

FOR 2nd CYCLE OF ACCREDITATION

SKN SINHGAD INSTITUTE OF TECHNOLOGY AND SCIENCE

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Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Sinhgad Technical Education Society's (STES's), SKN Sinhgad Institute of Technology & Science (SKNSITS), is a premier institute affiliated to the Savitribai Phule Pune University (SPPU). STES was established in the year 1993, under the dynamic leadership of Prof. M. N. Navale. The objective of the society is to impart quality education in the fields of Engineering, Medical, Dental, Pharmacy, Management, Computer Applications, Architecture, Commerce, Law, Science and School education.

SKNSITS, was established in the year 2011. It is approved by All India Council for Technical Education (AICTE), Directorate of Technical Education (DTE), Maharashtra. The institute is located at Lonavala, a hill station between two metros, Mumbai, and Pune with the quietude form of the ambience for learning. The institute runs three undergraduate programmes. Undergraduate programmes include; Mechanical Engineering, Computer Engineering, Information Technology.

The faculty works hard to pass on knowledge to students in order to improve their skills. SKNSITS has developed cutting-edge laboratories that are updated in accordance with SPPU syllabus revisions from time to time. The institute is entirely residential, providing students with a pleasant setting and several academic opportunities. It encourages them to improve their research mindset as well as character in order to prepare for a bright future. SKNSITS fosters a research culture and encourages academic and student innovations. The Student Training Programs (STPs), improve students' skill sets and employability.

To bridge the gap between industry and academia, students benefit from industrial visits, technological presentations, participation in various contests and technical events. SKNSITS was accredited for the first cycle, NAAC assigned the institute a grade of "A."

The institute has improved its operations and outcomes in response to NAAC peer committee recommendations. Furthermore, the institute is willing to assess its educational system and academic performances. It is required by the professional institute to strive for continuous refinements in its process. We collect stakeholders feedback on the teaching-learning and other processes. So, the institute is applying for NAAC accreditation for the second cycle in order to receive an improved grade.

Vision

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

Mission

Holistic development of students and teachers is what we believe in and work for. We strive to achieve this by

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imbibing a unique value system, transparent work culture, and 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

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- 1. State of art laboratories and infrastructure
- 2. Lush Green pollution free residential campus
- 3. Student centric learning and environment
- 4. Conducive work environment for faculty and staff
- 5. Effective training and placement cell with more than 90% of the eligible students placed Significant number of University rank holders
- 6. Fully equipped and spacious library with rich collection of books and journals Digital library with access to national and international e-journals
- 7. 24×7 reading room at central library with cafeteria facility Excellent internet bandwidth and campus Wi-Fi facility Support to faculty for pursuing higher studies leading to Ph.D.
- 8. Well planned and organized Student Training Program and Value Addition Programs Train The Trainer Program for newly inducted faculty
- 9. MoUs with industry for student centric programs
- 10. Well-guarded and safe environment for students on campus Emphasis on holistic development of students

Institutional Weakness

- 1. Number of funded research projects to be enhanced.
- 2. Interdisciplinary research activities, Consultancy, copyrights and patents should be strengthened.
- 3. Number of Faculties with Ph.D. qualifications is to be enhanced.
- 4. Quality Publications in Scopus indexed journals are to be improved.
- 5. Insufficient foreign university collaborations for faculty and student exchange

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Institutional Opportunity

- 1. Scope for an inter-disciplinary and collaborative research
- 2. To develop Centre of excellence in IoT.
- 3. Networking and strengthening relationship with stakeholders
- 4. Induction of faculty with Ph.D. qualification
- 5. Continuous efforts of Central Placement Cell to create greater opportunities for Higher packages, Internships & Industry projects.
- 6. Networking with institutes of national and international repute Alumni networking to enhance the academic and placement activities
- 7. 'Center of Excellence' in select areas in engineering and technology Collaborative research with corporate world

Institutional Challenge

- 1. Increasing the number of placements with higher perks
- 2. Bridging the gap between academia and industry
- 3. Attracting meritorious students
- 4. Inculcating R&D culture with quality publications among UG students.
- 5. Initiating consultancy services from the MNC industries
- 6. Enhancing employability skills of students in rapidly changing technology in an affiliated institute Adaptability to globally changing industrial scenario
- 7. Scarcity of faculty with Ph.D. qualification in select areas of engineering

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Sinhgad Technical Education Society's SKN Sinhgad Institute of Technology &Science (SKNSITS), is affiliated to Savitribai Phule Pune University (SPPU). The institute implements the curricula set and provided by the university. The Teaching- Learning process is scheduled according to university guidelines. Institute meticulously plans semester-wise academic calendar in tune with university academic calendar. It ensures

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timely preparation of theory, practical, internal exams, SPPU exams, curricular, extra-curricular activities, etc.

Faculty members were involved in evaluation work of university examinations, university question paper setting and in revision of curriculum of the university.

Course/s distribution to teachers, as per experience and willingness, is carried out well before commencement of the semester so that faculties can prepare course material and course file and make it available to the students in advance.

The periodic assessments of students are undertaken through assignments, Internal examinations. The institute has well defined continuous assessment & internal assessment (CAIA) mechanism. It is incorporated in academic calendar and followed strictly. Train the Trainers (TTT) program for all institutes of Sinhgad Technical Education Society ensure consistency in delivery of contents.

82 Value Added Programms(VAP) and other certificate courses were run to ensure appropriate action towards addressing any gap in the overall development and 86.12% students were involved.

Institution follows crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum for enrichment of curriculum. The current university curriculum 21% courses are focused on experiential learning aspect and 10% addresses cross cutting issues with 95.95% students involved in various project/ field works and internships, PBL, Lab Innovation.

To enhance the technical skills and latest technology knowledge of students, Institute offers honor courses prescribed by SPPU . Students are benefited from experiential learning through Value Addition Programs (VAPs), Industry visits, project work/internships etc. Students Training Program (STP) helps to develop all technical and non-technical skill sets, which enhances employability skills follows as per the academic calendar .

Regular feedback from stake holders (Students, Alumni, Industry, Parents) on academic performance & ambiance as well as curriculum are collected, analyzed and action taken report is available on the website.

Teaching-learning and Evaluation

The institute has built a reputation for the excellence in the teaching and learning processes. The 80% students are enrolled through government administered process while 20% seats are filled at institute level on merit through transparent process. The Teaching-Learning Process is continuously refined according to the feedback of stakeholders.

46.26 Percentage of seats filled against seats reserved for various categories as per the norms.

The Teacher Guardian scheme assists students in learning about new advancements, both academically and personally. To maintain a healthy student-teacher ratio (17.56:1), well-qualified full-time teachers are appointed against sanctioned posts in accordance with AICTE guidelines.

We follows student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences using ICT tools. The educational paradigm combines traditional teaching with student-centered learning practices like Project Based Learning (PBL),Lab Innovations, VAPs, STP etc. Content delivery and evaluation process is meticulously planned prior to

commencement of the semester. All the academic, co-curricular and extra-curricular activities are monitored periodically.

Institute is with 8% faculties having with NET/SET/Ph.D. qualifications.

The institute has adopted reforms in assessment and evaluation patterns of SPPU. Students' knowledge and understanding is measured using internal assessment tools like tests, assignments, practical work through a transparent and robust mechanism in place. Assessment and evaluation related grievances are addressed by the teachers-in-charge. The mechanism for mapping of course outcomes in the programme, the students' learning outcomes and performance in tests, in-semester, and end-of-semester exams.

The institute has adopted Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed and attainment of POs and COs are evaluated

The average passing percentage of the final year students is 93.52 %. The analysis of final year results in university exam is used for refinement and validation of the teaching learning process of the institute.

The student's online satisfaction survey is taken for overall improvement of teaching learning process in the institute. Special attention is given to address and cater students considering their diversity.

Research, Innovations and Extension

SKNSITS has established a Research and Development cell (R&D) to promote research, innovation, patenting and consultancy culture among the faculties and students. Under resource mobilization, the institute has received fund of Rupee 16.06 Lakhs from various Government and Non-Government agencies.

The institute encourages faculties to attend and organize workshops, conferences on research methodology, IPR and entrepreneurships to

update knowledge. Significant growth in Ph.D. scholars and faculty publications indicate institute's commitment towards research. Many faculties published their original research work in reputed journals, national and international conferences. In continuation of the research papers, faculties have written books and chapters in the books.

To encourage, motivate, and foster students to work with innovative ideas and turn them into prototypes SKNSITS has established an Institutional Innovation Cell.

Numerous groups within the department as well as the NSS team plan extension activities for social causes throughout the year, resulting in their holistic growth fulfilling the institutes mission. The neighborhood community praised the extension efforts that were carried out by the students.

The institute has academic collaborations with foreign universities, IT Industries, professional bodies and other organizations for skill enhancement and over all development of student and faculties.

The Career Counseling Cell (CCC)-Entrepreneurship Development Cell (EDC) induces business development programs in the institute through a series of professional lectures and seminars. Many students were adopted internships in industries in order to gain experience and develop their projects. Extension activities are carried

out through MoUs.

To inculcate and develop research culture among students, special attention is given while designing modules of student training program. Students are encouraged and guided to refer research papers on latest technology and publish their papers. Best papers are selected by organizing paper publication competitions and awarded. Students are motivated and supported to work on their innovative ideas. The models and prototypes or simulated products developed on their innovative ideas are presented in different competitions and technical events. Such students are getting appropriate weightages during finalization of their term work marks. They are motivated, guided and supported to file patents

Infrastructure and Learning Resources

The institute provides adequate, the state-of-the-art physical infrastructure and learning resources for smooth and effective implementation of Teaching-Learning process. The class-rooms(19), laboratories(31), workshops(03), tutorial rooms(05), reading halls (01), seminar halls(02) are furnished with all necessary ICT gadgets for efficient learning. Cultural center, indoor and outdoor sport facilities with international specifications, is parts of the physical infrastructure. The laboratories are furnished with modern equipment, machinery, computer hardware and software required for both academic and administrative purposes.

The institute changes its physical and IT infrastructure on a regular basis as per the norms of regulatory bodies. The library with digital library section includes ample number of books, references, journals, periodicals, eresources. A reading hall with capacity around 150 seats is open for students 24 x7. Library is automated with Autolib Library Management software having N6 and KOHA. The Autolib web OPAC module allows users to browse and search library books on the Intranet. Stakeholders can access e-journals from anywhere on the campus at any time because access is IP-based. The facility of library resources sharing is available with the library of SPPU and libraries of other institutes of the STES.

The institute has a network of 212 computers with 100 Mbps Internet connectivity and Wi-Fi facility to fulfill the academic and research needs. Student – Computer ratio is 1: 4.31 The institute also maintains and updates IT Infrastructure to ensure seamless connectivity and proper technical support in teaching learning process. A Corporate Training Centre (CTC) with 3-star residential facilities and having four well-furnished conference halls is used to conduct various corporate training and industry institute interaction related activities. The institute has in-house maintenance resources and also external agencies are used for IT infrastructure, so as to ensure seamless connectivity and proper support in the teaching learning processes for maintenance.

Provision for maintenance is made in the annual budget of the institute. The average percentage of expenditure incurred on maintenance infrastructure excluding salary component during the last five year is 40.71% the institute has well defined mechanism for maintenance of infrastructure and planning for utilization of resources available with optimizing techniques

Student Support and Progression

The institute provides students with the best possible education and career opportunities. Scholarships and cost reductions help deserving students to finish their studies. Around 93.51% of the students are benefited through state/Central government scholarships. The institute supports needy and meritorious students. The student's skills are enhanced by conducting various activities, meticulously designed VAPs, Corporate Social Responsibilities events, Technical skill enrichment events, and builds the decision making capacity (soft skills, language and communication skills, life skills, and ICT/computing skills). Student's career prospects

are groomed by conducting variety of professional activities like training and placement, career counselling, and

competitive examination guidance and coaching facilities for GATE/GRE, UPSC/MPSC etc. During the last five year on an average 52.92% of the students are benefited.

The institute has constituted statutory committees like, Internal Complaints Committee against Sexual Harassment, Anti-Ragging Committee, Discipline Committee, Grievance Redressal Committee, Students' Advisory Committee, SC/ST/OBC Committee, etc. address students' grievances in the manner prescribed by law/guidelines transparently and timely.

The Training & Placement cell provides all kinds of guidance, conducts various aptitude tests, and organizes the recruitment drives for the students. Students are placed in the multinational and national companies with average package of 4.5 lakhs per annum. Students are encouraged for higher education in foreign universities and institute of national repute. The students are taking initiatives in appearing for the state/ national/ international examinations and students are qualified.

