

# **SELF STUDY REPORT**

**FOR**

**1<sup>st</sup> CYCLE OF ACCREDITATION**

**CHOUDHARI ATTARSINGH YADAV MEMORIAL TRUST  
SIDDHANT COLLEGE OF ENGINEERING,SUDUMBARE**

A/P-SUDUMBRE, CHAKAN-TALEGAON ROAD, TALUKA- MAVAL, DISTRICT-  
PUNE, PIN- 412109

412109

[www.siddhantcoe.in](http://www.siddhantcoe.in)

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**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**

**BANGALORE**

**February 2018**

# 1. EXECUTIVE SUMMARY

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## 1.1 INTRODUCTION

CAYMET's Siddhant College of Engineering, Sudumbare, Pune (SCE) was established in 2005, in the vicinity of the Asia's biggest industrial (Pimpri-Chinchwad, Chakan, Talawade and Talegaon) belts with an objective of imparting value based quality education. SCE is approved by AICTE, New Delhi and is affiliated to Savitribai Phule Pune University (SPPU), Pune. SCE provides Under Graduate programs in Mechanical Engineering, Electronics & Telecommunication Engineering, Computer Engineering, Civil Engineering and Information Technology. In addition, Institute also offers the post-graduation programs in ME (Mechanical - Design), ME (Computer Engineering), ME (Electronics - Digital Systems), ME (Electronics & Telecommunication - VLSI & Embedded Systems), ME (Information Technology). SCE also runs Diploma program in Mechanical Engineering, Civil Engineering, Computer Engineering and Electronics & Telecommunication discipline.

SCE is recognized under Hindi Linguistic Minority category. Minority serving institutions (MSIs) emerged in response to a history of inequity, lack of minority people's access to majority institutions and significant demographic changes in the country. SCE is situated at Village Sudumbare, one of the biggest Industrial belts close to city Pune. SCE caters for transport facility for staff and students and also has Hostel facility for students and staff. The strength of SCE lies in picturesque environment, excellent infrastructural facility, qualified and experienced faculty, commitment to personal attention, motivation to excel in academics, extracurricular activities and continuous interaction with Industry.

### Vision

Empowering through technical, economical and social development.

### Mission

- To impart quality education through dedicated efforts.
- To inculcate entrepreneurial attitude and values amongst learners.
- To inculcate ethical values and technology to serve social needs.
- To create conducive environment suitable for research and innovative ideas.

## 1.2 Strength, Weakness, Opportunity and Challenges (SWOC)

### Institutional Strength

- Qualified and experienced faculties.
- Academic flexibility to advance learners and excess support to slow learners.
- Efforts in accommodating diversified students, faculties and staff to impart quality education.
- Strong Management back up for Teaching-Learning Process.
- Stakeholder's participation in teaching-learning activities.

- Class rooms are equipped with LCD Projectors and PA system enabling delivery of lectures in Affective Domain.
- Adequate infrastructural facility with WiFi and conducive environment for academic.
- Transport facility connecting all parts of cities.
- Hygienic, Immaculate, and environment friendly oxygen zone campus
- Encouraging environment for teaching-learning process with amenities including hostel accommodation and common rooms (Boys and girls), campus clinic, cafeteria, auditorium, play ground with sports facilities, clean potable water, 500 KVA genset and UPS for power backup.
- Research and books Publications of faculty in national and international Conference/ Seminar / Journals.
- Central library with reference books, e-journals, with reading room facility.
- Professional Chapters for Students are functioning to enhance co-curricular and extra-curricular activities.
- Sensitization of Energy Conservation Awareness amongst faculty and students.
- Strong Anti-ragging practices are adopted.
- Financial support to arrange co-curricular and extra-curricular activities
- Faculties are encouraged to participate/arrange workshops/seminars/conferences etc
- MoUs with Industries to facilitate learning beyond syllabus for faculty and students.
- Support to faculty to upgrade their qualification.
- Faculties are encouraged to participate in NPTEL activities.
- External and Internal Feedback of Faculty teaching is used as a measure for continuous improvement in teaching-learning process.
- Adequate company specific technical/interpersonal training to students to help them appear for examination, campus placement etc.

### **Institutional Weakness**

- Limited academic flexibility being affiliated to Savitribai Phule Pune University.
- Location limitation to get urban students.
- Restriction in formulating choice based curriculum, open electives, industrial based subjects in curriculum
- Restriction in accommodating cutting edge technologies learning, interdisciplinary research based learning with respect to market dynamics due to non-flexibility in curriculum.
- Unavailability of public transport.
- Fluctuation of electricity supply being in the rural area.

### **Institutional Opportunity**

- Admission of overseas students
- Continuous enhancement of Industry-Institute partnership
- Starting up new courses like BE Mechatronics to accommodate interdisciplinary relevance
- Publication of own college National/International Journal
- Enhancing the opportunities for Industrial in plant Training to students and faculty
- Enhanced Practicing of Outcome Based Education.

## **Institutional Challenge**

- Enhancing strengthening positive thinking amongst the students.
- To improve soft skills and employability skills of students.
- Consultancy work by Faculty.
- Paperless working.
- Employability efforts for slow learners.
- Effective academic collaboration with NITs/IITs.
- Practicing IPR issues by the students and faculty members.
- Availability of research grants from Industries for affiliated Institutes.

## **1.3 CRITERIA WISE SUMMARY**

### **Curricular Aspects**

Curricular aspects are given dominant importance and focus it to form basis of technical development of students. Institute follows the curriculum prescribed by the Savitribai Phule Pune University. SCE frames the strategies for implementing the curriculum which is replicated in academic calendar. Beginning of the academic session / semester, Principal & HODs give instructions regarding Academic calendar.

Faculties are conveyed the content of syllabus and contact hours of curriculum through prepared course files. Faculty communicates teaching strategies and teaching methodology for effective learning during classroom contact hours. Periodic review is taken to cope up with pace of curriculum completion, along with effectiveness of curriculum delivery. Online/offline tools are provided to students for effective practice of MCQ's for improvement in technical, continues feedback system to identify curriculum gaps. Feedback, comments and suggestions are given to the subject syllabus revision committee and strategized in institute for overcoming by measures through industrial visits, guest lectures, value added courses, participation in workshops/conferences/exhibitions.

Remedial classes are conducted for slow learners to furnish their own pace of learning. SCE has ERP tool for distribution of curriculum.

