

# Strategic Plan 2021-2026





### NANDHA ENGINEERING COLLEGE (Autonomous)

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PRINCIPAL Nandha Engineering College (Autonomous) Erode - 638 052.

# **OUR INSPIRATION**



SRI NANDHA EDUCATIONAL TRUST was established in 1992 with efforts of Thiru. the conscious V.SHANMUGAN, B.Com., an eminent professional cum industrialist and a philanthropist par excellence. He is a leader with foresight and integrity. His vision is to enrich education, to promote the interests of students in rural areas, to offer them easy access of quality higher education and to build confidence in them to prove their realm of success. The trust functions

with Thiru. V.SHANMUGAN, B.Com., as Chairman cum Managing Trustee and his family members as trustees, thereby sharing the commitment in the pursuit of excellence in all things as a life-long endeavour. It is due to extraordinary vision, enthusiasm and forethought of our chairman, the trust could establish many institutions in a short period.

Nandha Engineering College established in 2001, which started with 3 branches, is in its 24<sup>th</sup> year of service to the student community. It remains the flagship brand of Nandha Educational Institutions and is recognized as one of the best engineering colleges in the state of Tamil Nadu. Nandha Engineering College, under the guidance of the illustrious Chairman Thiru. V. Shanmugan and Secretaries Thiru. S. Nandhakumar Pradeep and Thiru S. Thirumoorthy, with foresight and far-reaching vision, are at the forefront of innovation in technical and management education.

# **OUR JOURNEY**

S. No	Programmes	Year of Starting
1	B.E - Computer Science and Engineering (Permanent Affiliation)	2001
2	B.E - Electronics and Communication Engineering (Permanent Affiliation)	2001
3	B.Tech - Information Technology (Permanent Affiliation)	2001
4	B.E - Electrical and Electronics Engineering (Permanent Affiliation)	2002
5	B.E - Mechanical Engineering (Permanent Affiliation)	2005
6	B.E - Civil Engineering	2009
7	B.Tech - Agricultural Engineering	2017
8	B.Tech - Chemical Engineering	2017
9	B.E - Biomedical Engineering	2018
10	B.Tech - Artificial Intelligence and Data Science	2021
11	B.E - Computer Science and Engineering (Cyber Security)	2022
12	B.E - Computer Science and Engineering (Internet of Things)	2022
13	Master of Business Administration (Permanent Affiliation)	2005
14	Master of Computer Applications	2006
15	M.E - Computer Science and Engineering	2006
16	M.E - Engineering Design	2010
17	M.E - VLSI Design	2011
18	M.E - Structural Engineering	2013

# **CHAIRMAN MESSAGE**

I am immensely pleased to know that Nandha Engineering College has become alma mater for many of young and future generations. Success starts with a thought or an idea when nourished with hope and confidence, that idea sprouts, blossoms and leads to action with knowledge. Nandha Engineering College is a creation to impart and provide such a knowledge which is strength and power to the society with the learning of the latest developments of the world to meet the growing demand for trained man power. We are set to take the mission of implementing new education methodologies to enable quality learning. It also encourages independent thinking and helps the student in developing wholesome personality so that they can contribute their best to the society and the country. Nandha Engineering College takes keen interest in updating its infra structures which provides an ambience that stimulate intellectual thinking and academic interaction to meet the technological revolution and new challenges of modern era.



Thiru.V.Shanmugan Chairman

## SECRETARY'S MESSAGE

In an era of firm competition, success can only be achieved if one makes the right kind of effort at the right time. I am happy to note that Nandha is following the ideals of integrated learning by giving opportunities to students to personality develop their through different extracurricular activities and soft skills courses. An important component of academic excellence



Secretary, NET

is remarkable faculty that teach with skills and passion.

India is one of the few countries in the world that is blessed with rich cultural heritage, one of the oldest human civilizations, and highly hard working pool of young people seeking knowledge and education to raise India's stature to the top economies in the world. I am sure that your search for knowledge will definitely find its quench here and you will enjoy your stay at Nandha.

Foresight, ability to seize the opportunity, relentless drive to succeed and incredible acumen in recognizing the needs of the industry and integrating knowledge with professional inputs are the secrets behind Nandha which have

always kept us at the forefront of Education value creation and а sustainable model of growth and achievement for the past decades. Nandha provides a rich and diversified culture to hone the young brains so as to get evolve in to the challenging scenario with performance, competitiveness, value creation and other professional skills.Nandha



Thiru.S.Thirumoorthi Secretary, NEI

believes in imparting quality education based on ethics.

# **PRINCIPAL MESSAGE**

Nandha Engineering College (Autonomous), an eco-friendly campus that strives with a goal to attain excellence by empowering students with sound knowledge, wisdom and experience. Our strength lies in creating pleasant ambience with an excellent infrastructure, qualified and experienced faculty, commitment to personal care, motivation to excel in academic/extracurricular activities and continuous interaction with industry.