The students are given participation and representation on institutional bodies and committees. Apart from this the institute provides several opportunities to display their talents and skills in the field of sports and cultural activities. A national level "Sinhgad Karandak" is organized every year. Students represent the institute in intercollege activities, different open tournaments and bring awards to college. Individual students and teams have

grabbed awards through participation in university, state, national and international level.

The institute has a registered alumni association. The prominent Alumni interact with students and faculties frequently. They suggest the improvements in curricular and extracurricular activities, support to students in internships and contributes in overall development of the institute.

Governance, Leadership and Management

The vision and mission of the institute are designed in harmony with higher education policies of the Nation/State. The institute has supported various innovative programs like, Faculty Development Programmes, Train The Trainer, Teacher Advancement Programme, skill development programs, lectures on ethics and universal human values, Technical Training and Value Added Programs so that Teachers get benefit from it and upgrade their knowledge.

The institute has constituted different statutory bodies like Governing Body, frames various policies, establishes administrative setups, makes recruitments, and frames service rules for the employees. The effective implementations of strategies are leading to effective coordination and smooth functioning of the institute. Institute has incorporated paperless efficient e-governance for leave and staff profile management, e-communication including file transfer, pooled data filling through several Google Tools etc.

The institution has effective welfare measures for teaching and non-teaching staff. The institution has effective welfare measures for teaching and non-teaching staff like health care centre, Leave Schemes for all staff, Maternity leave, Study Leave for higher education, Provident Fund System for staff, Group Insurance Policy, Gratuity etc.

The institute has provided financial support to the faculties for attending conferences, workshops, and also membership of different professional bodies. The institute motivates and supports to teaching and non teaching faculty members to undergo different FDPs, administrative training programs etc.

The institute has a well formulated financial policy in place it ensures effective and optimal utilization of

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financial resources for academic, administrative and development of activities at the institute. Ultimately it helps in realizing the institute's vision and mission. The Institute has defined the standard operation procedure to monitor effective and efficient utilization of sanctioned financial resources for infrastructure development, academic processes and other activities.

The Institute has made the appropriate provisions in its books of account to ensure that available sufficient funds are used efficiently for each academic year. The institute in every financial year, internal and external financial audits has conducted to ensure that defined protocols are followed and financial resources are utilized appropriately. The IQAC cell has contributed in different processes/ systems developed and deployed in the institute for enhancement of Teaching-Learning processes.

Institutional Values and Best Practices

Through its Mission, the institute seeks to put its Vision of complete student development into practice. The academic calendar lists a variety of events that are used to put the ingredients necessary for creating competent engineering graduates into practice.

The institute addresses gender and cross-cutting issues through curricular and co-curricular activities, beginning with the new entrants' induction sessions. The ICC hosts a variety of programmes like expert talks, workshops, etc for promotion of gender equity and sensitization. The institute works to create a more inclusive environment with social events, annual social gatherings, and awareness programmes .

The affiliating university, SPPU, has inducted credit courses in the curriculum on environmental studies and Democracy, Election and Governance. National Service Scheme (NSS), different clubs/ units etc. are functional in the institute to inculcate values and social responsibilities among students.

The institute has designed and implemented environment-friendly policies. It includes; Tree-plantation, Solid Waste Management, use of Solar Water Heating Systems, Renewable Energy Resources, Water Harvesting, Disabled Friendly and Barrier Free environment. The institute has started many innovative programmes which have helped to create positive impact and improvements in energy conservation, water conservation, green campus etc.

The innovative ideas of corporate garden and birthday garden are implemented on the campus by the institute. It is unique feature of the institute. The campus was awarded as "Most Clean Campus in western region AICTE- Clean Campus Award-2017" on OCT 2, 2017, by AICTE.

The use of ERP software for the academic and administrative purposes has shown our commitment to a green environment. The Career Counselling Cell (CCC) in association with Higher and Technical Education, Maharashtra state conducts different programs on various issues like universal human values, tolerance and harmony, linguistic, and other diversities.

The institute monitors all these activities through well-defined mechanism. The inputs obtained through this and the periodic audits conducted are used to refine the processes set in the institute and campus.

The institute has established code of conduct for students and employees. The institute celebrates various national and international commemorative days, events and festivals.

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2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College			
Name	SKN SINHGAD INSTITUTE OF TECHNOLOGY AND SCIENCE		
Address	Gat No 309 , off. Mumbai - Pune Expressway, Kusgaon(Bk)Lonavala, Dist. Pune -410401		
City	Kusgaon Bk Lonavala		
State	Maharashtra		
Pin	410401		
Website	sknsits.sinhgad.edu		

Contacts for C	Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email	
Principal	Milind.s.roho kale	02114-673393	9552569863	-	principal.sknsits@s inhgad.edu	
IQAC / CIQA coordinator	N.k.gavade	02114-673339	9764355860	-	hodmech.sknsits@s inhgad.edu	

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details		

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State	University name	Document
Maharashtra	Savitribai Phule Pune University	View Document

Details of UGC recognition		
Under Section	Date	View Document
2f of UGC		
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)					
Statutory Regulatory Authority	Recognition/Appr oval details Instit ution/Department programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks	
AICTE	View Document	02-07-2021	12	Approved By AICTE	

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Gat No 309, off. Mumbai - Pune Expressway, Kusgaon(Bk)Lonavala, Dist. Pune -410401	Rural	149	10864.66

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Pro gramme/Co urse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Compute r Engg,	48	Passed HSC or its equivalent examination with Physics and Mathematics as compulsory subjects along with one of the Chemistry or Biotechnolog y or Biology or Technical Vocational subject or Computer	English	120	120
UG	BE,Informati on Technology,	48	Passed HSC or its equivalent examination with Physics and Mathematics as compulsory subjects along with one of the Chemistry or Biotechnolog y or Biology or Technical Vocational subject or Computer	English	60	60
UG	BE,Mechanic al Engg,	48	Passed HSC or its equivalent	English	30	0

examination with Physics and Mathematics as compulsory subjects along with one of the Chemistry or Biotechnolog y or Biology or Technical Vocational subject or Computer	
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Position Details of Faculty & Staff in the College

				Te	aching	Faculty	7					
	Profe	Professor			Assoc	ciate Pro	ofessor		Assis	Assistant Professor		
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	University			12			48					
Recruited	1	0	0	1	0	0	0	0	24	15	0	39
Yet to Recruit	5			12			9					
Sanctioned by the Management/Soci ety or Other Authorized Bodies				3				9				
Recruited	0	0	0	0	0	3	0	3	7	2	0	9
Yet to Recruit	0			0			1	0		1		

	Non-Teaching Staff							
	Male	Female	Others	Total				
Sanctioned by the UGC /University State Government				33				
Recruited	24	9	0	33				
Yet to Recruit				0				
Sanctioned by the Management/Society or Other Authorized Bodies				0				
Recruited	0	0	0	0				
Yet to Recruit				0				

	Technical Staff							
	Male	Female	Others	Total				
Sanctioned by the UGC /University State Government				11				
Recruited	6	5	0	11				
Yet to Recruit				0				
Sanctioned by the Management/Society or Other Authorized Bodies				0				
Recruited	0	0	0	0				
Yet to Recruit				0				

Qualification Details of the Teaching Staff

	Permanent Teachers									
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	1	0	0	0	1	0	3	1	0	6
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	2	0	28	16	0	46
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

				Part Ti	me Teach	ers				
Highest Qualificatio n	Professor					Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties						
Number of Visiting/Guest Faculty	Male	Female	Others	Total		
engaged with the college?	0	0	0	0		

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	147	5	0	0	152
	Female	50	2	0	0	52
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic	:
Vears	

Category		Year 1	Year 2	Year 3	Year 4	
SC	Male	15	17	4	1	
	Female	5	5	1	0	
	Others	0	0	0	0	
ST	Male	1	0	0	0	
	Female	0	0	0	0	
	Others	0	0	0	0	
OBC	Male	46	37	23	6	
	Female	12	14	4	2	
	Others	0	0	0	0	
General	Male	59	32	21	15	
	Female	19	9	3	4	
	Others	0	0	0	0	
Others	Male	31	42	30	7	
	Female	16	12	3	5	
	Others	0	0	0	0	
Total	'	204	168	89	40	

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:

Multidisciplinary/interdisciplinary: The vision and mission of the institute is to inculcate holistic development of students and teachers. The mission statement focuses on the needs of the society in explicit terms, namely imbibing a unique value system, transparent work culture, excellent academic and physical environment, and conducive to learning, creativity to accomplish the vision of the institution. The basic engineering sciences like physics, chemistry and mathematics, are part of curriculum in first year engineering. The institute follows the curriculum designed by university wherein courses related to humanities and social sciences are given proper weightage so as to give comprehensive

approach which satisfies STEM. The institute follows credit based curriculum prescribed by the university. The students are regularly engaged in community development programs through NSS, CSR etc. As the institute follows Savitribai Phule Pune University curriculum, at present multi- disciplinary flexible curriculum that enable multiple entry and exit at the end of academy year is not possible. All the departments of the institute encourage the students to focus on mini and major projects as part of curriculum in third and final year engineering.. The institute encourage students of different department in developing multi-disciplinary projects in the form of hybrid vehicle, solar vehicle, and rocket models so that the student participates in national and international competitions. The institute support the students by opening facilities like laboratories, library beyond the college working hours for completing the multidisciplinary projects. Value-based multidisciplinary education in the form of webinars, seminar, activities like Yoga, induction program, expert lectures are provided to the students with the intention of developing humanistic, ethical, social, constitutional, intellectual, and universal human values

2. Academic bank of credits (ABC):

Institute is affiliated to Savitribai Phule Pune University (SPPU) and the curriculum proposed by the university is strictly followed. The University provides flexibility to the institute to run selective audit courses, honor courses and electives at UG level. The SPPU curriculum also has the option for completing internship and industrial projects in interested fields. Faculty members are engaged in development of delivering content effectively by referring reference books, NPTEL lectures and demonstration of practical's using Virtual Laboratories. The student performance is evaluated by conducting unit tests, Quiz, Preliminary examinations and Mock Practical's etc.

3. Skill development:

As a step towards competence based learning that helps students to further improve their core skills, the institute offers Student Training Program (STP) in the form of soft, communication, Technical, Fundamental and Aptitude Training, Research Methodology, Technical report writing during second & third year of Engineering. In fourth year, value added programs are taught by the industry veterans

on latest technological developments and trending fields of engineering in order to develop the skill sets as per the industry requirement. These value added programs are beyond the syllabus content of SPPU and floated as per the requirements of students' interest. The students actively participate in NSS activities to learn ethical, humanistic and universal human values. The college organizes admission fair in the form Conclaves for providing opportunities for students to go for higher studies in abroad at various universities across the world like USA, Canada, Germany, Denmark, United Kingdom, and Netherlands etc. In this Conclave, more than 50+ universities participate in every year and provide options for studying in Master of Science (MS) and integrated doctoral/ post-doctoral program in various streams of science and engineering. In this regard the institute has made Memorandum of Understanding (MOU) The college has also made MoU with "First Naukari.com" to provide training in up-gradation of soft and technical skills of students in areas such as SWOT Analysis, Training on Machine Learning, Artificial Intelligence, Robotics, Process automation, mechatronics and Programing on C, C++, JAVA, Python etc. The skill development sessions are conducted by our institute on data sciences, renewable energy, entrepreneurship & innovation with renowned institutes Techtonic, HACKATHON, Robotics competition, etc. The institute has made memorandum of understanding with Infosys India Ltd. to run Infosys campus connect program to develop soft skills for the students and faculty by conducting Workshop on Foundation Programs, Webinar on soft skills etc.. The Institute offers environmental Studies I & II credit courses at first year engineering, to make the students familiar with environmental issues and their effect which includes conservation of biodiversity and sustainable development. The curriculum also includes study of constitution, democracy and election.

