SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

SINHGAD TECHNICAL EDUCATION SOCIETY'S SINHGAD COLLEGE OF ENGINEERING

SINHGAD TECHNICAL EDUCATION SOCIETYS, SINHGAD COLLEGE OF ENGINEERING, SURVEY NO. 44/1, VADGAON (BK), OFF SINHGAD ROAD, PUNE
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Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Sinhgad Technical Education Society (STES) was established in the year 1993 under the dynamic leadership of Prof. M.N. Navale, Founder President, with an objective of providing quality education in the field of Engineering, Management, Architecture, Pharmacy, Medical Sciences, Hotel Management, Law, Science, commerce and the basic school education from kinder garter onwards. There are more than 70 institutes under the aegis of STES offering school education, Diploma, Graduation, Post-Graduation and Ph.D. programs in various fields.

All the institutes are recognized by the concerned statutory authorities and they meticulously fulfil the norms and standards laid down by these statutory authorities. All the members of the management committee of STES are eminent persons from academics and industry under whose guidance the institutes are progressing academically over the period of time.

Sinhgad College of Engineering (SCOE) is private unaided institution established in the year 1996. The institute offers eight undergraduate engineering programmes of four year duration namely Mechanical Engineering, Electronics & Telecommunication Engineering, Computer Engineering, Chemical Engineering, Information Technology, Production Engineering, Civil Engineering and Biotechnology. Three departments namely Mechanical Engineering, Civil Engineering and Electronics & Telecommunication Engineering are offering post-graduate programs. The department of Mechanical Engineering, Electronics & Telecommunication Engineering and Civil Engineering are recognized Ph.D. Research Centre by Savitribai Phule Pune University (SPPU). The institute also offers a post-graduate program leading to MBA degree. It has a total under-graduate and post-graduate intake of 1140 and 150 students respectively. All the courses are approved by All India Council for Technical Education (AICTE) and affiliated to Savitribai Phule Pune University, Pune.

Vision

उत्तमपुरुषान् उत्तमाभियंतृन् निर्मातुं कटिबद्धाः वयम् ।

"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 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

- State of art laboratories and infrastructure
- Good faculty and staff retention ratio
- Student centric environment
- Conducive work environment for faculty and staff
- Effective training and placement cell with more than 90% of the eligible students placed
- Significant number of University rank holders in every academic year
- Fully equipped and spacious central library with rich collection of books and journals
- Digital library with access to national and international e-journals
- 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.
- Well planned and organized Student Training Program and Value Addition Programs
- Train The Trainer Program for newly inducted faculty
- MoU with industries for student centric programs
- Well-guarded and safe environment for students on campus
- Co-curricular and extra curricular activities for holistic development of students

Institutional Weakness

- Limited number of consultancy and extension activities
- Moderate Industry Institute interaction
- Lack of Technology Business Incubation Centres to transfer the technology to industry
- Less number of book publications and patents
- Insufficient foreign university collaborations for faculty and student exchange
- Less number of faculty with Ph.D. qualification in few departments

Institutional Opportunity

- Development of web based learning mechanisms
- Networking with institutes of national and international repute
- Strengthining alumni networking to enhance the academic, placement and enterpreneuship activities
- 'Center of Excellence' in select areas in engineering and technology
- Collaborative research with corporate world

Institutional Challenge

Enhancing employability skills of students in rapidly changing technology in an affiliated institute

Adaptability to globally changing industrial scenario

Scarcity of faculty with Ph.D. qualification in select areas of engineering

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

STES's Sinhgad College of Engineering is a premier self-financing institute affiliated to Savitribai Phule Pune University (SPPU). The institute follows the curriculum designed by respective Board of Studies in consultation with various stakeholders. The Course Education Objectives and Course Outcomes are prepared by the University and faculty for effective delivery of respective course. The curriculum is based on Choice Based Credit System and the students are given a choice to choose elective subjects in third and final year. The academic calendar is strictly followed by every department, which is prepared on the basis of calendar circulated by SPPU.

Almost every department of the institute has representation either in Board of Studies,
Academic Council or Senate of SPPU. Many faculty members are involved in setting of question papers and holding the portfolio of Subject Chairman for UG and PG courses. The institute encourages the faculty to attend FDP, refresher courses during vacation and organizes programs like Train the Trainer for effectively transacting the curriculum and improving teaching practices.

The institute has well equipped central library and digital library for online access to international/national journals as well as several online academic resources. It encourages the students to enrol and complete different online certificate/add-on courses. The institute offers several 'value addition' programs for students in their academics apart from the programs of SPPU. Several topics related to Professional Ethics, Gender, Human Values, Environment and Sustainability are embedded into the Curriculum.

All the departments of the institute make an effort to enrich the curriculum in the form of content beyond syllabus, project work/internship and enhance the experiences of the students by coping with the rapidly changing technological innovations in industry. In addition, the departments conduct industrial visits, site visits, sponsored projects, technical events and Student Training Programs.

The student feedback is taken in every semester to assess the quality of teaching-learning in all courses, and corrective measures are taken by the faculty based on the feedback. The institute has a formal mechanism to obtain feedback on curriculum from other stakeholders like final year students (Exit survey), alumni, parents and industry.

Teaching-learning and Evaluation

The students' admission to the institute is in accordance with SPPU, Maharashtra State Government and AICTE rules. They are admitted through Centralized Admission Program of Directorate of Technical Education, Mumbai which ensures the diversity of student admissions to the institute.

The institute has a policy of recruiting qualified and experienced faculty as per AICTE and SPPU norms which helped in improving teaching – learning process and maintain good retention ratio. It always tries to achieve excellence in teaching – learning by introducing new modules to enhance the employability and academic results. All the departments of the institute prepare academic calendar for the entire semester. The faculty members prepare teaching plan based on feedback from stakeholders and use ICT enabled tools. A set of PEOs, POs and PSOs are formulated for every program based on the 'outcome based education' approach.

Course objectives and outcomes, are prepared for each course following the appropriate levels of Blooms taxonomy. The institute has defined policies for the teachers like giving study leave for course work, thesis writing and financial assistance for attending FDP and conferences. It has implemented examination reforms of the University like online examinations, in- semester and end semester examination and project based seminars.

The academic progress of student is monitored by Guardian Teacher (Mentor) who is assigned with around twenty students. All the departments ensure the 100% coverage of the syllabus at the end of the semester. Regular unit tests, mock online examinations, prelim tests, mock oral/practical examinations are conducted for enhancing the student results at University examinations. The institute has well established procedures to assess the learning levels of the students and to organise special programmes for slow and advanced learners. Remedial classes are conducted for slow learners and extra classes are organized for the lateral entry students. The advanced learners are encouraged to participate in Hackathons/Design contests etc. All the students are encouraged to take up academic projects in collaboration with industries. All these initiatives resulted in consistently producing University rankers. A transparent and time bound mechanism is at place to resolve the grievances related to examinations and other issues.

Research, Innovations and Extension

The institute has vibrant research environment having linkages with government research bodies/institutes, industry and consulting agencies. It has three recognized research centre programs affiliated to SPPU namely Civil, E & TC and Mechanical Engineering. These centres are equipped with adequate hardware and software infrastructure and other facilities. During the last five years, 34 students registered for their Ph.D., 15 completed and 19 teachers are working as recognised research guides in these three programs. A Research and development cell is at place and it plays a critical role in promoting the research and development within the Institute. Plagiarism check of the research outcomes is at place in order to ensure originality.

The institute has received Rs.155.88 Lakhs as grants for 35 research projects from Government and Non-Governmental agencies during the last five years. It has created a suitable environment to promote innovation, explore new ideas and share the
knowledge among the faculty and students. Workshops/seminars on research methodology, entrepreneurship and intellectual property rights are conducted regularly.

The institute encourages the faculty and staff to pursue higher studies. It provides academic leave for pursuing Ph.D. work, permission and partial financial support for attending conferences and faculty development programs. The faculty strives for research paper publications in peer reviewed journals. During the last five years, a total of 782 research papers, 43 patents and 171 books/chapters have been published by the faculty and the students in reputed national and international journals and conference proceedings. The institute supports research projects by providing the financial assistance to the students as per the requirement of project wherever it is necessary. It has well established procedures for consultancy activities. Both monetary and non-monetary benefits are extended to the faculty for utilizing their efforts towards consultancy assignments.

Students carryout good number of extension activities in the neighbourhood community and sensitized to social issues, for their holistic development. NSS and Prayas unit of the institute plays a significant role in this. The institute has signed 43 MoU's with industries and other agencies for promoting training, research and extension activities in technical education.

Infrastructure and Learning Resources

The infrastructure required for teaching–learning is available in all departments and it is in line with the norms of AICTE. It includes class rooms, tutorial rooms, laboratories, seminar hall, auditorium, departmental library and others. The infrastructural facilitates are being added from time to time to keep in pace with the requirements. All the class rooms are equipped with LCD projector, computer system and CCTV facility at important locations of the building. In addition, several other facilities are available for extra-curricular activities like Cricket Ground, Playground, Indoor Games, Open air theatre, Swimming Pool, Gymnasium, Cultural Center, Medical Store, General Stores and Campus Clinic.

The institute has sufficient hostel facility available in campus for both boys and girls. There are 10 boys' hostels including one NRI hostel with a capacity of 1068 rooms and a girl's hostel having 970 rooms with three, four and five seater capacity. Some of the three seater rooms are provided with provisions like refrigerator, TV, kitchen trolley with gas cylinder and washing machine. The institute has a campus clinic for counselling and treatment. In addition, the STES has got a medical and dental hospital which provides all the facilities of hospital free of cost to all the students, faculty and staff.

The institute has adequate computing facility in terms of both hardware and software. All the computer systems available are installed with licensed software. The campus is connected to central Universal Threat Management device through LAN which provides internet facility of bandwidth 300 Mbps. Out of which, Wi-Fi facility with band width 50 Mbps is made available 24×7.

The central library of the institute has floor area of 1911 sq.m. with a reading hall of 1145 sq.m to accommodate 1000 students. It has reprographic, scanning and printing facilities extended for users. It also has Online Public Access Catalog for students and faculty to reserve books. The e-journals can be accessed through LAN and also remote access with multi-user facility by all the students and staff. The institute has well established systems and procedures to maintain and utilize the physical, academic and support facilities.

Student Support and Progression

The institute facilitates all the scholarships offered by both the State and Central Government. The needy students are helped through Earn and Learn scheme of SPPU in which 30% of the funds are contributed by the institute and 70% by the university. All the eligible students admitted in reserved category are receiving financial assistance from State Government. Further, the institute enable the needy students to avail several private scholarships by organizing seminars. The institute arranges extra lectures for SC/ST students. Special preference is given for differently abled students for on-campus hostel accommodation.

The capability enhancement and development schemes includes skill development courses, communication skills, soft skills, technical skills, co-curricular and extra-curricular activities are embedded as part of curriculum for overall development of a student. The institute motivates the students to go for higher studies and research work. The institute has a centralized Training and Placement cell. It has a structured mechanism to make the students employable and also help them to choose the career of their interest. More than 100 companies visit the campus every year for campus placement with a placement rate of 90% of all the eligible students. The average passing percentage and completion rate of students during the last four years is in between 90-100%.

The institute has a transparent mechanism to address the grievance of students including sexual harassment and

ragging cases. The students' personal and academic grievances are taken care of by the guardian teacher, class teacher and the higher authorities, if needed. The institute has anti-ragging committee and squad comprising of Principal, senior faculty members and student representatives. The Alumni association contributes actively to the growth of the institution through registered alumni association.

The institute is part of annual cultural meet of students "Sinhgad Karandak". It is also a part of annual technical meet of students "Techtonic", which showcase the technical skills of students. In addition, students are encouraged to participate in various national and international level events in cultural, sports and technical activities. Several students from the institute received laurels by winning the events in all these activities.

Governance, Leadership and Management

The institute aims at holistic development of students and teachers by implementing education and other initiatives to strategically meet development goals of the institute. The institute has Governing Body and College Development Committee as per the rules and guidelines of Government of Maharashtra and SPPU.

The institute provide various platforms for faculty to develop leadership skills by giving them various portfolios. The policies for institution growth in terms of academic, administrative and financial matters are decided by Governing Body. The management has given freedom to the Principal, Head of Department and faculty for the overall progress and development of the institute in terms of academic and administrative matters. Effective leadership is ensured by decentralization and participative management. The management encourages faculty to carry out the research and consultancy activities. It has provided well-defined guidelines for the distribution of income generated through various research and consultancy programs.

e-governance has been successfully introduced in administration, finance and accounts, student admission and support and examination areas. The institute conducts both internal and external financial audits regularly and transparently. It has effective mechanisms and strategies for mobilisation of funds and the optimal utilisation of resources.

The faculty are encouraged to attend faculty development programs, refresher courses, workshops, conferences etc. and are financially supported by providing on duty, travelling allowance, registration fee etc. Administrative and technical training programs are conducted for non-teaching staff. Several committees formed in the institute play an important role in various institutional functions. The committees are headed by faculty and in some cases with student as members. Effective performance appraisal system is at place for teaching and non-teaching staff.

The institute implements several welfare schemes like Group Personal Accidental Insurance, EMBF, Provident Fund, Gratuity, Free medical facilities, Maternity leave, extended maternity leave, uniform for security guards, provision for qualification improvement and staff quarters for both teaching and non-teaching staff.

The IQAC has been formed immediately after the first cycle of accreditation and is playing a significant role in institutionalizing the quality assurance strategies and processes. It regularly reviews teaching-learning process, evaluation and assessment and prepares annual academic audit report.

Institutional Values and Best Practices

The institute organizes different programs such as international women's day, awareness on health and sexual harassment and *Nirbhay Kanya Abhiyan* for promotion of gender equity. Posters are displayed at prominent places on issues like climate change and environment. It adopts environment friendly green campus initiatives and takes necessary actions such as – energy and water conservation, waste recycling, carbon neutrality, restricted entry of automobiles etc. Quality audits on environment and energy are undertaken by the institution. Green audit initiative is taken by the faculty, staff and the students, through various projects. Institute promotes the use of power efficient equipment, solar energy and adherence to the guidelines of statutory bodies on degradable and non-degradable waste.

The institute organizes several programs to promote tolerance and harmony towards cultural, regional, linguistic, communal, socioeconomic and other diversities. It has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programs. The students participate in Swachh Bharat activities, organize blood donation camps, provide assistance to those affected by natural disasters, national and international commemorative days and take part in Street cause events. They are trained on human values and professional ethics as part of curriculum.

The two best practices that the institution believes and follows are:

- Students' Training Program (STP) to enhance employability skills – The aim of the program is to enhance the quality of the students by empowering them with skills that are globally at par. The institute has developed semester long course contents for five semesters for this program.
- Introduction of Virtual Lab (VLab) – This practice has been introduced in all the departments of the institute since the last two years. The institute has taken initiative to implement VLab in association with IIT Bombay and it has been recognised as one of the nodal agencies for implementing the contents of VLab for other colleges in and around Pune as well. The institute is distinctive in implementing this practice as it topped the list with total student usage of more than 63000 on different practical/assignments and it was appreciated by the IIT Bombay VLab Team for the efforts taken.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	SINHGAD TECHNICAL EDUCATION SOCIETY'S SINHGAD COLLEGE OF ENGINEERING
Address	Sinhgad Technical Education Societys, Sinhgad College of Engineering, Survey No. 44/1, Vadgaon (Bk), Off Sinhgad Road, Pune
City	Pune
State	Maharashtra
Pin	411041
Website	http://scoe.sinhgad.edu

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Shashikant Dnyandev Lokhande	020-24354705	9011030579	020-2435724 3	principal.scoe@sin hgad.edu
IQAC / CIQA coordinator	Kalpana Shrikant Joshi	020-24100234	9881230157	020-2435724 3	hodbiotech.scoe@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	
Date of establishment of the college	24-07-1996

University to which the college is affiliated/ or which governs the college (if it is a constituent college)		
State	**University name**	**Document**
Maharashtra	Savitribai Phule Pune University	[View Document](#)

Details of UGC recognition		
Under Section	**Date**	**View Document**
2f of UGC	25-07-2017	[View Document](#)
12B of UGC	25-07-2017	[View Document](#)

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)

Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	[View Document](#)	02-07-2021	12	Extension of Approval for Current Academic Year

Details of autonomy	
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No

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	Sinhgad Technical Education Societys, Sinhgad College of Engineering, Survey No. 44/1, Vadgaon (Bk), Off Sinhgad Road, Pune	Urban	5	39381

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Civil Engineering	48	Class XII and MHTCET or JEE or Diploma	English	180	155
UG	BTech,Biotechnology	48	Class XII and MHTCET or JEE or Diploma	English	60	40
UG	BE,Computer Engineering	48	Class XII and MHTCET or JEE or Diploma	English	180	180
UG	BE,Electronics And Telecommunication Engineering	48	Class XII and MHTCET or JEE or Diploma	English	240	239
UG	BE,Mechanical Engineering	48	Class XII and MHTCET or JEE or Diploma	English	300	139
UG	BE,Production Engineering	48	Class XII and MHTCET or JEE or Diploma	English	60	3
UG	BE,Chemical Engineering	48	Class XII and MHTCET or JEE or Diploma	English	60	40
UG	BE,Information Technology	48	Class XII and MHTCET or	English	120	120

			JEE or Diploma			
PG	ME,Civil Engineering	24	BE or BTech and GATE	English	18	8
PG	ME,Civil Engineering	24	BE or BTech and GATE	English	18	18
PG	ME,Electronics And Telecommunication Engineering	24	BE or BTech and GATE	English	18	6
PG	ME,Mechanical Engineering	24	BE or BTech and GATE	English	18	2
PG	ME,Mechanical Engineering	24	BE or BTech and GATE	English	18	3
PG	MBA,Management	24	Any Graduate and CAT or CMAT or MAH MBA CET	English	60	54
Doctoral (Ph.D)	PhD or DPhil,Civil Engineering	36	ME or MTech and PET or GATE	English	2	0
Doctoral (Ph.D)	PhD or DPhil,Electronics And Telecommunication Engineering	36	ME or MTech and PET or GATE	English	4	1
Doctoral (Ph.D)	PhD or DPhil,Mechanical Engineering	36	ME or MTech and PET or GATE	English	6	1