Over the past 15 years, the college has witnessed a strong blend of stateof-the-art infrastructure and dedicated human resource committed to provide professional education with thrust on creativity and innovation. The motivating environment in NEC for knowledge assimilation, generation and dissemination with a sense of social responsibility, human values and concern for environment has carved a niche for itself among the best technical Institutes.

"A desire can change nothing, a decision can change something but a determination can change everything".

Be committed with strong determination to learn and reach new horizon, NEC will shape you for a successful and rewarding career.



Thiru.Dr.U.S.Ragupathy

Principal

# **VISION & MISSION**

#### VISION

To be an Institute of excellence providing quality Engineering, Technology and Management education to meet the ever changing needs of the society.

#### MISSION

- To provide quality education to produce ethical and competent professionals with social Responsibility.
- To excel in the thrust areas of Engineering, Technology and Entrepreneurship by solving real- world problems.
- To create a learner centric environment and improve continually to meet the changing global needs.

# **QUALITY POLICY**

We, at Nandha Engineering College, are committed as a team to constantly and consistently work for the student's continual improvement in terms of quality in education, ethics, personality and career development to meet the global challenges.



Nandha Engineering College (Autonomous), Erode-638052 Strategic Plan 2021-2026

# **SWOC ANALYSIS**

#### STRENGTH

Highly equipped library with adequate books, journals and all the students, faculty members of our campus have registered in National Digital Library (NDL) to access e-journal and books. More than ten professional societies are available besides department association. Committed Training and Placement team to facilitate training activities for students and training starts from first year. Dedicated career guidance and counseling cell for the benefit of students for higher studies. Development of Virtual Lab jointly by department of Chemical Engineering and Indian Institute of Technology - Madras - (IIT- M). Encouraging students to become entrepreneurs through our CiPD and Entrepreneurship Development Cell.



#### WEAKNESS

Less opportunities for faculty training at industries as our campus is located in rural area. Fewer opportunities for faculty to receive funds from various funding agencies as we are self supporting Institute.

#### **OPPORTUNITIES**

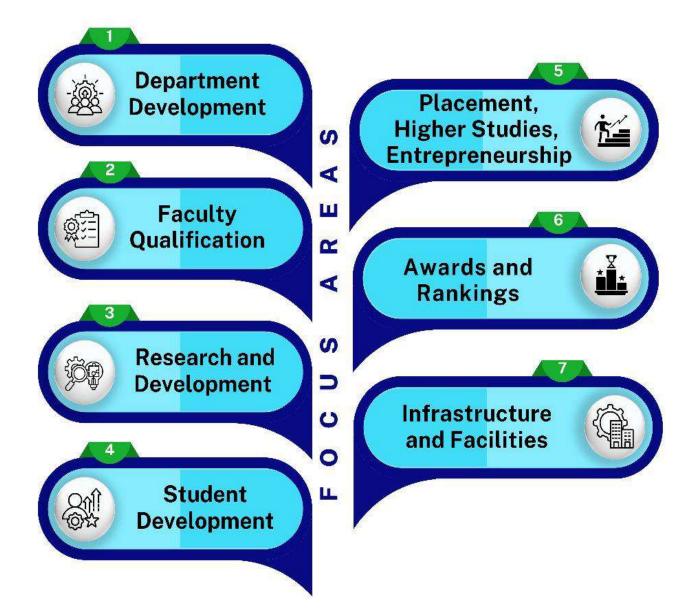
The institute can emerge itself as a role model in the fields of Engineering and Management education by adopting the best pedagogical tools. Scope for self learning through online courses. Institute can offer Inter- disciplinary courses in emerging areas. Strengthening Alumni participation in the development of the institution.



#### CHALLENGES

As large proportion of our students are hailing from rural area, enhancing communication and employability skills of the students remain a challenge in the present day industry requirements. Obtaining funds from the industries for research projects. Reading habits of student is declining due to media intervention.

# STRATEGIC PLAN



### **STRATEGIC PLAN AND IMPLEMENTATION STRATEGIES**

### **1.Department Development**

		Plan	Strategy to be
S.N o	Goal	(To reach in 5 years)	followed
1.1 &1.2	Introduce new program & increasing the intake of few existing courses	To increase the intake of 120 per year	<ul> <li>Potential demand needs to be identified.</li> <li>Getting NBA Accreditation for all eligible existing programmes.</li> </ul>
1.3	Faculty-Students Ratio (FSR) & Number of women faculty members	To reduce the FSR to 1:15 & to increase the number of women faculty members	<ul> <li>Increase of faculty recruitment by considering the ratio and percentage of women faculty members</li> </ul>
1.4	Students Strength, Enrollment of students from other state and country & women students	To increase the enrollment of students from other states and countries. The percentage of women students needs to be increased	<ul> <li>Concentration on other state and other country admission processes</li> </ul>
1.5	Organizing conferences (National/Internation al)	To organize minimum of 3 national conferences & 1 international conference every year	Different clusters will be formed and encouraged to organize at least one conference under each cluster.