Skill development and enrichment programs, certificate courses are offered by all departments of SCE and conducts awareness of gender equality, climate change, environmental education, and human right as per SPPU curriculum.

### **Teaching-learning and Evaluation**

Student admission at the SCE is centralized and purely on merit as per the common entrance test conducted by Directorate of Technical Education (DTE) Maharashtra state. Admission process of SCE is transparent and follows rules and regulations formulated by the government. SCE follows the guidelines of DTE regarding reservations to the backward classes, J & K and management quota. Encouragement is given to the students for participating in national and international competitions. At SCE, interactive learning, collaborative learning, independent learning, Project based learning, and Case -based approach are adopted to create student centric learning. Some topics are taught in a class through simulations by using software like MATLAB, KEILSDK, CAD/CAM, Raspberry pi. Students are encouraged to use (National Program on Technology Enhanced

Learning) NPTEL video lectures, audio/video clips, animations/simulations. Faculty are encouraged and sponsored to attend seminars, workshops, which helps them to adopt new technology in teaching. Academic calendar is planned and prepared in advance. It includes details about curriculum planning, development of teaching learning; evaluation methods and schedule are discussed and finalized. Internal assessment pattern is discussed at the starting of each semester and Continuous assessment is done to improve the students' academic performance. Guardian Faculty Member (GFM) is appointed to provide personal and academic support for a batch of students. Policies and procedure of Savitribai Phule Pune University are followed for evaluation and assessment. Examination section is in existence at the SCE which ensures the smooth facilitation of examination through Chief Examination Officer.

### **Research, Innovations and Extension**

SCE offers facilities to faculty and students for participating in research activities and improving research culture. 'Institutional Research Committee' (IRC) is formed to monitor R&D, implements the research policies as prescribed by SPPU and develops collaborations with various organizations. SCE arranges various workshops where researchers from IIT and Industry are engaged.

Faculty perusing higher education are motivated to participate and paper presentation at national and international seminars, conferences and for attending workshops. Library resources are also made available during extended college hours. SCE has digital library, e-learning resources IT infrastructure for research activities. Faculty and students are sensitized of publications in standard referred indexed journal and citation in Google Scholar, Scopus etc.

SCE has MoUs with industries for sharing technical best practices. Faculties are encouraged to take up industry/field based problems for research proposals for receiving research grants. Such efforts by faculties are well acknowledged in self-appraisal.

### **Infrastructure and Learning Resources**

SCE recognizes the need by providing learning environment to its students through effective learning outcomes through standard mandatory infrastructure

SCE provides well maintained classrooms for each department with LCD projector, OHP, white/black/green boards. SCE has dedicated supervisor of maintenance of equipment and computing facilities SCE.

SCE has a Central library equipped with collection of reference books, E-journals and digital study material (NPTEL Videos) and access provided to faculty and students through online process. SCE campus and hostels are Wi-Fi enabled. SCE has girls' hostel and boys' hostel in campus.

Gym and yoga center is available with trainer. Medical room and doctor is available daily within hostel premises. SCE ensures supply of portable water to students by installing water cooler and purifier in the hostel and campus.

Apart from technical infrastructure, supplementary physical facilities like ample parking space, clean and adequate potable water, green campus, waste water management, rain water harvesting, adequate toilets, and availability of all season Paved block roads, and 24 X 7 security personals.

## **Student Support and Progression**

SCE publishes prospectus annually admission mentioning eligibility criteria, academics details, technical expertise, placement opportunities, infrastructural facilities, employability and growth opportunities. To enrich the employability skills and inculcate originality, the students are encouraged to participate in various competitions. Faculty members encourage students to participate in competitions with extended use of all infrastructural facilities including laboratories, library provided by institute.

Apart from various academic resources like professional counseling, NPTEL from IITs, measures are taken up by faculty to strengthen slow learners.

Apart from government scholarships the institute provided flexibility to needy students to pay fees in installments, SCE management provides scholarship.

SCE sports activities reserves 2 days in second semester for all students to participate in various events, indoor and outdoor sports facilities are available in campus. Students actively participate in academic, placement and administrative activities in college. Student's council, robotics club, EDC Cell, NSS student's achievements are highlighted in college social media.

The T & P officer provides information to all students regarding overall placement procedures of campus recruitment.

SCE student grievances cell benefits students to resolve issues that will affect their performance in general. The cell addresses administrative issues, facilities rendered to students, diversified opinions of students. The Anti-ragging committee is constituted in SCE as per AICTE guidelines. SCE acknowledges achievers and motivate rest of other students to excel.

## **Governance, Leadership and Management**

SCE continuously works on vision provided by management to convey the quality education to all in society. The vision is implemented through mission under the guidance and leadership of Hon. Dr. U.M. Shirsat (Principal) in normal working of SCE to articulate administrative and academic-administrative framework of Institute. This structure is further encouraged and practiced by faculty in discussion with heads of departments. The philosophy of governance is "Decentralization" to empower internal stakeholders for academic excellence. Faculty are empowered to make decisions related to formulating laboratory infrastructure, selection of laboratory equipment's and encouraged to participate in interaction of stakeholder's activities to align academic requirements.

The financial term called "budgeting" is carried out annually to satisfy the academic and administrative requirements of all teaching-learning related activities before commencement of the semester. The institute also provided appropriate financial support to co-curricular and extra-curricular activities of students under the guidance of faculty coordinators. Faculty appraisal cell is governed by Internal Quality Assurance Cell (IQAC) containing of members from management, Principal, senior faculty, alumni, Industry expert to demonstrate the academic excellence.

### **Institutional Values and Best Practices**

SCE is fully aware about gender equity, i.e. everyone in the campus enjoys the same right, resource, opportunities and protections. This is achieved by arranging various programs and creating the environment. The faculty and student are prepared for issue of environment consciousness, issues of carbon emission, pollution awareness, rainwater harvesting, sewage water utilization, E-waste management and green practices.

SCE has provided facilities like lift, rest room, brail software for physical disabled (Divyanajan) students and staff. SCE is located in industrial belt and students are from rural and agricultural background. To bridge the gap between SCE and industry, SCE has initiated number of programs with the help of neighboring industries. For the best interest of student institute has laid down model code of conduct for students, teachers, principal and for governing body. SCE regularly organize social, ethical programs.

SCE functions as the professional code of AICTE/DTE/SPPU and focuses on the overall personality development of the student with the academic excellence. Enormous efforts are taken by the management to include research culture in the staff.

