Sinhgad Technical Education Society's Sinhgad Academy of Engineering, Pune 411048

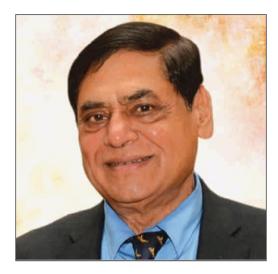


PERSPECTIVE PLAN

2022-2032



OUR DYNAMIC LEADERSHIP



Prof. M. N. Navale President Sinhgad Technical Education Society

The Sinhgad Group of Educational Institutes, spread over Maharashtra has a presence to reckon with. The Group is benchmarked in every aspect. It struck its foundation in 1993 to transform the dream of its visionary architect Founder President Prof. M. N. Navale into a palpable reality. The entire Sinhgad Group has convincingly evolved, into the most sought-after education destination. Every Institute is duly accredited by NAAC, approved by AICTE and affiliated to Savitribai Phule Pune University. Its Smt. Kashibai Navale Medical College subscribes to the code of the IMC. Every Institute has an Independent presence with enviable state-of-the-art infrastructure and all the facilities and resources, to label it an ideal place for learning. Invariably every campus has an impressive and extensively stocked Library. It Comprises Institutes in its fold, run by capable and qualified resource people, drawn from various disciplines. There are 12 Campuses, 7,000+ Employees, 85 Institutes, 26 Schools, 70,000+ Students. Still the entire Sinhgad Educational conglomerate continues in its search for excellence.

OUR MORAL SUPPORT



Dr. (Mrs.) Sunanda M. Navale Secretary Sinhgad Technical Education Society

Education in general and technical education in particular must be relevant to the rapidly changing needs of the industry and business houses. The educational environment must be dynamic and quickly adaptable, so that professionals must be capable of shouldering local and global responsibilities in industrial and social sectors.

OUR SOURCE OF STRENGTH



Ms. Rachana Navale-Ashtekar V. P. (Admin), Sinhgad Technical Education Society

Education is an instrument to enhance the capabilities of individuals. It helps them become knowledgeable, creative and good citizens. This thought urged me to develop excellent educational facilities at the Sinhgad Institutes.

OUR SOURCE OF STRENGTH



Mr. Rohit M. Navale V. P. (HR), Sinhgad Technical Education Society

Over the past few decades, knowledge traits have been cultivated to achieve a level of accuracy, speed and innovation in the Indian education system. Currently, this trend has been increased significantly, which has resulted in highly specialized, dynamic, talented and qualified staff. Looking at the rapid development of these personalities, we are also committed to very good quality of teaching and learning process by maintaining high level of discipline between staff and students and achieving superiority in academic field by maintaining an atmosphere conducive to research, state-of-the-art media center laboratories and digital libraries.

THE CAPTAIN OF THE SHIP



Dr. K. P. Patil Principal

It is widely accepted that technology is the key driver of economic growth of countries, regions and cities. Technological progress allows for the more efficient production of more and better goods and services, which is what prosperity depends on. Technical education is the key of our nation's technological progress and also the stepping stone for a country towards its journey to becoming a developed economy. Our mission at Sinhgad Academy of Engineering is to believe in and work for the holistic development of students and teachers. We seek to do this by instilling a distinct value system, a transparent work culture, and a superior academic and physical environment that fosters learning, creativity, technology transfer and share knowledge in order to build a more vibrant society. Through this, we plan to achieve our vision of producing not only good engineers but also good human beings and helps in India's technological progress and nation building through character building.

Institute started functioning in the academic year 2005. It is approved by All India Council for Technical Education (AICTE), New Delhi, affiliated to the Savitribai Phule Pune University (SPPU), Pune. Since its inception, the institute has grown in stature. The institute features a strong support staff of devoted, experienced full-time faculty members. Many of the faculties have earned their Ph.Ds. The Management encourages faculty members to seek Ph.D. degrees from reputed national institutions like IITs, as well as globally renowned universities such as Alborg University in Denmark which is well known for Problem based learning (PBL).

The institute's strategic development plan (SDP) is designed to provide a framework for the organization's various operations and goals. The institution has a Perspective/Strategic Plan in place to help it develop in a systematic, well-thought-out and phased manner. Institute's management and human resources help in implementing the program in successful manner. The college provides state-of-the art infrastructure, ICT enabled class rooms, seminar hall, library with digital access, Wi-Fi enabled campus, well-equipped computer labs, well-furnished hostels for boys and girls and dedicated faculty with ideal blend of seniors and fresh post graduates drawn from reputed universities and industry required to create excellent teaching-learning environment to mention a few which are as per the norms of AICTE. Sinhgad Academy of engineering have received a 'A' grade from the NAAC, a UGC autonomous organisation, for our academic achievements, infrastructure, co-curricular activities, and other developments.