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				24				51				111
Recruited	10	9	0	19	20	8	0	28	54	57	0	111
Yet to Recruit				5				23				0
Sanctioned by the Management/Society or Other Authorized Bodies				2				1				104
Recruited	2	0	0	2	0	1	0	1	61	43	0	104
Yet to Recruit				0				0				0

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				204
Recruited	157	47	0	204
Yet to Recruit				0

Technical Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				58
Recruited	44	14	0	58
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	**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.	9	9	0	13	3	0	10	7	0	51
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	1	0	0	7	5	0	44	50	0	107
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers									
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**		
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	1	0	0	0	1	0	2	4	0	8
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	1	0	0	0	0	0	59	39	0	99
UG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers									
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**		
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD/DM/MCH	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 engaged with the college?	**Male**	**Female**	**Others**	**Total**
	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	785	48	0	0	833
	Female	229	0	0	0	229
	Others	0	0	0	0	0
PG	Male	57	3	0	0	60
	Female	34	5	0	0	39
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	2	0	0	0	2
	Female	0	0	0	0	0
	Others	0	0	0	0	0

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

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	99	102	83	90
	Female	33	26	39	47
	Others	0	0	0	0
ST	Male	4	10	34	24
	Female	1	2	9	10
	Others	0	0	0	0
OBC	Male	255	244	262	263
	Female	88	55	79	97
	Others	0	0	0	0
General	Male	362	435	629	555
	Female	115	111	187	193
	Others	0	0	0	0
Others	Male	214	90	70	80
	Female	38	18	32	30
	Others	0	0	0	0
Total		1209	1093	1424	1389

Institutional preparedness for NEP

1. 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 whereas the subject of geology is part of syllabus in Civil 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, Prayas 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 runs Mechatronics program at the post graduate level in Mechanical Engineering department, which is a multidisciplinary program. 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 faculty and students are also engaged in interdisciplinary research in areas like online quality parameter monitoring for nallah (Canal), bacterial analysis of cow dung based bio enzymes jeevamrut, drainage line survey using robots, applications of image processing techniques in weld defect analysis, energy harvesting from conventional energy sources and smart home energy audit, IoT based projects and others. The students of Civil and Biotech departments work on interdisciplinary on environmental issues and developed Indigenous systems like grey water treatment for concrete casting and curing, Bioculture - wastewater treatment for agricultural purpose, water-less urinals and non-mechanized solid waste management system for the benefit of the society. The institute support the students by opening facilities like laboratories, central 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 both at UG, and PG 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 PRAYAS and 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) with the GENEX which provides services free of cost. 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 like Imperial college of London, Pennsylvania University, and Durham University, Denmark respectively. Students of the institute participate in building both internal combustion engine and hybrid vehicles, 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 and LEX, Enablement Program for faculty and students on Python and DBMS through INFYTQ Program, Quiz's on Python, New Digital Learning Initiative 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. Incubation center is developed in the Electronics and Telecommunication engineering department to enhance the skills and through this center a few entrepreneurs started their startups in the domain of embedded systems.
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 an art circle club to encourage the students' skill development in painting, photography, literature, article writing in multiple languages. The best articles of art circle club are published in annual college magazine "SRUJAN", which won prize at University level. The magazine published every year on a particular theme like 'Kshitij- Journey towards infinity', 'Kunj-The Shades of Life', 'Kshan: The Moment Defining fraction of life' and 'Aarambh: The Dawn of a new era' etc. This magazine inculcates creativity, novelty and scope for development in present times and inspires the students to take up new challenges in future. The students participate in intercollegiate FIRODIYA and PURUSHOTTAM Drama competitions and social events like SKIT, NSS and PRAYAS, etc. Our 'Pathnatya' street play team presented awareness camp on social and current issues and grabbed prize at district and state level

competition. Some of the students of NSS team from our college has achieved great success and represented the institute at international level delegation camp at China and South Korea, participated in National level Republic day parade and state level camps like leadership development, disaster management and social and cultural competitions. PRAYAS is a non-profitable "Youth forum and social awareness foundation" which promotes and supports educational and development efforts in rural India. In this forum students work for the enhancement of computer literacy, Vedic mathematics, 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, IBM Skill Build, Distance learning IIRS Outreach Programs, 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 has made Memorandum of understanding with Infosys Ltd. to provide online education in programming languages through INFYTQ Program and Quiz to develop soft skills. The institute is a nodal center for e-learning courses organized by IIRS Outreach Programs like, Image Statistics, Basic Remote Sensing, Photogrammetry and Cartography, Digital Image Processing, Geographical Information System, Global Navigation Satellite System etc. 300+ students have benefited from these courses. The Institute has liaison with IIT Bombay and it is recognized as nodal center (NCID-227) 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.

Extended Profile

1 Program

1.1

Number of courses offered by the Institution across all programs during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
608	592	613	724	714

File Description	Document
Institutional data prescribed format	View Document

1.2

Number of programs offered year-wise for last five years

2020-21	2019-20	2018-19	2017-18	2016-17
15	16	18	24	24

2 Students

2.1

Number of students year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
5443	5175	5307	5784	5931

File Description	Document
Institutional data in prescribed format	View Document

2.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
675	903	702	756	756

File Description	Document
Institutional data in prescribed format	View Document

2.3

Number of outgoing / final year students year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
1379	1449	1516	1557	1655

File Description	Document
Institutional data in prescribed format	View Document

3 Teachers

3.1

Number of full time teachers year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
265	245	256	323	311

File Description	Document
Institutional data in prescribed format	View Document

3.2

Number of sanctioned posts year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
265	245	256	373	371

File Description	Document
Institutional data in prescribed format	View Document

4 Institution

4.1

Total number of classrooms and seminar halls

Response: 65

4.2

Total Expenditure excluding salary year-wise during last five years (INR in Lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
768.41	984.11	1080.59	955.36	1964.07

4.3

Number of Computers

Response: 981

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1 The Institution ensures effective curriculum delivery through a well planned and documented process

Response:

Sinhgad College of Engineering is an unaided private Engineering College, founded under the aegis of Sinhgad Technical Education Society (STES), affiliated to Savitribai Phule Pune University (SPPU), Pune, and approved by AICTE, New Delhi. The college strictly adheres to the curriculum prescribed by SPPU.

Effective curriculum delivery is ensured through a transparent process as given below:

- The semester of every academic year begins with adherence to the University Academic Calendar which ensures that academic activities are planned well in advance. The institutional academic calendar is prepared based on the university academic calendar, then the departmental academic calendars are prepared for each semester with a balanced distribution of curricular, co-curricular and extra-curricular activities.
- At the beginning of every semester choice of subjects is taken from every faculty. Based on the expertise and experience of the faculty, the head of the department allocates the subjects.
- A comprehensive objective driven teaching plan is prepared by the subject teachers along with effective teaching material like course file, laboratory manuals, powerpoint presentation, and other required documents, for effective delivery of the subject.
- The institute is one amongst eight engineering colleges under the aegis of STES. A unique 'Train the Trainers' program is conducted for a group of faculty teaching the same subject in the form of sharing of subject teaching techniques, notes etc. This program helps both the teachers teaching the subject for the first time and also the experienced teachers.
- In case of multiple divisions and different faculty teaching the same subject, theory and practical subject coordinators are appointed to maintain co-ordinated conduction of the subject across divisions and practical batches.
- Whenever a new or revised syllabus pattern is implemented by the university, faculty members actively participate in syllabus discussion/implementation workshops conducted at different institutes at the university level so as to completely understand the teaching learning process of the subject.
- Periodic review of teaching-learning process by the Heads of department is taken in the form of syllabus completion reports, systematic internal examination process, guest lectures, seminars, internships, mini and major project work, industrial visits and training programmes of students so as to add impetus to the Teaching-Learning process.
- The faculty are supported and motivated to attend Refresher Courses, workshops and Faculty Development Programs for upgradation of their skills, which in turn helps in effective curriculum delivery.
- 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, Coursera, EDX and others.

- The academic progress, grievances and stakeholder's feedback are taken periodically. The difficulties/issues if any in curriculum delivery are resolved in consultation with the Head of Department and Principal.

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

1.1.2 The institution adheres to the academic calendar including for the conduct of CIE

Response:

The Semester of every academic year begins with adherence to the University Academic Calendar which ensures that Academic activities are planned well in advance. The Institutional Academic Calendar upon which the departmental Academic Calendars are prepared for each semester with balanced distribution of curricular, co-curricular and extra-curricular activities.

1. The departmental calendar clearly mentions test, mock practical test along with practical and project submission schedules.
2. To motivate the students to perform well, sample question papers and solutions are shared with the students before test conduction. The unit test and prelim examination is conducted as per the academic calendar.
3. The evaluation criteria for mock practical tests are conveyed to the students so as to prepare and perform well.
4. Every department has an academic monitoring committee consisting of faculty and head of department. This committee ensures that all academic activities planned in the department are carried out on a regular basis so as to enhance the academic results of the students.
5. An academic monitoring committee comprising faculty members from all departments is appointed at the institute level to monitor that the activities mentioned in the academic calendar are duly completed.
6. A testament for the conduction of tests and other evaluation processes is available with every subject teacher in the form of test results, continuous evaluation sheet and syllabus coverage report.
7. To ensure that students are prompt in following all academic activities, a teacher guardian scheme is in place which is judicious enough so that the batch of students assigned to a faculty member is monitored closely for achieving enhanced academic performance.
8. All types of evaluation sheets 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.
9. 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	[View Document](#)
Link for Additional information	[View Document](#)

1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years

      1.Academic council/BoS of Affiliating university
      2.Setting of question papers for UG/PG programs
      3.Design and Development of Curriculum for Add on/ certificate/ Diploma Courses
      4.Assessment /evaluation process of the affiliating University

Response: B. Any 3 of the above

File Description	Document
Institutional data in prescribed format	[View Document](#)
Details of participation of teachers in various bodies/activities provided as a response to the metric	[View Document](#)

1.2 Academic Flexibility

1.2.1 Percentage of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

Response: 93.33

1.2.1.1 **Number of Programmes in which CBCS / Elective course system implemented.**

Response: 14

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

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

Response: 222

1.2.2.1 **How many Add on /Certificate programs are offered within the last 5 years.**

2020-21	2019-20	2018-19	2017-18	2016-17
55	79	29	28	31

File Description	Document
List of Add on /Certificate programs	[View Document](#)
Any additional information	[View Document](#)

1.2.3 Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years

Response: 44.58

1.2.3.1 **Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
1761	3268	3384	1943	1783

File Description	Document
Details of the students enrolled in Subjects related to certificate/Add-on programs	[View Document](#)
Any additional information	[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 present curriculum has integrated all above issues through core, elective and audit courses.

1. Courses to address Professional Ethics and Human Values:

For almost all programs, these courses are offered as mandatory audit courses such as - Leadership and Personality Development, Professional Ethics and Etiquettes, Essence of Indian Traditional Knowledge, Code of conduct, Humanity and Social Sciences, Social Awareness and Governance Program, Intellectual Property Rights and Patents, Emotional Intelligence, Human Behaviour, Globalization and Culture, Patent

Law for Engineers and Scientists, Principles of Human Resource Management, Business Ethics, Disaster Management, etc. From A.Y. 2020-21 onwards, for all PG programmes one compulsory 2 credit audit course titled "Introduction to Constitution" has been introduced by SPPU.

2. Courses to address Environment and Sustainability:

The curriculum includes various courses that address Environment, concern for environment, awareness on hazards for environment. For example, the first year B.E. the program includes a mandatory audit course in both the semesters on 'Environmental Studies' (based on the AICTE mandatory guideline). In addition to this, mandatory audit courses at 2nd, 3rd and 4th year level has been incorporated by university in all programs, e.g. Water Management, Ecology and Environment, Ecology and Society, Science-Technology and Society, Green Construction and Design, Smart Cities, Sustainable Energy Systems, Energy Resources, Economics and Environment, Non-Conventional Energy Resources, Industrial Safety and Environment Consciousness, Green Computing, Sustainable energy systems, Urbanization and Environment, Environmental & Resource Economics, Environment and Development. Apart from this, there are core and elective courses to Biotech, Civil, Chemical, and Mechanical programs such as Environmental Biotechnology, Bioenergy and Renewable Resources, Environmental Engineering, Water Supply Engineering, Hydrology and water resources engineering, Energy Audit and Management, Solar and wind energy, Energy engineering, etc.

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, teaching rural children, "Police Mitra " during Ganesh festival, Eco Friendly Ganesh Visarjan camp, Road Safety, etc. 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. Special programs for girl students are arranged towards achieving Women Empowerment. The institute has established a 'Ladies Grievance Cell' 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. 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 the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	[View Document](#)
Any additional information	[View Document](#)

1.3.2 Average percentage of courses that include experiential learning through project work/field

work/internship during last five years

Response: 12.55

1.3.2.1 **Number of courses that include experiential learning through project work/field work/internship year-wise during last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
87	77	80	83	78

File Description	Document
Programme / Curriculum/ Syllabus of the courses	[View Document](#)
MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship	[View Document](#)
Any additional information	[View Document](#)

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

Response: 85.16

1.3.3.1 **Number of students undertaking project work/field work / internships**

Response: 4635

File Description	Document
List of programmes and number of students undertaking project work/field work/ /internships	[View Document](#)
Any additional information	[View Document](#)

1.4 Feedback System

1.4.1 *Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders 1) Students 2)Teachers 3)Employers 4)Alumni*

Response: A. All of the above

File Description	Document
Any additional information (Upload)	[View Document](#)
URL for stakeholder feedback report	[View Document](#)

1.4.2 Feedback process of the Institution may be classified as follows: Options:

1. **Feedback collected, analysed and action taken and feedback available on website**
2. **Feedback collected, analysed and action has been taken**
3. **Feedback collected and analysed**
4. **Feedback collected**
5. **Feedback not collected**

Response: A. Feedback collected, analysed and action taken and feedback available on website

File Description	Document
Upload any additional information	[View Document](#)
URL for feedback report	[View Document](#)

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 87.65

2.1.1.1 **Number of students admitted year-wise during last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
1161	1209	1093	1424	1389

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

2020-21	2019-20	2018-19	2017-18	2016-17
1350	1368	1404	1512	1512

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)

Response: 73.91

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

2020-21	2019-20	2018-19	2017-18	2016-17
509	650	515	556	569

File Description	Document
Average percentage of seats filled against seats reserved	[View Document](#)
Any additional information	[View Document](#)

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2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

Response:

The teaching learning process of the Institute goes on in regular manner in each semester. The students are being assessed through the internal as well as external assessment criteria systematically. However, it is realized that every student is different and everyone has different capabilities. Such students are in general classified into two categories. These are slow learners and advanced learners.

These students are identified through various parameters such as -

- Continuous assessments
- Attendance /regularity
- University results
- Discretion of teacher based on live teaching
- Regular assignments and tests

Once such slow learner students are identified, they are taken care specially through various well supported efforts. These efforts are -

- Remedial/extra classes and practical
- Assignments
- Counseling & motivation by subject teachers, class teachers and guardian teachers
- Communication with parents
- For economically weaker students, making aware of different scholarships, schemes, provisions for earn and learn etc.

Similarly, the advanced learner students are well supported through various techniques so that they can excel in professional way. These techniques are listed below -

- Prepare for global certifications
- Participate in value added training programs
- Promote for internships
- Help in getting Industry assisted/sponsored projects
- Enroll in Research and e-learning material like Course-era, NPTEL etc.
- Motivate for achieving higher performances in their summative assessments by felicitation
- Motivation to pursue higher studies and research by way of for GATE, CAT/GRE and other examinations
- Sinhgad Overseas cell- creating awareness regarding programs offered by foreign universities
- Motivation for Paper presentations in workshops/seminars and conferences
- Individual personal motivation & care
- Organization and Participation in departmental/Institutional events
- Promotion in co-curricular and extracurricular activities and competitions

File Description	Document
Upload any additional information	[View Document](#)

2.2.2 Student- Full time teacher ratio (Data for the latest completed academic year)

Response: 20.54

File Description	Document
Any additional information	[View Document](#)

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

Response:

The development of the students in multiple dimensions is necessary in professional engineering education. These dimensions help the students to excel in Industrial jobs, Entrepreneurships - Start Ups, Higher education, etc. 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 in Industries
3. Various Students' Chapters and Clubs
4. Industrial visits
5. Techtonic - Technical activities / events
6. Workshops /Seminars
7. Exposure to Virtual Lab environment through tie-up with IIT Bombay
8. IIT spoken tutorials, NPTEL, etc.
9. Students Training Programs (STP)
10. Project Based Learning (PBL)
11. Establishment of Industry collaborative laboratories
12. Participation in Research paper presentations, projects - Innovation/Avishkar activities of the University.

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.

The industries have given the funds in the form of development boards and softwares to various departments. These facilities have enriched the laboratories of the Institutes to the state of the art status.

Industry personnel are invited in the Institute for delivery of expert sessions, workshops, seminars and for hands on sessions.

The Institute has liaison with IIT Bombay in context with Virtual Laboratories. It is helping the students and faculties in performing practical on conventional and high end equipment through simulations. The Institute has highest number of users across the nation during last academic years.

The Institute also has tie-up with IIT Bombay through Spoken Tutorials. The students undergo variety of courses in these programmes and finally appear for the respective course examinations. These tutorials enabled the students in fundamental and state of the art technological learning.

The students also undergo various courses organized by National Programme on Technology Enhanced Learning (NPTEL). These participations are voluntary as well as for the completion of some of the audit courses of the University. It has been proved effective in clearing the fundamentals of various courses which are backbone of engineering and technology.

Project Based Learning (PBL) 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.

Students Training Programme (STP) is the programme that is being executed by the Institute with the aim of enhancement of employability of the students. It consists of modules on Writing/Listening/ Presentation skills, techniques to face personal interviews, practice in courses of thrust area, research attitude, group discussion/group task practice on industry oriented skills.

File Description	Document
Upload any additional information	[View Document](#)

2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

Response:

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. 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 to create the interest among the students, thus improving the effectiveness of the teaching- learning process.
3. Virtual laboratories and free online tools such as Compilers, SCILAB, AutoCAD and other

simulators are used for conducting laboratory sessions.