4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):

The curriculum of the institute is designed to instruct in English language, but the faculty members conduct separate lectures in English and local language to take care of slow learners. The institute runs wall magazine through various clubs to encourage the students' skill development in painting, photography, literature, article writing in multiple languages. The

best articles are published in annual college magazine "CHRONICALS"..This magazine inculcates creativity, novelty and scope for development in present times and inspires the students to take up new challenges in future. The college news letter "INNOVISION" published every year. The students participate in intercollegiate competitions and social events like NSS etc. In this forum students work for the enhancement of computer literacy, carrier guidance, and organization of camps like blood donation, tree plantations drives, sports competition, free health and dental checkup camps etc. The college organizes technical competition namely TECHTONIC & cultural event namely SINHGAD KARANDAK. It is a flagship event of cultural and sport extravaganza organized every year. This event enhance the creativity among students like modeling, analyzing, organizing, interpersonal, acting, singing, dancing, playing instruments and managerial skills etc

5. Focus on Outcome based education (OBE):

The Institute is affiliated to Savitribai Phule Pune University. The syllabus - curriculum is prepared by the University and institute follows it strictly. The faculty members of various departments participate and contribute in the process of syllabus framing. The valuable inputs are given by these faculty members in the framing of curriculum. All the courses mentioned under curriculum of a particular department have Program Educational Objectives (PEOs), Program Outcomes (POs) and Program Specific Outcomes (PSOs) as per the norms and guidelines of statutory regulatory bodies. The dissemination of these POs and PSOs to the teachers, students and various stake holders is done through institute Website, Student/Faculty notice boards, Laboratory notice boards, Posters in corridors, administrative areas, Laboratory manuals, Project work book, Conference proceedings, brochures of FDP/STTP, Department News Bulletin, Faculty Course files, etc. All the courses are defined with course objectives and course outcomes and the same is discussed with the students by the faculty. The outcomes of all the courses are mapped with POs and PEOs at the end of the semester by all the departments in order to make improvements in teaching-learning process in subsequent semester. The institute organizes Hackathon, Internet of Things challenge and

	Technical Design Competitions in addition to existing curriculum such as Project based learning, Mini Project, Seminar, Final Year Project and Internship in order to transform curriculum towards OBE.
6. Distance education/online education:	The institute motivates students to get certification for Massive Open Online Courses (MOOCs), Coursera, NPTEL, Spoken Tutorial, Infosys campus connect etc. The Institute uses online platforms like Google Classroom, Microsoft Teams, etc. for effective classroom teaching. The e-learning material in the form of lecture notes, Videos, etc. are shared through said platforms. The institute is a nodal center for e-learning courses organized by The Institute has liaison with COEP Pune and it is recognized as nodal center (NC 64) for V-Lab. This facility has been effectively used for conducting various courses practical in online mode during pandemic. The Institute has highest utility of virtual laboratory among the institutes across India.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Yes, Electoral Literacy Club (ELC) has been set up in the College.
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	Students' co-ordinator and co-ordinating faculty members are appointed by the institute. The ELC is functional. The ELC is representative in character
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	Innovative programmes and initiatives undertaken by the ELCs like Voters awareness and enrollment. Our NSS students actively participated in the election process for election booth help along with the Lonaval Gramin Police, Lonavala. Students has voluntary contribution in electoral processesparticipation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc. Voter Awareness Camp: aim to

enhancing voter enrolment and awareness for enhancing voting percentage in elections. Voter Awareness Program: Voting is our fundamental right & responsibility. On national voters day, staff & students la organize rallies in campus and nearby villages to generate awareness. Expert talk was organized on election process. National Voters Day India is a democratic country, so every major citizen has right to vote. The National Voter's Day is celebrated on 25th January. Programmes like Rallies, Expert Talks, Awareness camps are organized on this occasion to promote and motivate students and people to exercise his fundamental right of voting 4. Any socially relevant projects/initiatives taken by Yes, During NSS camp our students take a College in electoral related issues especially research survey, awareness drives at village and note the projects, surveys, awareness drives, creating content, number of voters in each home and village. publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc. 5. Extent of students above 18 years who are yet to be The ELC and college jointly identified the students enrolled as voters in the electoral roll and efforts by admitted in the First year admission. The SLC ELCs as well as efforts by the College to members along with the Teacher Guardian motivate, institutionalize mechanisms to register eligible guide such students about the enrolment/ registration as a voter in the electoral roll also highlights the students as voters. importance as a voter to nation students. Awareness camps are organized on this occasion to promote and motivate students to exercise his fundamental right of voting through the voters awareness camp every year for the eligible

Extended Profile

1 Students

1.1

Number of students year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
913	953	986	1122	1460

File Des	cription	Document
Upload s	supporting document	<u>View Document</u>
Institutio	onal data in the prescribed format	View Document

2 Teachers

2.1

Number of teaching staff / full time teachers during the last five years (Without repeat count):

Response: 95

5	File Description	Document
	Upload supporting document	<u>View Document</u>
	Institutional data in the prescribed format	View Document

2.2

Number of teaching staff / full time teachers year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
52	59	70	84	108

3 Institution

3.1

Expenditure excluding salary component year wise during the last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
222.35	205.21	274.19	320.44	442.8

Se	lf	Study	Report	of	SKN	SINH	GAD	IN	NSTITUTE	OF	TECHN	IOI	OGY	AND	SI	CIEN	CF

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1

The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment

Response:

STES's SKN Sinhgad Institute of Technology & Science, Lonavala (SKNSITS) is affiliated to the Savitribai Phule Pune University (SPPU), Pune.

- 1. The academic calendar of the institute and departments are prepared, uploaded on the college website and displayed on notice boards in line with the academic calendar of the University. All the activities are planned & strictly implemented as per the Academic calendar, thus ensuring complete adherence prepared for each semester with a balanced distribution of curricular, co-curricular and extra-curricular activities
- 2. The department HoD allocates subjects to teachers as per the choice, expertise and prepare time table. The teachers prepare the course file and delivery content before the commencement of teaching. Course files are checked each semester by the members.
- 3. The institute organizes Train The Trainer (TTT) programs for the faculty for effectively transacting the curriculum and improving teaching practices.
- 4. All students are encouraged to participate in various curricular, co-curricular activities and take up academic projects, internships, industrial visits in collaboration with industries. The curriculum is also enriched by designing Value Added Programme, Student Training Programme certificate courses, seminars, workshops, conferences, webinars, technical activities, Project Based Learning, Lab Innovation and industry-institute interaction to have holistic development & enhance the student's academic progress.
- 5. Periodic review of the teaching-learning process by the Heads of department is taken in the form of syllabus completion reports, systematic internal examination process and training programmes of students so as to add impetus to TLP.
- 6. The faculty are supported and motivated to attend workshops and Faculty Development Programs for upgradation of their skills,
- 7. The institute encourages the faculty and students to register and get certified for different online courses offered under the aegis of IIT Spoken Tutorial, SWAYAM/ NPTEL ,and othersContinuous Internal Evaluation (CIE) is done in accordance with following activities as per Academic Calendar.

Continuous Assessment & Internal Assessment (CAIA) is done in accordance with following activities as per Academic Calendar

- 1. The departmental academic calendar clearly mentions Internal Examination, mock practical, remedial classes along with practical and project submission schedules and is conducted as per the calendar.
- 2. The Internal evaluation norms are conveyed in advance to the students so as to prepare and perform well.
- 3. Internal Examinations results, Assignments, continuous evaluation sheet and syllabus coverage are available with every subject teacher.
- 4. The Internal IQAC comprising faculty members from all departments monitor the activities mentioned in the academic calendar and submit reports.
- 5. To ensure that students are prompt in following all academic activities, a teacher guardian scheme is in place which is monitored closely for achieving enhanced academic and overall performance.
- 6. All types of evaluations are finally compiled into a term work evaluation sheet which ensures that the students get the marks they deserve based on their academic performance for the semester.
- 7. In case of any last minute deviations in the given academic schedule by the university due to unforeseen circumstances, the institution adopts the revised schedule.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

1.2 Academic Flexibility

1.2.1

Number of Add on /Certificate/Value added programs offered during the last five years

Response: 82

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	<u>View Document</u>

1.2.2

Percentage of students enrolled in Certificate/ Add-on/Value added programs as against the total number of students during the last five years

Response: 86.18

1.2.2.1 Number of students enrolled in subject related Certificate/ Add-on/Value added programs year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
684	604	949	1119	1327

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

1.3 Curriculum Enrichment

1.3.1

Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum

Response:

The SPPU has mentioned various courses such as Environmental Studies, Humanities and Social Sciences, Soft skills, Stress management, Problem-solving, Intellectual Property Rights, Smart manufacturing, Lean management, Human behavior, Energy audit and management, human rights etc., in the curriculum. Some attempt to improve professional skills, while others aim to instill broad skills such as social and human values, environmental awareness, and so on, resulting in students' holistic development.

Institute incorporates crosscutting issues through the Student Training Programs (STPs) and various activities conducted by professional bodies, Gender equality through Women Empowerment activities, National Social Service (NSS) unit. Several student's clubs helps to induce Human Values, Environment and Sustainability in students. The activities like Swachha Bharat Abhiyan, Tree Plantation, Blood Donation Camps, and Self-awareness-Health is Wealth and Rain Marathon-Run for Unity, contributing to Environment and Social Awareness.

Institute has **National Social Service** (**NSS**) unit which organizes activities like how to stop food wastage were demonstrated, Donations to Orphanage and flood-affected inculcate human values and social responsibilities among students.

In addition to enriching the curriculum by integrating cross-cutting issues, the institute takes additional

efforts through the NSS unit to alert the students about Human values, Ethics, Environment and Gender awareness. NSS organizes various social events such as Blood donation camp, Tree plantation. Experts are arranged on cross-cutting issues like human values and gender equality.

Women Grievance cell, later reconstituted as Internal Complaints Committee to sensitize the students and employees on gender issues, make them aware of the social, moral, and legal implication of gender discrimination, encourage value education upholding gender equality, and at the same time to deal with instances of sexual harassment on campus and Anti-ragging cell, are lively in the Institute, which take utmost care and provides support to girl students and the female staff members.

On the occasion of "International Women's Day", program was conducted on Women empowerment under the Career Counseling Center (CCC) of the Institute. Expert talks/lectures by Police officers, Renowned Yoga Faculty, gynecologists were arranged.

Professional ethics are imbibed amongst students by encouraging them to participate in professional activities like seminars, conferences, workshops, etc., through a **state-level technical festival-Techtonic**. The institute provides equal opportunities to boys and girls in all types of student activities organized. The institute conducts every year a mega event called "Sinhgad Karandak" which includes cultural and technical competition involving equal participation of boys and girls.

The institute's "SC-ST Cell" is also functioning well. Awareness programs and events are organized on national and international days of importance such as World Water Day, World Environment Day, World Health Day, World Cancer Day, World AIDS Day, International Women's Day, Mother's Day, Teachers Day, Engineers Day, Republic Day, Independence Day, Yoga Day, Sports Day etc.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	<u>View Document</u>

1.3.2

Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)

Response: 91.57

1.3.2.1 Number of students undertaking project work/field work / internships

Response: 836

File Description	Document
Upload supporting document	<u>View Document</u>
Institutional data in the prescribed format	View Document

1.4 Feedback System

1.4.1

Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website (Yes or No)

Response: Yes

File Description	Document
Upload supporting document	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1

Enrolment percentage

Response: 51.74

2.1.1.1 Number of students admitted year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
204	168	89	40	213

2.1.1.2 Number of sanctioned seats year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
210	240	210	360	360

File Description	Document
Upload supporting document	<u>View Document</u>
Institutional data in the prescribed format	View Document

2.1.2

Percentage of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (Exclusive of supernumerary seats)

Response: 47.95

2.1.2.1 Number of actual students admitted from the reserved categories year - wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
67	32	89	15	77

2.1.2.2 Number of seats earmarked for reserved category as per GOI/ State Govt rule year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
88	102	90	152	152

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

2.2 Student Teacher Ratio

2.2.1

Student – Full time Teacher Ratio (Data for the latest completed academic year)

Response: 17.56

2.3 Teaching-Learning Process

2.3.1

Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences using ICT tools

Response:

With this view, in addition to the traditional teaching-learning methods, the Institute provides innovative student centric methods such as experiential learning, participative learning and problem solving techniques. Various events, efforts taken in this direction are listed below –

- 1. Various Competitions
- 2. Internships
- 3. Students' Chapters and Clubs
- 4. Industrial visits
- 5. Techtonic Technical activities / events
- 6. Workshops /Seminars
- 7. Exposure to Virtual Lab environment
- 8. IIT spoken tutorials, NPTEL, etc.
- 9. Students Training Programs (STP)
- 10. Project Based Learning (PBL), Lab Innovation (LI)
- 11. Participation in Research paper presentations, projects Innovation/Avishkar activities of the

University.