Governance:

The management of the institute has two main committees viz. Governing Body (GB) and Local Managing Committee (LMC).

1. Governing Body(GB) :

The role of GB (Table 1) is to decide vision and objectives of the institute based on which directions to LMC and head of the institute are given. The GB approves the budget recommended by LMC. In a academic year two GB meetings are conducted. The issues which require deliberations and consultations at the college levels are taken up to the Local Management Committee.

Table	1.	Govern	ning	Body	Memb	ers
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Sr No	Name	Designation
1.	Prof. Maruti Nivrutti Navale	Chairman
-	Founder President, STE Society	
2.	Dr. Mrs. Sunanda M. Navale	Member
	Founder Secretary, STE Society	
3.	Mrs. Rachana Navale Ashtekar	Member
	Vice President, STE Society	
4.	Mr. Rohit M. Navale	Member
	Vice President, STE Society	
5.	Mrs. Shruti R. Navale	Member
	Member, STE Society	
6.	Shri. A. V. Deshpande	Member
	Director, STE Society	
7.	Nominee Of AICTE	Nominee
	AICTE, New Delhi	
8.	Director Of Technical Education	Nominee
	Maharashtra State, Mumbai, Ex-Officio, DTE	
9.	Nominee, Savitribai Phule Pune University	Nominee
10	Nominee, Govt. Of. Maharashtra	Nominee
11	Regional Officer	Nominee
	WRO, AICTE, MUMBAI (EX-OFFICIO)	
12	Dr. K. P. Patil	Member Secretary
	Principal, SAE, Pune-48	
13	Shri. G.K. Shahani	Special Invitee

2. Local Managing Committee (LMC)

The organizational structure of SKNCOE is a blend of professional autonomy, individual accountability and well-defined administrative structure. Principal in turn frames implementation guidelines with the help of team of HODs and Local Management Committee (LMC) and revise them from time to time based on the needs of stake holders and directions received from management. This Committee (Table 2) meets periodically to discuss various academic and non-academic issues.

Name	Designation
Prof. Maruti Nivrutti Navale Founder President, STE Society	Chairman
Dr. Mrs. Sunanda M. Navale Founder Secretary, STE Society	Member
Mrs. Rachana Navale Ashtekar Vice President, STE Society	Member
Mr. Rohit M. Navale Vice President, STE Society	Member
Mr. K. M. Gaikwad Vice Principal & HOD ENTC Engg	Representative Teaching Staff
Dr. Daljeet Kaur Associate Professor & HOD F.E.	Representative Teaching Staff
Mr. S. N. Kamat Registrar	Representative Non-Teaching Staff
Dr. A. V. Deshpande Director, STE Society and Principal , SKNCOE	Member-Secretary
Shri G.K. Shahani	Special Invitee

Table 2. Local Managing Committee Members

College Level Committee Cell:

Various cells are formed in college for the smooth and efficient management of the activities (Table 3). The cells and cell in charges are constituted by the Principal in consultation with HODs for 05 academic years. All the cell in charge are requested to discharge their duties as per the norms of institute and all the staff are requested to cooperate with the cell in charge.

Sr.No	Name of Cell	Faculty In-Charge	Department
1	Student Development	Mr. T. S. Sargar	Mechanical Engineering
	Communication and Personality Development Cell	Mr. S. S. Yevale Mr. A. B. Ingole	Mechanical Engineering Electronics and Tele. Engg.
	Student Welfare Cell	Mr. A. N. Adpanwar	Computer Engineering
	Cultural Cell	Mr. A. N. Varade	Information Technology
	Social Responsibility Cell	Dr. S. L. Bangare	Information Technology
	Sports Cell	Mrs. Daware	Physical Director
	Medical and counseling Cell	Dr. N. P. Dharmadhikari	Engineering Science
2	Industry Institute Interaction Cell	Dr. S. L. Bangare	Information Technology
	Training and Placement Cell	Dr. D. K. Kamat	T & P Officer
	ED Cell	Mrs. M.S. Joshi	Civil Engineering
	Research Developmentand	Dr. K. M. Gaikwad	Electronics and Tele. Engg.
	Consultancy Cell	Dr. N. P. Dharmadhikari	Engineering Science
	Internship Cell	Mr. Y. K. Dhage	Mechanical Engineering
	Technology Business Incubation Cell	Dr. A. P. Kalmegh	Mechanical Engineering
	Startup Incubation Cell	Dr. K. M. Gaiwad Dr. S. P. Saptale	Electronics and Tele. Engg. Engineering Science
	Intellectual Property Right Cell	Dr. N. P. Dharmadhikari	Engineering Science
3	Academic Cell		