## 2. PROFILE

### 2.1 BASIC INFORMATION

| Name and Address of the College |   |
|---------------------------------|---|
| Name                            | Choudhari Attarsingh Yadav Memorial Trust<br>Siddhant College Of Engineering, Sudumbare |
| Address                         | A/p-Sudumbre, Chakan-Talegaon Road, Taluka-<br>Maval, District-Pune, Pin- 412109        |
| City                            | Pune  |
| State                           | Maharashtra   |
| Pin                             | 412109  |
| Website                         | <a href="http://www.siddhantcoe.in">www.siddhantcoe.in</a>                              |

| Contacts for Communication |                                       |                            |            |                  |                                 |
|----------------------------|---------------------------------------|----------------------------|------------|------------------|---------------------------------|
| Designation                | Name                                  | Telephone with<br>STD Code | Mobile     | Fax              | Email                           |
| Professor                  | Pravin<br>Mahadeo<br>Ghanegaonka<br>r | 02114-661906               | 9823882251 | 02114-66194<br>7 | pmghanegaonkar@<br>yahoo.com    |
| Principal                  | Uddhav<br>Maroti Shirst               | 02114-661966               | 9049300608 | 02114-66190<br>2 | siddhant.naac2017<br>@gmail.com |

| Status of the Institution |         |
|---------------------------|---------|
| Institution Status        | Private |

| Type of Institution |              |
|---------------------|--------------|
| By Gender           | Co-education |
| By Shift            | Regular      |



| <b>Recognized Minority institution</b>     |       |
|--|-------|
| If it is a recognized minority institution | Yes   |
| If Yes, Specify minority status            |       |
| Religious                                  |       |
| Linguistic                                 | Hindi |
| Any Other                                  |       |

| <b>Establishment Details</b>   |  |   |                           |                |
|--|--|---|---------------------------|----------------|
| Date of establishment of the college   | 22-06-2005   |   |                           |                |
| <b>University to which the college is affiliated/ or which governs the college (if it is a constituent college)</b>              |  |   |                           |                |
| <b>State</b>   | <b>University name</b>   | <b>Document</b>                         |                           |                |
| Maharashtra  | Savitribai Phule Pune University                                     | <a href="#">View Document</a>           |                           |                |
| <b>Details of UGC recognition</b>  |  |   |                           |                |
| <b>Under Section</b>   | <b>Date</b>  |   |                           |                |
| 2f of UGC  |  |   |                           |                |
| 12B of UGC   |  |   |                           |                |
| <b>Details of recognition/approval by stationary/regulatory bodies like AICTE, NCTE, MCI, DCI, PCI, RCI etc (other than UGC)</b> |  |   |                           |                |
| <b>Statutory Regulatory Authority</b>  | <b>Recognition/Approval details Institution/Department programme</b> | <b>Day, Month and year (dd-mm-yyyy)</b> | <b>Validity in months</b> | <b>Remarks</b> |
| AICTE  | <a href="#">View Document</a>  | 10-04-2017                              | 12                        |                |

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

| <b>Recognitions</b>   |    |
|---|----|
| 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 |

| <b>Location and Area of Campus</b> |   |                  |                             |                                 |
|------------------------------------|---|------------------|-----------------------------|---------------------------------|
| <b>Campus Type</b>                 | <b>Address</b>  | <b>Location*</b> | <b>Campus Area in Acres</b> | <b>Built up Area in sq.mts.</b> |
| Main campus area                   | A/p-Sudumbre, Chakan-Talegaon Road, Taluka-Maval, District-Pune, Pin-412109 | Rural            | 24                          | 16250                           |

## 2.2 ACADEMIC INFORMATION

| <b>Details of Programmes Offered by the College (Give Data for Current Academic year)</b> |                                       |                           |                            |                              |                            |                                 |
|---|---------------------------------------|---------------------------|----------------------------|------------------------------|----------------------------|---------------------------------|
| <b>Programme Level</b>  | <b>Name of Programme/Course</b>       | <b>Duration in Months</b> | <b>Entry Qualification</b> | <b>Medium of Instruction</b> | <b>Sanctioned Strength</b> | <b>No. of Students Admitted</b> |
| UG  | BE, Computer                          | 48                        | HSC                        | English                      | 120                        | 51                              |
| UG  | BE, Civil                             | 48                        | HSC                        | English                      | 60                         | 24                              |
| UG  | BE, Mechanical                        | 48                        | HSC                        | English                      | 120                        | 79                              |
| UG  | BE, Electronics And Telecommunication | 48                        | HSC                        | English                      | 120                        | 19                              |
| UG  | BE, Information Technology            | 48                        | HSC                        | English                      | 60                         | 14                              |
| PG  | ME, Computer                          | 24                        | BE                         | English                      | 18                         | 15                              |
| PG  | ME, Mechanical                        | 24                        | BE                         | English                      | 24                         | 14                              |
| PG  | ME, Electronics And Telecommunication | 24                        | BE                         | English                      | 18                         | 11                              |
| PG  | ME, Information Technology            | 24                        | BE                         | English                      | 24                         | 7                               |

### **Position Details of Faculty & Staff in the College**

| <b>Teaching Faculty</b>   |                  |        |        |       |                            |        |        |       |                            |        |        |       |
|---|------------------|--------|--------|-------|----------------------------|--------|--------|-------|----------------------------|--------|--------|-------|
|   | <b>Professor</b> |        |        |       | <b>Associate Professor</b> |        |        |       | <b>Assistant Professor</b> |        |        |       |
|   | Male             | Female | Others | Total | Male                       | Female | Others | Total | Male                       | Female | Others | Total |
| Sanctioned by the UGC /University State Government              | 10               |        |        |       | 23                         |        |        |       | 68                         |        |        |       |
| Recruited   | 3                | 0      | 0      | 3     | 1                          | 0      | 0      | 1     | 35                         | 21     | 0      | 56    |
| Yet to Recruit  | 7                |        |        |       | 22                         |        |        |       | 12                         |        |        |       |
| Sanctioned by the Management/Society or Other Authorized Bodies | 4                |        |        |       | 9                          |        |        |       | 11                         |        |        |       |
| Recruited   | 4                | 0      | 0      | 4     | 9                          | 0      | 0      | 9     | 9                          | 2      | 0      | 11    |
| Yet to Recruit  | 0                |        |        |       | 0                          |        |        |       | 0                          |        |        |       |

| <b>Non-Teaching Staff</b>                                       |             |               |               |              |
|---|-------------|---------------|---------------|--------------|
|   | <b>Male</b> | <b>Female</b> | <b>Others</b> | <b>Total</b> |
| 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 |             |               |               | 88           |
| Recruited   | 71          | 17            | 0             | 88           |
| Yet to Recruit  |             |               |               | 0            |

| <b>Technical Staff</b>  |             |               |               |              |
|---|-------------|---------------|---------------|--------------|
|   | <b>Male</b> | <b>Female</b> | <b>Others</b> | <b>Total</b> |
| 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 |             |               |               | 19           |
| Recruited   | 11          | 8             | 0             | 19           |
| Yet to Recruit  |             |               |               | 0            |