1.6	Organizing FDPs/Seminars/Sponsored /self-supporting and professional society activities	To organize minimum of 2 FDP & 4 FDP under IPR / Innovation /entrepreneur 6 expert lectures for every year students by all departments.	<ul> <li>Industrial experts will be identified &amp; invited for all core engineering courses.</li> <li>Identify the emerging areas for developing the faculty expertise through FDP.</li> </ul>
1.7 a)	Laboratory up- gradation	Upgrade the facility in each lab by 20% to carryout innovative experiments & projects.	<ul> <li>Purchase of new equipment as per the revision of the syllabus and emerging technologies.</li> <li>To procure a minimum of 5 new equipment every year.</li> </ul>
1.7b)	Improvement in Computing facility	Each student should possess a laptop.	<ul> <li>Implementing the Bring Your Own Device (BYOD) concept.</li> <li>The integrated courses are to be conducted using a laptop in classes itself.</li> </ul>
1.8	Promoting MoUs with Industries	To have 3 live MoUs and 1 active MoUs every year / Department.	<ul> <li>Identifying more number of Industries /Higher Education Institutions at national and international levels for collaborative works.</li> <li>At least one new MoU per year in every department.</li> <li>At least three activities (Expert lecture /Industrial Training, Internship, Industrial Visit, Industrial project) from each MoU in every academic year).</li> </ul>

1.9	Organizing Value added courses ( Skill, innovation IPR, Entrepreneur /Industry) & one credit Courses for students	To organize a minimum of 2 VAC & 3 OCC by all departments every year.	• Emerging areas are to be identified by all departments and training is arranged with the help of industry experts and in-house experts.
1.10	Professional Society (PS)	To have 3 Professional society/ department with each society containing 150 student members & minimum 2 events/ society	<ul> <li>Increasing the members in different professional bodies and the activities to be continuously organized.</li> </ul>
1.11	Visiting Faculty / Professor of Practice (PoP) (min.50 hours/year)	To have 2 visiting faculty for 2 course each year per department	<ul> <li>Industrial experts and experienced professors are to be identified</li> <li>Subjects are to be allocated as of their expertise.</li> </ul>
1.12	Increase the visibility of the college through Awards & Ranking	Faculty :16Awards/ Year Department: 1/department/ year	<ul> <li>Information pertaining to various awards will be sent to all departments to apply for potential awards.</li> </ul>
1.13	Faculty Experience (1/3, 1/3, 1/4)	Maintain the range	<ul> <li>Recruitment of experienced faculty members as per the need of a specific department to maintain the range</li> </ul>
1.14	Newsletter/ magazine	Newsletter- 1 / yr magazine - 2 / yr	<ul> <li>Achievements and activities of department are collected and magazine is prepared once in a semester</li> <li>Main event and achievement by the department should be consolidated as a newsletter once a year</li> </ul>

1.15	Alumni	Interaction: 140 Chapters: 1 Contributions: 2L	<ul> <li>Creating master list of alumni contact details for every batch in each department</li> <li>Creating alumni chapters in major places in India.</li> <li>Conducting alumni decade meet every year Creating a master list of renowned alumni in various categories such as Industrial expert, Academic expert, and renowned entrepreneur.</li> <li>Conducting Alumni meet and lectures</li> </ul>
1.16	Department Association activities	Symposium: 1 Workshops : 2/department	<ul> <li>Preparation of the plan of activities to be conducted in a year by the association secretary</li> <li>Execution of the activities by the student office bearers with support from faculty in charge and HOD.</li> </ul>
1.17	News publication in newspaper /Professional chapter news letter	News publication in newspaper /Professional chapter newsletter : 5 / department/year	<ul> <li>Publication of events in newspapers organized by department</li> <li>Preparation of newsletter for the profession bodies including Awards and Achievements by the students, faculty members and the department</li> </ul>

### 2. Faculty Qualification

S.No	Goal	Plan (To reach in 5 years)	Strategy to be followed
2.1	Faculty qualification	60% of faculty with Ph.D.	<ul> <li>Motivating all Non-Ph.D faculty to register</li> <li>Additional incentive /salary for the Ph.D completion</li> </ul>
2.2	Faculty retention	>80%	<ul> <li>Reward and recognition to be given every year based on performance.</li> <li>To provide a conducive environment for faculty members.</li> <li>Appointment of experts from industry and other institutions/Organizations as adjunct faculty.</li> </ul>
2.3	Faculty members to become certified Innovation Ambassador (IA)	Basic level: 10 Advanced level: 10 Activeness of IA to promote innovation: 102	<ul> <li>Faculty members are motivated to apply for the Innovation Ambassador (IA) certification</li> </ul>
2.4	Innovation in Teaching	10% of the courses	<ul> <li>Faculty members need to prepare a video lectures for the courses they handle.</li> <li>Utilization of virtual labs for available concepts</li> <li>PBL, learning by seeing and Hands-on to be planned by faculty members for their courses.</li> </ul>
2.5	Faculty to enrich knowledge in Emerging technologies (participant)	FDP/STTP (preferably in ATAL, NITTTR, etc.): 1/Faculty NPTEL course: 1/faculty/ semester	<ul> <li>Every faculty member is encouraged to participate a minimum of 1 or 2 activity / year</li> <li>Encourage faculty members to complete NPTEL course.</li> <li>Attending FDP /STTP (more than Conferences/workshops/seminars.</li> <li>Acting as resource person-expert lecture, Chief Guest ,chairperson, BOS member, etc.</li> </ul>