4. The institute has seminar halls for all the programs and also has auditorium equipped with multimedia facilities. Expert sessions, invited talks, seminars, conferences and workshops are conducted frequently in these seminar halls. The emphasis is given on interaction of students in terms of research paper presentations, debates, group discussions. With the help of ICT enabled tools, Communication skill classes/Mock tests are conducted which help the students to face the campus placement.

5. Swayam/NPTEL/MOOC, Virtual laboratory, SPOKEN TUTORIAL-IIT Bombay, such online resources are made available to the students. To demonstrate this, audio-visual tools are effectively exploited by the faculty members. The Institute has the highest usage of Virtual Laboratory (V-Lab) at National level in the academic year 2020-21.

6. In some of the programs like E&TC, any course through Swayam/ NPTEL is integrated into the curriculum and made mandatory audit course. The student is awarded with grade (AP) on successful completion of the audit course.

7. Due to COVID-19 pandemic situation, it was necessary for the faculty members to switch from traditional chalk and board teaching learning method to online mode. Faculty members have fluently adopted various Platforms such as Zoom, Google Meet, Microsoft Teams, etc. The Institute has official credentials of Microsoft teams.

8. Google / Microsoft platform were effectively used to upload video lectures, e-books/e material, assignments, practical submissions and online MCQ tests.

9. Faculty members use social media platforms like WhatsApp and Telegram to connect with the students and parents individually and collectively beyond the classroom for giving extra information and support to students.

All these multimedia aids make the learning experience of students' interactive, effective and enjoyable.

File Description	Document
Upload any additional information	[View Document](#)
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	[View Document](#)

2.3.3 Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year)

Response: 20.54

2.3.3.1 Number of mentors

Response: 265

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll.	[View Document](#)
mentor/mentee ratio	[View Document](#)
Circulars pertaining to assigning mentors to mentees	[View Document](#)

2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Response: 94.08

File Description	Document
Year wise full time teachers and sanctioned posts for 5years(Data Template)	[View Document](#)
List of the faculty members authenticated by the Head of HEI	[View Document](#)
Any additional information	[View Document](#)

2.4.2 Average percentage of full time teachers with 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: 17.78

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

2020-21	2019-20	2018-19	2017-18	2016-17
62	51	45	44	42

File Description	Document
List of number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. and number of full time teachers for 5 years (Data Template)	[View Document](#)
Any additional information	[View Document](#)

2.4.3 Average teaching experience of full time teachers in the same institution (Data for the latest

completed academic year in number of years)

Response: 8.7

2.4.3.1 **Total experience of full-time teachers**

Response: 2306

File Description	Document
List of Teachers including their PAN, designation, dept and experience details(Data Template)	View Document
Any additional information	View Document

2.5 Evaluation Process and Reforms

2.5.1 Mechanism of internal assessment is transparent and robust in terms of frequency and mode

Response:

The students undergo both Internal and external assessments. Internal assessment carried out by the Institute is well set process. The frequency and mode of internal assessments are defined at the start of the academics so that students plan the studies accordingly. These assessments are carried out by the faculties timely and transparently. Following table explores these assessment modes–

Table: Internal assessment frequency and mode

Sr. No.	Internal Assessment Tool	Frequency	Mode
1	Assignments/Class test/Mock test	2-6 per course	Paper/soft/Oral
2	Tutorials	3-6 per course	Paper/soft
3	Understanding of lab experiments	6-10 per course	Oral
4	Project evaluation	Once/Twice per semester	Through presentations
5	Mini project evaluation	Once per semester	Through presentations
8	Quiz	One per course	Paper/soft
9	Term work Assessment	Continuously for each experiment in semester	Paper/soft
10	Project based learning	One per semester	Paper/soft/implementation/presentation

Continuous internal assessment of the students is carried out by assigning appropriate weight-age to understanding of experiments, presentation in file/journal, regularity in the laboratories, etc. This assessment is transparent and carried out in presence of the students in the laboratories. Internal assessment of the project work of final year students is also carried out throughout the academic year. It consists of presentations given by the students periodically. These presentations and hence project work are evaluated

by the panel of faculties. Project guide is member of panel. The marks obtained by the students are disseminated in the project group so that students should enhance the work.

Mini project is also part of programme in various departments. These projects are assigned to the students in groups. Every student in the group woks on the tasks accordingly. It is complete term activity spread throughout the semester. Every student is continuously evaluated by the respective allotted guide. The exhibition cum demonstrations is also organized at the end of the term. A panel of referees evaluate the students based on various criteria. Many times the groups are given the ranks to motivate the students. Every student is again examined by the University appointed examiners for assessment.

Project Based Learning (PBL) consists of identification of problem, applying thought process to its probable solutions and showcasing the innovative solution to it. This enhances overall development of the students which in turn helps in professional jobs and individual startups.

Assignments and tutorials are the important components of internal assessment process. The problem statements based on content of the course are given to the students regularly so as to maintain the consistency throughout the semester. These efforts helped students in building up strong fundamentals and foundations of technology. Similarly, it helps students to remain alert and updated continuously. Quizzes are also organized by many faculties for various courses so as to maintain enthusiasm in the learning environment.

Class tests and Mock tests are organized by the programmes throughout the academic year. Normally, two class tests are organized per course per semester. The answer papers are timely assessed by the faculties.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

2.5.2 Mechanism to deal with internal/external examination related grievances is transparent, time-bound and efficient

Response:

1. Assessment of Term Work

Term work assessment is the transparent process which consists of evaluation based on regularity, presentation, understanding. The students are evaluated by the faculty in the laboratory itself. The grievance if any is resolved by the faculty immediately.

2. Class Tests & Assignments

Class tests are conducted for each theory course twice per semester. The conduction is online/offline mode. Discrepancy or grievance if any is resolved by the faculty and respective committee immediately.

3. Continuous Evaluation of Projects/Mini Projects

Internal assessment of the project work of final year students is carried out throughout the academic year. It consists of presentations given by the students periodically. These presentations and hence project work are evaluated by the panel of faculties. Project guide is member of panel. The marks obtained by the students are disseminated in the project group so that students should enhance the work. Thus the assessment is transparent and query if any is resolved by the guide, panel & respective coordinator.

4. External Examinations

External examinations is an important criterion in the overall assessment process. When the examinations are scheduled in liaison with Savitribai Phule Pune University, various processes start for smooth conduction of the examinations. Sometimes students face difficulties and there are registered complains at various stages accordingly. Such exemplary cases are mentioned here. 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. Similarly, there are few complains reported pertaining to the Hall - Ticket. These are also resolved by the office timely. When the students appear for examinations and the results are declared by the University, there are few cases of variation in the names, results etc. which is not as per expectations of the students. Such cases are resolved by the Institute through communication with the University. Thus all such issues raised by the students are solved by the Institute timely and transparently.

File Description	Document
Any additional information	[View Document](#)

2.6 Student Performance and Learning Outcomes

2.6.1 Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

Response:

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

POs signify the graduate attributes (GA) articulated by Washington Accord and accepted by NBA whereas PSOs are specifically defined outcomes of the programme which the learners attain at the end of the programme. After giving a thought process with senior faculty members, head of the department (HoD) and stake holders, two/three PSOs are formalized for each program. The dissemination of these POs and PSOs to the teachers, students and various stake holders is done through institute website, posters, during different activities. The list is as follows -

1. Institute Website

2. Student/ Faculty notice boards
3. Laboratory notice boards
4. Posters in corridors in each department, administrative areas
5. Laboratory manuals
6. Project work book
7. Conference proceedings
8. Various activities like FDP/STTP/etc. brochures
9. Department News Bulletin
10. Faculty Course files
11. Teaching in classroom
12. Through various feedback forms

COs describe the fundamental knowledge skill set about the course that student will be able to acquire at the end of a course. University provides the semester wise syllabus for each programme. Along with the syllabi, for many courses COs are defined by the University. Generally, the faculty members follow the COs provided by the University, but sometimes COs are modified and redefined timely as per the curriculum changes. In the situation where COs are not provided by the university, considering the guidelines of NBA for each programme, faculty members prepare the same. Using Bloom's taxonomy, the subject teacher prepares the course outcomes in consultation with the Head of the Department. The mapping of COs with POs and PSOs is done for every course, as COs are the path way to attain POs and PSOs and thereby the Mission and Vision of the institute.

File Description	Document
Upload COs for all Programmes (exemplars from Glossary)	[View Document](#)
Upload any additional information	[View Document](#)

2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.

Response:

As mentioned in the earlier sections of SSR, the Program Outcomes (POs) and Course Outcomes (COs) are defined as per the guidelines of NAAC and National Board of Accreditation (NBA) and an Outcome based evaluation system is observed by the Institute. While implementing the programmes with defined POs and COs, care is taken to fulfill the Mission and Vision of the Institute.

For any outcome based system, achieving the attainment level of the POs, PSOs, and COs is a key parameter that plays a vital role. This facilitates the development of academic culture among the students. Every program has its own academic monitoring committee which monitors attendance, teaching - learning process, assessment of the students, keeps the track of overall academics.

The following methods are used to assess the attainment of course outcomes.

1. Measuring the Course Outcomes Attained Through Internal Assessment

This includes performance of the student throughout the semester based on Theory/ Practical attendance, regular test exams, assignments, continuous assessment, Term work. Questions in the assessment tools are mapped with COs for good alignment of COs with POs.

2. **Measuring Course Outcomes Attained Through University Examinations**

This consists of University End-semester examination.

CO Attainment is computed based on the students' performance through above mentioned assessment tools. The attainment levels for courses are finalized based on previous results / performances. Three attainment levels help to compute the level of attainment of each course outcome. The measurement of attainment is based on the actual percentage of students achieving the passing percentage of marks or more.

- If percentage of students above passing level of marks is between 40 - 60 %, then attainment level is 1.
- If percentage of students above passing level of marks is between 61 - 80 %, then attainment level is 2.
- If percentage of students above passing level of marks is above 81%, then attainment level is 3.

Final CO attainment is computed by considering the performance of the students in the internal assessment and University examination, by giving proper weight-age (30% weight-age of internal assessment and 70% weight-age of University examination) to these two assessment components.

The correlation of POs and PSOs with COs is decided by the subject teachers. For mapping COs with POs and PSOs the correlation Level 1 means slight (low); 2 means moderate (medium) & 3 means substantial (high).

File Description	Document
Upload any additional information	View Document

2.6.3 Average pass percentage of Students during last five years

Response: 95.26

2.6.3.1 **Number of final year students who passed the university examination year-wise during the last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
1368	1433	1371	1469	1546

2.6.3.2 **Number of final year students who appeared for the university examination year-wise during**

the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
1379	1449	1516	1557	1655

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	<u>View Document</u>
Upload any additional information	<u>View Document</u>
Paste link for the annual report	<u>View Document</u>

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.22

File Description	Document
Upload database of all currently enrolled students (Data Template)	<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, Chairs in the institution during the last five years (INR in Lakhs)

Response: 155.88

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)**

2020-21	2019-20	2018-19	2017-18	2016-17
27.73	22.03	00.00	21.00	85.12

File Description	Document
List of endowments / projects with details of grants	[View Document](#)
e-copies of the grant award letters for sponsored research projects / endowments	[View Document](#)
Any additional information	[View Document](#)

3.1.2 Percentage of teachers recognized as research guides (latest completed academic year)

Response: 7.17

3.1.2.1 **Number of teachers recognized as research guides**

Response: 19

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

3.1.3 Percentage of departments having Research projects funded by government and non government agencies during the last five years

Response: 88.89

3.1.3.1 **Number of departments having Research projects funded by government and non-government agencies during the last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
8	8	8	8	8

3.1.3.2 **Number of departments offering academic programes**

2020-21	2019-20	2018-19	2017-18	2016-17
9	9	9	9	9

File Description	Document
Supporting document from Funding Agency	[View Document](#)
List of research projects and funding details	[View Document](#)
Any additional information	[View Document](#)
Paste link to funding agency website	[View Document](#)

3.2 Innovation Ecosystem

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

Response:

The institute has created a suitable environment to promote innovation, explore new ideas and share the knowledge to other likeminded in their interested domain for graduate, post graduate and Ph.D. students. As a part of this, the institute has R&D, Entrepreneurship cell through which students are encouraged to participate in different research activities. Workshops on Entrepreneurship, Research Methodology and Intellectual Property Rights are conducted to provide the base for researchers. As part of innovation, R&D cell encourages students and faculties for nurturing innovative ideas.

The R&D cell helps in identifying multidisciplinary innovative topics related to different engineering and management programs. The teaching-learning process at the institute is based on choice-based credit system of the University. It helps and motivate the students to do theme-based research projects which in turn make the students to have innovative knowledge helpful to the industry and society. Students are made aware about various research funding schemes of Government, AICTE, DST, SPP University. Regular industrial visits for the students are arranged at research organizations like CDAC, CWPRS, CEMET, IRSHA, Agharkar Research Institute, DIAT, DRDO, NCL, RCF, ARAI and industries like RCF, Fluid Controls, TATA Picasso etc. This in turn motivate the students to take up industrial projects at these reputed research organizations. The institute has mandated all the post graduate students to write and publish at least one research paper based on their project work. The institute had faculty exchange program

under Erasmus Mundus with Aalborg University-Denmark.

The students and junior faculty members are guided and motivated about publication of research papers in reputed journals, patents and copyrights registration, start-ups, consultancy and to pursue Ph.D. Further, faculty members are encouraged to participate and conduct different research activities, publication of technical books, and presentation of research papers at national and international conferences for knowledge sharing. The institute regularly organizes different Faculty Development Programs (FDP), workshops and conferences.

The institute regularly organizes Train the Trainer programs by the senior faculty to the newly joined faculty to transfer the knowledge on methodology of teaching different courses at undergraduate level. It also promotes the faculty to attend the training programs by way of guest lectures and expert's lecture sessions at other institutions for knowledge sharing. The students also participate at national and international events like Formula SAE, Rocketry, BAJA, Tifan, Hackathon for which partial funding is provided by the institute. Students have won several prizes at national and international level events through these research initiatives.

The institute encourages the faculty to pursue higher studies by offering study leaves for their course work completion. The library and laboratories resources are made available to the researchers for experimentation. Further, institute motivates the faculty and students to participate in different activities carried out in industry and society. This kind of well-defined practices has helped the institute to bring major changes in outcome amongst the students and faculties to present and publish papers in journals and conferences, organize and attend FDPs, STTP, seminars, workshops, start-ups and to file patents.

File Description	Document
Paste link for additional information	[View Document](#)

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

Response: 253

3.2.2.1 **Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year-wise during last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
48	51	45	46	63

File Description	Document
Report of the event	View Document
List of workshops/seminars during last 5 years	View Document
Any additional information	View Document

3.3 Research Publications and Awards

3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years

Response: 2.58

3.3.1.1 **How many Ph.Ds registered per eligible teacher within last five years**

Response: 49

3.3.1.2 **Number of teachers recognized as guides during the last five years**

Response: 19

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
Any additional information	View Document
URL to the research page on HEI website	View Document

3.3.2 Number of research papers per teachers in the Journals notified on UGC website during the last five years

Response: 1.72

3.3.2.1 **Number of research papers in the Journals notified on UGC website during the last five years.**

2020-21	2019-20	2018-19	2017-18	2016-17
101	184	61	80	56

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document
Any additional information	View Document

3.3.3 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: 0.61

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

2020-21	2019-20	2018-19	2017-18	2016-17
28	64	22	30	27

File Description	Document
List books and chapters edited volumes/ books published	View Document
Any additional information	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:

1. National Service Scheme (NSS)

The Institute plays a vital role in fostering social responsibility among the students and their holistic personality development through the participation in extension activities. The institute encourages and supports the students to participate in social activities. NSS helps the students to develop a concern on the health, environment, improving life of rural people through community service. The activities like traffic management, health, environment protection, organ donation etc. are carried out to shape every volunteer to be a responsible citizen about social issue.

- Organizing blood donation camps in association with Sassoon Government Hospital Blood Bank, Pune and SKN Medical College and Hospital Blood Bank, Pune.
- To develop concern about environment, activities like Swachh Bharat Abhiyan, Tree Plantation Drive, Plastic free city are carried out.

- Seminars and workshops are conducted to address issues like women health and hygiene, women empowerment, gender sensitization and various government schemes.
- Sexual Harassment cell educates women and girl students to prevent issues like sexual harassment, abuse etc.
- Equal opportunity cell is created to help women belonging to rural area and backward community to bring them to equal platform.
- NSS organizes special camps in which activities like women empowerment, cleanliness drive, health check-up camps, educating school students, solving water problems etc. are carried out.
- NSS unit of the institute extended help in natural calamities like flood & landslide in Malin village in Mahad District of Maharashtra and flood in Kerala State.
- During COVID 19 pandemic, NSS Volunteers distributed food and essential commodities to needy people.
- Organized blood stem cell registration camp, one volunteer of the institute is a matching donor amongst 4.65 lakh donors for severe blood disease patient.
- Encourages students to participate in various State, National and International level activities, workshops and camps.

2. PRAYAS Youth Forum Social Awareness Foundation, Pune.

- The institute has Prayas unit where in several students participate in different activities. Prayas Youth Forum and Social Awareness Foundation is a non-profit organization which promotes and supports educational and development efforts in India. Prayas is registered under Societies Registration Act, 1860 under Government of Maharashtra. 'Prayas' meaning endeavor. Prayas is making efforts towards bridging the gap between India and Bharat (widely coined as rural India) through contribution in different initiatives.

- Prayas aims to achieve all round development of society by channelizing dynamic youth power. It believes in "Empowering Intelligence for Sustainable Change", change in every aspect. Prayas works in areas like Computer Literacy, Carrier Guidance, Women Empowerment, Blood Donations, Health & Dental Check-ups. Tree Plantations etc. Prayas raises funds through public contributions, commercial organizations as well as through volunteers.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

3.4.2 Number of awards and recognitions received for extension activities from government/ government recognised bodies during the last five years

Response: 32

3.4.2.1 **Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.**

2020-21	2019-20	2018-19	2017-18	2016-17
02	11	08	06	05

File Description	Document
Number of awards for extension activities in last 5 year	[View Document](#)
e-copy of the award letters	[View Document](#)

3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

Response: 172

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

2020-21	2019-20	2018-19	2017-18	2016-17
31	34	33	45	29

File Description	Document
Reports of the event organized	[View Document](#)
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	[View Document](#)
Any additional information	[View Document](#)

3.4.4 Average percentage of students participating in extension activities at 3.4.3. above during last five years

Response: 33.54

3.4.4.1 **Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
1835	1465	1430	2604	1999

File Description	Document
Report of the event	[View Document](#)
Average percentage of students participating in extension activities with Govt or NGO etc	[View Document](#)

3.5 Collaboration

3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year

Response: 1294

3.5.1.1 **Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year-wise during the last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
233	288	313	236	224

File Description	Document
e-copies of related Document	[View Document](#)
Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/ internship	[View Document](#)

3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

Response: 43

3.5.2.1 **Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
09	06	07	06	15

File Description	Document
e-Copies of the MoUs with institution/ industry/corporate houses	View Document
Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years	View Document
Any additional information	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.

