# Institutional Development Plan (IDP) 2024–2029

Nadar Saraswathi College of Engineering & Technology An ISO 9001:2015 Certified Institution Approved by AICTE, Affiliated to Anna University, Chennai

# 1. Executive Summary

This Institutional Development Plan (IDP) outlines a strategic roadmap for NSCET from 2024 to 2029. The plan focuses on elevating academic excellence, strengthening research and innovation, modernizing infrastructure, deepening industry and community engagement, and achieving greater institutional autonomy. It reflects NSCET's commitment to its Vision and Mission, integrating the insights from the Fishbone Strategy and aligning with national education policies.

## 2. Institutional Profile

Nadar Saraswathi College of Engineering and Technology (NSCET), situated in Vadapudupatti, Theni District, Tamil Nadu, is an institution dedicated to providing high-quality technical education. Established under the auspices of the Theni Melapettai Hindu Nadar Uravinmurai, the college is affiliated with Anna University, approved by AICTE, and accredited by NAAC with an 'A' Grade. NSCET is ISO 9001:2015 certified and offers undergraduate and postgraduate engineering programs.

# 3. Vision, Mission & Quality Policy

#### Vision

To establish ourselves as a leading technological institution by imparting quality education and fostering innovation.

#### **Mission**

- 1. Deliver professional, learner-centred education to empower students with theoretical and practical knowledge.
- 2. Foster national development by creating a competent and ethically strong workforce.
- 3. Encourage innovation through research and collaboration with industry and academia.
- 4. Develop confident, competitive graduates capable of facing global challenges.

## **Quality Policy**

NSCET is committed to achieving excellence through continuous quality improvement in all academic and administrative activities. The institution adheres to a robust quality assurance framework via its Internal Quality Assurance Cell (IQAC), promoting transparency, accountability, and a culture of innovation.

# 4. Institutional SWOT & Strategic Context

# **Strengths**

- Accredited by NAAC with 'A' grade.
- Diverse range of engineering programs with qualified faculty.
- Growing number of MoUs with industries and research bodies.
- Active alumni network and placement cell.

#### Weaknesses

- Limited number of funded research projects.
- Scope for better integration of emerging technologies in the curriculum.

# **Opportunities**

- Expansion into interdisciplinary and PG programs.
- Collaboration with international institutions.
- Leverage online education and digital transformation.

#### **Threats**

- Dynamic regulatory environment and frequent policy changes.
- Increased competition from autonomous and private institutions.

# 5. Department-wise Vision and Mission Alignment

# **Computer Science and Engineering (CSE)**

#### Vision

To become a centre of excellence in computing and produce technocrats to meet global industry challenges.

#### Mission

- Provide strong theoretical and practical knowledge in computing.
- Inculcate ethical values, lifelong learning, and social responsibility.
- Facilitate industry-institute interaction and innovation through research.

## **Alignment Highlights**

- Supports Fishbone 2025–26 goal: Research Infrastructure Enhancement, Online Education Focus.
- Drives 2027 target: Leadership in Emerging Technologies.

# **Electronics and Communication Engineering (ECE)**

## Vision

To be a globally recognized centre in Electronics and Communication, fostering innovation and design.

#### Mission

- Deliver high-quality technical education with industry exposure.
- Encourage R&D and innovative thinking.
- Create socially responsible engineers with entrepreneurial skills.

#### **Alignment Highlights**

- Supports 2024–25 goals: Enhanced Industry-Academia Collaboration.
- Aligns with 2026–27 priorities: Tech Commercialization and Regional Outreach.

# **Electrical and Electronics Engineering (EEE)**

#### Vision

To evolve as a world-class department in Electrical Engineering with high social impact.

#### Mission

- Impart core knowledge and hands-on skills in electrical systems.
- Promote innovation in green and smart energy technologies.
- Enhance employability and ethics through project-based learning.

## **Alignment Highlights**

- Supports 2026 strategy: Technology Transfer and Continuing Education.
- Contributes to 2028: Innovation Ecosystem Development.

## **Civil Engineering**

#### Vision

To be a centre of excellence in Civil Engineering with a commitment to sustainable infrastructure development.

#### Mission

- Provide technical knowledge in modern civil systems.
- Address environmental and societal issues through engineering.
- Build leadership through exposure to construction practices.

## **Alignment Highlights**

- Promotes 2025–26 goals: Social Innovation & Centre of Excellence.
- Prepares for 2029: Institutional Autonomy via Sustainability Leadership.

# **Structural Engineering (PG)**

#### Vision

To develop professionals in structural engineering capable of leading sustainable and innovative designs.

#### Mission

- Impart analytical and experimental knowledge in structural design.
- Promote usage of advanced software and real-time projects.
- Collaborate with industry and research organizations.

## **Alignment Highlights**

- Direct contributor to 2025 goal: Postgraduate Expansion.
- Supports 2028: Agile Curriculum Development.

## **Science and Humanities**

#### **Vision**

To provide a strong foundational platform in science, mathematics, and communication for engineering applications.

#### Mission

- Enhance students' analytical and communication skills.
- Instil ethical, environmental, and global perspectives.
- Enable smooth transition into core engineering programs.

# **Alignment Highlights**

- Core to 2024–25 goals: Enhanced Academia Collaboration.
- Aligns with lifelong learning and skill-based teaching focus (2026).

# **Summary Alignment Table**

Department	Vision Alignment	Mission Highlights	Fishbone Years
CSE	Global tech	Lifelong learning,	2025, 2026, 2027
	readiness	innovation	
ECE	Global recognition	R&D, design,	2024-2027
	in ECE	entrepreneurship	
EEE	Green and Smart	Practical learning,	2026, 2028
	Energy	ethics	
Civil	Sustainable	Leadership & social	2025, 2029
	Infrastructure	engineering	
Structural	Advanced Structural	Industry	2025, 2028
	Design	partnerships	
S&H	Foundation for	Ethical and global	2024-2026
	Engineering	thinking	