**Qualification Details of the Teaching Staff**

| <b>Permanent Teachers</b>    |                  |               |               |                            |               |               |                            |               |               |              |
|------------------------------|------------------|---------------|---------------|----------------------------|---------------|---------------|----------------------------|---------------|---------------|--------------|
| <b>Highest Qualification</b> | <b>Professor</b> |               |               | <b>Associate Professor</b> |               |               | <b>Assistant Professor</b> |               |               | <b>Total</b> |
|                              | <b>Male</b>      | <b>Female</b> | <b>Others</b> | <b>Male</b>                | <b>Female</b> | <b>Others</b> | <b>Male</b>                | <b>Female</b> | <b>Others</b> |              |
| D.sc/D.Litt.                 | 0                | 0             | 0             | 0                          | 0             | 0             | 0                          | 0             | 0             | 0            |
| Ph.D.                        | 6                | 0             | 0             | 4                          | 0             | 0             | 0                          | 0             | 0             | 10           |
| M.Phil.                      | 0                | 0             | 0             | 0                          | 0             | 0             | 0                          | 0             | 0             | 0            |
| PG                           | 1                | 0             | 0             | 6                          | 0             | 0             | 35                         | 21            | 0             | 63           |

| <b>Temporary Teachers</b>    |                  |        |        |                            |        |        |                            |        |        |              |
|------------------------------|------------------|--------|--------|----------------------------|--------|--------|----------------------------|--------|--------|--------------|
| <b>Highest Qualification</b> | <b>Professor</b> |        |        | <b>Associate Professor</b> |        |        | <b>Assistant Professor</b> |        |        | <b>Total</b> |
|                              | Male             | Female | Others | Male                       | Female | Others | Male                       | Female | Others |              |
| D.sc/D.Litt.                 | 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      | 9                          | 2      | 0      | 11           |

| <b>Part Time Teachers</b>    |                  |        |        |                            |        |        |                            |        |        |              |
|------------------------------|------------------|--------|--------|----------------------------|--------|--------|----------------------------|--------|--------|--------------|
| <b>Highest Qualification</b> | <b>Professor</b> |        |        | <b>Associate Professor</b> |        |        | <b>Assistant Professor</b> |        |        | <b>Total</b> |
|                              | Male             | Female | Others | Male                       | Female | Others | Male                       | Female | Others |              |
| D.sc/D.Litt.                 | 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            |

| <b>Details of Visting/Guest Faculties</b>                         |             |               |               |              |
|---|-------------|---------------|---------------|--------------|
| <b>Number of Visiting/Guest Faculty engaged with the college?</b> | <b>Male</b> | <b>Female</b> | <b>Others</b> | <b>Total</b> |
|   |             | 22            | 4             | 0            |

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

| Programme |        | From the State<br>Where College<br>is Located | From Other<br>States of India | NRI Students | Foreign<br>Students | Total |
|-----------|--------|---|-------------------------------|--------------|---------------------|-------|
| Diploma   | Male   | 219   | 9                             | 0            | 0                   | 228   |
|           | Female | 46  | 1                             | 0            | 0                   | 47    |
|           | Others | 0   | 0                             | 0            | 0                   | 0     |
| UG        | Male   | 577   | 28                            | 0            | 0                   | 605   |
|           | Female | 173   | 7                             | 0            | 0                   | 180   |
|           | Others | 0   | 0                             | 0            | 0                   | 0     |
| PG        | Male   | 26  | 2                             | 0            | 0                   | 28    |
|           | Female | 21  | 0                             | 0            | 0                   | 21    |
|           | Others | 0   | 0                             | 0            | 0                   | 0     |

| <b>Provide the Following Details of Students admitted to the College During the last four Academic Years</b> |        |               |               |               |               |
|--|--------|---------------|---------------|---------------|---------------|
| <b>Programme</b>   |        | <b>Year 1</b> | <b>Year 2</b> | <b>Year 3</b> | <b>Year 4</b> |
| SC   | Male   | 15            | 25            | 22            | 25            |
|  | Female | 7             | 7             | 8             | 5             |
|  | Others | 0             | 0             | 0             | 0             |
| ST   | Male   | 3             | 1             | 1             | 0             |
|  | Female | 0             | 0             | 0             | 0             |
|  | Others | 0             | 0             | 0             | 0             |
| OBC  | Male   | 77            | 123           | 124           | 104           |
|  | Female | 27            | 44            | 48            | 43            |
|  | Others | 0             | 0             | 0             | 0             |
| General  | Male   | 491           | 895           | 891           | 968           |
|  | Female | 164           | 275           | 324           | 389           |
|  | Others | 0             | 0             | 0             | 0             |
| Others   | Male   | 23            | 32            | 39            | 31            |
|  | Female | 8             | 10            | 12            | 15            |
|  | Others | 0             | 0             | 0             | 0             |
| <b>Total</b>   |        | <b>815</b>    | <b>1412</b>   | <b>1469</b>   | <b>1580</b>   |



### 3. Extended Profile

#### 3.1 Programme

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

Response : 295

Number of self-financed Programmes offered by college

Response : 9

Number of new programmes introduced in the college during the last five years

Response : 0

#### 3.2 Student

Number of students year wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 834     | 815     | 1412    | 1469    | 1580    |

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 153     | 122     | 159     | 162     | 177     |

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 207     | 419     | 568     | 424     | 500     |

Total number of outgoing / final year students

Response : 207

#### 3.3 Academic

**Number of teachers year wise during the last five years**

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 110     | 82      | 84      | 101     | 103     |

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 84      | 82      | 84      | 101     | 103     |