Response:

Sinhgad College of Engineering is situated in beautiful landscape and have well equipped laboratories, spacious classrooms and good infrastructure facilities.

Teaching-Learning Facilities

1. Classrooms

All the classrooms in the institute are furnished, capacious and well ventilated. All the classrooms are equipped with Desks, bench, Platform, Fans, Tube lights, Green board, LCD Projector, curtains and LAN/Wi-Fi connectivity thus creating the conducive environment for teaching-learning.

2. Laboratories

Laboratory facilities are as per the AICTE norms satisfying the requirements of furniture, carpet area, lighting, and ventilation. These well-equipped laboratories provide adequate experimental set-ups for carrying out experiments as per the University syllabus. The laboratories are permitted to open beyond college working hours depending on the need of students.

3. Computing Equipment

The institute has 1046 computer systems with licensed software installed. Sufficient number of supporting equipment like scanners and printers are also available. The campus is connected to Universal Threat Management (UTM) device through VLAN which provides internet facility of bandwidth 300 Mbps wired link. To secure internal LAN, Quick Heal antivirus is installed. Adequate licensed software is available with every department as per the requirements of the syllabus.

4. Seminar Halls and Smart Class Room

College has four well equipped seminar halls and two smart classrooms with adequate seating capacity, with facilities like LCD projectors, whiteboards, raised platforms and public-address system with internet facility to make it suitable for the big gatherings in the department.

5. Departmental Library

Every department has the departmental library situated in same building of the department, making it convenient for the students and faculties to access the text books, reference books and project reports etc.

6. Central Workshop

Various sections in the central workshop like machine shop, fitting, sheet metal working, welding, carpentry and foundry are well equipped with conventional machines / tools.

7. Drawing Hall

Drawing Hall is equipped with drawing boards, stools, chalk boards.

8. Central Library

Central library is enriched with 56,219 books, 14,989 titles of various current as well as syllabi-based books of all disciplines of Engineering, Management and Engineering Sciences. The library also has 4781 reference books, 131 periodicals and 76 Bound Volumes IEEE transactions and ASME journals. Further, library also possesses 1345 CDs as offline databases. English, Marathi newspapers are made available in the central library.

9. Training and Placement Cell

Central Placement Cell is established for training and placement activity and is well equipped to carry out skill development activities etc.

10. Faculty Rooms

Individual/shared faculty rooms are equipped with the required furniture along with LAN connection.

11. Washroom and Drinking Water Facility

Adequate Gents and Ladies washrooms are available in every department along with water purification and cooler facility.

12. Hostel Facility

Separate hostel accommodation for girls and boys is available. 11 boys hostel with capacity of 4224 (Four seated) out of which one is for NRI students and 09 girls hostel with capacity of 3476 (Three/Four seated).

13. Other Facilities

Canteen facility, Photocopy center, Laundry, Bank with ATM, and Post office are also available in the campus.

File Description	Document
Upload any additional information	View Document

4.1.2 The Institution has adequate facilities for cultural activities, sports, games (indoor, outdoor), gymnasium, yoga centre etc.

Response:

The institute encourages the students to participate in several extra-curricular activities. To cope up with the requirements for extra-curricular activities, the institute has sufficient infrastructure facilities.

1. Cultural Activities

- Sinhgad Cultural Center (Open Air theatre) having ample space with Dias, Chairs, Lights, fans, LCD Projector and 1500 seating capacity for audience is available.
- Under the banner of 'Sinhgad Karandak', annual Cultural fest-NEON and Techfest- Techtonic are arranged every year to encourage the students to participate in performing arts and technical events. It is one of the biggest annual student festival in Pune. It started with a series of events for students of STES Society. Through this event, students are showing their talent by participating in different events and competing with students from different colleges. It is organized for inter-campus, inter-collegiate with separate events for international students.
- This platform provides the students to showcase extra-curricular talent, leadership and organization skills. It comprises of events in the form of competitions, workshops, and stage performances such as, Mr. and Miss. Sinhgad, Singing, Dance, Street play, Treasure Hunt, Art Gallery, Fashion Show and many others.
- The institute has Sinhgad Students Club, wherein a basket of 18 clubs are made available to the students to choose from, which enhances their talents and encourages them to pursue their hobbies.

2. Sports and Games

- The institute has facilities for organizing both indoor and outdoor sports. Facilities for outdoor sports include cricket, lawn tennis and indoor sports include table tennis, carom board, chess. The Cricket ground is used for organizing various local and regional level tournaments. A swimming Pool is available for students and there is a special batch for ladies.
- **Yoga Center:** We believe that yoga is what youngsters need most today and thus institute celebrates International Yoga Day every year on 21st June. Practicing yoga might improve quality of life; reduce stress; helps to relieve anxiety, depression and improve overall physical fitness, strength, and flexibility. Yoga and meditation sessions are conducted for the students and staff in the premises through NSS unit of the institute.

3. Medical facility

- The campus has emergency campus clinic with medical store and Sinhgad Dental College Hospital. The institute has SKN Medical College and Hospital nearby with ambulance facility.

4. Other Facility

- **General Stores:** General stores with various facilities like all engineering accessories, mobile recharge vouchers etc. are available.
- **Milk Parlor:** More than two milk parlors are available for students and staff in the campus.
- **Fruit Centre:** More than two fruit centers are available for students and staff in the campus
- **Parlor:** Separate Parlor for boys and girl students and staff are available in the campus.
- **Power Backup /Generator :** Power backup from Kirloskar Genset 500KVA (50 Hz)
- **Central Water Pump House:** To Supply water to the different buildings in campus.

- **Parking Facility:** Ample parking facility for vehicles of staff and students.
- **Ambulance:** For medical emergency ambulance service is also available in college.

File Description	Document
Upload any additional information	[View Document](#)

4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. *(Data for the latest completed academic year)*

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 65

File Description	Document
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	[View Document](#)
Upload any additional information	[View Document](#)

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

Response: 3.41

4.1.4.1 **Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)**

2020-21	2019-20	2018-19	2017-18	2016-17
30.28	10.1	53.52	29.6	79.64

File Description	Document
Upload Details of budget allocation, excluding salary during the last five years (Data Template)	[View Document](#)
Upload audited utilization statements	[View Document](#)

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS)

Response:

The Central Library is an important knowledge resource of the Institute. It has well developed book collection in Engineering and Management disciplines. It has floor area of 1911 sq.m. in total, with a reading hall of 1145 sq.m to accommodate 1000 students. Library has reprographic, scanning and printing facilities extended for users. It also has Online Public Access Catalog (Web OPAC) for students and faculty in order to reserve books. The digital library has 30 computers with internet facility of 8 Mbps. It enables remote access to DELNET, NDL and NList for user benefit. The Library has 850 e-books through DELNET and NDL.

The central Library is automated with proprietary software SLIM 21 with perpetual license. It is a web-based version with state-of-the-art integrated library management software developed by the M/S Algorhythms, Pune. It is user-friendly software developed to work in client-server environment.

1. Features of SLIM 21 Library Software

SLIM software has all the salient modules required for Library transactions. It has multilingual Software support. The AACR II and MARC 21 formats are used at the back end for cataloguing entries. Books and User database can be easily ported through excel sheet entries. Retro conversion is also possible. It facilitates all the additional information about book and cover photograph, generate barcodes and call numbers which are convenient for transaction of books.

2. SLIM 21 Library Software Module details:

a. Cataloguing Module

Cataloguing module is used for creating book database, retrospective conversation using MS-Excel work sheet. Various reports can be generated regarding books and other reading material which can be customized as per the institutional requirements. Through cataloguing module various sub communities can be created as Subject Bibliographies, SDI services, Publisher Databases.

b. Circulation Module

 The circulation module helps in all counter transactions as well as Library books, periodicals transaction activities. Member ID cards are generated with barcode on it to facilitate automated transaction logs. Overdue Books, Reserved Books, Binding, Weed out, Compact storage books are separately indicated. Email Reminders can be generated. It also gives shelf guide for specific book.

c. Library Administration Module

 In this module library rules are defined, working hour, holidays are also notified and students can be separated course and year wise.

d. Acquisition Module

 Book Purchase orders can be placed through this module. Requisition from users are collected and processed through this module and purchase order is generated.

e. Serial Control Module

 Printed periodical and journal entries are done in this module, and it gives reminder for non-received issue.

f. Statistics module

 This module facilitates all types of tabular and graphical presentations of Library transactions.

g. OPAC

SLIM 21 has web OPAC with remote search facility using simple search and advance search. Boolean operators are facilitated to narrow down the scope of the search. A separate terminal is kept in Library for OPAC Search. The library offers Open access to its users.

File Description	Document
Upload any additional information	View Document

4.2.2 The institution has subscription for the following e-resources

1. e-journals
2. e-ShodhSindhu
3. Shodhganga Membership
4. e-books
5. Databases
6. Remote access to e-resources

Response: A. Any 4 or more of the above

File Description	Document
Upload any additional information	View Document
Details of subscriptions like e-journals, e-ShodhSindhu, Shodhganga Membership , Remote access to library resources, Web interface etc (Data Template)	View Document

4.2.3 Average annual expenditure for purchase of books/e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

Response: 2.67

4.2.3.1 **Annual expenditure of purchase of books/e-books and subscription to journals/e- journals year wise during last five years (INR in Lakhs)**

2020-21	2019-20	2018-19	2017-18	2016-17
0.21	0.65	1.03	3.5	7.95

File Description	Document
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the last five years (Data Template)	[View Document](#)
Audited statements of accounts	[View Document](#)
Any additional information	[View Document](#)

4.2.4 Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the latest completed academic year

Response: 12.88

4.2.4.1 Number of teachers and students using library per day over last one year

Response: 735

File Description	Document
Details of library usage by teachers and students	[View Document](#)

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

IT infrastructure facilities are created taking into consideration the requirements of all the stakeholders.

- Institute is having Campus agreement with Microsoft since last twelve years, for up-gradation of Windows Operating System and Microsoft Application Software.
- The infrastructure and application support are regularly updated to meet the ever-changing needs of the syllabus. The institute allocate adequate budget to purchase and maintain the IT infrastructure with learning resources like ICT classrooms, hardware, software and other computer peripherals.
- The institute has 24×7 Wi-Fi facility in the campus for the student and faculty members to avail internet connection at any place in the college and hostel. The Internet Bandwidth of 300 Mbps ILL 1:1 is available in the Campus. TCL, TTSL, and Inspire Networks are the Internet Service Providers for the campus.
- In order to ensure safety and security of data, licensed UTM having facility of firewall, web content filtering, gateway antivirus, VPN, bandwidth shaping and VLAN routing is available with institute.
- Institute Computers having internet connectivity are secured with Quick Heal antivirus.

- Institute is having a biometric machine for taking attendance of faculty and staff members.

- Enterprise Resource Planning (ERP) based training and placement management module JUNO CAMPUS is used by the institute for creating and updating student database. Academic year-wise student list can be retrieved from the database of UG & PG students. Training and Placement module additionally manage interview schedules, student list announcements, company criteria, record of various training and placement activities. This module of ERP solution can assign login rights to the department staff, where the faculty can also check how many students have registered for the company. There is also a provision for faculty to approve/disapprove a student for placement. Students can register their details online, through the Training and Placement portal, update their resume details, apply for interviews, get updates about Training and Placement schedules, interviews and selection procedures.

- Today's students have risen up communicating and sharing experiences on social media sites like Facebook & Instagram. Using the power of different networks and engaging content, institutes are using social media to attract students, interact with current students and stay connected with alumni. At the Institute level, two main platforms are available to communicate with students namely Facebook (https://bit.ly/34xh6Nj) and YouTube (https://www.youtube.com/c/Sinhgad College of Engineering). Various activities and event details like upcoming webinars, guest lectures, first year student's induction program, Alumni meet are posted on social media. Faculty and student achievements like student placement, rankers in university examination are posted on these platforms.

File Description	Document
Upload any additional information	[View Document](#)

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

Response: 5.55

File Description	Document
Upload any additional information	[View Document](#)
Student – computer ratio	[View Document](#)

4.3.3 Bandwidth of internet connection in the Institution

Response: A. ?50 MBPS

File Description	Document
Upload any additional Information	View Document
Details of available bandwidth of internet connection in the Institution	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average 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: 18.1

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)**

2020-21	2019-20	2018-19	2017-18	2016-17
196.27	253.92	270.35	6.26	265.04

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View Document
Audited statements of accounts	View Document

4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

Response:

The following maintenance activities are carried out at Department and College Level

1. Classrooms, Seminar Hall and Tutorial Rooms

Before the commencement of every semester, departmental technical assistants and peons inspect the class rooms and tutorial rooms to check the adequacy of furniture, working of projectors, tube lights, fans, etc. and ensure all the facilities are available in good condition for the students. All the rooms are cleaned by departmental peon and this activity is daily monitored by departmental technical assistant. Repair work of classroom, seminar hall and tutorial rooms are done internally through workshop instructor and electric related maintenance is carried though estate office. The regular maintenance of ICT tools in classrooms, seminar hall are taken care by technical assistants.

2. Central Library

The Central Library of the institute is well maintained and each section in it is taken care by an assigned person for cleanliness. Book Stacks are thoroughly cleaned once in a week. The books are weed out as per the norms and procedure laid down by the society. The book binding and other
related work is outsourced. The stock verification is done as part of regular maintenance and weed out activity as and when required.

3. Laboratory Equipment

The faculty in-charge and technical assistant look after the maintenance of each laboratory. The funds are made available from the budget to repair any break-down item. When new purchases are to be made, faculty in-charge proposes the annual requirement, and provisions for the same is made in the budget. For consumable items, budget is prepared by the faculty in-charge and the technical assistant. The equipment and instruments calibration and maintenance are carried out regularly and this activity is monitored by faculty in-charge.

4. IT infrastructure

The computers of the institute are maintained by Departmental Technical Assistant and Lab Technician of every department. All the computers and peripherals are checked by the technical assistant for any problems once in a semester before the start of the academic year. Any maintenance activity if required is carried out immediately. Also, any peripherals if required are replaced as per the prescribed process of the institute. The power backup facilities including UPS and batteries are monitored, maintained and replaced as and when it is necessary.

The following maintenance activities are carried out at Campus Estate office level

1. Civil Work Maintenance

Civil work maintenance is carried out by the estate office of the society for minor maintenance and through civil contractor for major maintenance. Regular maintenance of all buildings are carried out and the frequency of inspection is decided in consultation with the Principal/Campus Director. For example, Building maintenance committee handles maintenance request raised by the department. The committee forward the approved maintenance request to estate office. The estate office carry out the minor maintenance work and get the major work like coloring, water leakage, etc. through civil contractor. On completion of work, the inspection report and billing are submitted to account section for the payment purpose.

2. Garden Maintenance

Garden maintenance is looked after by gardening staff under the supervision of estate officer. Work carried out by gardening staff is checked by the supervisor from the estate officer. The Estate officer submits the monthly attendance report of gardening staff to the account section for their payment purpose.

3. Furniture   Maintenance

Minor furniture maintenance for benches, table, notice board, chair etc. is carried out through college

workshop or outside party. Major furniture maintenance is routed through estate office.

4. Electrical Maintenance

It includes all electrical repair works like electrical switches, outlets, Ground fault circuit interrupt (GFI) outlets, Light fixtures, exit lights, emergency lights, lightning arresters, earth bits and electrical panel boxes. Department raises the repair or maintenance issue to the college which is further forwarded to estate office for counter check. As per the complaint, the list of electrical devices that require regular maintenance is ordered through proper permission. Once the required electrical repairing is over then the completion of work entry is done in the register.

5. Water treatment Plant

Dedicated water treatment plant is available in college campus which is maintained by estate office.

6. Generator

Maintenance of generator is carried out on regular basis for change of fuel filters, checking of governor and adjustment of correct speed, draining of water from tank and inspection for contamination, change in engine oil and filter, and lubrication.

7. Fire Extinguisher and Safety

Fire Extinguishers are provided at appropriate locations of the building for safety purpose and First Aid Box is kept in every department for emergency usage.

8. Pump House

The pump house is used to lift the required amount of water from canal is well maintained centrally by the Estate office. It is installed in the campus to distribute the potable water to the different buildings. .

9. Sewage Treatment Plant

Annual Maintenance Contract has been made with the contractor for operation and maintenance of the 275 KLD Sewage Treatment Plant. Skilled manpower is employed to operate the plant for required number of hours.

10. Garbage Collection

Annual Maintenance Contract has been made with the contractor for collection of and segregation of garbage on daily basis. The garbage is disposed-off at disposal point specified by Pune Municipal Corporation (Ramtekadi Hadpsar-Pune).

11. Water Supply from Canal

An Agreement with the Maharashtra State Irrigation Department has been made for the supply of 0.526 million cubic meters of water to the Campus. It is for the period of six years from the date of agreement.

