

Strategic Plan

Introduction

SSN College of Engineering (SSNCE) was established in 1996 and has since undergone significant growth and transformation. This strategic plan outlines our institutional progress through three distinct phases and delineates our future direction.

Phase 1: Focus on Teaching and Learning

During the first decade, SSNCE primarily concentrated on strengthening its teaching and learning framework. The introduction of academic programs was systematically planned, as detailed below:

- 1996-97: B.E. programs in Electrical and Electronics Engineering (EEE), Electronics and Communication Engineering (ECE), and Computer Science and Engineering (CSE) were launched.
- 1999-2000: Information Technology (IT) was introduced.
- 2004-05 to 2011-12: Expansion into diverse engineering disciplines:
 - Chemical Engineering (2004-05)
 - Biomedical Engineering (2005-06)
 - Mechanical Engineering (2007-08)
 - Civil Engineering (2011-12)
- 2003-04: Introduction of postgraduate programs.
- 2023-24: Initiation of the Integrated Master's program in Computer Science and Engineering.

Phase 2: Transition to a Research-Oriented Institution

Post-2011, following the establishment of the Civil Engineering undergraduate program, the institution strategically shifted its focus towards research excellence. Several initiatives were undertaken to cultivate a robust research culture:

- Faculty were encouraged to pursue doctoral studies, supported by institutional schemes. As a result, approximately 170 faculty members have obtained their Ph.D. degrees, reducing the number of non-Ph.D. faculty to just seven, all of whom are currently pursuing their doctorates.
- Research funding mechanisms were introduced, including:
 - STIRS (Stimulus for Technology Innovation and Research for Students): A scheme enabling students to engage in research from their first semester.
 - Seed Funding for Faculty: Institutional support for faculty research initiation.
- The management invests approximately INR 1 crore annually in these internal funding initiatives.
- Achievements in research include:
 - Receipt of the Research Excellence Award from Clarivate.
 - Three faculty members ranked among the Top 2% researchers globally by Stanford University.
 - Ten patents granted within a single year.
 - Increased faculty engagement in industrial consultancy.
 - Acquisition of external research grants totaling INR 62 crores.

Phase 3: Quality Enhancement through Outcome-Based Education (OBE)

To ensure continuous improvement in academic quality, SSNCE has actively pursued accreditation and benchmarking initiatives:

- Attained NAAC accreditation with a score of 3.39 in 2024, leading to autonomous status.
- Revised and modernized the curriculum to align with industry standards and OBE principles.
- Seven faculty members have been recognized as Margadarshaks by NBA.
- Commitment to ongoing compliance with NBA, NAAC, and NIRF recommendations.
- Consistent improvement in NIRF rankings:
 - Engineering Category: Improved from 48 to 46.
 - Overall Category: Advanced from 96 to 81.

The Way Forward

Implementation of NEP 2020

SSNCE is proactively integrating the key recommendations of the National Education Policy (NEP) 2020, within the regulatory framework of Anna University:

- Credit Transfer Mechanism: Enabled within the 450 affiliated colleges.
- Incorporation of Online Learning: SWAYAM courses integrated into the curriculum.
- Multi-Skilling Opportunities: Introduction of Honors and Minors as additional electives.
- Internships: Made mandatory and credit-based to enhance employability.

Addressing Challenges in PG Enrollment

Recognising the declining interest in traditional PG programs, SSNCE has introduced an Integrated Master's in Computer Science, aligning with NEP 2020. This program has garnered significant interest, achieving full enrollment of 60 seats in its inaugural batch.

Future Institutional Growth: Towards Deemed University Status

The next step in SSNCE's evolution is attaining Deemed University status. As per the UGC guidelines (June 2023), SSNCE meets all eligibility criteria for this transition. Two potential pathways are under consideration:

1. Applying for independent Deemed University status.
2. Amalgamating with Shiv Nadar University.

A decision on this matter will be taken after due deliberation by the management. In the interim, our focus remains on further enhancing OBE implementation and NEP 2020 integration to elevate the quality of teaching, learning, and research at SSNCE.

Conclusion

Through a structured and strategic approach, SSNCE has evolved from a teaching-focused institution to a research-driven academic hub. The path forward entails leveraging accreditation frameworks, research excellence, and policy innovations to solidify SSNCE's position as a premier engineering institution and transition towards a university framework shortly.