided to needy students	Direct		
		Making friendly environment for the students to enjoy the learning	Direct		
		Conducting online tests to +2 students to get	Direct		
		Treating the students as professionals by			
		teaching, non-teaching and supporting staff			
		members			
5.	Alumni Network	Establishing alumni regional center's	PD & FS		
		Region wise alumni meeting may be conducted	PD & FS		
		every year.			
		Ted talks by alumnus may be arranged periodically	Direct		
		Alumni mentoring for needy students	Direct		
		Industrial visit to alumni entrepreneurs'	Direct		
		organizations			
		Solving industrial problems of alumni through	Direct		
		our students			
Note: I	PD - Policy Decision	; FS-Financial Support			

### **ACADEMIC PROCESS**

## Academic course plan

After the subject allocation, course planning is to be finalized in course committee with course instructors well in advance before the start of semester by referring previous year documents.

Minutes of the meeting should be recorded properly.

If necessary, appropriate corrections on course outcome statements and blooms levels may be carried out in the course committee meeting, record it in the minutes and communicated to Dean (Academics) and Controller of Examination through HOD and the Principal.

## Guidelines for preparing the course planning

- Based on the Bloom's taxonomy level of the course outcomes, content delivery methods to be chosen.
- Course outcomes with the level of K3 and above, to practice minimum any two of the active learning process, online tutorial, assignment, case studies etc.
- Course outcomes with the level of K2, in addition to test, any one of the other assessments may be considered to ensure the basic concepts understanding. Use google forms to conduct quiz, MCQs etc, on key topics.
- For each course outcome, schedule for conducting other assessments should be planned.
- Assignments should not be either copy-type from other assignments or reproduction of the existing materials and have to confirm the learning level of the students. It may be of class assignment, individual topic or group assignment.
- Tutorial problems should be of think and do level and/or open-ended problems type.
- Open book test, case studies, etc., are also for higher level CO assessments.
- Appropriate, possible, manageable and optimum number of assessment methods should be chosen. The number of assessment methods for course outcomes should be proportional to the level of the course outcomes.
- Target and threshold should be meaningful. It should reflect the significance and hardness of course outcomes.

# Implementing and Monitoring

• Immediately after the formation of LMS of the courses, each course instructor should share it with co-instructors, HOD, and Dean (FD).

- HODs should monitor the progress of academic activities periodically and ensure that the content delivery methods and assessments methods against each course outcome are correctly followed as per the plan.
- Immediately after the completion of delivery for each course outcome and before
  the start of next course outcome, the other assessments for the particular course
  outcome should be completed.
- Immediately after the evaluation of internal assessment tests, evaluation of the particular course outcomes should be completed and declared to students along with internal marks earned. (I test CO1, II test CO2,3, III test CO4,5)
- Before the last working day, evaluation of the all-course outcomes should be completed and internal marks should be declared to students.
- Within one week of the last working day, by forming department level committee to audit the LMS to verify the quality of the process and to check for all the necessary documents are in the order as per the course file check list.

### **Content Delivery Methods**

### Passive Learning Methods

Lecture, Lecture with Discussion, Quiz, Viva, Demonstration, Tutorial, Assignments (New Situation), Mini Project, Group Discussion, Brain Storming, Asynchronous Discussion, Case studies, Debate, Major Project, Product, Journal Publication, etc.

### **Active Learning Methods**

Think-pair-share, Formulate-Share-Create-Revise, Mud cards, Recitation/Ticking, Gallery walk, Problem based learning, Project based learning, Blended learning, Jigsaw learning, etc.

### Assessment Methods

Controlled Test, Quiz, Viva, Notes taking, Tutorial, Assignments, Laboratory, Mini project, uncontrolled test, Group Discussion, Brain Storming, Case studies, Tutorials, Mini/Major Project, Seminar presentation, Project, Product, Journal Publication, etc.

# Guidelines for choosing content delivery and assessment process

S.No	K	Appropriate	Content	Delivery Appropriate	Assessment
3.NO	Leve	el Methods		Methods	
1	K1	Lecture, Quiz		Controlled Test, Qu	uiz

S.No	K Level	Appropriate Content De Methods	elivery	Appropriate Methods	Assessment
2	K2	Lecture with Discussion, Demonstration			ng, Controlled Test
3	К3	Lecture with Discussion, T Assignments (New Situation), pair-share.	utorial, Think-	Tutorial, Assign Controlled Test	ments, Laboratory, (to some extend)
4	K4	Tutorial, Assignments (New Situ Mini Project, Group Discussion, Storming, Asynchronous Discussi	Brain	Mini project,	uncontrolled test,
5	K5	Assignments, Case studies, Storming, Debate, Tutorials, Project	Brain Major	Case studies. Tu	torials, Mini/Major presentation
6	К6	Project, Product, Journal Publicat	ion	Project, Pr Publication	oduct, Journal