File Description	Document
Upload any additional information	[View Document](#)

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during last five years

Response: 62.53

5.1.1.1 **Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)**

2020-21	2019-20	2018-19	2017-18	2016-17
3936	3584	3393	3151	3125

File Description	Document
upload self attested letter with the list of students sanctioned scholarship	[View Document](#)
Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template)	[View Document](#)

5.1.2 Average percentage of students benefitted by scholarships, freeships etc. provided by the institution / non- government agencies during the last five years

Response: 1.31

5.1.2.1 **Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)**

2020-21	2019-20	2018-19	2017-18	2016-17
22	55	57	93	142

File Description	Document
Upload any additional information	View Document
Number of students benefited by scholarships and freeships institution / non- government agencies in last 5 years (Date Template)	View Document

5.1.3 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
Details of capability building and skills enhancement initiatives (Data Template)	View Document
Any additional information	View Document
Link to Institutional website	View Document

5.1.4 Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years

Response: 21.64

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

2020-21	2019-20	2018-19	2017-18	2016-17
1399	1176	1723	849	748

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document
Any additional information	View Document

5.1.5 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: B. 3 of the above

File Description	Document
Upload any additional information	[View Document](#)
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	[View Document](#)
Details of student grievances including sexual harassment and ragging cases	[View Document](#)

5.2 Student Progression

5.2.1 Average percentage of placement of outgoing students during the last five years

Response: 29.01

5.2.1.1 **Number of outgoing students placed year - wise during the last five years.**

2020-21	2019-20	2018-19	2017-18	2016-17
404	601	451	333	383

File Description	Document
Upload any additional information	[View Document](#)
Self attested list of students placed	[View Document](#)
Details of student placement during the last five years (Data Template)	[View Document](#)

5.2.2 Average percentage of students progressing to higher education during the last five years

Response: 42.2

5.2.2.1 Number of outgoing student progression to higher education during last five years

Response: 582

File Description	Document
Upload supporting data for student/alumni	[View Document](#)
Details of student progression to higher education (Data Template)	[View Document](#)
Any additional information	[View Document](#)

5.2.3 Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Response: 48.59

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations, *etc.*)) year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
72	114	289	107	54

5.2.3.2 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

2020-21	2019-20	2018-19	2017-18	2016-17
143	201	390	301	206

File Description	Document
Upload supporting data for the same	[View Document](#)
Number of students qualifying in state/ national/ international level examinations during the last five years (Data Template)	[View Document](#)
Any additional information	[View Document](#)

5.3 Student Participation and Activities

5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.

Response: 198

5.3.1.1 **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) year-wise during the last five years.**

2020-21	2019-20	2018-19	2017-18	2016-17
3	36	64	40	55

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/ national/international level during the last five year	[View Document](#)
e-copies of award letters and certificates	[View Document](#)
Any additional information	[View Document](#)

5.3.2 Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities following duly established processes and norms (student council, students representation on various bodies)

Response:

Students constitute a major stakeholder in institutional growth. The institute has student representatives in many of the academic and administrative bodies/committees of the institution for effective functioning of the same. Some of the bodies are listed below

1. Student Council

As per the Maharashtra Public Universities Act 2016, every institute affiliated to University has to elect a Student Council every year by appointing a faculty as Election Officer with Principal as the overall Incharge for student council elections. The process for the same was initiated by the Savitribai Phule Pune University and the appointment of Election Officer was also done and communicated to University on 5th August 2019. However further Guidelines on the election process were not communicated by the University and hence the student elections could not be completed as per the act. Afterwards the pandemic started and elections are held.

However the institute has the Sinhgad Student Council (SSC) which is a student association with a perfect blend of clubs to produce competent students to face the newer challenges of today's globalized world through holistic development.

2. Student Grievance Redressal Cell

The institute has a Student Grievance Redressal Cell in every department comprising of Head of department, Faculty members and student representatives. Students personal & academic grievances are taken care of by the guardian teacher, Class Teacher & the higher authorities if needed. The examination department of the institute solves student's academic grievances pertaining to university results, revaluation process etc.

3. Sexual Harassment Cell

The institute has Sexual harassment cell comprising of Principal, woman faculty and students. The cell resolves the issues by taking proper disciplinary actions. The frequency of the meeting is based on the need and complaints received.

4. Anti-Ragging Committee

The institute has an anti ragging committee and squad comprising of Principal, Senior faculty members, Student representatives, Police Officer and NGO representative which takes preventive actions to avoid ragging. The Committee gives wide publicity to related acts, statutes and punishments in the form of display boards in the college, library, website and hostels. It is mandatory for the students to produce an anti-ragging affidavit during admission to the institute. The Anti-ragging squad makes random visits to various departments, library and hostels to ensure that no ragging takes place.

5. NSS (National Social Service)

The NSS Unit of Sinhgad College of Engineering was started in the year 2015 with an aim to "inculcate the social welfare thoughts in the students, and to provide service to the society without any prejudice. NSS advisory committee is formed under the Chairmanship of Principal and this committee consists of Vice Principal, NSS Programme Officer, Senior Faculty Members and Students Representative as members.

6. Magazine Committee

The institute publishes College magazine "**Srujan**" every year. The annual college magazine committee comprises one faculty member from each department headed by the Senior faculty as the chairman. The magazine is supervised by students who act as Chief Editor and Co-chief Editor. The student committee for the magazine is carefully chosen by proper selection/interview process.

File Description	Document
Upload any additional information	View Document

5.3.3 Average number of sports and cultural events/competitions in which students of the Institution

participated during last five years (organised by the institution/other institutions)

Response: 26

5.3.3.1 **Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
1	31	38	26	34

File Description	Document	
Upload any additional information	[View Document](#)	
Report of the event	[View Document](#)	
Number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions (Data Template)	[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 played a key role in transforming the careers of students into global technophile, entrepreneurs, researchers, directors, and managers. In order to cultivate a bond with almamater, improve job opportunities, and create a networking platform to share and influence the success stories of alumni, the institute has started an alumni association on 06th December 2003. The registration number of the association is "Maharashtra /1494/2003/ Pune/Dec. 6, 2003." By the end of the academic year 2021, the alumni association had grown to 18,100 plus members and 200 entrepreneurs. The alumni association has established a strong bonding between alumni and current students. The working committee of the Alumni Association consists of Students representatives and Faculty Coordinators from each department. At present the alumni association does not contribute financially to the development of the institute; however it helps in several support services by way of Training and placement, student projects and internship, higher education, expert and guest lectures, industrial visits and participation in different student clubs and social activities.

1. Objectives of the Alumni Association

- To carry out smooth functioning of yearly alumni meet
- Update the various records of the alumni association.
- To prepare and distribute yearly reminiscence booklet

- To encourage the Alumni for start-up their own company with the help incubation centre

2. Major Activities of Alumni Association

- Placement Assistance
- Industry Institute Interaction
- Personality Development Programs
- Project Assistance for final year students
- Inviting Alumni to deliver Seminar / Expert lecture
- Alumni are invited as judge for technical competitions
- Alumni are invited for counselling of students for career guidance
- Annual Alumni Meet

3. Responsibilities of the Alumni Association

- Planning and Organisation of yearly Alumni Meet.
- To update the records of Alumni as an Entrepreneur.
- To update the records of Prominent, renowned or Star Alumni.
- To create the departmental alumni student's cell for organising various events / activities such as guest lecture, seminar, workshop, referee or judge for the event etc. under the guidance of departmental alumni coordinator.
- To invite the Alumni for First year Induction Program for Inspirational Speech.
- To create and update the year-wise alumni database.

To maintain the amiable relationship between all the stakeholders, the Alumni meet for the academic year 2019-20 was organized on Saturday 29th February, 2020. During the meet interactive sessions at departmental level were arranged between the alumni, the present batches of students and faculty members to generate innovative ideas for grooming the current students, explore job opportunities in various sectors followed by discussion on recent trends in technology and industry etc. During the interaction, alumni shared memories and experiences during their stay at the Institute. In every department few alumni were felicitated for their extraordinary achievements after the graduation.

File Description	Document
Upload any additional information	[View Document](#)

5.4.2 Alumni contribution during the last five years (INR in lakhs)

Response: E. <1 Lakhs

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

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 and an excellent academic environment is available for the students and faculty. It aims at becoming a premier institute in engineering and management education with state-of-the-art facilities and good Industry Institute Interaction.

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 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"

The Vision and Mission of the institute have been developed with the active involvement and participation of all faculty members with thoughtful and focused deliberations. The Vision and Mission statements serve the institute as a navigational guide for the betterment of the institute. The Vision and Mission statement is communicated to all the students, teachers, staff, and other stakeholders through the college website, circulars, display boards, college magazines, and the college prospectus making it available to all the stakeholders.

The Heads of Department (HoD) in consultation with the faculty prepare academic and administrative plans of the department which are discussed and finalized in HoD meetings with the Principal and IQAC. This helps in imbibing a unique value system, transparent work culture, excellent academic as well as a physical environment conducive to learning, creativity, and inculcation of human values. These plans are monitored by IQAC periodically by way of academic monitoring, examination results, student feedback, faculty appraisals, research publications, academic and administrative audits, training programs for faculty and students, and preparing the annual reports. IQAC also ensure that they are in line with Institute's Vision, Mission, and Quality Policy.

The Teaching-Learning process is adopted with state-of-the-art infrastructure, 24×7 library reading room facility, augmented library, and classroom equipped with ICT tools. The institute also facilitates various schemes for economically needy students. Highly qualified and dedicated teaching faculty take efforts for excellent results in university examinations, good placement records, and exposure to upcoming technologies by way of participation in competitions, projects, internships, industry-institute interaction, etc. The institute conducts various extracurricular programs which are instrumental in the overall growth of

the students. As a result, students from nearby cities, other states in India, and abroad opt for this institute for quality education.

The institute has innovative programs like Student Training Program, Train The Trainer, skill development programs, lectures on ethics and universal human values, and Technical Training and Value Added Programs so that students can imbibe and cultivate human values and skills. The documentation of all these programs and the action taken reports are prepared and appraised to all the concerned. All these activities lead to the achievement of the institutional vision and mission statement.

File Description	Document
Upload any additional information	View Document

6.1.2 The effective leadership is visible in various institutional practices such as decentralization and participative management

Response:

The organizational structure of SCOE is a blend of professional autonomy, individual accountability, and a well-defined administrative structure. Within this overall framework, faculty members have professional autonomy in conducting their research, training, and consultancy. All the HODs are members of the IQAC, they monitor the quality of all these activities of the institute. The faculty members are given the responsibility of handling statutory and non-statutory committees independently which are framed to perform specific functions and responsibilities. The involvement of faculty members is seen in all aspects of academic and administrative activities. The Institute has 22+ institute level committees including statutory committees and 70+ department-level committees

The teaching-learning process is monitored by the Academic Monitoring Committee (AMC) of the department, which include senior faculty members who periodically discuss academic and non-academic issues. The HoD allocate course to the faculty well in advance based on expertise and the subject choice given by the faculty. The HoD ensures that the academic calendar and timetable of the department are prepared by incorporating regular academic activities proposed by SPPU and additional activities suggested for the overall development of students by the IQAC. Principals and HODs ensure that the academic calendar of SPPU is strictly followed and academic discipline is maintained at all levels.

The principal and HoD empower the departmental AMC members for monitoring and reporting on the conduction status of academic activities as per the academic calendar. The Class Coordinator monitors and guides the students regarding their academic needs and reports the status periodically to the HoD. The departmental level AMC also monitors the daily conduction of lectures and practical and prepare a report. The non-conduction of lecture/ practical is communicated to the concerned faculty through HoD.

The Guardian Teacher system is implemented in all the departments to address the academic and personal issues of any of the students. Each faculty member is assigned a batch of about 20 students for mentoring and addressing their issues and also to interact with the parents to update them on the progress of their ward. In order to have continuous improvement in the teaching-learning process, feedback is collected from the students twice in a semester. The feedback is analyzed and communicated to the concerned

faculty member/s through HoDs for further corrective actions if any.

File Description	Document
Upload any additional information	[View Document](#)

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

The institutional strategic plan is to undertake efforts to develop students through various capacity building and skill enhancement initiatives. The institute has established and ensured the quality academic practices and procedures for excellence in teaching learning process. Based on the information collected through various stakeholders, the institution always strived to improve its quality of programs. For overall growth of the students, the institute has introduced various capacity building and skill enhancement initiatives so as to make them employable resulting in good placements. The institute is committed for the overall development of students which involves curricular, co-curricular and extra- curricular activities. This helps the students to build up confidence for a good placement and also create a positive impression in social and professional circle. This can be achieved by ensuring participation of students on various platforms and involving them in various initiatives like:

1. Improvisation of soft skills through Student Training Program (STP)

The institute had taken initiative to enhance students' communication, language and soft skills by implementing the Student Training Program. The STP is introduced in different modules in every semester. These modules focus on Aptitude and logical reasoning, Personality and stress management, Listening, Speaking, Reading and Writing (LSRW) skills, Behavioural skills, Group Discussion, Personal Interview etc.

2. Learning through Value Added Programs under STP

The institute had conducted various activities in the form of guest lectures, certification courses through various value-added programs department wise. MOUs with various industries for the purpose of workshops, guest lectures on upcoming trends and technologies in corporate world like Latex, Linux, REVIT architecture, learning ICT and Computing Skills through e-Yantra.

3. Improvisation by introducing initiatives for life skills

Conduction of activities like lecture on health care initiatives, organ donation, diet and nutrition, boosting mental and physical health through Ayurveda and Yoga, Yoga sessions, Meditation sessions, Blood donation camp, Mega cleanliness drive, webinar on mental health. These initiatives help the students in their overall performance and thus getting placed in companies of repute.

File Description	Document
Upload any additional information	View Document

6.2.2 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules and procedures, etc.

Response:

The institute has a well-established administrative setup. Several committees are formed at institute level for appropriate coordination of the activities. Due departmental representation is ensured at institute level committees.

Some of the committees for internal coordination and monitoring are listed below:

1. Purchase Committee
2. Anti-Ragging Committee
3. Grievance Redressal Committee
4. Website Committee
5. Research Co-ordination Committee
6. Alumni Committee
7. Internal Complaints Committee
8. Committee for college Magazine 'Srujan'
9. Dead stock verification Committee

All the departments of the institute have departmental committees coordinated by faculty members and monitored by the Head of the Department to keep a check on academics for effective and efficient performance of the department.The service rules and regulations manual are at place for the employees of the institute. These manual details the duties and responsibilities, leave rules, code of conduct, qualifications for recruitment and scales of pay and promotion policy etc. of various categories of employees. The institute has well-designed website which displays all the important information. It also has well defined policy for carrying out various consultancy and research projects.

The institute has Chief Examination Officer (CEO) for coordinating with the departments and the students for university examinations and results, Chief Librarian for Central library, Dean for Training and Placement Office, rector and warden for boys' and girls' hostel and mess, Estate officer for regular maintenance of infrastructure facilities in the campus.

The institute has various administrative departments headed by Registrar for smooth functioning of administrative setup. The establishment section looks after the faculty recruitment, implementation of various HR policies like leave management, promotion etc. of employees. The students section looks after for allotment of roll numbers, collection and issuing of documents like bonafide certificate, college leaving certificate and other documents of importance. The scholarship section looks after implementing various public and private scholarship schemes for the benefit of eligible students. The examination section takes care of conduct of internal and external examinations by coordinating with SPPU. The accounts department looks after fee collection from students, salary disbursement of employees, maintaining records of all other financial transactions like purchases, bill settlements etc. It also looks after the financial

statements, internal and external audits of the institute.

File Description	Document
Upload any additional information	[View Document](#)
Link to Organogram of the Institution webpage	[View Document](#)

6.2.3 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
Screen shots of user interfaces	[View Document](#)
Details of implementation of e-governance in areas of operation, Administration etc	[View Document](#)
Any additional information	[View Document](#)

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff

Response:

1. Personal/ General Welfare Schemes for all staff:

- Earned leave, Half Pay leave/Medical leave for both teaching and nonteaching staff
- Maternity leave of 180 days for women staff and extended maternity leave if required
- EMBF
- Implementation of pay scales, contribution to Provident Fund and Gratuity
- Availability of campus clinic and a doctor to provide free medical check up for the teaching and non-teaching staff and their families
- Availability of an ambulance with all facilities at the campus round the clock
- Provision of medical treatment at concessional rates at Shrimati Kashibai Navale Medical College and General Hospital, Narhe and Sinhgad Dental College and Hospital, Vadgaon for the teaching and non-teaching staff and their families
- Faculty and staff quarters at the campus
- Availability of Canteens and Mess facility for students, teaching and non-teaching staff members
- Security guards at institute and residential areas in campus; Police chowky in the campus

- Admission to the wards of faculty and staff at schools and colleges run by STES
- Following are the other common facilities available in the campus
  - Free parking for staff and students
  - Two Nationalized Banks, 3 ATMs and a Post-office
  - Medical Store, General Store, separate ladies and gents' salons
  - Fruit shop
  - Laundry services
  - Pune Municipal Corporation bus facility
  - Fitness/Sports Facilities
    - Well-equipped gym
    - Swimming Pool
    - Tennis court
    - Cricket ground
    - Indoor Games Center

2. Welfare schemes for professional growth of t*eaching staff:*

- The institute motivates and support the faculty to pursue higher studies leading to Ph.D. by way of granting permission as either fully or partially sponsored.
- The institute organizes Train the Trainer (TTT) programme to identify the areas of improvisation in course conduction and resource sharing.
- The registration fee for the MOOC courses like NPTEL is partially reimbursed to the faculty.
- The heads of departments issue the appreciation letters to the faculty who have given good results in university examination or performed well in any activity of the department.

The Institute encourages and motivates the faculty for

- Attending workshops, conferences, seminars, short term courses, refresher courses, orientation programs organized by other institutes
- Membership of professional bodies and participation in the activities organized/sponsored by them
- Undergoing industrial training programs and visits to industry and distinguished institutes for knowledge acquisition / sharing
- Applying research project grants from various government organizations
- Upgrading teaching skills by way of modern teaching aids, use of online resources like Harvard, EDX courses, etc.

- Interaction with resource persons from industries, researchers and academicians

3. Non-Teaching Staff

- Arranging need based training programs for skill enhancement and permitting them to attend similar programs at other institutes
- Encouraging for higher studies and participation in the organization of technical events

File Description	Document
Upload any additional information	[View Document](#)

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

Response: 11.92

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**

2020-21	2019-20	2018-19	2017-18	2016-17
0	22	35	56	61

File Description	Document
Upload any additional information	[View Document](#)
Details of teachers provided with financial support to attend conference, workshops etc during the last five years	[View Document](#)

6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

Response: 2.6

6.3.3.1 **Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
3	5	2	2	1

File Description	Document
Upload any additional information	[View Document](#)
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff	[View Document](#)

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

Response: 43.07

6.3.4.1 **Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course year-wise during the last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
155	172	76	104	77

File Description	Document
Upload any additional information	[View Document](#)
Details of teachers attending professional development programmes during the last five years	[View Document](#)

6.3.5 Institutions Performance Appraisal System for teaching and non-teaching staff

Response:

The Institute has well established system for appraisal of teaching and non-teaching staff. It is mandatory for all the teaching and non-teaching staff to annually submit the appraisal form at the end of the academic year. The teaching and non-teaching staff have different formats of appraisal forms. The performance appraisal system consists of self-appraisal and appraisal by the reviewing officer.