Faculty as a	<ul> <li>Faculty member are to be</li></ul>
founder/co-founder in	motivated through many lecture
any startups (with	programs towards startups <li>Needed to get financially</li>
DIN)/ Entrepreneurial	supported by the institution and
venture (with GST)	other private agencies

### 3. Research and Development

	Dian			
S.N o	Goal	Plan (To reach in 5 years)	Strategy to be followed	
3.1	R&D Grants received	100L/ year	<ul> <li>Focusing more on multi-disciplinary research.</li> <li>SEED money will be provided for developing internal projects to apply for grants.</li> <li>The faculty member with Ph.D. qualification is encouraged to apply for a funded research project every year.</li> <li>Collaborating with industries and institutes of repute.</li> <li>Strengthening the facility for doing research</li> <li>Additional incentive for faculty receiving the grant.</li> </ul>	
3.2	Sponsored Seminars with grants	14 L/ year	<ul> <li>Identify the viable funding agencies to provide financial support for organizing FDP/Workshop and Conferences.</li> <li>An additional incentive for faculty receiving the grant.</li> <li>Scrutinizing the proposals with the expert team before applying to agencies.</li> </ul>	
3.3	Revenue to be generated through Industrial Consultancy /Events/CoE	100 Lakhs / Year	<ul> <li>Identify the requirements of industries.</li> <li>Develop groups of people in the domain expertise.</li> <li>An additional incentive for faculty &amp; staff involving in consultancy works.</li> <li>Strengthening the lab facility in each department.</li> </ul>	

3.4	Average Publication (WoS/ Scopus only)	Scopus indexed/ WoS: 3/ faculty Non SCI: 20/ intake	<ul> <li>Getting Research center recognition for all Departments.</li> <li>Recruiting more full-time research scholars.</li> <li>Introducing Research policy for incentive and other benefits for achieving a higher number of publications &amp; high impact factor journals.</li> <li>Converting quality students projects into publications.</li> <li>Periodical reviews with faculty &amp; research sch olars.</li> </ul>
3.5	Number of Book Chapter / Book to be authored by faculty	Total Publication in Book:15Book Chapters:20/intake	<ul> <li>Faculty members are motivated to write Book &amp; Book</li> <li>Chapters</li> <li>Guiding the faculty to publish with renowned publisher.</li> <li>Incentive for Book Publications with renowned publishers.</li> <li>Financial and Administrative support is provided to all faculty</li> </ul>
3.6	Patent Publication	Total patent Publication:81 Patent Grant:12 Copyright/ Trade Secret/ Trade Mark:45	<ul> <li>/staff /students for filing of patents/other IPR related activities.</li> <li>Good projects to be incubated by a Special lab with funding support from NEC.</li> <li>A minimum of one technology transfer needs to take place and one patent to be commercialized.</li> </ul>
3.7	Number of Interdisciplinary Projects to be completed	12	<ul> <li>The Institute encourages faculty &amp; students to establish networks with other departments to develop qualityprojects.</li> <li>Guidelines will be provided to form the teams.</li> <li>A project expo will be organized every year to motivate the students to collaborate with other departments.</li> </ul>

3.8	Number of Technology Transfer/Product Commercialization	7	<ul> <li>One project to be developed into the product by each department every year.</li> <li>Seed money will be provided to develop further.</li> <li>A competition with attractive cash prizes will be organized every year to develop innovative projects.</li> <li>Completed products will be transferred to market through our own startups or industries.</li> </ul>
3.9 & 3.10	Ph.D.Scholars	Full Time Ph.D.Scholars:3 0/year Part Time Ph.D. Scholars: 80/ YearNumber of Ph.D. to be awarded in the research center :1/Year	<ul> <li>The stipend will be provided for full time research Scholars by the Institution</li> <li>Research facilities will be improved in all departments to attract more research scholars.</li> <li>Performance incentives are provided to eligible faculty members based on their research performance.</li> </ul>
3.11	Ph.D. Supervisors(With Respect to No. of Ph.D. holders)	95% of Ph.D. holders must have supervisor recognitions.	<ul> <li>Mandate to get supervisor ship from Anna University after completion of Ph.D. by all faculty members.</li> <li>Helping the faculty members to get a sufficient number of publications through CFRD.</li> </ul>

### 4. Student Development

S.No	Goal	Plan (To reach in 5 years)	Strategy to be followed
4.1	Students would pursue Higher Education in India & Abroad Universities	Abroad:3% India:5%	<ul> <li>Motivate students to opt for higher education at Top Indian Universities.</li> <li>Arranging the career guidance programs through Career Advancement Cell.</li> <li>Arranging the Stipend &amp; admission in foreign universities</li> </ul>