**Number of sanctioned posts year wise during the last five years**

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 101     | 135     | 135     | 135     | 135     |

**Total experience of full-time teachers**

**Response : 786**

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

**Response : 4**

**Number of full time teachers worked in the institution during the last 5 years**

**Response : 31**

### **3.4 Institution**

**Total number of classrooms and seminar halls**

**Response : 27**

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 100     | 228     | 486     | 570     | 574     |

**Number of computers**

**Response : 399**

**Unit cost of education including the salary component(INR in Lakhs)**

**Response : 0.87**

**Unit cost of education excluding the salary component(INR in Lakhs)**

**Response : 0.28**

NAAC

## 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:

SCE has a dedicated vision, mission and objectives that is efficiently interfaced and communicated within the stakeholders. SCE has five undergraduate & four postgraduate programs affiliated to Savitribai Phule Pune University (SPPU) and follows its prescribed curriculum for the effective curriculum design. SCE has planned and structured process for efficient and effective implementation of prescribed curriculum of SPPU. There is well-planned strategy for implementation of effective curriculum. SCE academic calendar is designed as per guidelines of SPPU academic calendar. For better and efficient implementation of curriculum our faculties goes through orientation and different subject workshops. Academic flexibility as prescribed in the curriculum is offered to opt elective subject in UG. Students have option to opt any branch after completing the first year as per their own choice if vacancy is available.

SCE has provisions for effective delivery, consciously plans and ensures discussion of content beyond curriculum, expert lectures, study tours and exposure to industry through industrial visits, sponsored projects from the industry. To bridge existing gaps in curriculum and to enhance knowledge of latest technology amongst students; different courses, seminars and workshops are organized at SCE.

SCE has well equipped central library and state of art digital library for online access to international/national journals as well as several online academic resources.

*Institute has an academic strategy plan for the effective implementation of the curriculum.\**

*\*Note: Attached in additional information*

###### Action Plan Development for Effective Implementation

*The following sequence of action plan is done for effective implementation of the curriculum.*

- Head of the Department (HoD) conducts meeting at beginning of academic year to discuss strategy of implementation of academic calendar, time table, industrial visit, expert lectures.
- Faculty prepares course file which contains syllabus, course objective, course outcomes, lesson plan, planning for extra tutorials, notes of subject, university question papers, unit test question papers, oral questions and multiple choice practice questions. This file also includes attainment CO's with PO's.
- Periodic unit test and re-test are conducted for improvement of performance of students.
- Project work and its progress is monitor by maintaining diary.

All records are verified during semester by the HoD and Principal. Auditing of deployment by Academic Audit Committee is carried out at the end of each semester.

**Institute initiates many mechanisms contributing to effective curriculum delivery as follows -**

- Teaching learning for faculty.
- Extra classes/tutorials for slow learners.
- Extra lecture and practical sessions for directly admitted second year engineering students.
- Online/Offline MCQs practice.
- Conduction of mock practical/oral examination.

**Contribution through feedback-**

Feedback from students, alumni, parents and faculty are taken. Comments, suggestions from alumni, eminent visitors to SCE are also taken into consideration. Analysis of feedback is done, analysis of this feedback is conveyed to the governing body of SCE.

| File Description           | Document                      |
|----------------------------|-------------------------------|
| Any additional information | <a href="#">View Document</a> |

**1.1.2 Number of certificate/diploma program introduced during the last five years**

**Response:** 4

**1.1.2.1 Number of certificate/diploma programs introduced year wise during the last five years**

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 0       | 2       | 0       | 2       | 0       |

| File Description                            | Document                      |
|---|-------------------------------|
| Details of the certificate/Diploma programs | <a href="#">View Document</a> |

**1.1.3 Percentage of participation of full time teachers in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years**

**Response:** 8.81

**1.1.3.1 Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year wise during the last five years**

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 14      | 9       | 8       | 5       | 2       |

| File Description                                       | Document                      |
|--|-------------------------------|
| Details of participation of teachers in various bodies | <a href="#">View Document</a> |
| Any additional information                             | <a href="#">View Document</a> |

## 1.2 Academic Flexibility

| <b>1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years</b> |                               |
|---|-------------------------------|
| <b>Response:</b> 34.92  |                               |
| 1.2.1.1 How many new courses are introduced within the last five years  |                               |
| Response: 103   |                               |
| File Description  | Document                      |
| Details of the new courses introduced   | <a href="#">View Document</a> |

| <b>1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented</b> |                               |
|--|-------------------------------|
| <b>Response:</b> 100   |                               |
| 1.2.2.1 Number of programs in which CBCS/ Elective course system implemented.  |                               |
| Response: 9  |                               |
| File Description   | Document                      |
| Name of the programs in which CBCS is implemented  | <a href="#">View Document</a> |

|  |         |         |         |         |
|--|---------|---------|---------|---------|
| <b>1.2.3 Average percentage of students enrolled in subject related Certificate/ Diploma programs/Add-on programs as against the total number of students during the last five years</b> |         |         |         |         |
| <b>Response:</b> 31.62   |         |         |         |         |
| 1.2.3.1 Number of students enrolled in subject related Certificate or Diploma or Add-on programs year wise during the last five years  |         |         |         |         |
| 2017-18  | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
| 346  | 500     | 148     | 546     | 120     |

| File Description  | Document                      |
|---|-------------------------------|
| Details of the students enrolled in Subjects related to certificate/Diploma/Add-on programs | <a href="#">View Document</a> |

## 1.3 Curriculum Enrichment

### 1.3.1 Institution integrates cross- cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum

#### Response:

#### Gender -

- Students are encouraged to work together in various curricular, co-curricular, sports activities.
- Established women cell headed by senior faculty members who can solve problems of girl students regarding academics & personal.
- Women's grievances cell, Anti ragging Committee & Squad nominated and headed by the Head of the Institution.
- The Institute also celebrates International Women's Day on 8th March by felicitation of all the women teaching and non-teaching staff & students members.

#### Environment and Sustainability-

- Encouraging students to participate in national and international conferences, workshops, intercollegiate competitions (debate, quiz, and paper presentations) for boosting self confidence in students.
- Awareness about the environment is created among the students through various programs like tree plantation, Swachha Bharat Abhiyaan etc.
- More than 300 Trees are planted in the Campus.
- Utilization of used papers for various administrative works.
- The Institute has well equipped computer and language labs which are used for Conduction of online exams due to which paper work is reduced.