1. Performance Appraisal System of the Teaching Staff

The performance appraisal of the teaching staff is carried out in online mode. The appraisal form consists of four parts covering Student Centric activities, Professional Development and Academic Contribution, Research Contribution and Assessment by the Head of Department and the Principal. The details of all the four parts are as below:

- Part 1: Student Centric activities [out of 100]
    - Teaching-Learning and Evaluation related activities
    - Co-Curricular, Extra Curricular & Extension Activities
    - Student's feedback, attendance for lectures and laboratory sessions conducted by the faculty and university results of a particular course.
- Part 2: Professional Development and Academic Contribution [out of 100]
    - Qualification improvement
    - Certification from reputed organization
    - Interaction with outside world as eminent resource person
    - Organization and participation in training programs
    - Internal Revenue Generation
    - Institutional level Governance responsibilities assigned
- Part 3: Research Contribution [out of 100]

- Publication of Research articles in referred and/or non-referred International Journals, Conference Proceedings, chapters in edited books, Text books and Reference books by National level publishers/State and Central Govt. etc.,
- Sponsored/ Funded Projects, Consultancy Projects etc.,
- Patents/Technology transfer / Product /Copy rights
- Research Guidance to post graduate and Ph.D. students.
- Part 4: Assessment by Head of Department and Principal

After self-evaluation on each of these parts is completed by the faculty, it is submitted for evaluation, remarks and endorsement by HoD. After the endorsement and submission by HoD, Principal gives the final remarks and forward the same to the management of the society. The appraisal form of each staff is screened by the apex authority of society, and guidelines if any for improvement are informed to the concerned staff.

For evaluating performance of a professor more emphasis is given to research contribution whereas for assistant professor more emphasis is given to student centric activities.

2. Performance Appraisal System of the Non- Teaching Staff:

- The performance-based appraisal system for non-teaching staff is in paper based format and it covers the information on multiple activities. It also consists of four parts.
- Part A: It covers the general information and academic background, Date of Joining, Improvement in Qualification, Nature of Duties performed, Officiating designation, Attendance, Knowledge, Quality of Work, Communication, Supervisory ability, Initiative and cooperation, Interpersonal relations etc.
- Part B: Remarks by Head of Department based on the information filled by individual staff
- Part C: Principal's remarks based on the information filled by individual staff and the assessment done by Head of Department
- Part D: Final Review by accepting authority.

The duly completed appraisal form in all aspects is forwarded to the management for final review and comments.

File Description	Document
Upload any additional information	[View Document](#)

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

The institute conducts transparent internal and external financial audits periodically. The internal financial audit of the Institute is entrusted to a committee of 3 or 4 accountants working with the STES along with the institute's accounts department.

The copies of invoices, vouchers, and supporting documents related to the expenditure are maintained in the respective department, and the original documents are sent to the accounts department of the institute. All the documents are verified by the accounting officer, and discrepancies if any, are brought to the attention of the head of department for immediate rectification. The accounts department consolidates all the expenditures made in the financial year. The internal audit committee of the STES audit all of the account records periodically during the financial year. The records verified during the internal audit are cash book, bank statements, entries in tally software, vouchers, cheque registers, fee registers, ledgers, inward and outward register, attendance muster, movement register, service book and biometric attendance. Further, internal audit is also carried out for all the grants received from BCUD, SPPU, AICTE, DST, DBT and other external agencies. During the internal financial audit, auditors raise objections related to finance and stock related reports, giving an opportunity to the college to address and rectify the same. They also give necessary guidance for improvement in account maintenance. These measures ensure no further discrepancy in the records that can objected to by the external auditors.

Every financial year, the external financial statutory audit is conducted by a chartered accountant. A comprehensive examination and verification of all the financial transactions are carried out. All observations and objections of the auditor are communicated through their report to the institute. These are examined by the Principal, the internal auditor, and the accounts department. The short comings in the auditor's report are addressed and rectified through compliance with necessary supporting documents within the stipulated time limits.

File Description	Document
Upload any additional information	View Document

6.4.2 Funds / Grants received from non-government bodies, individuals, philanthropers during the last five years (not covered in Criterion III)

Response: 2.58

6.4.2.1 Total Grants received from non-government bodies, individuals, Philanthropers year wise during the last five years (INR in Lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
0.265	0.885	0.45	0.98	00.00

File Description	Document
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the last five years	View Document
Annual statements of accounts	View Document

6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Response:

The institute has an effective system at place to track how well the financial resources are being used. The financial budget for the academic year is prepared by considering all the possible   income and expenditure. Being a self-financed college, the primary source of income to the college comes from the fee paid by the students. Every year, the college fees is approved by the Fee Regulating Authority, Government of Maharashtra by considering various expenditures of the institute including the audit reports. The institute conduct the admission process of all the programs as per the norms of the government and the fee is collected in the form of payment through Sinhgad institute student APP, demand draft, NEFT etc. Various funding schemes of SPPU under QIP are utilized for organization of conferences, workshops, Purchase of examination and sports related equipments. Research funds are also received by the faculty members from ASPIRE, BCUD. The Institute apply for various schemes of NSS and Student Welfare Department of SPPU and accordingly utilize the sanctioned funds for organizing various activities as per the norms of SPPU.

1. Resource Utilization Strategies

At the beginning of every academic year, all the departments prepare a budget based on the requirements, such as the purchase of equipment, instruments, consumables, etc. The financial requirements of each department are compiled and forwarded to the Principal's office. The Principal's office reviews the budget and presents it to the Local Management Committee (LMC) for approval. The LMC critically reviews the budget and after necessary modifications / corrections, it approves the budget. Once the budget is approved, the Heads of Departments can proceed with the planned activities.

2. Salaries of the Employees

  The salaries of employees are paid as per the statutes and norms of the SPPU and the Govt. of Maharashtra. The remuneration/honorarium is given to visiting/guest faculty for various academic and administrative events. The institute supports the faculty and staff by way of partial payment of registration/travelling expenses whenever they attend seminars/workshops/conferences/FDP/ NPTEL courses etc.

3. Augmentation of Infrastructure

  As per the requirement in syllabus, the infrastructure is augmented in terms of classrooms, laboratories, instruments, equipment, software, hardware and Furniture etc. The institute has a centralized purchase committee headed by a senior faculty, which ensures a transparent policy in procurement of all the items as per the allocated budget of the department.

4. Laboratory expenses and other Consumables

Funds are effectively utilized for the purchase of stationary requirement, Chemicals, Glassware and other consumables.

5. Repairs and Maintenance

The institute has a well-defined process for repairs and maintenance of civil work, electric work, annual maintenance work, Computer based repairs etc.

6. Library expenses

The institute allocate funds to the central library and the same is effectively utilized for the purchase of books, newspapers, magazines, journals and other e-resources as per the requirements of syllabus revision by the SPPU.

File Description	Document
Upload any 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

Response:

The Internal Quality Assurance Cell (IQAC) was set up in the academic year 2016-17. The IQAC comprises of senior faculty from various departments and expert members from management, industry, research institutes, social organizations, etc. 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. Strengthening Core and Inter-Disciplinary Research Among the Faculty and Students

In view of emerging trends in engineering and technology and the requirements of industry and their feedback, the IQAC has contributed in enhancing core and interdisciplinary research.

All the departments of the institute encourage the students and faculty to apply for funded projects and also carry out the major and minor research projects which are interdisciplinary and cross functional, participate and arrange the interdisciplinary seminars and conferences to attract researchers of eminence to visit the campus and interact with faculty and students.

Faculty members are also encouraged to collaborate with research organizations for projects, to publish their research work, to enrol for doctoral programs and to become members of and participate in the activities of professional bodies in their respective fields. The result is seen in

- Increase in number of research projects undertaken by the faculty in association with different funding agencies.
- Increased number of publications in Scopus/web of science/Google scholar indexed Journals and Conferences.

2. e-Resources Usage and Development

The IQAC of the institute has encouraged teachers and students to register in various online courses offered by NPTEL-SWAYAM. edX, Udemy, Harvard case studies etc., As a result several faculty and students attended and were certified by the above agencies in various contemporary technological domain

The institute is a nodal center for Virtual lab (VLab) of IITBombay. This facility has been fully utilized by all the engineering departments during last two years of pandemic period. Majority of the courses' practical are covered by way of virtual experimentation, modeling and simulation using VLab. The write-up for these practical assignments are also made available to the students using this facility. A total of more than 63000 students had registered and successfully availed the facility. The institute stood first in terms of number of students benefited by usage of this facility among the colleges who registered as nodal centers and it was also appreciated by the team of VLab from IIT Bombay.

The faculty of the institute has developed and shared the e-content of the courses with the students on regular basis. This is the regular practice followed by all the departments. As an outcome

- The faculty members got familiarized with the development and usage of e-learning resources which are accessible from anywhere.
- Access to numerous courses has enhanced the learning outcomes of the faculty members which helped in development of content of the course.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities (For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives   )

Response:

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 lesson plan for theory and practical sessions as per the allocated workload. These plans are reviewed and execution of the same is monitored by the HoD for regular conduction of lectures and practical. During semester, regular assignments and tutorials are conducted for each subject.

In addition to Term work, students appear for the various exams like Insem, prelims and final semester end exams. 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 Guest lectures, sponsored projects, internships, STP – VAP. The gaps were also bridged by introducing Skill development courses (Honors courses) and promotion for courses for life-long learning like NPTEL etc. Efforts were taken for the formation of entrepreneurship cell . The E- cell provides the mentoring and infrastructural support for the entrepreneurship project. It also makes available the financial support to the students by approaching the appropriate investors.

2. Adapting Technology for Teaching Learning Process and Administrative Purpose

Various approaches were percolated to facilitate working. Even during pandemic the teaching learning process and administration have adopted new techniques of delivery. Already it has been started with creation of ICT facilities in the classrooms for effective teaching

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) In case of students missing out the lectures due to technical constraints the recordings were shared with them for covering the loss of academics.

The practicals were conducted online through IITB, Vlab which helped the students in understanding the practical concepts. Even for Co-curricular courses and Extra Curricular Activities students were encouraged for online registration.

For administrative purpose, a mobile app is developed to pay the academic fees and examination fees. Examination forms are collected through google forms generated by the examination section.

The IQAC committee reviews the process regularly by interacting with the prime stakeholders viz. students, teachers and alumni. Effective 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 any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

6.5.3 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 intitiatives with other institution(s)**
3. **Participation in NIRF**
4. **any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)**

Response: A. All of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Upload details of Quality assurance initiatives of the institution	View Document
Upload any additional information	View Document
Paste web link of Annual reports of Institution	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 during the last five years.

Response:

The Institute is a co-ed college. The management provides equal opportunities to all, irrespective of class, creed, gender etc. It is carried out in following ways:

- Special programs such as **'Celebration of International Women's Day', 'Awareness on Sexual Harassment', 'Health Awareness Program'** etc. are arranged for girl students and women faculty members on regular basis within the campus.
- Institute provides equal opportunity for all to participate in administrative, co–curricular and extracurricular activities. The Institute also deputes women faculty members for orientation courses. Faculty members are nominated in different academic and administrative committees without any discrimination (gender, caste, religion).
- Special programs are organised for Girl Students such as *Nirbhay Kanya Abhiyan.* Such programs help the girl students to become stronger on emotional grounds as well as on physical grounds. The girls also participate in Sports and represent the Institute at various levels in various sport events.
- The institute gives equal opportunities to boys and girls to work as team leaders in various students' activities and allows them to become members of the students' council at institute level, which is formed at the beginning of every academic year.
- Women grievances cell is formed and it functions separately for the benefit of the women employees and girl students.
- At present 40% of faculty members are women employees and 23% students are girl students in the institute. This shows a healthy percentage and representation of women in the Human Resources of the Institute.
- Girl students are encouraged to apply for different schemes / scholarships from various regulatory bodies, corporate and NGOs, etc. They are also encouraged to participate in sports events like Cricket etc. to showcase their talent.
- Four out of eleven heads of department are women. In addition, in all the institutional and departmental committees, women faculty members are assigned with important portfolios.
- An average of 40% of final year project groups comprise girl students for the last 05 years.

The institute is a co-educational institute and always strives to maintain a safe and secure environment for all the women staff and girl students.

- Creating a safe environment in the institute is the key responsibility of security officers who are deployed 24x7 hours at different entry points of the institute. The security officers deployed at the gate allow the students, visitors and staff after the verification of Identity cards.
- Institute has CCTV surveillance throughout the campus. CCTV is continuously monitored by Security personnel at the estate office, making the campus safe. CCTVs are also deployed at the Girls' Hostel ensuring safety of the girls residing in the Hostel.
- Proper lighting arrangements are provided throughout the campus at all key locations, classrooms and common facilities.

- There are separate gents and ladies wash rooms on each floor which are cleaned every day and hygiene is maintained.

File Description	Document
Link for specific facilities provided for women in terms of: a. Safety and security b. Counselling c. Common Rooms d. Day care center for young children e. Any other relevant information	[View Document](#)

7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

1. Solar energy
2. Biogas plant
3. Wheeling to the Grid
4. Sensor-based energy conservation
5. Use of LED bulbs/ power efficient equipment

Response: C. 2 of the above

File Description	Document
Geotagged Photographs	[View Document](#)
Any other relevant information	[View Document](#)

7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- **Solid waste management**
- **Liquid waste management**
- **Biomedical waste management**
- **E-waste management**
- **Waste recycling system**
- **Hazardous chemicals and radioactive waste management**

Response:

1. Solid Waste Management

The solid waste is separated into two types, degradable and non-degradable. Degradable waste includes papers, journals, files, dry tree leaves, raw kitchen waste (canteen, mess) and hostel waste. Whereas non-biodegradable includes glass, metals, and E waste. After collection, these are disposed of through the collection mechanism set by the Pune Municipal Corporation which is adopted by the institute. For this, the Institute has an Annual Maintenance Contract with the approved agency, who collects the garbage on a

daily basis. Students and faculty members are made aware of issues of solid waste management and the Institute organises campaigns and collection drives in the campus. The Institute conducts workshops for non teaching faculty members to train them for preparing Cow Dung and Cow Urine based bioenzyme Jeevamrut, which is used for composting of dry leaves in the garden.

2. Liquid Waste Management

The institute has a Sewage Treatment Plant of 275 KLD installed in the campus which caters for treatment of wastewater generated in the entire campus. The plant is well maintained by an outside agency through an Annual Maintenance Contract which is renewed periodically. The treated wastewater is recycled and reused for gardening purpose. The recycle and reuse of wastewater has resulted in saving and reduced dependency on fresh water . The urinals in few of the departments are converted into waterless urinals thus resulting in huge saving of fresh water. Support staff looking after cleaning of these urinals are trained for proper usage of the system.

3. Biomedical Waste Management

Biomedical waste collected in the campus is disposed-off through a mechanism set by Sinhgad Dental College & Hospital located in the campus.

4. e-Waste Management

Keeping in mind the global hazards of electronic waste, Institute has set up a mechanism for removal of E-waste and scrap. Different types of e-waste generated in the institute like damaged batteries, cells, CDs, Hard Disk Drives, Monitors, Keyboards, Cables, Cartridges, etc. are collected and handed over to an external e-waste recycling agency. Students and staff are encouraged to deposit the e-waste generated at a specific location in every department, dedicated for collection of e-waste. The CDs which are no longer needed are utilized by students for decorative purposes during various college events.

5. Waste Recycling System

Waste water recycling is practiced in the institute as mentioned above. Emphasis is given on use of one side papers for internal communication. Other scrap is given to an outside agency with whom an MoU has been signed.

6. Hazardous Chemicals and Radioactive Waste Management

The daily academic activities do not make use of any hazard chemicals and radioactive materials. Hence there is no need for separate provision for their management. The acids used in departments like Biotechnology / Chemical or Civil Department are in diluted form and hence not detrimental to the environment.

7. Hazardous Waste Management

Hazardous waste such as Battery, Cells, Bulbs and Tube lights are collected separately and handed over to an external recycling agency.

File Description	Document
Any other relevant information	[View Document](#)
Link for Relevant documents like agreements/MoUs with Government and other approved agencies	[View Document](#)

7.1.4 Water conservation facilities available in the Institution:

1. **Rain water harvesting**
2. **Borewell /Open well recharge**
3. **Construction of tanks and bunds**
4. **Waste water recycling**
5. **Maintenance of water bodies and distribution system in the campus**

Response: D.1 of the above

File Description	Document
Any other relevant information	[View Document](#)

7.1.5 Green campus initiatives include:

1. **Restricted entry of automobiles**
2. **Use of Bicycles/ Battery powered vehicles**
3. **Pedestrian Friendly pathways**
4. **Ban on use of Plastic**
5. **landscaping with trees and plants**

Response: B. 3 of the above

File Description	Document
Any other relevant documents	[View Document](#)

7.1.6 Quality audits on environment and energy are regularly undertaken by the Institution and any awards received for such green campus initiatives:

1. **Green audit**
2. **Energy audit**
3. **Environment audit**
4. **Clean and green campus recognitions / awards**
5. **Beyond the campus environmental promotion activities**

Response: A. Any 4 or all of the above

File Description	Document
Certification by the auditing agency	View Document
Link for any other relevant information	View Document

7.1.7 The Institution has disabled-friendly, barrier free environment

1. Built environment with ramps/lifts for easy access to classrooms.
2. Divyangjan friendly washrooms
3. Signage including tactile path, lights, display boards and signposts
4. Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment
5. Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading

Response: C. 2 of the above

File Description	Document
Policy documents and information brochures on the support to be provided	View Document
Geotagged photographs / videos of the facilities	View Document
Any other relevant information	View Document
Link for any other relevant information	View Document

7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).

Response:

Institute is taking efforts / initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities. Institute is undertaking various initiatives in the form of celebration of days of Eminent personalities National Festivals, NSS and other such activities to provide for an inclusive environment by bringing students and teachers with diverse backgrounds on a single platform for creating an inclusive environment. These functions help in developing tolerance harmony towards culture, region and linguistics and also communal, social, economic and other diversities.