4.2	Students achievements in Competitions (Co- curricular & Extra-curricular activities)	Internationallevel:1% Nationallevel:10% Statelevel:20%	<ul> <li>Creating the facilities for developing quality projects</li> <li>Motivating the students to work beyond the working hours in labs to develop projects.</li> <li>Providing financial assistance for travel and registration</li> <li>Additional incentives and awards for achieving prizes in national level competitions</li> <li>Organizing Exhibitions and Hackathon, etc.</li> </ul>
4.3	Developing Projects to provide solutions to the pressing problems	Industry projects (UG & PG): 52 Smart India Hackathon (SIH) KAPILA (IIC) : 26 Innovation Day (TRL:4 to 9): 325 "YUKTI : 80	<ul> <li>Motivation of final year students to take up industrial projects</li> <li>Identification of projects by students from environment</li> <li>Applying for Hackathon</li> </ul>
4.4	Students to complete the NPTEL/ MOOC /Industrycourses,etc.	90%	<ul> <li>Encouraging students tc</li> <li>Course exemption for completion of NPTEL courses with proctored exams.</li> <li>Getting a license from NPTEL platform agencies.</li> <li>Reimbursement of Registration fees for the students completing with top scores.</li> <li>Conducting value- added/one-credit courses</li> </ul>

			]
4.5	Offering an OE	Innovation / Entrepreneurship: 1- OE / year IPR : 1- OE / year	<ul> <li>Offering Open Electives for students during the final year</li> </ul>
4.6	Students to complete International Certifications	1% of students strength	<ul> <li>Motivating the students to take up international certifications for better placements.</li> <li>Organizing the courses through MoU- signed Industries.</li> <li>Arranging the training classes for L&amp;T, IBM and N P T E L Certificate courses.</li> </ul>
4.7	IIC	IIC driven activities: 56 Self-driven activities related to innovation/IPR/startup: 112 Celebrations of National important day: 16	<ul> <li>Activities to be organized with a proper schedule which has to be planned before the start of academic year</li> <li>The activities to be accounted and presented every month by CPID</li> </ul>
4.8	Students to undergo Internship at Top MNC/ Foreign University / IIT & NIT etc.,	408	<ul> <li>Identifying more number of Industries/Higher Education Institutions at national and international level for collaborative works.</li> <li>Alumni support for students placement and internship.</li> <li>Creating a list of core industries and encouraging students for Industrial visits, In- Plant Training and Internship.</li> </ul>

4.9	Out Reach Programs (NSS,NCC, PCD) club activities	80	<ul> <li>Club activities to be conducted every working Saturdays</li> <li>The programs organized to be correlated with POs and documented periodically</li> </ul>
4.10	End Semester PassPercentage	UG : 85% PG : 95% PhD : 95%	<ul> <li>Experienced faculty members are allotted with subjects to make the students understand easily.</li> <li>Special care is provided to the Slow learners.</li> </ul>

### 5. Placement, Higher Studies and Entrepreneurship

S. No	Goal	Plan (To reach in 5 years)	Strategy to be followed
5.1	No. of students to get valid Score in GATE Examination	1/intake	<ul> <li>Introducing the GATE syllabus as a Comprehensive elective.</li> <li>GATE – level questions will be asked in continuous assessment tests.</li> <li>Arranging expert lectures &amp; training through CAC.</li> <li>More importance for GATE subjects through Continuous Assessment Test.</li> </ul>
5.2	No. of students to get Valid score in IELTS/GMAT/ TOEFL /CAT/GRE/etc.,	1/intake	<ul> <li>Conducting awareness sessions on Foreign University studies.</li> <li>Arranging the stipend for interested students through KIC.</li> <li>Conducting mock tests for interested students in IELTS/GMAT/TOEFL/CAT/GRE.</li> </ul>
5.3	No. of students to be qualified in UPSC /Any Government examination	1/intake	<ul><li>Conducting awareness sessions.</li><li>Arranging in-house training.</li></ul>

5.4	Entrepreneur	15	<ul> <li>Conduction of some promotion programs for the willing students to be an Entrepreneur.</li> <li>Giving some opportunities to promote and market the product through stalls.</li> </ul>
5.5	Establishing Startups/enterpre ural venture with CIN, GST (registered in MSME Udhayam)	Students: 14 Faculty: 2 Others (outside investors): 2	<ul> <li>Guidance to the establishment of start ups.</li> <li>Supporting with financial assistance.</li> </ul>
5.6	Higher Studies TANCET, GATE SCORE, IELS, TOEFT, GRE, etc	15% of final year students	<ul> <li>Conducting awareness/ training programmes.</li> <li>Conduct of mock tests for TANCET, GATE SCORE, IELS, TOEFL, GRE, etc</li> </ul>
5.7	Percentage of students to be placed	95%	<ul> <li>Corporates and industries are to be identified by the placement cell</li> <li>IRS training for the students conducted for the students and conduct of mock tests in basic core knowledge</li> </ul>
5.8	Student salary package (Per Annum) (In Lakhs)	Average Salary:6 L Minimum Salary:3L Maximum Salary:10 L Median: 6 L	<ul> <li>Arranging the training from second year onwards.</li> <li>Guiding students to build their Resume to get higher package placement.</li> <li>Preparing the training calendar for placement from second year onwards.</li> <li>Inviting top MNC Company for Placement.</li> </ul>