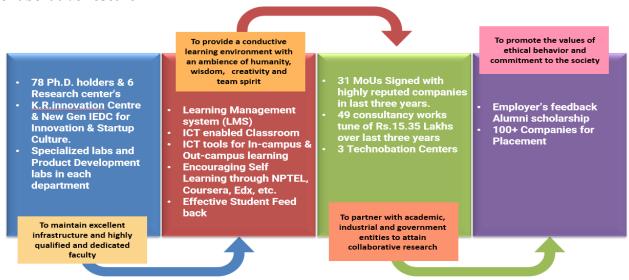
# **Vision, Mission & Quality Policy**

### **Institute Vision**

Transforming lives through quality education and research with human values.

### **Institute Mission**

- To maintain excellent infrastructure and highly qualified and dedicated faculty.
- To provide a conducive environment with an ambiance of humanity, wisdom, creativity, and team spirit.
- To promote the values of ethical behavior and commitment to the society.
- To partner with academic, industrial, and government entities to attain collaborative research



### **Short- and Long-Term Goals of the Institute:**

### **Short Term**

- Respecting college students as budding engineers and scientists embarking adventure towards innovation and invention.
- Nurturing freedom of idea and expression and inspiring a experience of quest.
- To bring 100 % career settlement for students in Core, Product based and IT industries.
- To put together college students for careers throughout an extensive variety of science, engineering, mathematics, and technology disciplines.
- To enhance the self-learning skills among the students.
- To tie-up with national and international industries to create industry-ready students

### Long Term:

- To enrich the potentials of training programme for grooming the technical and soft skills for the students.
- To implement an efficient system that creates the scholars to induce involvement in improving professional and entrepreneurship skills with social and environmental importance

### **Ouality Policy:**

NEC is committed to the culture of quality through the process of continual monitoring and improvement by developing a student centric approach which provides a conducive teaching-learning and research environment with the ambience of creativity, wisdom and team spirit to orient the talents of students with human values for making a positive contribution to society. This would be achieved by meeting legal, statutory and interested parties' requirements.

# **Research and Development Policy**

National Engineering College (NEC) was established in 1984 with a vision, "Transforming lives through quality education and research with human values". The Institute has developed excellent facilities, both in terms of infrastructure and scholastics. NEC encourages faculty members and students to undertake sponsored research projects with a commitment to serve the society. Research and development are carried in several areas like Computation, Energy, Environment, Image Processing, Materials, Manufacturing, Nanotechnology, Telecommunication, and Sensor Networks and simulation studies. Six departments of NEC have been recognized as research centers by Anna University, Chennai.

Regulations relating to the Degree of Doctor of Philosophy (Ph.D) and MS (By Research) in the related Faculties of Engineering and in Science and Humanities of NEC are as per the Regulations for Ph.D and MS (By Research) prescribed by the Anna University, Chennai.

### 1. Research and Development (R&D) Centre:

To achieve high quality research ambience in the Institute, a Research & Development Centre is set up with the objective of developing the strategic plan for scientific and technology research and ensuring the implementation of such plans. The R&D Centre provides specialized administrative and managerial support for the operation of academic research, sponsored research, consultancy and other R&D related activities of the Institute.

#### **2.** Academic Research

### 2.1. Doctor of Philosophy (Ph.D.) and Master of Science (M.S.) by research

- i. A candidate should register at NEC research Centre on getting provisional registration letter from Anna University, Chennai.
- ii. Ph.D./M.S candidates should present their research progress before the review

committee constituted by the concerned department once in six months.  iii. Faculty members with Ph.D. must get supervisorship from Anna University, Chennai.  iv. Maximum of 8 Scholars are permitted to do research under a supervisor.			

- v. The Research scholars are encouraged to publish their research works in reputed SCI indexed journals after getting the approval from their supervisors.
- vi. Research Supervisors are advised to submit the research articles to the journal only after checking the Plagiarism.

### **2.2.** Institution Fellowship:

The enrollment of full-time research scholars plays a vital role in enhancing the quality of research in the institute. In support of our vision and to strengthen the quality of research and development in all our research centers, Institution Fellowship Scheme is implemented exclusively for full-time Ph.D. Scholars. The institutional research fellowship of Rs.10,000/- per month is given to the Ph.D. Scholars. The institutional fellow has to abide by the Research policies of NEC.