1. Cultural and Regional Programs

Institute organizes cultural programs for all the students and its planning and execution is done by students with the guidance of faculty members. The students are encouraged to participate in various cultural events and competitions at a national level event. Sinhgad Institutes organise an event called "Sinhgad Karandak", a national level event. The events consist of Singing, Dancing, Fashion Show, Street Play, Mr.

and Miss. Sinhgad. Traditional Day is celebrated at Institute to showcase traditions of different cultures of India from where the student comes.

2. Linguistic

The following programs are organised to emphasise the importance of Regional Language, Marathi. **Marathi Bhasha Din:** Marathi Bhasha Din is celebrated every year on 27th February by conducting various programmes, in the fond memory of eminent poet, playwright, novelist **V. V. Shirwadkar**. He was popularly known with his pen name *Kusumagraj.* He has many awards to his credit, including Padma Bhushan and Gyaanpeeth to name a few.. Students and faculty members are encouraged to participate in this event. The Institute magazine SRUJAN published every year is also a platform available for students and faculty members to showcase their talent in the area of Language, Arts as well as Technical sections.

3. Days of National Importance

Republic Day and Independence Day are celebrated every year. All teaching, non-teaching staff and students participate in these national festivals. Inspiring speeches are delivered on the occasion by the chief guest.

4. Communal and Socioeconomic Activities

The Institute has a policy to celebrate all days of National Importance as well as days of International Importance to maintain communal harmony amongst all the stakeholders. Institute is taking efforts / initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities. Institute is undertaking various initiatives in the form of celebration of days of Eminent personalities National Festivals, NSS and other such activities to provide for an inclusive environment by bringing students and teachers with diverse backgrounds on a single platform for creating an inclusive environment. These functions help in developing tolerance harmony towards culture, region and linguistics and also communal, social, economic and other diversities.

5. Universal Human Values and Ethics

The institute imparts these principles to the students during the FE induction program. This has been practiced since the last 02 years as an AICTE initiative to promote sensitization of students towards social harmony.

File Description	Document
Link for supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	[View Document](#)
Link for any other relevant information	[View Document](#)

7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations:

values, rights, duties and responsibilities of citizens (within 500 words).

Response:

Institute undertakes different initiatives by organizing various activities to sensitize students and employees to the constitutional obligation: Values, Rights, Duties and responsibilities of the citizens.

1. Constitution Day

Constitution Day is celebrated on 26th November at the institute. As per the Constitutional resolution, Indians have resolved the country into a Sovereign Socialist Secular Democratic Republic country and assures security to all its citizens. The information about Justice, Liberty and Equality is disseminated amongst the participants. The fundamental rights, Duties, Values and responsibilities of citizens as stated in the Constitution of India are brought to the notice of all concerned. Our constitution provides for human dignity, equality, social justice, Human rights and freedom, Rule of law, equity and respect and superiority of constitution in life. Whole country is governed on the basis of the rights and duties preserved in the Constitution of India. SPPU has introduced two compulsory Audit Courses; one at **First Year UG level named Democracy, Election and Governance** for all engineering disciplines and another for all **PG Programs named** "**Introduction to Constitution:**. Objective of these two courses is to create awareness and sensitize the students and employees to constitution obligations.

2. Republic Day and **Independence Day**

Republic Day on 26th January and Independence Day on 15th August are celebrated every year in Institute by organizing activities highlighting the importance of the Indian Constitution and to highlight the struggle of freedom fighters and to remember their battle and contribution towards the nation.

3. Tree Plantation Drive

Tree Plantation drive for Sustainable and Clean Environment by Students and Faculties in specified locations in and around city is conducted. This creates awareness amongst students as well as make them socially responsible for their duties towards the environment.

4. Water and Energy Saving Practices

Water and Energy Saving Practices inculcating amongst Students and faculty Members to Make Responsible Citizen and Awareness about Nation Building.

File Description	Document
Link for details of activities that inculcate values necessary to render students in to responsible citizens	[View Document](#)

7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

1. **The Code of Conduct is displayed on the website**
2. **There is a committee to monitor adherence to the Code of Conduct**
3. **Institution organizes professional ethics programmes for students, teachers, administrators and other staff**
4. **Annual awareness programmes on Code of Conduct are organized**

Response: B. 3 of the above

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting number of programmes organized reports on the various programs etc in support of the claims	[View Document](#)
Code of ethics policy document	[View Document](#)

7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

Response:

Institution practices a pluralist approach towards all religious functions and encourages the students and faculty to showcase the same. Staff and students get to know importance of national integrity in the country in general and their role in particular.

1. World Water Day (22nd March)

The day is used to advocate for the sustainable management of freshwater resources. Relevant issues include water scarcity, water pollution, inadequate water supply, lack of sanitation, and the impacts of climate change. The UN declares Theme for World Water Day every year, Various activities are planned in the Institute to celebrate this event.

2. World Environment Day (5th June)

It aims to inspire more people than ever before to take action to prevent the growing strain on planet Earth's natural resources to encourage awareness and environmental protection activities.

3. International Yoga Day (21st June)

Yoga is a physical, mental and spiritual practice which originated in India. The International Day of Yoga has been celebrated annually on 21 June since 2015.

4. National Librarian's Day (12th August)

National Library Day is celebrated in India on 12th of August Every year in memory of the Birthday of Mr. S.R. Ranganathan, the man who gave a lot in the Library and Information Science field.

5. National Sports Day (29th August)

This Day aims to fit India Movement, which inspires all for physical fitness. Institute has a swimming Pool, lush green cricket ground, tennis court, Gym for various sport activities. By practicing in sport activities students secure a number of medals at State, National and International levels.

6. Teachers' Day (5th September)

Institute celebrates Dr. Radhakrishnan's birthday as Teacher's Day with great respect.

7. Engineers Day (15th September)

Institute celebrates Engineers day 15th September consistently as an exceptional tribute to occasion of Birth Anniversary of Bharat Ratna Sir Mokshagundam Visvesvaraya as a tribute to the great engineer, who helped in building some of the architectural marvels including Krishna Raja Sagar dam in Karnataka.

8. Mahatma Gandhi and Lal Bahadur Shastri Birth Anniversary (2nd October)

Gandhi Jayanti is praised in our Institute on 2nd October consistently to stamp the birth commemoration of Mahatma Gandhi. It's also the birth anniversary of Lal Bahadur Shastri. The standards of truth, peacefulness and trustworthiness are recalled and generally plugged among the students of the institute. NSS students organize every year Campus Cleaning Drive to pay tribute to Mahatma Gandhi who is path setter for Clean Nation**.**

9. Ganesh Chaturthi and Navaratri

Every year the institute celebrates two main hindu festivals in the temple premises by organizing special poojas and worshipping idols of Lord Ganesha during Ganesh Chaturthi and Goddess Durga at the time of navaratri. Institute celebrates regional events such as Dandiya (Ras-Garba) during Navratri. It is open for all the students and staff members with family members of STES.

File Description	Document
Link for Annual report of the celebrations and commemorative events for the last five years	[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:

A) BEST PRACTICE I: Students' Training Program (STP)

Objectives

The advancement in technology has not only revolutionized the scope of engineering education, but also redefined the expectations from engineering graduates. A need was identified to start an innovative practice known as "Student Training Program" that would help the students to build a personality equipped with exquisite technical and soft skills. With this in mind, a state- of-the-art STP is being implemented from the year 2013-14. The aim of the program is to enhance the quality of the students by empowering them with skills that are globally at par. The major objectives are:

- To enhance the employability opportunity.
- To prepare students for entrepreneurship and
- To prepare students for higher education in India and abroad.

The Context

The Institute has a strong liaison with the industries. The training and placement wing of the Institute has identified the industry requirements and accordingly, based on recommendations received, the Institute has started an exhaustive programme under Students' Training Program (STP) which caters for the Industry requirements to make the students industry ready.

Reason Behind Starting STP

To enhance employability skills. This is achieved through:

- Integration into the curriculum: Training incorporated into the curriculum to help the students for preparation and self - evaluation in technical and soft skills.
- Expert faculty: A good blend of class room and hands-on training provided by industry experts as part of Value Added Programs.
- AMCAT assessment: Training need and outcome assessment using AMCAT, a test preferred by many well-known industries globally.

The Practice: The duration of STP is 120 hours that is spread over 5 semesters. It is to be undertaken by the student from the start of the second year of engineering. The details of the program are as follows:

1. STP 1: Semister III

At this level, the students are trained for 10 basic modules of two hours duration comprising of presentations, training and assignments. All Students undergo the first AMCAT Test in this semester.

- Module 1 -   Personal and career goal setting
- Module 2 -   SWOT analysis
- Module 3 -   Behavioural skills
- Module 4 -   Public speaking
- Module 5 -   Presentation skills
- Module 6 –   Resume writing
- Module 7 –   Listening skills
- Module 8 –   Group discussion
- Module 9 –   Report writing
- Module 10 –   Letter/Application writing

The AMCAT TEST is based on four modules comprising Quantitative Aptitude, Logical Reasoning, English & Personality. It is used to assess the training needs of the student for training in soft skills.

2. STP 2: Semister IV

Based on the AMCAT scores, the Students' Weaknesses are identified and further Training is planned accordingly. This program consists of 4 modules namely: Speaking Skills, Listening Skills, Reading Skills and Writing Skills.

3. STP 3: Semister V

This level of training aims at training and refreshing technical fundamentals core engineering subjects. The students are provided with training to improve basic domain knowledge and concepts of all core subjects. All students undergo AMCAT test 2 in this semester. In this, Quantitative Aptitude, Logical Reasoning, English & Personality and 2 modules on any 2 domain subjects are tested. This AMCAT assessment is used to evaluate the improvement in technical and soft skills of the students. These scores are used to assess the need for further training in technical and soft skills so as to enhance the students' employability.

4. STP 4: Semister VI

In this module, training on inculcating research aptitude and CV writing is imparted by senior faculty of the department. This training along with AMCAT scores make the students' ready for campus placement in 7th semester.

5. STP 5: Semister VII

Training from internal faculty and outside experts is provided for practicing Group Discussion and Personal Interview (GD-PI) as part of this module. QALR practice tests are conducted every week. All the departments conduct a Value Added Program of 18 hours' duration from industry experts as part of STP 5. The nature and type of this Value Added Program is based on the needs of industry and interest of the students.

Evidence of Success

The program has helped the students in motivating and preparing for better employment during campus placement. The outcome of this can be judged from the final year placement of students.

Problems Encountered and Resources Required

The only problem encountered for starting this program was the motivation and convincing the faculty to undergo training on soft skills area. The required resources are primarily computer laboratories which are sufficiently available in all the departments. The VAP is required to be conducted in parallel with regular academics. Therefore, extra sessions from industry experts are normally arranged on weekends. Convincing the students to attend such sessions is a challenging task. Industry experts and corporate trainers charge heavily to the students for professional training. However Institute provides the training at minimal cost

B) BEST PRACTICE II: Introduction of Virtual Lab (V-Lab), IIT Bombay

Objectives:

This practice has been introduced in all the departments of the institute since the last two years due to the pandemic situation. This situation has opened new doors for use of the latest technologies for disseminating the knowledge to the students in higher educational institutes. The institute has taken initiative in implementing V-Lab in association with IIT Bombay and it has been recognised as one of the nodal agencies for implementing the contents of VLab for other colleges in and around Pune as well.

The advantages of V-Lab are summarised as follows:

1. Remote access to simulation based labs in various disciplines is possible.
2. Opportunity for possibility of designing simulation based experimentations.
3. To extend the existing lab facilities for better understanding of the experimentation.

Context:

V-Lab, an IIT Bombay initiative has been a very effective and useful tool for the students across the country. It provides to the students the result of an experiment by modelling the physical phenomenon by a set of equations and carrying out simulations to yield the result of the particular experiment, hence providing an approximate version of the real world experiment. This would entail carrying out the actual lab experiment remotely. SCOE has signed the Expression of Interest with V-Lab and became one of the nodal agencies at Pune.

Action Plan for Effective Execution:

The faculty members from various departments of the institute worked under the guidance of the Central Coordinator appointed for this activity, monitored by head of departments and the institute head for its effective implementation. Our institute topped the list with total usage of more than 63000 and was appreciated by the IIT Bombay V-Lab Team for the efforts taken.

All the departmental coordinators under the Central Coordinator planned the execution of V-Lab in a very systematic manner. The Departmental Coordinators in association with respective Head of the Department, identified the faculty members for the subjects for which V-Lab facility is available. The subject teachers studied the available V-Lab exercises and then explained to the students in online mode. The students in turn, completed all these experiments and submitted the same in online mode. A proper record and feedback was taken for each of the experiments /activities conducted.

Evidence of Success:

As an outcome of the efforts taken by the Institute in implementing the VLab across various departments, the Institute has delivered maximum usage of 63692.

Problems Encountered and Resources Required:

The V-Lab is for the benefit of the students. The simulations are made available by experts from IITs and other renowned organisations to the students free of cost. However, this facility needs to be availed by all

students. After a consistent follow-up with students by the faculty members (in some cases), students have used this facility. More emphasis needs to be given on mentoring the students to make best use of the facility. Adequate resources are available for executing V-Lab, thus there is no dearth of resources.

File Description	Document
Link for Best practices in the Institutional web site	[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:

1. All-inclusive Campus and Policies for Overall Development of Students

Sinhgad College of Engineering under the aegis of Sinhgad Technical Education Society (STES) is affiliated to Savitribai Phule Pune University. It is recognised as one of the renowned institutions, not only in Maharashtra but also in India and outside India. The college has been fetching admissions across the country as well from other countries like Afghanistan and many African and Gulf countries. All-inclusive campus and favourable policies for overall development of students is the peculiarity of the college. All day-to-day facilities required for the students and faculty are available in the campus and the details are as follows:

2. Academic Infrastructure

The Institute has all the facilities available for effective conduction of Lectures and Practicals through various laboratories and well lit classrooms. State of the art laboratories and ICT enabled class rooms make the Teaching Learning very effective and enjoyable for the students. The institute has a culture of maintaining cordial relations between students and faculty members. Disputes / difficulties if any, are immediately looked into and resolved. The Institute also encourages students to participate in extracurricular and co-curricular activities for the overall development of the students.

Apart from the overall academic infrastructure, the All Inclusive Campus makes the students' stay comfortable and enjoyable. This helps the students to excel in their chosen field of career path such as campus placement, entrepreneurship, competitive examinations. higher studies etc. Apart from Academic Infrastructure, other facilities as mentioned below, help the students throughout their academic journey on the campus:

3. Excellent Hostel Facility

Separate hostels for boys and girls with a total capacity of 7000+ students including International students (4000+ for boys , 3000+ for girls) are available. Girls' Hostels have full security guards with 24×7 availability and CCTV vigilance for safety of girl students.

4. Central Library

The institute has a unique Central Library with facility of borrowing books from other domain area. Thus, an Engineering students working on interdisciplinary program like architecture or pharmacy can borrow books from these libraries through their library cards without any hastles. The Library is open 24×7 and has a seating capacity of 3000 students at a time. Library facility is also made available to SCoE alumni who are preparing for competitive examinations like UPSC, MPSC and others.

5. Mess and Cafeteria

The Campus has more than 10 different institutes in an area of more than 150 Acres. Students have many food court options available within the campus.

6. Other Ancillary Facilities

The institute has all other ancillary facilities available in the campus such as Stationery Store, Photocopy Centre, Wi-Fi, Laundry, Campus Clinic, Sports Ground, Swimming Pool, Cultural Centre, Gymnasium etc., Apart from this, the institute has two nationalized banks with ATM, post office, Private Courier Service within the campus. These facilities make the students stay in campus comfortable and joyful.

7. Staff Quarters

The staff quarters are made available to staff members as per the availability. Many staff members have been staying in these quarters for a long period of more than 10 years.

8. Special Efforts for Student Mentoring

The institute has a Teacher Guardian Scheme at place, wherein a group of approximately 20 students is monitored by one faculty member. The Teacher Guardian acts as students' mentor and looks into their academic and personal difficulties if any.

9. Strong Training and Placement Cell

The institute has a well-established training and placement cell headed by Dean, Training and Placement Officer and Departmental faculty coordinators. Several MNCs and reputed companies visit the campus for recruitment. Thus companies having good repute at national and international level are made available by the training and placement cell to the students for their internship and employability. The institute has a good track record for the highest number of placements for the last many years.

10. MoUs With Industries

All the departments of the institute have strong liaison with industries in the form of Memorandum of Understanding (MoU). Through these MoU, students get a chance to work in industry on live projects through internships and final year projects.

11. Co-Curricular and Extra-Curricular Activities

The Institute encourages the students to take part in Co-curricular and Extra-Curricular activities such as

participation in various technical competitions organised by institutes of National importance like IITs and NITs. For leadership and skill development, the institute has the Sinhgad Students Council, which has many clubs for the students. The clubs include Photography Club, English Club etc., The students of the institute are encouraged to participate in extracurricular activities like Drama, Debate, Elocution, Oratory and Theatrical Reading Competitions conducted by various groups, from University to Regional, State and National Level. The institute also encourages the students to participate in various sports competitions, from local to University, State and National level. The students of the institute have brought laurels in all the above mentioned activities for the last many years thus making the institute as one of the reputed institutes in state and national level.

The Institute promotes various activities of Local / State / National / International level. Interdisciplinary teams participating in BAHA, Rocketory, Robotics, HYPERION and STES Racing represent the Institute at National as well as International Level. The students also participate in other events such as Hyperion, Hackathon etc. They are also encouraged to participate in Technical competitions like Avishkar which is conducted by Savitribai Phule Pune University. The students are also encouraged to participate in various regional level competitions such as Purushottam Karandak, Firodiya Karandak through an active Art Circle of the Institute. They are also given an opportunity to work on social issues and for upliftment of society through various platforms like National Service Scheme, Prayas etc. Participation in such activities helps for the overall development of the student and help them for placement, higher education and make them ready to face all the challenges they come across during their professional life.