- 1. Industries are the end destinies for the students from professional programmes. The experiential as well as participative learning takes place effectively in Industries. The Institute is keen in exposing the students in such industrial environment. Internship is one of such activities. It is as like as practice school beyond the Institute. Students complete internships in various private, government industries successfully every year. Similarly, industrial visits are also arranged for the students every year.
- 2. The students appeared Spoken Tutorials of IIT Bombay. The students undergo variety of courses in these programmes and finally appear for the respective course examinations.
- 3. The students also undergo various courses organized by NPTEL. These participations are voluntary. It has been proved effective in clearing the fundamentals of various courses which are backbone of engineering and technology.
- 4.PBL and LI activities are carried out by the Institute every year. These activities are proven very useful in enhancing the systematic problem solving ability and overall development of the students
- 5.STP is the programme that is being executed by the Institute with the aim of enhancement of employability of the students

The institute adopts Information and Communication Technology (ICT) enabled teaching learning process by providing the required infrastructure in addition to traditional classroom teaching. To enhance the learning experience of the students, recent educational methodologies are used by faculty members to make teaching learning a joyful experience.

- 1. For all the programs, the institute has ICT enabled classrooms, seminar halls. These classrooms include multimedia teaching aids such as LCD projectors, Wi-Fi/ internet connection, computer/laptop, audio system etc.
- 2. The institute encourages the faculty members to use these recent teaching tools. These tools are Power Point Presentations (PPTs), related videos, animations, free online resources etc. to deliver the lectures, thus improving the effectiveness of the teaching-learning process.
- 3. Virtual laboratories and free online tools such as SCILAB, AutoCAD and other simulators are used for conducting laboratory sessions.4
- 4. Swayam/NPTEL/MOOC, Virtual laboratory, SPOKEN TUTORIAL-IIT Bombay, such online resources are made available to the students.
- 5. Due to COVID-19 pandemic situation, Faculty members have fluently adopted various Platforms such as Zoom, Google Meet, Microsoft Teams, etc. used to upload video lectures, e-books/e material, assignments, practical submissions and online MCQ tests. The Institute has official credentials of Microsoft teams.
- 6. Faculty members use social media platforms like WhatsApp and Telegram to connect with the students and parents individually beyond the classroom for giving extra information and support to students.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

2.4 Teacher Profile and Quality

2.4.1

Percentage of full-time teachers against sanctioned posts during the last five years

Response: 95.89

2.4.1.1 Number of Sanctioned posts / required positions for teaching staff/ full time teachers year wise during the last five years:

2021-22	2020-21	2019-20	2018-19	2017-18
52	59	70	84	124

File Description	Document
Upload supporting document	<u>View Document</u>

2.4.2

Percentage of full time teachers with NET/SET/SLET/ Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

Response: 8.04

2.4.2.1 Number of full time teachers with NET/SET/SLET/Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
8	6	6	5	5

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

2.5 Evaluation Process and Reforms

2.5.1

Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient

Response:

There is complete transparency in the internal assessment. The mechanism designed and adopted is as per the guidelines of **Continuous Assessment & Internal assessment (CAIA) Norms** and SPPU.

• At the beginning of the semester, faculty members inform the students about the various

components in the assessment process during the semester as per the CAIA.

- The academic calendar and CAIA prepared and are communicated to the students well in advance.. The scheduled tests, prelim exams etc., are conducted in proctored manner. Also, students submit written assignments in the stipulated time.
- Evaluation is done by the subject teacher within a week from the date of examination.
- Assessed answer papers are distributed to students for verification, and any discrepancies are immediately addressed. The results of students' internal evaluation tests are displayed on the notice board of the department.
- Attendance of the student is monitored strictly daily. Monthly attendance is displayed on the notice board and communicated to students and parents.
- Mentor mentee / Teacher Guardian Scheme (TG) is also used to solve the queries of students and parents regarding their academic and personal.
- Continuous Assessment of students for every experiment is done based on regularity, performance, viva and punctuality in submitting the record.
- For laboratory courses, viva voce is used to examine the independent learning, practical approach to real-time applications. The Project Review Committee, in collaboration with the project guides, evaluates the quality of the projects.
- At the end of the semester, internal assessment based on the parameters specified in the above processes is done, and internal assessment marks are allotted as per the CIA norms displayed well in advance..
- The internal assessment/term work marks are displayed on the department notice board; students go through it and query, if any, communicate to the concerned faculty for rectification.
- Due weightage is given to the students who has participated in different curricular and extracurricular activities etc as per the CIA
- The final internal assessment marks are displayed and sent to the university.
- Mistakes, if any, are observed in the transfer entries of internal assessment marks on the datasheet of the university. The internal exam officer rectifies such mistake with the help of the concern faculty according to university guidelines.
- Examination form fill up and payment of fee process is online. Sometimes students stuck in the process and cannot proceed ahead due to one or the other reason. In such cases, students report to examination section and get his/her difficulty solved
- After the end semester examinations, the result is declared by the university. Sometimes mistake are observed in the result sheet of the students some issues are observed. Such students apply to the principal ,CEO to take appropriate steps to solve the query by communicating with the university.
- This is well defined, set and transparent process followed for the internal assessment and grievance thereof. Thus all such issues raised by the students are solved by the Institute timely

and transparently	
File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

2.6 Student Performance and Learning Outcomes

2.6.1

Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website and attainment of POs and COs are evaluated

Response:

As per the guidelines of NAAC and NBA, an Outcome based evaluation system is observed by the Institute. UG programme follow the defined program outcomes (POs). For all the programs, POs, Programme Specific Outcomes (PSOs), and Course Outcomes (COs) have been articulated.

After giving a thought process with senior faculty members, HoD and stake holders, two/three PSOs are formalized for each program and for some courses it is provided by SPPU. The dissemination of these POs and PSOs to the teachers, students and various stake holders is done through institute website, posters. The list is as follows –

- 1. Institute Website
- 2. Student/ Faculty/Lab. notice boards
- 3. Posters in corridors
- 4. Faculty Course files.

For any outcome based system, achieving the attainment level of the POs, PSOs, and COs is a keyparameter that plays a vital role.

The following methods are used to assess the attainment of COs.

1. Internal (Direct and Indirect) Assessment Tool:

Direct assessment methods include an assessment based on the internal evaluation by the institute and university examinations.

Internal assessment is based on attendance, internal examinations, assignments, continuous assessment of laboratory work, presentations, mock orals etc. The faculty evaluates students continuously and encourages them to improve in performance. Individual, as well as group assignments, are given to students.

According to the university exam pattern, 30% weightage is to the In-semester examination, and 70% weightage is to the End-semester examination. Results declared by the University at the end of each semester are thoroughly analyzed in academic audits of programs.

Once all COs are computed, a rigorous qualitative analysis is done to attain the COs for that particular course.

2. External Assessment Tool:

Institute has a mechanism in place to interact and get feedback from its distinguished stakeholders (Students, Alumni, Parents and Industry) At the end of every academic year, students graduate exit survey is conducted, analyzed and used as an attribute to evaluate attainment. Distinguished alumni are invited as an expert resource persons to inspire and motivate students by sharing their experiences. They gave valuable feedback as an essential stakeholder is analyzed and used to improve and add any good practices.

Parents get feedback from their wards regarding the functioning of various activities in the institute and support for the overall development by giving valuable feedback. Regular interaction is done with the Industry/employers and feedback is obtained about the performance of our students, which is an indicator of attainment In a nutshell, COs and POs are evaluated based on Internal and External(direct and indirect) assessment tools. In the direct assessment tools, the internal assessment parameters (Test, Preliminary Examination, Mock, Project, Assignments, Tutorials, Laboratory Experiments, Presentations, In-sem Exam, and End-sem Exam) are considered. While for External assessment tools, the parameters considered are graduate exit Survey,

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

2.6.2

Pass percentage of Students during last five years

Response: 93.52

2.6.2.1 Number of final year students who passed the university examination year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
264	310	430	392	308

2.6.2.2 Number of final year students who appeared for the university examination year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
278	312	434	441	357

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

2.7 Student Satisfaction Survey

2.7.1

Online student satisfaction survey regarding teaching learning process

Response: 3.81

File Description	Document
Upload database of all students on roll	<u>View Document</u>

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1

Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

Response: 8.69

3.1.1.1 Total Grants from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
00	00	4.62	3.73	0.34

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	<u>View Document</u>

3.2 Innovation Ecosystem

3.2.1

Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

Response:

Institute created an innovation ecosystem for students and staff to think innovative and convert their innovative ideas into knowledge and help to construct start-ups.

Institute has constituted different cells like,IIC, R&D , IPR , IIIC, and CCC. The Institute has constituted different cells, and ecosystems to carry out various activities that moderate students and faculties to transfer their innovative ideas into knowledge.

The institute supports financially to implement, and explore their innovations. The institution has taken a number of steps to promote research activities and establish an ecosystem for innovation through set systems through different cells.

The R&D Cell promotes research activities in order to foster a research culture in the institute. It encourages staff and students to conduct research in new frontier areas of Engineering, Technology,

Science, and Humanities, as well as multidisciplinary fields.

EDC helps ambitious engineers to establish their own firms or enterprises through a series of expert lectures and workshops. Distinguished businessmen and aspiring entrepreneurs are frequently invited to motivate student Departments to have a growing membership in International Professional Clubs such as SAE,ISTE and IETE which encourage students to participate in various activities towards holistic development.

The Institute has an IIC cell for nurturing various activities related to entrepreneurship, innovation, IPR, and startups. IIC of SKNSITS was set up to create a vibrant local innovation ecosystem. It deliberately inculcates the culture of Innovation among the students and faculties together by conducting various workshops and seminars related to entrepreneurship, innovation, IPR, and start-ups. The Institute has a special IPR cell to provide assistance and guidance to file IPR. The major objective of the IPR cell is to explore recent trends. Faculty and students with higher intellectual levels, resulting in improved overall quality, future career options, and the institute's overall growth. SAE BAJA competitions is to simulate the real-world engineering design of an ATV and its real-world off road challenges. The team is focused and determined to design a vehicle by keeping in mind the SAE BAJA requirements as per the rule book, the driver's comfort and safety, and the overall performance of the vehicle during the main event. Institute has provided a platform and financial support for the competions.

NPTEL Online Certification Courses are introduced for quality improvement. It is now possible for anyone outside the IIT System to be able to do an online certification course from NPTEL and get a certificate from the IITs. IITs are reaching out and taking education to the homes of people through this initiative. Institute is providing a platform and financial support for Registration Fees certification of NPTEL Courses. Institute is motivating students and faculties for Patents. Institute is always helping students and faculties for filing and publications of patents. The institution has taken a number of steps to promote research activities and establish an ecosystem for innovation through facilities through submitting the QIP proposals- SPPU Institute organized different conference, workshops, webinars for the knowledge transfer .Students participated in various competions like Avishkar, i-2-e competition, SKNINNOTECH, etc.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

3.2.2

Number of workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years

Response: 46

3.2.2.1 Total number of workshops/seminars/conferences including programs conducted on

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Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
7	5	12	14	8

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	<u>View Document</u>

3.3 Research Publications and Awards

3.3.1

Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

Response: 0.06

3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
0	4	2	0	0

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

3.3.2

Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during last five years

Response: 0.48

3.3.2.1 Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
6	6	6	18	10

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

3.4 Extension Activities

3.4.1

Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.

Response:

In line with the institute's vision and mission, the institute is very insightful to the impact of various extension activities on its students, employees, as well as on the regional community and on the environment. The institute believes in giving back what it has gained from the communities in which we live, work and play. The institute considers the impact of all extension activities on the local community and hence the various social activities, events and programs. We aimed to chase our goals as, keeping in agreement with the planet and society. Through the NSS program and social activities students should develop qualities like leadership, administrative work, personality development, social awareness and overall holistic development. Also through events students should get closer to the community and environment and understand nature concerning the environment.

Social activities include

- Winter Special Camp for Village Development: Every year NSS Special camp is organized by the team as per SPPU guidelines. Special camp helps to neighborhood community to aware of government schemes and benefits, implementation of renewable energy sources, the importance of cleanliness and health, energy literacy and enhancement, construction of water-rich camps and dams, encouragement to school students by various competition, aware about land consolidation, importance about rules and regulation during the day to day life.
- Blood Donation Camp is arranged every year.
- Swachha Bharat Abhiyan: Cleanliness drives arranged near society and campus.
- Street plays and drama on social issues are done by students.
- Tree Plantation: To provide oxygen, supporting wildlife is done by students.
- Traffic Rule Awareness Rally and Pledge: to aware society of traffic signs and road rules with the help of Lonavala police.
- Voter Awareness Camp: aim to enhancing voter enrolment and awareness for enhancing votingpercentage in elections.
- Flood donation drives for Kerala and Sangli Kolhapur affected areas done by a team in the form

of cloths foods and daily needy things along with NGO CIVIC PRIDE organization. A donation to the chief minister's relief fund is done with the help of contributions from the campus community.