Table 3. College Level	Committee Members
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	IQAC Cell	Mr. D. W. Gawatre	Civil Engineering				
	Examination Cell	Dr. S. R. Patil	Mechanical Engineering				
	Examination Cell	Mr. M. K. Nivangunge	Computer Engineering				
	Purchase Committee	Mr. A. N. Adpanwar	Computer Engineering				
	Library Cell	Dr. K. M. Gaikwad Dr. N. P. Dharmadhikari	ENTC Engineering Engineering Science				
	Website Cell	Mr. A. P. Rajput Mr. Sagar Khopade	ENTC Engineering Information Technology				
	Alumni Cell	Mr. Shyam Ladkat	Mechanical Engineering				
	Women Development Cell	Dr. R. V. Patil Mrs. P. S. Banagare	ENTC Engineering Information Technology				
	College Magazine Cell	Mr. V. Ramnathan	Mechanical Engineering				
	Admission And Induction Program Cell	Dr. Daljeet Kaur Dr. N.P. Dharmadhikari	Engineering Science Engineering Science				
4	Grievances and Redressal Cell	Dr. K. M. Gaikwad	ENTC Engineering				
	Anti-Ragging Cell	Mr. A. B. Ingole Mr. A. N. Adpanwar	ENTC Engineering Computer Engineering				
	OBC Cell	Mr. K. C. Salunke	Mechanical Engineering				
	SC/ST Cell	Mr. S. P. Saptale	Engineering Science				
	Women Grievance Cell	Mrs. P. S. Bangare	Information Technology				
	Grievance Redressal Cell (Staff)	Mr. R. B. Bajare	Civil Engineering				
	Anti-Sexual Harassment Cell	Dr. J. P. Shinde	ENTC Engineering				
	Minority Cell	Dr. K. M. Gaikwad Dr. Daljeet Kaur	ENTC Engineering Engineering Science				

PERSPECTIVE PLAN

The governance of the institution is reflective of and in tune with the vision and mission of the institute

VISION

उत्तमपुरूषान् उत्तमाभियंतृन् निर्मातुं कटिबद्धाः वयम्।

We are committed to produce not only good engineers but also good human beings.

<u>MISSION</u>

Holistic development of students and teachers is what we believe in and work for. We strive to achieve this by imbibing a unique value system, transparent work culture, excellent academic and physical environment conducive to learning, creativity and technology transfer. Our mandate is to generate, preserve and share knowledge for developing a vibrant society."

The policy statements and action plans for fulfillment of the stated mission are described in terms of short- and long-term goals as mentioned below

Long term goals

- To serve as Engineering Knowledge Centre for Society in General.
- To initiate Research in focused areas from Electronics and Telecommunication Engineering department, Computer Engineering department, Information Technology department, Civil Engineering department and Mechanical Engineering department
- To form Research Centre for Doctoral programs
- To strengthen the relationship among Industry and Institute Interaction under III cell activity and to offer Expertise for Projects, Training and Consultancy.
- To have 100 % Ph.D. holder faculty members in all departments.
- Modernized equipment in laboratories and workshops to be setup to facilitate revenue generation and skill development with new advanced machinery.

Short term goals

- As per the present needs of industries, develop the technical knowledge and skill among the student for making them competent to face the challenges due to globalization.
- Qualitative Academic improvement towards excellence.
- To get accreditation with excellent grades in NAAC.
- To get all programs accreditation with good grades in NBA.
- Improvement in Cadre ratio in all departments
- To strengthen Industry liaison by way of Faculty Training, Students Internship and projects, Testing, MOUs etc.
- To promote R & D activities in all Departments in liaison with industry.

COLLEGE GROWTH PLAN 2022 – 2032

1. Research & Development

1.1 Research Projects

Strategy 1. To Promote advance research and scholarly enterprise:

- To appoint Faculty with good research and scholarship potential.
- To support Faculty members in pursuing Ph.D.
- To identify and support programs and areas of emerging distinction.
- To have a Center of excellence in each emerging technology by 2027
- To establish HPC center in collaboration with IIT/ NIT by 2026.
- To provide opportunities for UG research experience by organizing National and International Technical Events like conferences and consortium.

Strategy 2. To improve research collaborations with Industry:

- To stimulate long-term, mutually beneficial industrial collaborations (2025 target: 25% Faculty with at least one industry research / consulting contact per year).
- To increase appreciation of entrepreneurship among students and Faculty Members.