File Description	Document
Link for appropriate web in the Institutional website	[View Document](#)

5. CONCLUSION

Additional Information :

- Annual in-campus higher education fair of foreign universities for making awareness on admission procedures, scholarship, visa and other details.
- Industry-Institute Interaction Cell in every department for organizing industrial visits, internship and project work.
- Sinhgad Student Council for the promotion of student hobbies through different clubs.
- Professional student chapters for conducting different technical programs
- Technical clubs to carryout interdisciplinary projects
- Local chapter for NPTEL – SWAYAM courses and Spoken Tutorial – IITB, Mumbai
- Intituitional membership of National Digital Library, ARAI Library, and SPPU Library
- Uploading of the institutional activities uploaded on the institute social media platform Facebook (https://bit.ly/34xh6Nj) and YouTube (https://www.youtube.com/c/SinhgadCollege of Engineering)
- Winners in annual college magazine competition at SPPU for the year 2017 – 18
- Winners in BAJA, Rocketry and Solar Vehicle competitions at national and internarial competitions.

Concluding Remarks :

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 examination reforms. Good number of faculty are members of SPPU Senate, academic council, Board of Studies of SPPU. 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 well established research and consultancy policy. Good 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.

The institute has adequate state of art infrastructure and learning resources. Appropriate budgetary provisions are made to maintain and augment the existing Infrastructure.
Institute has well established organizational structure to execute smooth functioning of administrative and academic processes. It has effective welfare measures for teaching and non-teaching staff. The e-governance has been implemented wherever it is necessary.

In view of all the above credentials and recognition in the field of technical education over the period of time, the institute is planning for 'Centre of Excellence' and 'Academic Autonomy' in association with industry and Government bodies.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification
1.1.3	**Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years** 1. **Academic council/BoS of Affiliating university** 2. **Setting of question papers for UG/PG programs** 3. **Design and Development of Curriculum for Add on/ certificate/ Diploma Courses** 4. **Assessment /evaluation process of the affiliating University** Answer before DVV Verification : A. All of the above Answer After DVV Verification: B. Any 3 of the above
1.2.1	**Percentage of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented** 1.2.1.1. **Number of Programmes in which CBCS / Elective course system implemented.** Answer before DVV Verification : 17 Answer after DVV Verification: 14 Remark : HEI is offering only 14 programmes excluding Ph.D
1.2.2	**Number of Add on /Certificate programs offered during the last five years** 1.2.2.1. **How many Add on /Certificate programs are offered within the last 5 years.** Answer before DVV Verification:

1.2.2 (continued)

2020-21	2019-20	2018-19	2017-18	2016-17
58	85	33	29	32

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
55	79	29	28	31

1.2.3 **Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years**

1.2.3.1. **Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years**
Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
4800	7386	4788	6141	3568

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
1761	3268	3384	1943	1783

1.3.2 | **Average percentage of courses that include experiential learning through project work/field work/internship during last five years**

1.3.2.1. Number of courses that include experiential learning through project work/field work/internship year-wise during last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
87	77	80	83	78

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
87	77	80	83	78

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

1.3.3.1. Number of students undertaking project work/field work / internships
Answer before DVV Verification : 4635
Answer after DVV Verification: 4635

1.4.1 | *Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders*

1) Students

2)Teachers

3)Employers

4)Alumni

Answer before DVV Verification : A. All of the above
Answer After DVV Verification: A. All of the above

1.4.2 | **Feedback process of the Institution may be classified as follows:**

Options:

1. **Feedback collected, analysed and action taken and feedback available on website**
2. **Feedback collected, analysed and action has been taken**

3. **Feedback collected and analysed**
4. **Feedback collected**
5. **Feedback not collected**

　　Answer before DVV Verification : A. Feedback collected, analysed and action taken and feedback available on website

　　Answer After DVV Verification: A. Feedback collected, analysed and action taken and feedback available on website

2.1.1	**Average Enrolment percentage (Average of last five years)**

2.1.1.1. **Number of students admitted year-wise during last five years**

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1161	1209	1093	1424	1389

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
1161	1209	1093	1424	1389

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1350	1368	1404	1512	1512

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
1350	1368	1404	1512	1512

2.1.2	**Average percentage of seats filled against reserved 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:

2020-21	2019-20	2018-19	2017-18	2016-17
647	732	547	608	642

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
509	650	515	556	569

	Remark : As per the documents provided
2.3.3	**Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year)** 2.3.3.1. Number of mentors Answer before DVV Verification : 265 Answer after DVV Verification: 265
2.4.2	**Average percentage of full time teachers with 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)** 2.4.2.1. **Number of full time teachers with *Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt.* year wise during the last five years** Answer before DVV Verification: 	2020-21	2019-20	2018-19	2017-18	2016-17
---	---	---	---	---
62	51	45	44	42 | Answer After DVV Verification : | 2020-21	2019-20	2018-19	2017-18	2016-17
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62	51	45	44	42	
2.4.3	**Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)** 2.4.3.1. **Total experience of full-time teachers** Answer before DVV Verification : 2306 Answer after DVV Verification: 2306
2.6.3	**Average pass percentage of Students during last five years** 2.6.3.1. **Number of final year students who passed the university examination year-wise during the last five years** Answer before DVV Verification: 	2020-21	2019-20	2018-19	2017-18	2016-17
---	---	---	---	---
1368	1433	1371	1469	1546 | Answer After DVV Verification : | 2020-21	2019-20	2018-19	2017-18	2016-17
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1368	1433	1371	1469	1546	 2.6.3.2. **Number of final year students who appeared for the university examination year-wise during the last five years**

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1379	1449	1516	1557	1655

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
1379	1449	1516	1557	1655

| 3.1.1 | **Grants received from Government and non-governmental agencies for research projects, endowments, Chairs 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:

2020-21	2019-20	2018-19	2017-18	2016-17
27.73	22.03	00.00	21.00	85.12

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
27.73	22.03	00.00	21.00	85.12

| 3.1.2 | **Percentage of teachers recognized as research guides (latest completed academic year)**

3.1.2.1. **Number of teachers recognized as research guides**
Answer before DVV Verification : 19
Answer after DVV Verification: 19 |

| 3.1.3 | **Percentage of departments having Research projects funded by government and non government agencies during the last five years**

3.1.3.1. **Number of departments having Research projects funded by government and non-government agencies during the last five years**
Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
8	8	8	8	8

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17

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| 8 | 8 | 8 | 8 | 8 |

3.1.3.2. **Number of departments offering academic programes**

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
9	9	9	9	9

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
9	9	9	9	9

3.2.2	**Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years** 3.2.2.1. **Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year-wise during last five years**

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
48	51	45	46	63

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
48	51	45	46	63

3.3.1	**Number of Ph.Ds registered per eligible teacher during the last five years** 3.3.1.1. **How many Ph.Ds registered per eligible teacher within last five years** Answer before DVV Verification : 49 Answer after DVV Verification: 49 3.3.1.2. **Number of teachers recognized as guides during the last five years** Answer before DVV Verification : 19 Answer after DVV Verification: 19

3.3.2	**Number of research papers per teachers in the Journals notified on UGC website during the last five years** 3.3.2.1. **Number of research papers in the Journals notified on UGC website during the last five years.**

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
139	240	124	137	142

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
101	184	61	80	56

Remark : As per the documents provided

3.3.3

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

 3.3.3.1. **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:

2020-21	2019-20	2018-19	2017-18	2016-17
28	64	22	30	27

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
28	64	22	30	27

3.4.2

Number of awards and recognitions received for extension activities from government/ government recognised bodies during the last five years

 3.4.2.1. **Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.**

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
02	11	08	06	05

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
02	11	08	06	05

3.4.3

Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

 3.4.3.1. **Number of extension and outreached Programmes 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:

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2020-21	2019-20	2018-19	2017-18	2016-17
31	34	33	45	29

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
31	34	33	45	29

3.4.4	**Average percentage of students participating in extension activities at 3.4.3. above during last five years** 3.4.4.1. **Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years** Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1835	1465	1430	2604	1999

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
1835	1465	1430	2604	1999

3.5.1	**Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year** 3.5.1.1. **Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year-wise during the last five years** Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
233	288	313	236	224

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
233	288	313	236	224

3.5.2	**Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years** 3.5.2.1. **Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years** Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
09	06	07	06	15

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
09	06	07	06	15

4.1.3	**Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc.** *(Data for the latest completed academic year)* 4.1.3.1. Number of classrooms and seminar halls with ICT facilities Answer before DVV Verification : 65 Answer after DVV Verification: 65

4.1.4	**Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years(INR in Lakhs)** 4.1.4.1. **Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)** Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
30.28	10.1	53.52	29.6	79.64

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
30.28	10.1	53.52	29.6	79.64

4.2.2	**The institution has subscription for the following e-resources** 1. **e-journals** 2. **e-ShodhSindhu** 3. **Shodhganga Membership** 4. **e-books** 5. **Databases** 6. **Remote access to e-resources** Answer before DVV Verification : A. Any 4 or more of the above Answer After DVV Verification: A. Any 4 or more of the above
4.2.3	**Average annual expenditure for purchase of books/e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)** 4.2.3.1. **Annual expenditure of purchase of books/e-books and subscription to journals/e-journals year wise during last five years (INR in Lakhs)**

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
0.21	0.65	1.03	3.50	7.95

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
0.21	0.65	1.03	3.5	7.95

4.2.4	**Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the latest completed academic year**
	
	    4.2.4.1. Number of teachers and students using library per day over last one year
	    Answer before DVV Verification : 735
	    Answer after DVV Verification: 735

4.3.3	**Bandwidth of internet connection in the Institution**
	
	    Answer before DVV Verification : A. ?50 MBPS
	    Answer After DVV Verification: A. ?50 MBPS

4.4.1	**Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years(INR in Lakhs)**
	
	    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)**
	    Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
202.73	261.00	274.57	259.80	273.39

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
196.27	253.92	270.35	6.26	265.04

Remark : As per the documents provided

5.1.1	**Average percentage of students benefited by scholarships and freeships provided by the Government during last five years** 5.1.1.1. **Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)**

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
3936	3584	3393	3151	3125

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
3936	3584	3393	3151	3125

5.1.2	**Average percentage of students benefitted by scholarships, freeships etc. provided by the institution / non- government agencies during the last five years** 5.1.2.1. **Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)** Answer before DVV Verification: <table><tr><th>2020-21</th><th>2019-20</th><th>2018-19</th><th>2017-18</th><th>2016-17</th></tr><tr><td>22</td><td>55</td><td>57</td><td>93</td><td>142</td></tr></table> Answer After DVV Verification : <table><tr><th>2020-21</th><th>2019-20</th><th>2018-19</th><th>2017-18</th><th>2016-17</th></tr><tr><td>22</td><td>55</td><td>57</td><td>93</td><td>142</td></tr></table>
5.1.3	**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** Answer before DVV Verification : A. All of the above Answer After DVV Verification: A. All of the above
5.1.4	**Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years** 5.1.4.1. **Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years** Answer before DVV Verification: <table><tr><th>2020-21</th><th>2019-20</th><th>2018-19</th><th>2017-18</th><th>2016-17</th></tr><tr><td>1399</td><td>1176</td><td>1723</td><td>849</td><td>748</td></tr></table>

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
1399	1176	1723	849	748

5.1.5	**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** Answer before DVV Verification : A. All of the above Answer After DVV Verification: B. 3 of the above
5.2.1	**Average percentage of placement of outgoing students during the last five years** 5.2.1.1. **Number of outgoing students placed year - wise during the last five years.** Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
404	601	451	333	383

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
404	601	451	333	383

5.2.2	**Average percentage of students progressing to higher education during the last five years** 5.2.2.1. **Number of outgoing student progression to higher education during last five years** Answer before DVV Verification : 582 Answer after DVV Verification: 582
5.2.3	**Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)** 5.2.3.1. **Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations*, etc.*)) year-wise during last five years** Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17

| 72 | 114 | 289 | 107 | 54 |

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
72	114	289	107	54

5.2.3.2. **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:

2020-21	2019-20	2018-19	2017-18	2016-17
143	201	390	301	206

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
143	201	390	301	206

| 5.3.1 | **Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.**

5.3.1.1. **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) year-wise during the last five years.**
Answer before DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
\|---\|---\|---\|---\|---\|
| 3 | 36 | 64 | 40 | 55 |

Answer After DVV Verification :

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
\|---\|---\|---\|---\|---\|
3	36	64	40	55	
5.3.3	**Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)** 5.3.3.1. **Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years** Answer before DVV Verification: | 2020-21	2019-20	2018-19	2017-18	2016-17 | |---|---|---|---|---|
1	31	38	26	34	

	Answer After DVV Verification :				
	2020-21	2019-20	2018-19	2017-18	2016-17
	1	31	38	26	34

6.2.3	**Implementation of e-governance in areas of operation** 1. **Administration** 2. **Finance and Accounts** 3. **Student Admission and Support** 4. **Examination** Answer before DVV Verification : A. All of the above Answer After DVV Verification: A. All of the above
6.3.2	**Average percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years** 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** Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
0	22	35	56	61

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
0	22	35	56	61

6.3.3	**Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years** 6.3.3.1. **Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years** Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
3	5	2	2	1

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
3	5	2	2	1

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6.3.4	**Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).**
	6.3.4.1. **Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course year-wise during the last five years**

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
155	172	76	104	77

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
155	172	76	104	77

6.4.2	**Funds / Grants received from non-government bodies, individuals, philanthropers during the last five years (not covered in Criterion III)**
	6.4.2.1. Total Grants received from non-government bodies, individuals, Philanthropers year wise during the last five years (INR in Lakhs)

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
0.265	0.885	0.45	0.98	00.00

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
0.265	0.885	0.45	0.98	00.00

6.5.3	**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 intitiatives with other institution(s)**
3. **Participation in NIRF**
4. **any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)**

Answer before DVV Verification : A. All of the above
Answer After DVV Verification: A. All of the above

7.1.2	**The Institution has facilities for alternate sources of energy and energy conservation measures**

1. **Solar energy**
2. **Biogas plant**
3. **Wheeling to the Grid**
4. **Sensor-based energy conservation**
5. **Use of LED bulbs/ power efficient equipment**

Answer before DVV Verification : B. 3 of the above

Answer After DVV Verification: C. 2 of the above

7.1.4	**Water conservation facilities available in the Institution:**

1. **Rain water harvesting**
2. **Borewell /Open well recharge**
3. **Construction of tanks and bunds**
4. **Waste water recycling**
5. **Maintenance of water bodies and distribution system in the campus**

Answer before DVV Verification : C. 2 of the above

Answer After DVV Verification: D.1 of the above

7.1.5	**Green campus initiatives include:**

1. **Restricted entry of automobiles**
2. **Use of Bicycles/ Battery powered vehicles**
3. **Pedestrian Friendly pathways**
4. **Ban on use of Plastic**
5. **landscaping with trees and plants**

Answer before DVV Verification : A. Any 4 or All of the above

Answer After DVV Verification: B. 3 of the above

7.1.6	**Quality audits on environment and energy are regularly undertaken by the Institution and any awards received for such green campus initiatives:**

1. **Green audit**
2. **Energy audit**
3. **Environment audit**
4. **Clean and green campus recognitions / awards**
5. **Beyond the campus environmental promotion activities**

Answer before DVV Verification : A. Any 4 or all of the above

Answer After DVV Verification: A. Any 4 or all of the above

7.1.7	**The Institution has disabled-friendly, barrier free environment**

1. **Built environment with ramps/lifts for easy access to classrooms.**
2. **Divyangjan friendly washrooms**
3. **Signage including tactile path, lights, display boards and signposts**
4. **Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment**
5. **Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading**

	Answer before DVV Verification : C. 2 of the above
	Answer After DVV Verification: C. 2 of the above
7.1.10	**The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.** 1. **The Code of Conduct is displayed on the website** 2. **There is a committee to monitor adherence to the Code of Conduct** 3. **Institution organizes professional ethics programmes for students, teachers, administrators and other staff** 4. **Annual awareness programmes on Code of Conduct are organized** Answer before DVV Verification : B. 3 of the above Answer After DVV Verification: B. 3 of the above

2.Extended Profile Deviations

ID	Extended Questions
1.1	**Number of courses offered by the Institution across all programs during the last five years** Answer before DVV Verification: <table><tr><td>2020-21</td><td>2019-20</td><td>2018-19</td><td>2017-18</td><td>2016-17</td></tr><tr><td>608</td><td>592</td><td>613</td><td>724</td><td>714</td></tr></table> Answer After DVV Verification: <table><tr><td>2020-21</td><td>2019-20</td><td>2018-19</td><td>2017-18</td><td>2016-17</td></tr><tr><td>608</td><td>592</td><td>613</td><td>724</td><td>714</td></tr></table>
1.2	**Number of programs offered year-wise for last five years** Answer before DVV Verification: <table><tr><td>2020-21</td><td>2019-20</td><td>2018-19</td><td>2017-18</td><td>2016-17</td></tr><tr><td>17</td><td>18</td><td>20</td><td>26</td><td>26</td></tr></table> Answer After DVV Verification: <table><tr><td>2020-21</td><td>2019-20</td><td>2018-19</td><td>2017-18</td><td>2016-17</td></tr><tr><td>15</td><td>16</td><td>18</td><td>24</td><td>24</td></tr></table>
2.1	**Number of students year-wise during last five years** Answer before DVV Verification: <table><tr><td>2020-21</td><td>2019-20</td><td>2018-19</td><td>2017-18</td><td>2016-17</td></tr><tr><td>5443</td><td>5175</td><td>5307</td><td>5784</td><td>5931</td></tr></table> Answer After DVV Verification: <table><tr><td>2020-21</td><td>2019-20</td><td>2018-19</td><td>2017-18</td><td>2016-17</td></tr></table>

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5443	5175	5307	5784	5931

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
675	903	702	756	756

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
675	903	702	756	756

2.3	**Number of outgoing / final year students year-wise during last five years**

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1368	1433	1371	1469	1546

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1379	1449	1516	1557	1655

3.1	**Number of full time teachers year-wise during the last five years**

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
265	269	300	323	311

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
265	245	256	323	311

3.2	**Number of sanctioned posts year-wise during last five years**

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
265	245	256	373	371

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17

265	245	256	373	371

4.1	**Total number of classrooms and seminar halls** Answer before DVV Verification : 65 Answer after DVV Verification : 65

4.2	**Total Expenditure excluding salary year-wise during last five years (INR in Lakhs)** Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
768.41	984.11	1080.59	955.36	1964.07

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
768.41	984.11	1080.59	955.36	1964.07

4.3	**Number of Computers** Answer before DVV Verification : 981 Answer after DVV Verification : 981