#### Human Values & Professional Ethics-

- Institute has various committees like Woman's grievance committee, Anti-Ragging committee for human rights.
- Institute also arranges special lectures, seminars like Nirbhaya woman safety program to create awareness on these issues.
- Institute conducts various awareness programs by guest faculty.
- Institute conducts enrichment programs like Yoga day.

**\*Programmes offered by Institute to ensure development of students are as follows:**

*\*Note: Attached in additional information*

| File Description           | Document                      |
|----------------------------|-------------------------------|
| Any Additional Information | <a href="#">View Document</a> |

### 1.3.2 Number of valued added courses imparting transferable and life skills offered during the last five years

**Response:** 17

1.3.2.1 Number of value-added courses imparting transferable and life skills offered during the last five years

Response: 17

| File Description  | Document                      |
|---|-------------------------------|
| Brochure or any other document relating to value added courses.           | <a href="#">View Document</a> |
| Details of the value-added courses imparting transferable and life skills | <a href="#">View Document</a> |

### 1.3.3 Percentage of students undertaking field projects / internships

**Response:** 14.63

1.3.3.1 Number of students undertaking field projects or internships

Response: 122

| File Description                        | Document                      |
|---|-------------------------------|
| Institutional data in prescribed format | <a href="#">View Document</a> |
| List of students enrolled               | <a href="#">View Document</a> |

## 1.4 Feedback System

**1.4.1 Structured feedback on curriculum obtained from 1) Students 2) Teachers 3) Employers 4) Alumni 5) Parents For design and review of syllabus semester wise/ year wise**

**A. Any 4 of the above**

**B. Any 3 of the above**

**C. Any 2 of the above**

**D. Any 1 of the above**



**Response:** A. Any 4 of the above

| File Description  | Document                      |
|---|-------------------------------|
| Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management | <a href="#">View Document</a> |

**1.4.2 Feedback processes of the institution may be classified as follows:**

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

**B. Feedback collected, analysed and action has been taken**

**C. Feedback collected and analysed**

**D. Feedback collected**

**Response:** B. Feedback collected, analysed and action has been taken

| File Description           | Document                      |
|----------------------------|-------------------------------|
| Any additional information | <a href="#">View Document</a> |

## Criterion 2 - Teaching-learning and Evaluation

### 2.1 Student Enrollment and Profile

#### 2.1.1 Average percentage of students from other States and Countries during the last five years

**Response:** 1.26

##### 2.1.1.1 Number of students from other states and countries year wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 10      | 6       | 24      | 31      | 9       |

#### File Description

#### Document

Institutional data in prescribed format

[View Document](#)

List of students (other states and countries)

[View Document](#)

#### 2.1.2 Average Enrollment percentage (Average of last five years)

**Response:** 35.27

##### 2.1.2.1 Number of students admitted year wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 414     | 124     | 302     | 471     | 387     |

##### 2.1.2.2 Number of sanctioned seats year wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 934     | 842     | 946     | 1012    | 996     |

#### File Description

#### Document

Institutional data in prescribed format

[View Document](#)

#### 2.1.3 Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years

**Response:** 42.27

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 83      | 32      | 61      | 94      | 61      |

| File Description                        | Document                      |
|---|-------------------------------|
| Institutional data in prescribed format | <a href="#">View Document</a> |

## 2.2 Catering to Student Diversity

**2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners**

**Response:**

1. Orientation program for fresher's is organized and given brief introduction about syllabus, internal assessment system, quality enhancement programs like industrial visits, training from experts, guest lectures, examination scheme of Savitribai Phule Pune University, training to be conducted in department through presentation.
2. SCE assesses the students needs in terms of knowledge and skills by conducting a survey that enables us to know the academic background of the student based on their score for PCM, JEE, MHCET. At every department, induction program is organized on the very first day of the commencement of DSE course to get familiar with the department faculty members and facilities.
3. Each department identifies slow learners and advanced learners by conducting Aptitude Test, internal tests, and MHT-CET/JEE results, and organizes remedial classes for slow learners.
4. Separate time table is made for slow learners as per the student needs and to fulfill the curriculum/syllabus prescribed by the Savitribai Phule Pune University.
5. Special attention is given to the slow learners to boost their performance level through counselling by guardian faculty member.
6. Extra practical/classes are arranged for slow learners. Even for students having backlogs remedial lectures are arranged.
7. Handouts, class notes for each subject is given at the starting of semester for easy understanding of the topics.
8. Slow learner's progress is discussed with parents through Guardian faculty member or in the Parent Teachers meet.
9. Once the learning process of slow learners is conducted, retest is conducted for them for verification of their learning ability and same is informed to their parents. Feedback is taken from their parents about their improvement in studies.
10. Students are advised to participate in innovative projects to take part in national level competitions
11. For advanced learners following activities are encouraged. They are also asked to plan the various events at Institute level

- Extra case studies
- Discussions/debates on recent issues
- Various Co-curricular and Extra-curricular events

1. Advanced learners are made coordinators for institute level cells like Entrepreneur Development Cell (EDC). They are also motivated to participate in various technical events. Encouragement is given to participate in national and international competitions.
2. Personality development Programs are conducted to enhance their leadership qualities.

Social ethics are enhanced through conducting various programs such as road safety measures, Tree plantation and various activities conducted under NSS. German language workshop is conducted as add on course.

| File Description           | Document                      |
|----------------------------|-------------------------------|
| Any additional information | <a href="#">View Document</a> |

### 2.2.2 Student - Full time teacher ratio

**Response:** 8.02

| File Description                        | Document                      |
|---|-------------------------------|
| Institutional data in prescribed format | <a href="#">View Document</a> |

### 2.2.3 Percentage of differently abled students (Divyangjan) on rolls

**Response:** 0

#### 2.2.3.1 Number of differently abled students on rolls

| File Description                        | Document                      |
|---|-------------------------------|
| Institutional data in prescribed format | <a href="#">View Document</a> |

## 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:**

SCE, interactive learning, collaborative learning, independent learning, Project based learning, Originative Facile Approach and Case -based approach are adopted to create student centric learning.