### 6. Awards and Rankings

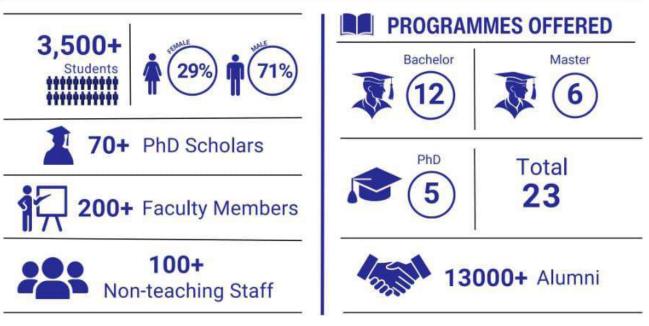
S.No	Goal	Plan (To reach in 5 years)	Strategy to be followed
6.1	NIRF Ranking	150	<ul> <li>Inculcate research culture to the faculty members and students.</li> <li>Publishing the articles in Quality Journals &amp; improving the citation of articles.</li> </ul>

6.2	NIRF Innovation Ranking	50	<ul> <li>Concentrating more on research and publication activities</li> </ul>
6.3	SDGs Ranking	Apply	<ul> <li>Identify the criteria falling under SDGs Ranking and strengthen it.</li> </ul>
6.4	QS Rating	** Active Participation	<ul> <li>Periodical Reviews to improve the Teaching Learning Process.</li> </ul>
6.5	AICTE-CII Survey	Active Participation by all Departments & every year one department must win the award.	<ul> <li>Concentrating more on Industrial Interaction in all academic activities.</li> <li>Concentrating on Consultancy&amp; innovation activities.</li> </ul>

### 7. Infrastructure

S.No	Parameter	Plan (To reach in 5 years)	Strategy to be followed
7.1	Pre-incubation facility (600 SQ)	Innovation cell: 1 Tinkering lab: 1 Startup cell: 1 Technology transfer cell: 1	<ul> <li>Sanction of separate budget for the startup of the cells</li> <li>Allocation of in charge for the cells separately</li> </ul>
7.2	Facilities for Physically Challenged Students	<ol> <li>Arrangement of LIFT in Block- IV</li> <li>Increase the No. of Toilets for PCS</li> <li>Wheel Chair in few more blocks</li> <li>Installation of open source software for Visually</li> <li>Challenged in all the labs.</li> </ol>	<ul> <li>Sanction of separate budget for providing the needs of the Physically Challenged Students</li> </ul>

### **NEC AT A GLANCE**



**Accreditations and Rankings** 



# LOOKING AHEAD

The created strategic plan document will act as a guide from management to staff and as a monitoring tool for self-appraisal at different levels. It is vital to take the required corrective action after conducting periodic reviews to evaluate the degree of performance in relation to the plan. It is hoped that the objectives outlined in the document can be accomplished with perseverance, participation, oversight, and assistance.





#### NANDHA ENGINEERING COLLEGE- (Autonomous) ERODE-52

SP-00, Rev.0, 01.07.2024

#### STRATEGIC PLAN (2023-2024 & 2024-2025 & 2025-2026)

12722		-	0		Actual	Target	Target
S. No	No Paramete		ter		AY 23-24	AY 24-25	AY 25-26
1.1	UG Program	Start of New Program			NIL	Additional intake	2 New Program in the emerging area / Additional intake in the existing program
		Accreditation (o	of Existing	g Program)	3 CSE,IT,ECE	6 (MECH, EEE, CHEM, CIVIL, BME & AGRI)	All eligible programs to be accredited
1.2	PG Program	Start of New Pro	ogram		NIL	Additional intake MCA -30, ME-CSE-6	New programs to be started in Emergin areas
		Accreditation (o	of Existing	g Program)	NIL	1 (MBA)	I (MCA)
			FSR		1:20	01:15	01:15
1.3	Faculty-Student Engineering De S&H (I Year)	ts Ratio (FSR) pt(II,III,IV year)	Women I 50%	Faculty (Nwf)	46%	116/233	116/233
			Students UG + PG	entrolled (NE) -	900+114	95%	99%
1.4	Students Streng	ents Strenoth		Other state	0.60%	10%	20%
			(UG & PG)	Other country	0%	1%	1%
			Women students (Nws): 50%		26%	510/1020 75/150	510/1020 75/150
anes.		1001 1001	National	3/year	0	CSE,ECE,MECH	IT,EEE,AGRI,MBA+S&H
1.5	1.5 No. of Conferences organi		Internatio	onal	1	R&D	R&D
			FDP/ ST	TP	1	1/Sem/Dept	1/Sem/Dept
1.6	•	1 01 (50)		hrs) on vation/entrepren	0	4(CiPD)	5(CiPD)
	(organizing)		Guest Lecture		29	152	160
	New Infrastruct	ture Facilities to	Facilities to Research Lab/ Special lab / CoE		4	EEE(Automation) & Cyber Security	MECH(EV) & AI&DS
1.7		aboratories, Halls, Centres of		ab	2	AI&DS	loT, MBA
1.8	No. of Active N	Active MoU Re		Institutions/ on units/ Parks	39	3 live MOU & 1 new MOU/department	4 live MOU & 1 new MOU/department
				Universities	1	CSE,BME,MBA,AGRI	EEE,Cyber Security,CIVIL,MCA
				Skill (1/Intake)	11	20	20
	No. of Value-a		o. of Value-added courses	Innovation (1/Cluster)	0	2(CSE & MECH)	3(AGRI,BME,S&H)
1.9 / h	/ Industry one organized	credit courses		IPR (1/Cluster)	1	2(EEE,IT)	3(ECE, CHEM, MBA)
				Entrepreneur	0	2(EDPC)	3(EDPC)
				redit Courses	23	36	36
			No. of P Society	rofessional	15	24	26
1.10	Professional Se	ociety (PS)	Active M	Aembership	568	40%	50%
			Activity		27	48	52