Strategy 3. To obtain research grants from various Government sources such as AICTE, DST, UGC, DRDO, SERB, ISRO, RGSTC, BCUD of SPPU, Pune etc.

- To fetch the grant up to INR 50 lakh under MODROBS (Modernization and Removal of Obsolescence of Lab Equipment/Machinery) scheme of AICTE by 2025.
- To motivate the faculty members to get the funding under the category of Research Promotion Scheme (RPS) for innovation in established and newer technologies.

1.2 Consultancy

- Strategy 1. To provide consultancy services such as material testing, planning and design, technical third-party audit, structural audit in Mechanical and Civil Engineering, High computing labs in Computer, Testing labs with high quality equipment's such asSpectrum analyzer etc in Electronic & Telecommunication Engineering and Information Technology to Pune, Nasik, Mumbai Thane and Ahmednagar infrastructure firms, auto industry and other surrounding areas. To have a tie up with Government College of Engineering, DIAT, ARAI, IIT, NIT, BATU for consultancy and R&D activities.
- Strategy 2. To work Under Unnat Bharat Abhiyan (UBA) and Unnat Maharashtra Abhiyan (UMA) and provide expertise to nearby Talukas, and raise revenue for the institute.

To get enrolled in the empaneled list of institutes recognized by Government of Maharashtra for consultancy and technical audit work.

1.3 Intellectual Property Rights (IPR)

- **Strategy 1.** Encourage registration of IPR by providing financial support to students and faculty members.
 - To establish Intellectual Property Right cell for smooth conduction of IPR activities.
 - To have more number of patents filed (2025 target: two patents per Dept).
 - To make commercialization of Patents according to the need.
 - To get more number of registrations for various types of IPR such as Design Registration, Copy Right, Trade Mark, Patent and Geographical Indications (if any).

- To implement the guidelines given in National Innovation and Start up Policy (NISP by AICTE).
- To establish Institutions Innovation Council (IIC) cell and conduct various activities related to it.

1.4 Internal Revenue Generation (IRG) Scheme.

- **Goal**: Generate income for sustaining SKNCOE growth plan on a No-Profit basis to the tune of Rs.10 Crore by 2032.
- Strategy 1. Introduce min. 30 hours/semester value addition technical programs using SAE's infrastructure in evening sessions after regular college hours:
 - IT Courses on C, C++, Python, R programming, Data structures, Open-Source C Programming, JAVA and .Net, Big Data Sciences, AI, ML, Android using current lab set-up and industry experts initially and own trained Faculty thereafter.
 - Electronics & Telecommunication Engineering Courses on VLSI embedded systems techniques, Virtual instrumentation using Lab-view software, High computing lab etc
 - Civil Engineering courses such as AutoCAD, Revit, STAADPro, ETABS MS Project, Primavera etc
 - Mechanical Engineering Courses on CAD/CAM/CAE, CNC / VMC training, CATIA, MATLAB and SIMULINK, Robotics, ANSYS etc.
- **Strategy 2.** Introduce Competitive exams like GATE/ CAT/GRE/TOEFL etc. coaching to achieve at least 20% number of students at NIT/IIT/Any other reputed engineering or management colleges for PG.
- Strategy 3. Introduce Finishing School: 30 hour per semester courses on Soft Skills and hands-on skills development for all streams of graduation under TPO for Placement and revenue generation.
- **Strategy 4**. Extend the IT infrastructure for conduction of various examinations by external agencies such as MPSC, UPSC, NTA, DTE, IBPO, JEE, NEET etc.'

2. Strengthening Industry Institute Interaction:

2.1 Internship Program

2.2 Strategy 1: To promote industry institute interaction for students through internshipPrograms.

- To develop industry institute interaction cell in each department.
- To collaborate with present and past student's parents and alumni associated with various industries and PSU's.
- To promote development of Mini Projects through internship programs.

Strategy 2: To organize guest lecture / seminar of industry personnel

- To invite industry personnel in the field of mechanical, computer, mechatronics, robotics, automations, data science, digital communication, VLSI, embedded systems etc.
- To invite alumni associated with industries as speaker for seminar/talks on current fields of engineering and technology.

2.3 Industry institute interaction through Consultancy

- Strategy1: To provide consultancy services (such as material testing, planning and design, technical third-party audit, structural audit) in the various field of engineering such as Mechanical, Computer, Electronic & Telecommunication Engineering and Information Technology to Pune, Nasik, Mumbai Thane and Ahmednagar infrastructure firms, auto industry and other surrounding areas.
- **Strategy2**: To get enrolled in the empaneled list of institutes recognized by Government of Maharashtra for consultancy and technical audit work.