- Help through Donation at Orphanage
- Maha Tree Plantation Drive in collaboration NSS to support Govt of India initiative. These activities impact on neighborhood community in a way that they are aware of the implementation of renewable energy sources, the importance of cleanliness and health, energy literacy and enhancement, construction of water-rich camps and dams, encouragement to school students by various competitions, aware about land consolidation, importance about rules and regulation during the day to day life. Through these activities, student improves their qualities such as time management, project management, costing, marketing skills, event management, and communication skill.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

3.4.2

Awards and recognitions received for extension activities from government / government recognised bodies

Response:

SKN Sinhgad Institute of Technology & Science, Lonavala has a NSS unit. NSS Units organised NSS Special camp every year. During the camp the students resides at village and perform the various activities like Computer training program, solar energy and their use, digital banking, education rules and regulations, blood donation camp, competition for various, school students, health awareness program, training about the electric bill payment, electrol literacy club, yoga training session and many more.

We are working for various extension activities in association with civic Pride organisation, Pune _NGO.

We have received various awards and recognitions for the various extension activities from the government and government recognised bodies for the activities like Computer training program, solar energy and their use, digital banking, education rules and regulations, blood donation camp, competition for various, school students, health awareness program, training about the electric bill payment, electrol literacy club, yoga training session and many more activities are being conducted by our institution and we have received various awards and recognitions for the same

File Description	Document	
Upload Additional information	<u>View Document</u>	
Provide Link for Additional information	View Document	

3.4.3

Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organised in collaboration with industry, community and NGOs) during the last five years

Response: 25

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
3	2	6	8	6

File Description	Document
Upload supporting document	<u>View Document</u>
Institutional data in the prescribed format	<u>View Document</u>

3.5 Collaboration

3.5.1

Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

Response: 27

File Description	Document	
Upload supporting document	<u>View Document</u>	
Institutional data in the prescribed format	View Document	

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1

Availability of adequate infrastructure and physical facilities viz., classrooms, laboratories, ICT facilities, cultural activities, gymnasium, yoga centre etc. in the institution

Response:

The development and quality education of the institute depends not only on the excellent technical staff but it also requires good infrastructure and related facilities which should be unique and specific. These facilities increase the reputation of institute & create healthy environment amongst staff and students.

The institution has excellent infrastructure required for effective teaching-learning process, co-curricular and extra-curricular activities. The infrastructure has adequate facilities to fulfil the norms laid down by the AICTE, DTE and SPPU.

The institute has adequate number of well-furnished, well ventilated, spacious and with proper luminance classrooms equipped with the necessary ICT facilities required for effective delivery of the content. Adequate number of tutorial rooms are available in the institute for interactive learning activities, interactive discussions and active learning.

Laboratories are regularly maintained and updated. The Charts and models are displayed in the laboratories for better understanding of theory and practical concepts. Laboratories are equipped with state-of-the-art machines/equipment, open source and latest proprietary software's etc. Beyond the syllabus, laboratories are also used for technology enhancement learning and training sessions like Value Addition Programs, Workshops and Industry training sessions. Institute is a Nodal centre for virtual lab under COEP.

The institute has 2 Seminar halls with 300 seating Capacity equipped fully with necessary ICT facilities. These halls are utilized on regular basis for conducting different activities. Also, Corporate Training Center (CTC), to interface with the corporates, is available for conducting corporate meetings, Seminars, conferences, workshops.

For Internet access and computing purpose, the institute has network of 212 computers with 100 MBPS bandwidth as per the norms. Centralized firewall is used to monitor and for security. The Microsoft Teams, is available as an online teaching & learning platform. It is used extensively during the pandemic by faculties and students.

To encourage and support the co-curricular and extracurricular activities for overall development of the students. The facilities developed by our institute for Cultural, sports, indoor and outdoor gymnasium etc, are spread across around 40 acres the campus.

The institute has Amphitheatre for cultural events such as Spandan, Sinhgad Karandak, Kojagiri, Dandia Night & Holi Celebration. The students and cultural committees are actively involved in organizing the above events.

A well-equipped gymnasium is also provided at the campus which is freely accessible to students, for encouraging them towards fitness.

Yoga and meditation sessions are conducted for the students and staff in the premises at sports complex. 'International Yoga Day' celebrated every year.

Institute has indoor sports facilities like Badminton, Table tennis, Chess, Carom etc. Outdoor facilities like Football, Hockey, Kabaddi, Basketball, Tennis, Volleyball, 800m 11 lane Jogging track, Cricket ground, 10 practice wickets, Skating track, Swimming pool with area 312.5 Sq.M.

Cricket Ground – A separate and spacious cricket ground with international specifications is spread over an area of 5 acres. A separate practice cricket ground is also available for students and residential staff. All the outdoor sports grounds are covered with proper facilities to enjoy their play during the night also.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

4.1.2

Percentage of expenditure, excluding salary for infrastructure augmentation during last five years (INR in Lakhs)

Response: 2.45

4.1.2.1 Expenditure for infrastructure augmentation, excluding salary during the last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
0.11	0.00	1.83	0.49	33.48

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	<u>View Document</u>

4.2 Library as a Learning Resource

4.2.1

Library is automated using Integrated Library Management System (ILMS), subscription to eresources, amount spent on purchase of books, journals and per day usage of library

Response:

The library is an important knowledge resource of Institution. It has well developed book collection of Engineering discipline.Institute has Integrated Library Management System(ILMS) software 'Autolib' version 1.0 since 2011 and is used to manage different functions of library. The new 'Koha' Library software installation & implementation process is going on which is having Web OPAC facility.

Autolib Software is purchased from Akash Infotech, Pune, who provide online and offline support for software problem, proper backup, and maintenance of software services. The software is renewed every year as per the AMC policy.

This software has modules like Acquisition, Cataloguing, Circulation and Serial Control. It is used to create accession register reports, add bulk student records, and update item lending policies and their status. Book issues, returns, and reserves are all available under the circulation module. This module can generate a variety of reports, including circulation status summary, item transactions, item inventory status, operator transactions, etc. Similarly, this module generates library barcodes, making time-consuming library work easier and more efficient.

Autolib software also provides statistics analysis for Library Management systems, such as weekly transitions, most issued books, least issued books, and reference books, among other things as the e-journals access is IP based, the stake holders can take benefit of this facility from anywhere in the campus at any time. The Institute library also shares downloaded NPTEL Video Lectures, as well as a digital library collection database, along with facilitate NDLI, ,Shodhganga,open source e-resources, and previous year University question papers to all students through the ftp local server of college. The link for viewing the NPTEL Video Lectures and other resources / study material is http://122.252.236.67/

We get resource sharing facility in the form of DELNET share by SIT,Lonavala and Springer Engineering database containing 181 electronic journals share by NBNSTIC, Vadgaon, Pune. Total number of books available in the library is 12286. Library purchase books every year accordingly university syllabus and requirement given by concern branch faculties. Avarage 50 thousand rupees expenditure done on book purchase every year. Library is having Advisory Committee who guide for implementation of best practices and soft administration policy for the purpose of user satisfication in the form of CAS/SDI, User Orientaion, Facilities apart from that library provide various facilities like Reprography Service, Email Full text Research Paper , Printed Periodical Journal, e-books, Digital Library with Wi-Fi, Reference service, Earn while Learn, Book Bank to EWS, SC/ST, students.

Library user usage report maintain in Reading Hall Register, Library Entry Register, Digital Library Register, as well as issue-return Register. Daily average 6.51 user (staff and students) get faciliy in library. Reading hall seating capacity is 150 we keep Reading Hall open for 24*7. Library and Digital library service gives in working hour of library that is 8am to 5pm. Library provide the knowledgebase service. to all students and staff who visit the Library for serach book, ebooks, question bank, full text research paper. We displayed Rules and regulation of Library and Reading Hall to aware the user about library facilities.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

4.3 IT Infrastructure

4.3.1

Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection

Response:

The institute is well-equipped with a strong IT infrastructure, to cater to the quality education and effective implementation of curriculum. The Central computing facility with 100 Mbps Internet connectivity is available for this purpose. For uninterrupted computing, generator backup of 500KVA is available.

• The Institute has developed centralized maintenance system in order to support the IT

infrastructure, campus facilities and equipment.

- The institute maintains and updates its IT Infrastructure to ensure seamless connectivity and proper technical support in teaching learning process.
- Faculty members are provided the Internet connection at their respective locations.
- All the Computer laboratories and facilities are connected with the Internet and are made available to the faculties and students for their academic needs in their respective departments.

In the field of digital communication and pandemic situation, the internet communication is important in teaching learning process. The Institute has IT facilities like leased line for internet connection and the software is also frequently updated.

- Application Software such as MATLAB, ANSYS, Altair Hyper Works, CATIA V6, Xilinx 9, Multisim, Auto CAD 2009 etc. are available at institute level. Software are updated continuously, Laboratories are continuously updated with latest version of computers such as i3, i5. Institute has well established language lab to enhance communication skills of the student and faculties.
- Advanced Dell, HP Computer systems, Windows server are available for smooth conduction of various activities such as online examinations, workshops, online competitive exams, virtual lab, etc.
- The Institute is designated Nodal centre for virtual lab (VLNC), under COEP Pune..
- Learning Management System (LMS) For smooth and effective conduction of academics in all respect, the Institute has provided license copy of Microsoft Teams as a common online platform for teaching-learning. It has helped the faculty members and students immensely during the pandemic situation.
- The institute has massive network of 212 computers with 100 Mbps Internet connectivity and Wi-

- Fi facility to fulfill the academic and research need. Centralized server room is used for network monitoring, management and Internet security.
- The institute has deployed the educational Enterprise Resource Planning (ERP) software, which manages the entire administration, campus operations, and academic management in an efficient way.

LAN facility: 3-Layer Switching (Core, Distributed and Access) network is available for the entire campus. Core layer switches in the buildings have been connected with the Optical Fibre Ring Network. This core switching is further extended to Distributed Switching for departments where 100Mbps (Gigabit Switches) are installed.

File Description	Document
Upload Additional information	<u>View Document</u>
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4.3.2

Student – Computer ratio (Data for the latest completed academic year)

Response: 4.31

4.3.2.1 Number of computers available for students usage during the latest completed academic year:

Response: 212

File Description	Document
Upload supporting document	<u>View Document</u>

4.4 Maintenance of Campus Infrastructure

4.4.1

Percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years (INR in Lakhs)

Response: 40.71

4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year wise during the last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
84.07	71.13	106.24	156.58	178.40

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	<u>View Document</u>

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1

Percentage of students benefited by scholarships and freeships provided by the Government and Non-Government agencies during last five years

Response: 89.9

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government and Non-Government agencies year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18	
785	784	989	1067	1260	

File Description	Document
Upload supporting document	<u>View Document</u>
Institutional data in the prescribed format	View Document

5.1.2

Capacity building and skills enhancement initiatives taken by the institution include the following

- 1. Soft skills
- 2. Language and communication skills
- 3. Life skills (Yoga, physical fitness, health and hygiene)
- 4.ICT/computing skills

Response: A. All of the above

File Description	Document
Upload supporting document	<u>View Document</u>
Institutional data in the prescribed format	View Document

5.1.3

Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years

Response: 52.96

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5.1.3.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
412	298	607	771	790

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

5.1.4

The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

- 1. Implementation of guidelines of statutory/regulatory bodies
- 2. Organisation wide awareness and undertakings on policies with zero tolerance
- 3. Mechanisms for submission of online/offline students' grievances
- 4. Timely redressal of the grievances through appropriate committees

Response: A. All of the above

File Description	Document
Upload supporting document	<u>View Document</u>

5.2 Student Progression

5.2.1

Percentage of placement of outgoing students and students progressing to higher education during the last five years

Response: 39.38

5.2.1.1 Number of outgoing students placed and / or progressed to higher education year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
130	146	136	161	98

5.2.1.2 Number of outgoing students year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
264	310	430	392	308

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

5.2.2

Percentage of students qualifying in state/national/international level examinations during the last five years (eg: JAM/CLAT/GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 5.17

5.2.2.1 Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ Judicial Services/Public Prosecution services/All India Bar Exams/State government examinations) year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
0	2	0	0	1

5.2.2.2 Number of students appearing in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT,GRE/ TOFEL/ Civil Services/ State government examinations) year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
3	18	26	7	4

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

5.3 Student Participation and Activities

5.3.1

Number of awards/medals for outstanding performance in sports/ cultural activities at University / state/ national / international level (award for a team event should be counted as one) during the last five years

Response: 41

5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
8	5	15	12	1

File Description	Document
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Institutional data in the prescribed format	View Document

5.3.2

Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)

Response: 4.2

5.3.2.1 Number of sports and cultural programs in which students of the Institution participated year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
8	3	3	4	3

File Description	Document
Upload supporting document	<u>View Document</u>
Institutional data in the prescribed format	View Document

5.4 Alumni Engagement

5.4.1

There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Response:

The Institute has established an Alumni association which was registered in the academic year 2017-18.(MH/1362/2017 /Pune Dtd.27/09/2017 Pune) In the broad sense it is a platform to support each other for mutual benefit of Institute and alumni members .