	Visiting Faculty /	No. of faculty	4	22	24
1.11	Professor of Practice (PoP) (min.50 hours/year)	No. of courses to be taught by Industry	3	22	24
		Faculty(1/Intake)	8	15	18
	Awards & Ranking	Department (1/Dept)	4	12	14
1.12	Awards won for innovations @ State, national & International levels	Students (9/Intake) (State/National - 8/Intake) (International - 1/Intake) MBA/MCA - 5/Intake	42	162	179
		Faculty	6	14	18
		Department	2	12	12
		Average experience	11	11.75	11.75
1.13	Faculty Experience (1/4, 1/3,	<8	57	57	57
1.13	1/3)	8 to 15	97	97	97
		> 15	55	55	55
1.14	News letter/ magazine	Newsletter-1/ yr magazine-2/yr(1-batch, 1- dept)/year	News letter- 1 / yr magazine - 2 / yr	News letter- 1 / yr magazine - 2 / yr	News letter- 1 / yr magazine - 2 / yr
		Interaction	27	120	140
1.15	Alumni	Chapters (Institute)	0	1	2
		Contributions		2L	3L
		Symposium	1	1	1
1.16	1.16 Dept. Association	Workshops	18	II year - 1/dept III year - 1/dept	II year - 1/dept III year - 1/dept
1.17	News publication in news paper news letter	/Professional chapter	28	5 / dept/year	7 / dept/year
. FAC	ULTY QUALIFICATION	AND RETENTION			
2.1	Percentage of Faculty with Ph.D	. (29%)	26.30%	40%	60%
2.2	Faculty Retention Percentage		70%	80%	85%
		Basic level	12	15	17
		Advanced level	3	11	12
2.3	No. of faculty to become certified Innovation Ambassador (IA)	Activeness of IA to promote innovation (guide and mentor students/Innovators to shape their innovative ideas)	10	72	102
2.4	Innovation in Teaching	Videos/models/ hands-on/field visits/etc.	81	30% of the courses	50% of the courses
		Paper presentaion in IITs/NITs/NIRF ranked	4	215	233
2.5	Percentage of faculty to enrich	FDP/STTP (preferably in ATAL, NITTT, etc.)	64	215	233
	knowledge in Emerging technologies (participant)	Internship at Industry/ R&D organization (Minimum 2 weeks)	0	108	116
		Attending Online course: NPTEL	86	430	466
	Faculty as a founder/co-founder	r in any startups (with	2(EEE & MBA)	2(AI&DS,CIVIL)	2(AGRI&IoT,CiPD)

3.1	Research Projects (89 L)	n Projects (89 L)			112 L	120 L
3.2	Sponsored Seminars with grants			-	15 L	14 L
3.3	Revenue to be generated through Consultancy /Events/ CoE	Industria	1	41L	60 L	72 L
		Scopus		69	(27/2)(5 1-)	005 (2.5% - 1.)
	Average Publication (WoS/ Scopus only)	WoS		30	- 636 (3/faculty)	805 (3.5/faculty)
	(1100, 000, 000, 000, 000, 000, 000, 000	Others		245		
3.4		Citation	Scopus: Average	20		
	Quality of Publications	s	WoS: Average Total	4	2120	2300
3.5	Number of Book Chapter / Co Book to be authored by faculty Da		rmposium, ce, Innovation ects, Magazines N number	10	15	15
		Book Ch	apters (Scopus	3	20% of Faculty	30% of Faculty
3.6	Patent Filed/ Publication in the nam		EC (In Nos)	25	84	84
5.0	Patent Granted (In Nos)	Patent Granted (In Nos)		24	12	12
3.7	Number of Interdisciplinary Pro	jects com	oleted	0	12	14
3.8	Number of Technology Transfer Commercialization	Number of Technology Transfer/ Product			7 .	10
2.0	Ph.D. Scholars enrollment (per	Full time		2	15	30
3.9	intake)	Part time		62	60	80
3.10	No. of Ph.D students to be gradu	ated	Full time	1	FT - 0	FT - 2
			Part time	0	PT - 10	PT - 15
3.11	Ph.D. Supervisors: All PhD hold	lers to get	AU supervisor	22	16	22
4. STU	DENT DEVELOPMENT					
	Students would pursue Higher	Abroad		4	12	14
4.1	Education	India		11	24	28
			onal level	48	16	18
4.2	Students achievements in Competitions (Co-curriculur &	National		106	10% of strength	15% of strength
4.2	Extra curricular activities)	State lev		59	20% of strength	25% of strength
		2488-259-249-01	projects (UG &	27	52	60
		-	dia Hackathon	7	32	35
	Developing Projects to provide	KAPILA	(IIC)	0	14	14
4.3	solutions to the pressing		on Day (TRL: 4	12	318	351
	problems	YUKTI	novations &		83	90