#### **2.3.** Incentives for Publications:

In order to motivate the faculty members towards research and publishing their research findings in reputed journals with impact factor, incentives are given to faculty members.

### 2.4 SCI Journal

ications with Impact Factor(Clarivate Analytics)	tive Amount(Rs.)
1.5 and above	10,000
0.5 and above and less than 1.5	5,000
Less than 0.5 but more than 0.1	2,000

#### Patents

For granted patent, Rs, 10,000/- (Equivalent to one high-impact factor journal publication incentive) may be given as an incentive to the inventor (faculty).

### • Scopus Publication

Faculty members with Scopus indexed publications may be given an incentive of Rs. 3000/- per publication.

### 3. Sponsored Research

### 3.1. Recruitment of a project staff:

i. All the appointments related to projects (Junior research fellow/Senior research fellow/Research Assistants/Institutional Fellow) will be contractual and on the basis of consolidated monthly emoluments prescribed by the Sponsoring Agency or the institute.

- ii. The tenure of appointment of a project staff will be for the duration of the project.
- iii. The Project staff shall execute a contract agreement of non-judicial stamp paper at Rs.100/- at the time of joining.
- iv. The selection of project staff shall normally be made as per the guidelines provided by sponsoring agency and with the approval of Principal through Dean (R&D)
- v. The project staff may be allowed to register for Full- time MS (By Research)/Ph.D programme, if he/she fulfills all the requirements prescribed by the Institute.

### **3.2.** Salary and Allowances:

- i. A separate book of accounts shall be maintained for each project.
- ii. Overhead charge of the project will be transferred to the 'Funded Project' account.
- iii. Accounts for sponsored projects shall be maintained under five broad budgetheads. They are: Salary, Equipment, Contingency & Consumables, Travel and Institutional Charges (Overhead). Minor adjustment in approved budget heads may be permitted by the Principal without violating the norms of funding agency.
- iv. Principal Investigators (PIs) shall arrange to maintain Procurement-cum- purchase Registers and Stock/Asset Register.
- v. Cash advance shall be drawn in the name of PI/Co-PI of the project.
- vi. All expenditures shall normally be made within the proposed date of completion of the project. Exception may be permitted with the consent of the sponsor.

### **3.3.** Incentives for Projects Funded by Sponsoring Agency:

In order to promote research environment and activity of the Institute and motivating the researchers, incentives are given to the faculty members, who have Projects sponsored by sponsoring agencies. 50% of the Overhead charge defined by the Agency is given as Incentive to the PI and Co-PI of the project. If no overhead isspecified in the Project Fund, 2% of the amount received is given as Incentive to the PI and Co-PI of the project.

### **4.** Consultancy and related Services:

To promote research-oriented consultancy works, to effectively utilize the equipment's, to impart practical knowledge and to generate revenue, each and every department is encouraged by the Institute to actively take up consultancy works with Industries. The revenue generate for such consultancy works are shared as per the following details.

Category	Activity	Institutes Share as a	Faculty Share as a %
		% of consultancy cost	ofconsultancy cost
I	Projects requiring use o Laboratory and other facilities of the Institute		40 Percent

II	Projects that do not	use 40 Percent	60 Percent
	InstitutesFacilities		

### 5. Faculty Development & Research Interactions:

To get expertise in specific domain and promote the research interest, NEC is providing full financial help (Registration/course Fee and TA/DA) to faculty members attending International Conference/Seminar in abroad and in India, GIAN Courses and Research Workshop/Industry Know How. A faculty can avail these benefits once in an academic year. TA/DA and Honorarium is allowed for the experts coming to NEC for Research Interactions and Collaborative Research works.

### POLICY & PROCEDURE FOR SEED MONEY SCHEME

### Introduction:

A robust research component provides an excellent opportunity for teachers to keep abreast of developments in their respective research areas of interest.

Seed Money Scheme (SMS) has been initiated at NEC to provide research grants to motivate faculty members to stimulate competitive research in their areas of interest. SMS will develop the faculty members to apply major research proposals for funding from National and International agencies.

### Objectives:

- To facilitate faculty members in starting a research program that has the potential to attract funds from external agencies.
- To promote inter-faculty collaboration in emerging research areas.
- To increase the number of publications in peer-review journals.
- To promote the culture of product development.
- To attract the young talented people.

#### Awards:

- Seed money grant of a maximum of 10 lakhs.
- The maximum duration of funding is 2 years.