Few of the objectives of alumni association to mention are:

- To promote and foster beneficial interaction between Alumni and the Institute.
- To encourage the Alumni to take abiding interest in the process and development of the Institute.
- To arrange and support placement activities for the students of the Institute.
- To encourage the current students of the Institute and members of the Association for research &development activities.
- To mentor the students of the Institute for higher education, development of character and

becoming good human beings.

- To encourage and guide the students of the Institute on self-employment to become entrepreneurs.
- To guide students of the Institute on various professional avenues available and support them through various activities such as expert advice, seminars, visit etc.
- Promote the Industry-Institute interaction to bridge the gap between industry requirements and education offered and enhance students' employability.
- To help and assist other regional bodies for training programs in entrepreneurship development, with resources available with association.
- To encourage and support students of the Institute in sports, cultural and extra-curricular activities.
- To help and guide students and ex-students of the Institute for anti-drug, and other anti-social activities.

In the beginning, alumni meetings were conducted annually. However the institute has strong bonding with the alumni members and avail their services throughout the year .

Non financial contributions by alumni:

Our esteemed alumni members help the institute in many ways. During the meetings conducted by the institute, they give feedback on the processes designed and implemented in the institute. They significantly contribute in finalization of contents of programmes for enrichment of curriculum. They give meaningful contributions in designing student training programmes, value addition programmes based on their experiences and knowledge in the relevant field. They also support the implementation of such programmes, arrange expert talks and guide students in enhancing their employability skills.

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Alumni students support in providing internships, getting industry sponsored projects, arranging industrial visits, project Exhibition-SKNINNOTECH etc. They provide their services as resource persons, experts in different evaluation mechanisms in the institute throughout the year.

Financial contributions by alumni:

The financial contributions done by alumni members are considered in two ways, direct financial and indirect financial contribution. In direct financial contribution alumni financially sponsor technical events , projects of the students , events in Sinhgad Karandak etc. They help in institutional activities like admission awareness , technical activities during the Techtonic at no cost.

File Description	Document
Upload Additional information	<u>View Document</u>
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Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1

The governance and leadership is in accordance with vision and mission of the institution and it is visible in various institutional practices such as decentralization and participation in the institutional governance

Response:

The institute aims at the holistic development of students and teachers by implementing education and other initiatives to strategically meet the development goals of the institute. Transparency is maintained in administrative affairs of the college for unique work culture.

Vision.

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

Misson.

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, and 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.

Nature of Governance:

The top management including Governing Body, Academic Monitoring Committee, Local Management Committee, Principal, Head of Department and

faculty focus on institutional goals as follows Top management directs the principal focusing on the vision and mission of the institution. The principal

adheres to top management policies in order to realize the vision with the support of staff. The Principal, Vice Principal and Heads of Departments organize several committees to provide "participative and decentralized management" in the institute. The institution is committed to follow a quality framework with the support of IQAC. The Perspective plan of the institution suggests improving the quality of teaching learning process, to encourage research among staff and students, to enhance industry institute interactions and development of infrastructure.

The institution has a decentralised governance framework with well- defined interlinkages. Working with the decentralised governance system, the

Institute allocates adequate and structured authority to the programs. Various teaching staff committees

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have been established to oversee various institutional operations. For numerous academic and cocurricular activities, committees are formed.

The events are meticulously planned and effectively implemented by the student committees under the supervision of faculty. "Student Training Programs (STP)" are divided into five stages and taken from Second Year to Final Year of Engineering. STP-1 covers SWOT analysis, Public Speaking, Presentation Skills, Listening Skills, Behaviour Skill and Group Discussions. STP-2 covers Reading Skills. STP-3 covers the revision on fundamental subjects which are important from the point of view of placements especially in technical rounds. The fundamental purpose of these STP's is to prepare students in all aspects for facing placements. Apart from this, STP-4 covers the student's ability to write reports and scientific papers. Finally, STP-5 is taken up with recent technology and students are given training conducted by industry experts. The suggestions and opinions given by students during the interaction are considered in finalization of STPs. Institute practises to assign roles and responsibilities to various authorities in consultation with Principal and management. The suggestions made by teachers in meetings with the HoD, IQAC, AMC and department meetings are conveyed to management through the principal. The teaching learning process has been strengthened by involvement of teachers.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

6.2 Strategy Development and Deployment

6.2.1

The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, deployment of institutional Strategic/ perspective/development plan etc

Response:

Institute has successfully established an organizational structure to facilitate the efficient and effective management of the academic processes.

Various bodies are constituted as basic units of the organizational structure. The governing body is the highest decision-making body, consisting of members of the management, principal and faculty members. The Local Management Committee includes three members elected amongst the teachers, one member of the non-teaching staff and principal along with other members as per AICTE guidelines.

The institutional organization structure is as follows:

Institute has internal organizational structure as: The governing body, frames various policies, establishes

administrative setups, makes recruitments, and frames service rules for the employees. The effective implementations of strategies are leading to effective coordination and smooth functioning of the institute. The tasks taken up by it include academic, infrastructural, administrative and overall developments. The processes in line with the vision of the institute and their implementation procedures are set by the Governing body. The Governing body and LMC have the responsibility to take decisions at the central level regarding financial, academic and administrative policies, defining benchmarks of performance and development of the institute. Service rules, Procedures, Recruitment and Promotional Policies: As per the norms of the AICTE, university, state government the institute has framed service rules, policies and regulations which have been approved by the GB. In order to make awareness among the staff (both teaching and non-teaching) the service rules and related guidelines are made available on the institute portal. Also, their hard copies are kept in the administrative office. Institution has a well-defined Strategic plan aiming to achieve excellence in the aspects of Academic, Research, Faculty, Student and Society. The proposed performance indicator with a set target assesses attainment of each strategy. Strategic Plan and deployment documents are provided on the Institute website.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

6.2.2

Implementation of e-governance in areas of operation

- 1. Administration
- 2. Finance and Accounts
- 3. Student Admission and Support
- 4. Examination

Response: A. All of the above

File Description	Document
Upload supporting document	<u>View Document</u>

6.3 Faculty Empowerment Strategies

6.3.1

The institution has effective welfare measures and Performance Appraisal System for teaching and non-teaching staff

Response:

The institute gives highest priority to the welfare of teaching as well as non-teaching staff as follows:

- Group Insurance: The master group insurance scheme (GIS) is available for all employees.
- Providing death claims of RS. 1.5 Lakh for the employees having AGP 6000 and above, Rs. 1 Lakh for the employees having AGP 1900 to AGP 6000 and Rs. 0.75 Lakh for the employees having AGP below 1900 respectively.
- Accidental insurance policy (EMBF) is also available with the deduction of Rs.20 for teaching and Rs.10 for non-teaching staff which provides benefits up to Rs.1 Lakh.
- Maternity leave: Under the new Law, The Maternity Benefit (Amendment) Act 2017, passed by the Rajya Sabha in August 2016, maternity leave is raised from the current 12 weeks to 26 weeks. Institute provides 6 Months full paid maternity leaves to women employees.
- Gratuity: This scheme is for retirement benefits or on leaving the job and it is implemented in the institute. An employee receives a gratuity in exchange for their contributions to the institute.
- Rural Health Care Centre: We have Rural Health Training Center (RHTC) Centre in the Campus.
- Free medical service is provided as and when required.
- Employees' Provident Fund is availed to all eligible as per STES policy and applicable Act.
- Residence for Employee: Staff quarters are provided to all categories of employees, 1 RK, 1BHK,2BHK, and 3 BHK and Directors Residence. Quarters are equipped with a 24 Hrs. Security Services, CCTV Surveillance, Electricity Backup, Water Supply and WiFi facility. Nominal maintenance charge is charged.
- R & D facility: Institute provides financial assistance towards registration fees of research article publication. Study Leave facility is provided to the staff who is pursuing PhD or research. Other available resources are provided.
- An Internal Complaint Committee is established for both staff and students. Girl's common room is available. Equipped with necessary facilities.
- Transport Facility: Pick up and drop common transport facility is provided to the employees of the Institute coming from Pune and other locations. Institute provides conveyance allowance applicable as per norms to teaching and non-teaching staff.
- Internet and free Wi-Fi facilities are also available on campus for staff.
- Institute provides summer and Winter Vacations for faculty members.
- Miscellaneous: Medicine and Grocery store is available in the institute campus Laundry Services
 are available in the institute Campus. International level Sports facility for Indoor and Outdoor
 games is available with no cost. ICICI, SBI, Canara Bank ATMs are available in the institute
 campus. In and around campus, various food centers have been established which are accessible
 to all staff.
- Day Care Facility: To empower the women and to protect their rights, Day Care Facility available at campus. Day Care Facility is open for children between the ages of 3 months to 10 years of teaching and non-teaching staff.

In a nutshell, the Institute strives hard to keep our staff happy, healthy and comfortable.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

6.3.2

Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

Response: 12.6

6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
6	3	6	24	8

File Description	Document
Upload supporting document	<u>View Document</u>
Institutional data in the prescribed format	View Document

6.3.3

Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), professional development /administrative training programs during the last five years

Response: 61.59

6.3.3.1 Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), professional development /administrative training programs during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
93	52	99	102	42

6.3.3.2 Number of non-teaching staff year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
44	46	49	62	56

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

6.4 Financial Management and Resource Mobilization

6.4.1

Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/nongovernment organizations) and it conducts financial audits regularly (internal and external)

Response:

The institute has a well formulated financial policy in place that ensures effective and optimal utilization of financial resources for academic, administrative and development of activities at the institute.

The Institute has made the appropriate provisions in its books of account to ensure that available sufficient funds are used efficiently for each academic year.

The variance reports of sanctioned budget and actual expenditure are maintained and reviewed on a regular basis, the institute utilizes funds as per sanctioned budget, as per guidelines from management and Principal.

The Institute has defined the standard operation procedure to monitor effective and efficient utilization of sanctioned financial resources for various activities. Every year, the budget is prepared well in advance after taking into consideration the financial requirement generated by every department. The finalization of the tentative budget is proposed to the management for discussion and prepared in the meetings of HoDs. It comprises both recurring and nonrecurring expenses.

The Principal puts up the budget in the College Development committee meeting and after discussion and necessary corrections/modifications; committee recommends the budget for approval to the Governing body.

The meetings of concern committees are conducted as per guidelines of apex bodies. The institute has provisions for advance extra funds if needed. The Governing body studies the annual expenditure, scrutinizes the budget and provides feedback for efficient use of financial resources. The Institute has standardized procedures for sanctioning of funds for various activities.

The Management has given authority to principal for organization of various co-curricular,

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extracurricular activities also providing financial support for attending conferences, pursuance of higher education etc. and for participation of students at various events like Baja, Go-Kart, etc.

The Institute has constituted a separate Purchase Committee composed of Principal, HOD and concerned staff. The set procedure is calling quotations, preparing comparative statements, negotiation meetings and finalization of the vendors for effective and efficient use of available financial resources. The committee ensures that appropriate equipment with correct specifications are acquired at the best possible price.

Every financial year, internal and external financial audits are conducted to ensure that defined protocols are followed and financial resources are utilized appropriately.

Internal Financial Audit: -

A senior auditor from the pool of auditors at the audit department of STES is appointed as internal auditor to conduct an internal audit of the institute.

He not only pointing out mistakes from propriety/regulatory point of view but to suggest corrective measures so that same mistakes do not recur in future. It helps in devising a proper financial system in the institute .Each financial activity/transaction and the relevant documents are examined/verified by auditor. Audit objections raised by the auditor during the process are resolved by discussion with heads of all concerned sections in the institute.

External Financial Audit: -

The external audit of the institute is conducted by appointing an external agency. K. S. Mali & Co., Chartered Accountant firm is appointed as external auditor. The scrutiny and verification of various financial statements and audits are conducted by external auditors periodically.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

6.5 Internal Quality Assurance System

6.5.1

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

Response:

The Internal Quality Assurance Cell (IQAC) was set up in the academic year 2017-18. IQAC is instrumental for coordinating quality-related activities in the institute. It develops a framework for conscious, steady and synergetic work culture for better performance of employees and students through extension of various academic and administrative activities in the institution and set benchmark for quality. As a result of IQAC initiative, the following two practices are institutionalized.