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4.4	Students to com courses	plete the NPTEI	/ MOOC / Industry	406	950	1000
			Innovation / Entrepreneurship	0	1-OE / year(CiPd)	1- OE / year(CiPD)
4.5	Offering an OE course: (a student must have completed both of these courses during their four-year degree program)		IPR	0	1- OE / year	I- OE / year
4.6	Students to com	nplete Internation	al Certifications	0	1% of strength	1% of strength
	IIC	IIC driven activ	ities (defined by IIC)	30	56	90
4.7	(must be in alignment with	Self driven activ innovation/IPR/	vities related to startup	25	112	176
	dept. association	Celebrations of	National important days	3	16	16
4.8	Students to und	lergo Internship	reputed industries/MNC/ Universities (IIT,NIT)	257	336	363
			Foreign University	0	4	5
4.9	Out Reach Prog	grams (NSS,NCC	C, PCD) club activities	10 clubs (40 activities)	60(Club)	80(Club)
	End Semester P	ass Percentage		80%	80%	85%
4.10	Percentage of C	Graduation - UG		90%	95%	97%
	Percentage of C	Braduation - PG		94%	95%	98%
. stu	DENT CARE	ER DEVELO	PMENT			
5.1	No. of students	to get valid Scor	re in GATE Examination	1	1/intake	1/intake
5.2	No. of students TOEFL/ CAT/C		re in IELTS/ GMAT/	0	1/intake	1/intake
5.3	No. of students Government ex		n UPSC / TNPSC/Any	4	1/intake	1/intake
5.4	Enterpreneur			10	15	15
			Students		14	14
	Establishing Startuns/entern	raural ventura	Faculty	_	2	2
5.5	5.5 Startups/enterp with CIN, GST MSME Udhay	(registered in	Others (outside investors)		2	2
5.6	Higher Studies (TANCET, GATE SCORE, IELS, TOEFT, GRE, etc			2	5% of final year students	10% of final year students
5.7	Percentage of students to be placed		80%	90%	95%	
12006			Average Salary	3L	5.5 L	6L
	Student salary	package	Minimum Salary	2L	2.5L	3L
5.8	(Per Annum in		Maximum Salary	6.5L	8L	10L
			Median	4L		6L

6.1	NIRF Ranking		Participated	200	150
6.2	NIRF- Innovation	Institute Level	Participated	100	50
6.3	SDGs Ranking		NA	Identification of parameters	Apply
6.4	QS Rating		NA	*	** Active Participation
6.5	AICTE - CII Survey		NA	Active Participation by all Dept	Active Participation by all Dept
INF	RASTRUCTURE/ BUDGET	/ ADMINISTRATIVI	E/ OTHERS		
-		Innovation cell	Available	1	1
7.1		Tinkering lab	NIL	1	
		Startun cell	NIL	1	
	Pre-incubation facility (600 SQ)	IEDC/EDC	Available		
		IPR cell	NIL		
		Technology transfer cell	NIL	1	1
7.2	Challenged Students	Readers, computers with screen reading software, low- vision aids, scanners, mobility devices	1. Ramps in all blocks2.	<ol> <li>Arrangement of LIFT in Block- IV</li> <li>Increase the No.of Toilets for PCS</li> <li>Wheel Chair in few more blocks</li> <li>Installation of open source software for Visually</li> <li>Challenged in all the labs.</li> </ol>	
7.3	Publication of Result	End semester	No specific time	Before 20 days from the date of last exam	Before 20 days from the date of last exam
7.4	Financial Resourse and Utilization				
	Annual capital Expenditure (per student for previous 3 years) [Excluding expenditure on land and new building]	Library (Books, journal, e-resourses)	23.56L	50 L	60 L
		New equipments &	98.56L	130 L	140 L
		Engineering Workshop	25.93L	40 L	50 L
		Other Expenditure: classroom, seminar/conference hall, library, Innovation	141.9L	400 L	450 L
		Salary	140.5	2200 L	2600 L
	Annual operational Expenditure (per students for previous 3 years) [Excluding maintenenace of hostel and allied services]	Maintenance of Academic Infra	90.7L	2500L	3000 L
		Students activities: Seminar/conference/wor kshop	37L	70 L	80 L

Mah & F/24 HEAD/IQAC

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