# **KRIC Innovation Policy**

National Engineering College (NEC), Kovilpatti is a self-financed autonomous engineering institute affiliated to Anna University, Chennai offering various programmes under engineering and technology. The faculty, staffs and students of NEC are always committed towards knowledge generation in emerging thrust areas. K.R. Innovation Centre (KRIC), NEC Business Incubator motivates students, faculty and staff to do activities related to innovation and entrepreneurship through the implementation of NEC Innovation and Startup Policy 2020. This Policy highlights the intellectual property ownership management, technology licensing and commercialization, thus enabling the creation of a robust innovation and Startup ecosystem in the college and also in the southern region of Tamilnadu.

National Engineering College (NEC), Kovilpatti envisions to become a top Innovation and Startup (I&S) creation & supporting Institute among all private Colleges in India by 2025. Our Institute has developed and implemented an Innovation & Startup Entrepreneurship strategy and policy in order to integrate the entrepreneurial startup ventures and innovation activities across students and faculty members of various departments, alumnus, outside entrepreneurs, thus enabling free flow of communication among all stakeholders. Entrepreneurship promotion and development is the major objective of KRIC. To facilitate development of an entrepreneurial ecosystem in the organization, specific objectives and associated performance indicators are defined here in our innovation and startup policy document. These guidelines will also help emphasize that startup entrepreneurship is all about creating an innovative business venture, which is financially successful in the long run. In our region of the state, innovation is still not the main focus of engineering education. In order to achieve the cultural and attitudinal shift, we ensure that 'Innovation and Startup' culture is the primary motive of our Institution. Therefore, this policy framework and guidelines are the need of the hour. These guidelines will enable our Institution Business Incubator to actively support our faculty, staff, students, alumnus and outside entrepreneurs to participate in Innovation and Entrepreneurship (I&E) related activities, thus creating more Jobs in our local region.

### TEAM AND AUTONOMY FOR BUSINESS INCUBATOR

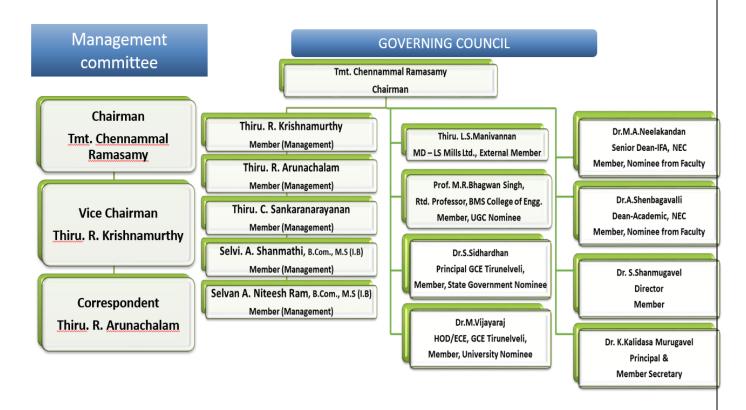
We have very carefully chosen our NEC Business Incubation and Institution Innovation Council (IIC) team as they not only understand the I&S businesses but also in sync with our vision, mission and objectives. Resource mobilization plan has been worked out at our institute for supporting pre-incubation, incubation and IIC activities. For expediting the decision making, hierarchical barriers have been minimized and individual autonomy and ownership of initiatives have been permitted for the Incubation

management team. Micro action plan has also been developed by our team members to accomplish these policy objectives.

### FINANCIAL SUSTAINABILITY

Investment in entrepreneurial activities is a part of our institutional financial strategy. Minimum 1% fund of our total annual budget of the institution is set to be allocated every year for funding startups and Innovation related activities by allocating a separate 'NEC Startup Innovation fund". Apart from this we have formed a strategy to raise funds from diverse sources to reduce dependency on the public funding. We already have New Generation Innovation and Entrepreneurship Development Centre (NEWGen IEDC) fund for 5 years through National Science and Technology Entrepreneurship Development Board (NSTEDB), Department of Science and Technology (DST), New Delhi and we also have a committed Corporate Social Responsibility (CSR) fund from local industry to support our technology incubator for next 10 years, under CSR as per section 135 of the company act 2013.

# **Governing Council**



# **Looking Ahead**

The developed strategic planning document will act as a guide from management all the way down to the staff level and as a monitoring tool for self-evaluation at different levels. Periodic reviews are required in order to evaluate the degree of accomplishment in relation to the plan and implement any necessary corrective measures. It is hoped that the objectives outlined in this report can be accomplished with perseverance, participation, oversight, and assistance.