**Interactive learning/ participative learning**

- Theory classes are made interesting by using various teaching aids like smart boards, audio/video clips, animations/simulations etc. Students are encouraged to ask the questions and their difficulties are solved there itself or informally after the lecture.
- In each department batch wise tutorials are arranged by concerned faculty which makes faculty to communicate and to know the understanding level of the students.
- For interactive learning our faculty use Information and Communication Technology (ICT).
- Group discussions are conducted in a class assigning different topics to each group consisting of 5 to 10 students which creates interest in subject learning.
- Faculty members also conducts quiz, debates and puzzles where individual students take participation and hence makes learning more informative and interesting. Students are made to select innovative technical topic for seminar to enhance their knowledge and communication skill.

#### **Collaborative learning:**

- Students are made to work in a group for collaborative learning which makes learning active.
- Students are encouraged to undertake the in-plant training in industry.
- Industrial visits are arranged to gain practical knowledge through which students will come to know the recent technology used in industry.
- Experts lectures are arranged to make aware of recent technologies used in industries which bridges the gap between industry and curriculum
- Students do projects in collaboration with industries.

#### **Experimental /project based learning:(PBL)**

- Teachers are also encouraged and sponsored to attend training programs to improve teaching and technical skill organized by the institute and by other organizations.
- Project-based learning (PBL) is a student centered pedagogy that involves a dynamic classroom approach.
- Some topics are taught in a class through simulations by using software like MATLAB, KEILSDK, CAD/CAM, Raspberry pi, Students are encouraged to learn basic principles of topic by developing small project models.

#### **E-resources:**

- Students are encouraged to use (National Program on Technology Enhanced Learning) NPTEL video lectures, audio/video clips, animations/simulations.
- Students go through online certification courses conducted by NPTEL, edX, Coursera.
- Institute has a central library which has journals, international and national periodicals and also has digital library.
- Students are encouraged to attend webinars.
- Each department has departmental library which includes reference books, general books for student's usage.

| File Description           | Document                      |
|----------------------------|-------------------------------|
| Any additional information | <a href="#">View Document</a> |

### 2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.

**Response:** 75

#### 2.3.2.1 Number of teachers using ICT

Response: 78

| File Description   | Document                      |
|--|-------------------------------|
| List of teachers (using ICT for teaching)                                  | <a href="#">View Document</a> |
| Provide link for webpage describing the " LMS/ Academic management system" | <a href="#">View Document</a> |

### 2.3.3 Ratio of students to mentor for academic and stress related issues

**Response:** 9.93

#### 2.3.3.1 Number of mentors

Response: 84

| File Description  | Document                      |
|---|-------------------------------|
| Year wise list of number of students, full time teachers and students to mentor ratio | <a href="#">View Document</a> |

### 2.3.4 Innovation and creativity in teaching-learning

**Response:**

SCE encourages teachers to provide students a comprehensive, innovative and value based educational environment and every effort is made for maintaining such an environment in the institute.

- Faculty delivers lectures by using tools like smart class room, audio/videos, animation.
- College has procured NPTEL e-resource pack which is used by faculty for better content delivery.
- Faculty members are encouraged and sponsored to attend seminars, workshops, which help them to adopt new technology in teaching.
- Various innovative teaching-learning practices like quiz, group discussion, brainstorming, puzzles, are incorporated in the teaching plan to make learning more interesting and effective.
- Use of simulation software in classroom teaching, to explain difficult concepts which are hard to visualize, is one innovative approach practiced in various departments.
- Animations are used to visualize the theoretical aspect which clears fundamental concepts.
- Participative learning through poster presentation is adapted in teaching learning methods.
- Teacher's uses student centric methodologies like problem based learning, interactive learning, experiential learning. Students learn through making small projects/modules.

- Collaborative projects between student and faculty represents one of the innovative practices in domain of research and development.
- Faculty upload tutorials, notes, video lectures, study material, Power point Presentations to the students on e-learning resource centre.
- Faculty uses Information and Communication Technology (ICT) tools such as Google class room, word press website to facilitate for students learning.
- Laboratory- museum: Equipment, tools, spare parts and components are displayed in laboratory. Equipment are disassembled and kept open for exhibition for learning purpose.

|                            |                               |
|----------------------------|-------------------------------|
| <b>File Description</b>    | <b>Document</b>               |
| Any additional information | <a href="#">View Document</a> |

## 2.4 Teacher Profile and Quality

|   |                               |
|---|-------------------------------|
| <b>2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years</b> |                               |
| <b>Response:</b> 71.45  |                               |
| <b>File Description</b>   | <b>Document</b>               |
| Year wise full time teachers and sanctioned posts for 5 years   | <a href="#">View Document</a> |
| List of the faculty members authenticated by the Head of HEI  | <a href="#">View Document</a> |

|   |                               |         |         |         |
|---|-------------------------------|---------|---------|---------|
| <b>2.4.2 Average percentage of full time teachers with Ph.D. during the last five years</b> |                               |         |         |         |
| <b>Response:</b> 4.22   |                               |         |         |         |
| <b>2.4.2.1 Number of full time teachers with Ph.D. year wise during the last five years</b> |                               |         |         |         |
| 2017-18   | 2016-17                       | 2015-16 | 2014-15 | 2013-14 |
| 11  | 3                             | 2       | 1       | 1       |
| <b>File Description</b>   | <b>Document</b>               |         |         |         |
| List of number of full time teachers with PhD and number of full time teachers for 5 years  | <a href="#">View Document</a> |         |         |         |

|   |
|---|
| <b>2.4.3 Teaching experience of full time teachers in number of years</b> |
|---|

**Response: 7.56**

| File Description   | Document                      |
|--|-------------------------------|
| List of Teachers including their PAN, designation, dept and experience details | <a href="#">View Document</a> |

#### 2.4.4 Average percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years

**Response: 0.72**

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 1       | 1       | 1       | 0       | 0       |

| File Description                                 | Document                      |
|--|-------------------------------|
| Institutional data in prescribed format          | <a href="#">View Document</a> |
| e-copies of award letters (scanned or soft copy) | <a href="#">View Document</a> |

#### 2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years

**Response: 13.74**

2.4.5.1 Number of full time teachers from other states year wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 23      | 11      | 15      | 18      | 18      |

| File Description  | Document                      |
|---|-------------------------------|
| List of full time teachers from other state and state from which qualifying degree was obtained | <a href="#">View Document</a> |