- 1. Counseling: The Teacher Guardian (TG) scheme is a distinct feature. TG meetings are conducted weekly. The academic and nonacademic issues of the students are addressed in the TG meetings. From the feedbacks of academic monitoring committees, performance of the students, inputs from stakeholders, the IQAC has guided to initiate different schemes like STP, VAP's, Internships and other skill improving activities for the students. The Career Counseling Center (CCC) is established under the guidance of IQAC. The CCC conducts various activities and programs to motivate and guide students for competitive exams, higher education, Entrepreneurship etc.
- 2. **Alumni Meet:** The IQAC has provided guidance to constitute, register and functioning of alumni associations in the institute. The alumni meet is conducted semester wise. A process is set to collect feedback from the alumni about curriculum, infrastructural facilities of the institute, different enrichment programs, VAP's, STP etc. Based on the outcomes of this feedback, IQAC has suggested a refinement in the operations of the set processes or induction of new processes.

According to the directions of IQAC and institute, Heads of the department give instructions to the teaching and other staff for improvements in the overall teaching and learning process and operational methodologies.

All the faculty prepare the subject teaching plan are reviewed and execution of the same is monitored by the HoD for regular conduction of lectures and practical.

Student feedback and result analysis are then reviewed by IQAC members for the course conduct and result improvement. The suggestions of IQAC are then implemented for the coming semester.

The two examples of institutional reviews and implementation of teaching learning reforms facilitated by the IQAC are as under:

1.Strengthening of Programs by Utilizing Teaching and Learning Resources

The identified gaps in the curriculum were initially filled up by promoting Invited Talks, sponsored projects, internships, VAP, Honour Courses, etc.

2. Adapting Technology for Teaching Learning Process and Administrative Purpose

IQAC encourages use of audio-visual aids during lectures. Usage of various academic videos and audio clips for better understanding of the concepts. During the pandemic the lectures and practicals were conducted online. (MS TEAMS) The practicals were conducted online through Vlab. Even for Co-curricular courses and Extra Curricular Activities students were encouraged for online registration.

The IQAC committee reviews the process regularly by interacting with the prime stakeholders. Effective

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measures are initiated to improve and upgrade the quality of teaching learning process and placements. The outcomes are visible as per the numbers showing results and placements, faculty's intellectual growth and research development during last five years

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	<u>View Document</u>

6.5.2

Quality assurance initiatives of the institution include:

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements
- 2. Collaborative quality initiatives with other institution(s)/ membership of international networks
- 3. Participation in NIRF
- 4.any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA, ISO Certification etc

Response: A. All of the above

File Description	Document
Upload supporting document	<u>View Document</u>
Institutional data in the prescribed format	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1

Measures initiated by the Institution for the promotion of gender equity and Institutional initiatives to celebrate / organize national and international commemorative days, events and festivals during the last five years

Response:

SKNSITS provides a safe and secure environment for girl students and ladies faculty members in the institute. For these purposes the institute has constituted various committees like, Internal Complaint Committee, Grievance redressal cell, Counselors etc. These committees put on a variety of initiatives for female students. In addition, the institute has given counseling to female students in a variety of methods. The separate common rooms for girl students are provided for their comfort. The curriculum of SPPU has been implemented by the institute, addressing the issues related to gender equity, environmental concerns, governance etc.

1. Safety and Security:

Girl students' safety and security is a major concern. The institute aspires to develop students who are self sufficient, respectful of cultural variety, conscious of their social and civic duties, and sensitive to gender issues. There is a safe parking place fitted with CCTV closer to the academic blocks for female students. On campus, there is a separate and secure hostel facility for females. The classroom is set up in such a way that female students feel at ease.

The Internal Complaint Committee takes care of issues of grievances and welfare of the women. Security guards are placed in the campus and hostels. On special occasions like college fest, cultural / academic programmes, placement drives etc., special transportation is provided for girl students. All corridors and laboratories are equipped with fire extinguishers. Every year, a large celebration of Women's Day is held, and inspiring women personalities are invited to share their experiences. The institute is providing two vending machines of sanitary napkin with a capacity of 20 pads each for Rs. 5 at suitable locations in the institute buildings and hostels

2. Counseling:

Both general and personalized guidance has been concurred to the students. Well-being mindfulness programs for young girl students are organized in hostels and in the institute throughout the academic year. When a complaint or a protest occurs, the students are led to the proper ladies' complaint cell/authorities or explicitly assigned women workforce, one by one. The institute takes extreme attention to detail in managing the said matters of advising the young girl student. Through Co-Curricular and extra-Curricular exercises and comprehensive directing of girl-students, the institute strives to ensure the complete character development of female students and female faculty members, resulting in increased fearlessness, positive mental self-portrait, common regard, and so on.

SKNSITS was established in 2011. Right from establishment, the institute has given importance to

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celebrate / organize national and international events, days, festivals. It helps in overall development of the students which is in line with the vision of the institute.

Republic Day and Independence Day:

Every year the institute celebrates Republic Day and Independence Day. On this occasion all staff and students of the institute participate in the celebration. The programs start with Flag Hoisting/Unfurling at the auspicious hands of Chief Guest. It is followed by the National Anthem, Patriotic songs.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

7.1.2

The Institution has facilities and initiatives for

- 1. Alternate sources of energy and energy conservation measures
- 2. Management of the various types of degradable and nondegradable waste
- 3. Water conservation
- 4. Green campus initiatives
- 5. Disabled-friendly, barrier free environment

Response: A. 4 or All of the above

File Description	Document
Upload supporting document	<u>View Document</u>

7.1.3

Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following

- 1. Green audit / Environment audit
- 2. Energy audit
- 3. Clean and green campus initiatives
- 4. Beyond the campus environmental promotion activities

Response: A. All of the above

File Description	Document
Upload supporting document	<u>View Document</u>

7.1.4

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic diversity and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

Response:

SKNSITS Lonavala carried out various activities for providing and inclusive environment, activities such as SPANDAN - annual gathering of college in which traditional days celebrate and cultural ethics inculcating to students. Maintain tolerance and harmony toward regional, linguistic and other diversities sarsvatipooja for north indian students, In the month of holy Ramzan providing prayer room to students, dandiya festival, shivjaynti Celebrations. Also for socioeconomic in our institute implements Earn and Learn Scheme for students whose financial background is weak.

1. SPANDAN:

SPANDAN is an annual gathering event organized by SKNSITS. SPANDAN offers a platform to the students to show their skills other than academics. Every year SPANDAN was organized in the second semester, Jan or Feb month. Various events were organized like Solo Singing, Duet Singing, Solo Dance, Duet Dance, Group Dance, Fashion Show, Mr. and Miss SKNSITS, Stage Play, Ages of Rock, etc. Students from various departments are participating in this event and get a chance to explore their extracurricular skills apart from their academics. Various judges from different fields were invited to judge the students' performance and select the best among them. Event is aimed at the overall development of the students.

2. Earn and Learn Scheme:

The main objective of the scheme is to develop a student as a multifaceted personality with academic excellence and a commitment to an egalitarian society. India lives in her villages and to bridge the gap between rural Bharat and urban India, this scheme is basically undertaken for the benefit of students coming from the rural areas, who are economically backward, intelligent, and meritorious but cannot afford higher education, needy and financially hard pressed. It inculcates in the student the idea that no work is big or small and develops a work culture with the right aptitude. This is a vision of keeping our youth gainfully employed as well as to contribute from civil society. This is a paradigm shift in the way we see higher education. This will make higher education accessible and available to the poor, meritorious and the marginalized.

SKNSITS Lonavala carried out various activities for students & employees to add values, rights, duties to make them a responsible citizen. For that purpose we organise different activities such as tree plantation, blood donation, cleanliness drive, visit to orphanage, NSS camp visits to different villages & many more

3. Tree Plantation:

Our Institute comes under a big campus with a lot of open spaces. So we launched an extensive Tree Plantation Programme on the occasion of the World Environment Day. The students and teachers selected the empty places and to plant saplings in a well-organized way.

The saplings were supplied by the local government nursery. In order to restore the eco-balance, the afforestation drive was taken with all seriousness.

4. Blood Donation:

Blood is a significant component of our body which constitutes almost 7% of the body weight. Blood donation is a noble act where a healthy person donates blood for the use of ailing people. Our institute organises.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

7.2 Best Practices

7.2.1

Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual

Response:

1. Best Practice 1: Student Training Programs (STP)

Student Training programs are specially designed programs to get students acquitted with industrial practices, where every branch set up the program in relevant to academics and currently in use in industries.

- 1. **Title of the Practice:** Student Training Programs (STP)
- 2. **Objectives of the Practice:**
- ? To bridge the gap between Institution and Industry
- ? To enrich the knowledge of students beyond the curriculum
- ? To prepare the students for placement

- ? To inculcate life –long learning among the students for career development and growth
- ? To facilitate the students to get certificates from renowned industries and other agencies

3. The Context:

As the institution is affiliated to SPPU, the students have to follow the syllabus prescribed by the University for Various Courses. The industry too needs employable graduates. Therefore, Student Training Programs serve to bridge the gap between the university curriculum and the industrial needs.

4. The Practice:

Student Training Programs are carried out for all the departments with the courses tuned to the respective industrial exposure. For instance, the value addition programs like hypermesh, Catia V5 are arranged for the mechanical engineering department. For Computer, IT and electronics and telecommunication departments, the STPs in Python, Java and other state of the art concepts are provided. Students are encouraged to enrol in STPs through the Training and Placement office. The students' attendance is ensured, and their evaluation is done through structured tests and assignments given by the expert. It has been observed that the students have shown their keen interest in the STPs and shown active participation. Training provided is based on the need of the student. Program is spread over 7 semesters. Total duration of program is 120+ hours.

1. Evidence of Success

Students over 90% enrolled in STPs and exhibited enthusiastic participation to learn the field-oriented skills. This has immensely helped them in improving the hands-on aspects. Second Year students who participated in STP developed an interesting mini Project. Students and STP Trainers solve societal problems and provide feasible solutions for real-life problems using technology platforms such as Core Java.

2. Problems Encountered and Resources Required

As this is an activity over and above regular academics, time management was one of the crucial issues. Retaining the students after college hours was a challenge. The remote location of the college also posed difficulties in retaining the students after college hours. However, better coordination among the departments was yet another issue, leading to the development of interdisciplinary culture positively. Arranging the resources such as laboratories and modern tools.

3. **Notes:**

This kind of Student Training program activities in which various course like C, C++, Java, Microsoft certification courses and other department courses help students for designing innovative project and in placement support.

2. Best Practice 2: TRAIN THE TRAINER (TTT)

Train the Trainer Programs are implemented to enhance the academic and intellectual environment by providing faculty members with the knowledge, idea and skills to improve the quality of education:

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1. Title of the Practice:- TRAIN THE TRAINER (TTT)

TTT program aims at enhancing the academic and intellectual environment in the Institute by providing faculty members with the knowledge, idea and skills to improve the quality of education. The success of an institute curriculum is closely related to its effective implementation. Teachers have to be personally aware of the institute curriculum and improve and enhance the necessary skills to interpret the concept changes accurately. The need for a training programme for teachers plays an essential role in successful education reform.

2. Objectives of the Practice

The main goal of the TTT is to prepare faculty members to present information effectively, respond to student's questions, and lead activities that reinforce learning. Other goals include ensuring that trainers can: Direct participants to supplementary resources and reference materials.

- Can plan, design, and deliver their course more effectively.
- Know how students learn and how to create a positive learning environment.
- Have the communication skills and competencies of an effective teacher.

3. The Context

It's more crucial than ever to stay competitive and relevant in your market. However, to be relevant, training and development must be included in the list of factors that contribute to your success. A well-trained and motivated faculty base is critical for the student's overall growth, where the train-the-

4. The Practice

The TTT practice is a classic example of peer teaching-learning. The senior teachers from the sister institutes play the role of mentors for their colleagues. The training sessions are arranged on the following themes:-

- planning the lectures and retain the attention of the students for the successful delivery of the lecture
- Sharing the best practices in teaching-learning
- Minute to Minute Lecture plan

The TTT is practiced at least twice a year and reportedly helped the teacher improve their professional delivery of resource materials.

5. Evidence of Success

The teaching-learning ambience improved considerably. It helped in enriching the content beyond the syllabus. It also helped in standardising the teaching resources and providing the students with state of the art knowledge resources for reference. The newly joined faculty have used TTT as an orientation/induction avenue to adopt innovative teaching-learning practices. The examination results, in turn, have improved significantly since the teachers through this practice were encouraged to frame the model answers and share the same with their colleagues and the student community. Standard techniques such as Bloom's taxonomy and translating the same in meaningful teaching-learning are another

outcome of this practice.