2.4 Development of laboratories in association with industries through MoU Strategy

1: To collaborate with industries in and around Pune for developing the

laboratories as per industry standards.

 To encourage the adoption of the laboratories by the various industries for technological infrastructural up gradation from time to time.

Perspective plan proposed by Principal

Sr.	Goal	Metric	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No.			2023	- 2024	2025	- 2026	- 2027	2028	2029	2030	2031	2032
	Research &	Research Projects										
1	Development	Promote advance research	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
		and scholarly enterprise										
		Improve research										
		collaborations with	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
		industry										
		Obtain research grants										
		from various Government										
		sources such as AICTE,	0%	10%	20%	30%	40%	50%	70%	80%	90%	100%
		DST, UGC, DRDO,	070			3070						
		SERB, ISRO, RGSTC,										
		BCUD of SPPU, Pune etc										
		Consultancy										
		Provide consultancy										100%
		services (such as material										
		testing, planning and										
		design, technical third										
		party audit, structural										
		audit) in the various field										
		of engineering such as	10%	20%	30%	40%	50%	70%	80%	90%	100%	
		Mechanical, Computer, Electronic &										
		Telecommunication										
		Engineering and										
		Information Technology										
		to Pune, Nasik, Mumbai										
		Thane and Ahmednagar										
		infrastructure firms, auto										

	1 1 1 1										
	industry and other										
	surrounding areas.										
	Work Under Unnat Bharat										
	Abhiyan (UBA) and										
	Unnat Maharashtra										
	Abhiyan (UMA) and	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
	provide expertise to										
	nearby Talukas, and raise										
	revenue for the institute.										
	Intellectual Property										
	Rights (IPR)										
	Encourage registration of										
	IPR by providing financial	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
	support to students and										
	faculty members.										
	Internal Revenue										
	Generation (IRG)										
	Scheme										
	Goal: Generate incomefor										
	sustaining SAE growth	10%	20%	30%	40%	50%	70%	80%	90%	100%	100%
	plan on a No- Profit basis										
	to the tune of Rs.10 Crore										
	by 2032.										
	Introduce min. 30										
	hours/semester value										
	addition technical										
	programs using	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
	SAE's infrastructure										

				1	1	1			1	1		r
		in evening sessions after										
		regular college hours										
		Introduce Competitive										
		exams like GATE/										
		CAT/GRE/TOEFL etc.										
		coaching to achieve at										
		least 20% number of	10%	20%	200/	400/	50%	60%	70%	80%	90%	1000/
		students at NIT/IIT/Any	10%	20%	30%	40%	50%	60%	/0%	80%	90%	100%
		other reputed engineering										
		or management colleges										
		for PG.										
		Introduce Finishing										
		School: 30 hour per										
		semester courses on Soft										
		Skills development for all										
		streams of graduation	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
		under TPO for Placement	1070	20%								100%
		and revenue generation.										
		Extend the IT										
		infrastructure for										
		conduction of various										
		examinations by external	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
		agencies such as MPSC,	10%	20%	30%	40%	30%	00%	/0%	80%	90%	100%
		UPSC, NTA, DTE, IBPO										
		etc.										
	Strengthening	Internship Program										
	Industry	Promote industry institute										
2	Institute	interaction for students	100/	2004	200/	1004	5004	600/	7004	0001	0000	1000/
	Interaction	through internship	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
		programs.										

Organize guest lecture /										
seminar of industry	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
personnel										
Industry Institute										
Interaction through										
Consultancy										
Provide consultancy	10%									
services (such as material										
testing, planning and								80%		
design, technical third						60%	70%		90%	
party audit, structural										100%
audit) in the various field										
of engineering such as										
Mechanical, Computer,		20%	30%	40%	50%					
Electronic &	1070	2070	2070	1070						
Telecommunication										
Engineering and										
Information Technology										
to Pune, Nasik, Mumbai										
Thane and Ahmednagar										
infrastructure firms, auto										
industry and other										
surrounding areas.										
Get enrolled in the										
empaneled list of										
institutes recognized by										
Government of	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Maharashtra for										
consultancy and technical										
audit work.										

Development of										
laboratories in										
association with										
industries through MoU										
Collaborate with	100/	2004	200/	100/	500/	C 00/	700/	000/	000/	1000/
industries in and around	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Pune for developing the										
laboratories as perindustry										
standards.										

Perspective plan year wise progression proposed by Principal and approved by