6. Problem encountered and Resources required

Some of the problems encountered are as follows:

- Locating the training materials that can be reused in the form of Open Educational Resources
- In-house knowledge and resources (content creators, video equipment, etc) required to build training content.
- Access to classroom space for in-person training sessions.
- Commercial aspects of some of the courses that cover some of training needs.
- Getting the free schedule of the senior teachers for the training programs

File Description	Document
Best practices as hosted on the Institutional website	View Document
Any other relevant information	View Document

7.3 Institutional Distinctiveness

7.3.1

Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Response:

The rapid development in infrastructure at local, regional and global level has led to various environmental issues, being a leading institution of higher Technical Education, SKN Sinhgad Institute of Technology & Science initiates the Green Campus activity which will support environmentally sustainable development. 'The Green Campus' actively promotes the various programs for the environment protection and sustainability such as, use of bicycles, public transport, and pedestrian friendly roads, promotes plastic free campus, green landscaping with various types of trees and plants.

1. Green Campus Initiatives

The Sinhgad Institute of Technology acknowledge the importance of; Eco-friendly campus, in order to protect the environment by making use of the available resources in a sustainable and responsible manner. The institute has plan to plant 10% more trees every year which resulted in availability of moreover 7500 well grown tree cover in campus. Institute has constituted green policy and implementation of it is strictly observed.

1. Implementation of Tree Plantation:

SKNSITS Lonavala is well known for its greenery. We received the green campus award by AICTE. Today this campus has moreover 7500 well grown trees of various species. This count is increasing day by day. We conduct tree plantation activities on various occasions like,

- Independence day
- Republic day
- World environment day
- Foundation day of society
- Birthday Celebrations
- NSS day etc.

We have dedicated gardening team of campus to look after these activities of plantation and further nurturing of plants. At the end of every year, CO2 absorption capacity is analyzed.

2. Green Audit

While transforming ourselves from regional campus to national level campus it is the responsibility of such campus to face the global future challenges and try to find out possible solutions for them. As SKNSITS campus is provided with skillful human resource supported by analytical infrastructure, it is our duty to bring such ideas in practice. While understanding the call of time our team has decided to enumerate the green cover of campus and quantify the carbon sequestration of existing tree population.

1. Objectives

- 1. To study woody green cover of the campus.
- 2. To study species diversity of woody vegetation in the campus.
- 3. To understand biomass and carbon stock accumulated by woody vegetation in the campus.
- 4. To explore carbon sequestration potential of woody vegetation in the campus.
- 5. To explore potential of woody vegetation of the campus as an oxygen source.
- 6. To measure canopy cover of the trees on the campus.

2. Study Area

SKNSITS Lonavala campus is situated on hills of Sahyadri range east of Lonavala city Maharashtra, at 18.734103 latitude,73.427735 longitudes. SKNSITS Lonavala covers an area of about 200 acres. The major area of the campus is covered with vegetation.

3. Data Analysis

All the collected data is tabulated and analyzed with the help of MS- Excel spreadsheets and the findings are extracted by using various factors given by Intergovernmental Panel on Climate Change (IPCC). Following parameters are measured for analysis purpose.

- MEASUREMENT OF CIRCUMFERENCE OF THE TREE:
- HEIGHT MEASUREMENT:
- ABOVE GROUND BIOMASS (ABG) OF TREE:
- ESTIMATION OF CARBON:
- DETERMINATION OF WEIGHT OF CARBON DIOXIDE (CO2) SEQUESTRATED IN THE
- TREE: CANOPY COVER:

4. Findings

Following are the findings of green audit:-

? Carbon Sequestration:

Carbon sequestration is long-term storage of carbon dioxide or other forms of carbon to avoid climate change. It has been considered as a way to slow the atmospheric and marine accumulation of greenhouse gases, which are released by burning fossil fuels.

? Oxygen released

Woody vegetation in SKNSITS Lonavala campus release 416.34 tons of oxygen in a year. Thus, it is supposed to release 416.34 tons of oxygen annually.

A single tree supports oxygen demand of two people for their life. Thus, 7500 woody trees on the SKNSITS Lonavala campus are supporting 15000 people on and around the campus.

? Canopy cover

The vertical projection of plant foliage onto a horizontal surface is called as Canopy cover. Forest canopy structure regulates radiation interception through the canopy, affects the canopy microclimate, and consequently influences the energy, water, and carbon fluxes between soil, vegetation and atmosphere through interactions with leaf photosynthesis. The total canopy area calculated around the campus is 78 acres. The total canopy cover area on the campus is 39 % and is more i. e. 33% forest cover decided for country or state

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3. Carbon foot prints:

As the SKNSITS Lonavala campus considered as institutional organization, the various energy resources like electricity, fuels, Liquefied petroleum gas (LPG) are used. It is necessary to calculate the carbon footprint of the campus to upgrade the Clean Developmental Mechanism (CDM) in various processes.

? Electricity carbon footprint:

In the campus, electricity is used for various purposes like residential, office use and in the laboratories. The total electricity used in the campus is around 4000 MWh/annum which (approximately) liberates 12240000 kg of CO2 per year.

The solar panels are installed on the roof of SKNSITS building 2, produces 12 MWh electricity per year. The electricity produced from solar panels saves 18615 kg of CO2 per year.

Conclusion:

India's CO2 emission is increased by an estimated 4.6 % in 2017, despite a turbulent year for its economy. The carbon footprint of nation is measured per person; India's emissions are still very low at only 1.8 tons of CO2 per capita- which is much lower than the world average of 4.2 tons. But those emissions have been increasing steadily, with an average growth rate of 6% over the past decade. The educational institutes are the organizations which are having large areas that consume high quantities of electricity and LPGs for many purposes. The SKNSITS Lonavala Campus emits 12282.53 tons of CO2 per year approximately. The present Clean Development Mechanism (CDM) or practices reduces the 22.51 tons CO2 per year approximately.

The SKNSITS campus covers total 200 acres area which is having the green cover of 75000 mature woody trees which capture 138.78 tons of CO2 per year.

File Description	Document
Appropriate web in the Institutional website	<u>View Document</u>
Any other relevant information	View Document

5. CONCLUSION

Additional Information:

STES's SKN Sinhgad Institute of Technology & Science(SKNSITS) has an ideal atmosphere for effective teaching learning with lush green surroundings and panoramic views. It is a fully residential campus, situated on a delightful hillrocks of Sahyadri ranges. Institute is duly approved by AICTE and affiliated to Savitribai Phule Pune University. Institute has enviable state-of-the-art infrastructure and all the facilities and resources, to label it an ideal place for quality learning.

The International level Sports facility available in the campus provides remarkable platform for students wishing to develop their technical and tactical skills which will improve overall performance and success in their chosen sport. The institute environment is constructed and equipped to support various curriculum and non-curriculum activities. The institution is proud of its staff, students, and alumni who have demonstrated their mettle at the frontiers of knowledge and creativity via research and community service across a wide range of academic and professional activities.

Project-based learning, value-added programmes, Lab-Innovation and industry-oriented project work, and other initiatives are prioritised by the institute. We have Effective internal assessment norms. Installation of a biometric attendance—system for teaching and nonteaching staff. Students training Program (STP) is well defined and designed to groom the students right from first to final year student to develop overall technical and Non-technical skill sets.

Institute ensures effective implementation of academic calendars and adheres to proper planning of all curricular and non-curricular activities. Updating of courses in accordance with the university curriculum are all vital parts of the institute's functioning. Feedback from the all stakeholders ensures appropriate action towards addressing any gap in student progression.

A Corporate Training Centre with 3-star facilities, is used to conduct various corporate training and industry institute interaction related activities. The institute also maintains and updates IT Infrastructure to ensure seamless connectivity and proper technical support in teaching learning process.

The T&P cell guides and counsels the students for placement activities through various initiatives such as online assessment tests, STPs, etc.

Institute provide excellent platform to cater the needs of all students to meet the professional and societal expectations for the overall growth and development of the students.

Concluding Remarks:

Conclusion

The institute has well defined vision, mission by considering all the stakeholders of the society. Being an affiliated institute of SPPU, it strictly follows and implements the academic calendar, curriculum and

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examination reforms. Many faculty members are paper setters and evaluators of University examinations. The institute has effective feedback mechanism for making changes and improvement in teaching-learning process.

The Institute is continuously focussing on excellence in technical education. The systematic and well planned efforts of the institute in this regard are reflected in activities conducted throughout these years that resulted in good number of University rankers and other recognitions. The faculty adopts student centric methods and use ICT enabled tools for effective teaching-learning process.

The institute has established research and consultancy policy. Moderate number of research papers are published during the last five years in reputed international journals. Several extension activities are planned and executed. All the departments have functional MoU's with industry to enhance the industry-institute interaction in teaching-learning process. It has a transparent mechanism for timely redressal of student grievances. There is a registered Alumni Association in the institute, and it hosts alumni meet every year.

The governments both central and state are promoting sports culture. Inline with these guidelines, the Institute has developed International standard indoor & outdoor sports facilities on its campus. The specialized L3 coaches, sports teachers are made available for students and staff.

Being a 100% residential campus, students are getting sufficient time to acquire other skills. Many activities are conducted towards the holistic development of students

6.ANNEXURE

Metric ID	Sub Questions ar	d Answers	before and	after DVV	Verification		
1.2.1	Number of Add	Number of Add on /Certificate/Value added programs offered during the last five years					
	Answer be	fore DVV V	erification	: 82			
	Answer At	ter DVV Ve	erification:	82			
1.3.2	Percentage of st	udents und	ertaking p	roject work	/field work	/ internships (Data for the latest	
	completed acad	emic year)					
	Answer af	er DVV Ve			t provided b	y HEI.	
2.1.1	Enrolment perc	entage					
2.1.1	2.1.1.1. Num	C			e during la	st five years	
2.1.1	2.1.1.1. Num	per of stude			se during la	st five years	
2.1.1	2.1.1.1. Num Answer be	per of stude	Verification:	:		st five years	
2.1.1	2.1.1.1. Num Answer be 2021-22 204	per of stude fore DVV V 2020-21 168	7 derification: 2019-20 89	2018-19	2017-18	st five years	
2.1.1	2.1.1.1. Num Answer be 2021-22 204	per of stude fore DVV V	7 derification: 2019-20 89	2018-19	2017-18	st five years	

2.1.1.2. Number of sanctioned seats year wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
210	240	210	360	360

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
420	450	420	468	468

Remark: Input edited as per the supporting documents.

2.1.2 Percentage of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (Exclusive of supernumerary seats)

2.1.2.1. Number of actual students admitted from the reserved categories year - wise during the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
79	73	32	9	79

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
79	73	32	9	79

2.1.2.2. Number of seats earmarked for reserved category as per GOI/ State Govt rule year wise during the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
88	102	90	154	154

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
210	225	210	234	234

Remark: Input edited as per the reservation policy.

- 3.1.1 Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)
 - 3.1.1.1 Total Grants from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
00	00	4.62	11.10	0.34

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
00	00	4.62	3.73	0.34

Remark: Input edited as per the supporting documents.

- Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during last five years
 - 3.3.2.1. Total number of books and chapters in edited volumes/books published and papers

in national/international conference proceedings year wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
21	26	11	23	13

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
6	6	6	18	10

Remark: Input edited as per the consolidated list provided by HEI.

- Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organised in collaboration with industry, community and NGOs) during the last five years
 - 3.4.3.1. Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year wise during the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
14	6	12	15	14

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
3	2	6	8	6

- Percentage of students benefited by scholarships and freeships provided by the Government and Non-Government agencies during last five years
 - 5.1.1.1. Number of students benefited by scholarships and freeships provided by the Government and Non-Government agencies year wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
816	823	1036	1120	1290

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
785	784	989	1067	1260

- Percentage of students qualifying in state/national/ international level examinations during the last five years (eg: JAM/CLAT/GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)
 - 5.2.2.1. Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ Judicial Services/Public Prosecution services/All India Bar Exams/State government examinations) year wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
1	4	4	3	2

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
0	2	0	0	1

5.2.2.2. Number of students appearing in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT,GRE/ TOFEL/ Civil Services/ State government examinations) year wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
3	18	26	7	4

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
3	18	26	7	4

Remark: Input edited as per the scoresheet showing results of the students provided by HEI

- 5.3.2 Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)
 - 5.3.2.1. Number of sports and cultural programs in which students of the Institution participated year wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
24	593	124	156	0

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
8	3	3	4	3

2.Extended Profile Deviations

ID	Extended Questions
1.1	Number of teaching staff / full time teachers during the last five years (Without repeat count): Answer before DVV Verification: 175 Answer after DVV Verification: 95