## 2.5 Evaluation Process and Reforms

### 2.5.1 Reforms in Continuous Internal Evaluation(CIE) system at the institutional level



**Response:**

- In education, the term assessment means evaluating, measuring the performance of students for academic readiness, learning progress, skill development and educational need of students. Assessment results are used to improve learning of students.
- Institute adopted following reforms as a part of the of students continuous Internal evaluation process.
- Institute designs academic calendar which gives details of all academic and administrative events.
- It consisting of the schedule of internal tests, midterm practical examinations, practice of online examination and conduction of internal online examinations on the MODULE like MY-Examo and all details of technical and non-technical events.
- Assessment tests comprise a variety of modalities, including individual and group exercises, quizzes, open book tests, simulations, viva-voce, audiovisual presentations and case discussions.
- Each assessment test is thus meant to aid the process of teaching and learning based on continuous assessment.
- Based on the first test results slow learners are identified and remedial classes are planned for them. Other students are also allowed to attend the remedial classes as per their willingness.
- Attendance of students in theory class and practical session is considered as assessment and the same is informed to parents to improve students' performance.
- Assessment of student's performance is continuously done in practical sessions by considering regularity in performing practical, submission of journal in time, presentation of journal and oral ofpractical done.
- Continuous internal assessment of a student is conveyed to the parents and appropriate measures are taken to improve the results. Retest is conducted for the failures to improve their performance. Teacher's also choice to evaluate the students through Declared Test, Make up Test, Quiz, Seminars, Group Discussions, Assignments and Presentations etc. ensuring continuous evaluation of students and their progress throughout the semester.
- **Indirect assessment**
- Students are also assessed through their extracurricular activities, like paper presentation, internship at industry, participating in various competitions like project exhibition, module making, puzzle solving.

| File Description           | Document                      |
|----------------------------|-------------------------------|
| Any additional information | <a href="#">View Document</a> |

**2.5.2 Mechanism of internal assessment is transparent and robust in terms of frequency and variety****Response:**

Before commencement of theory classes we plan academic calendar with consideration of Savitribai Phule Pune University academic calendar. Our academic calendar includes the schedule of online, in semester examination, theory final examination. Looking into the above examination schedule we plan internal tests time table. Internal assessment pattern is discussed at the starting of each semester.

Continuous internal assessment 25/50 marks of students is carried out and it includes two internal tests, regularity in attending theory and practical classes, regularity in submission, viva and presentation of practical journal. Assignments are given to students and oral on assignments are conducted. Online mock tests are conducted. Mock oral helps the students to face university oral/practical examination with confidence thereby enhancing students' examination performance. Online mock tests are conducted regularly and helps students to get acquainted with online examination system and to boost the confidence of facing any such competitive examinations. Record of attendance, test marks and term work marks are displayed on notice board.

| File Description           | Document                      |
|----------------------------|-------------------------------|
| Any additional information | <a href="#">View Document</a> |

### 2.5.3 Mechanism to deal with examination related grievances is transparent, time-bound and efficient

#### Response:

Examination related grievances is made available by University only for end semester examinations and not for online, term work/oral/practical, project and seminar examination.

The mechanisms for redressal of grievances with reference to evaluation is as follows

#### Institute level –

- A CEO (Central Examination Officer) is appointed for conducting all SPPU examinations by the University. Online examinations, in semester, end-semester examinations as per the norms and schedule is given by the University.
- Students are made aware of the assessment methods at the beginning of the semester by the subject in charge in under the guidance of Chief Examination Officer & Principal whenever necessary
- The assessed answer sheets of internal tests are given to the students and performance is discussed by the respective faculty with the help of assessment sheet, we inform the performance to the parents during Parent's Meet.
- Students having grievances with the internal evaluation process can directly discuss their doubts individually with respective faculty members & Head of the Department.
- Students can approach the Principal, in case of any grievances

#### University level –

- University declares schedules of Online examinations (Phase I, II), in semester, end-semester examinations, practical, oral, project and seminar examinations on Savitribai Phule Pune University website. Procedure for submission of online photocopies of assessed answer sheet is given on website.
- Paper setting, conduction of examination, evaluation and declaration of results is done very properly by SPPU.
- After the results are declared by the University, students can apply for photo copy of their answer

sheets, which are provided by the University on payment of fees

- If the student has grievance after receiving photo copy of answer sheet, then he/she can apply for revaluation by paying revaluation fees.

#### **2.5.4 The institution adheres to the academic calendar for the conduct of CIE**

##### **Response:**

1. As per Savitribai Phule Pune University academic calendar, institute academic calendar is prepared and is circulated to all departments. The same is displayed on centralized and departmental notice board and college website.
2. Academic calendar includes commencement dates of semester, oral/practical examination dates of Savitribai Phule Pune University, online examination dates for first year and second year courses, in semester examination dates for third year and final year courses.
3. It also includes plans for curricular and extra-curricular activities, technical training from eminent industrial experts, technical events, class tests, preliminary exams, declaration of marks, , guest lecture plans. Declaration of defaulter list.
4. As per the academic calendar internal tests, online mock examinations, mid semester practical submissions, midterm practical examinations are conducted and test marks are displayed on notice board and through mentor marks of students are informed to parents.
5. Based on the first test results slow learners are identified and remedial classes are planned for them.
6. Curricular and Co-curricular activities are conducted as per academic calendar

##### **Teaching Plan:**

Before commencement of semester faculty members prepare teaching plan, Course file is prepared. Content of course file is as below

- Mission and Vision of Institute
- Academic calendar of Savitribai Phule Pune University
- Academic calendar of Institute
- Time Table
- Individual Time Table
- Syllabus Structure
- Course Objectives and outcomes
- Lesson plan
- List of Reference book & Text book
- Attendance sheet
- Unit wise Lecture notes(Hard / Soft)
- Power Point Presentation, Hand-outs(Hard / Soft)
- Savitribai Phule Pune University question papers
- Unit wise Question bank (ERP)
- List of assignments unit wise
- Unit Test question papers
- Comparative Savitribai Phule Pune University result analysis of the subject
- Website, resources personal, ICT Tools used.

- Direct and Indirect mapping of CO's, PEO, PO.

## 2.6 Student Performance and Learning Outcomes

**2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students**

**Response:**

### **PROGRAM OUTCOMES**

**Engineering Graduates will be able to:**

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, & demonstrate the knowledge of, and need for sustainable development.
8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend & write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

**\*Note: PROGRAM SPECIFIC OUTCOMES ARE UPLADED IN ADDITIONAL INFORMATION.**

| File Description                              | Document                      |
|---|-------------------------------|
| Any additional information                    | <a href="#">View Document</a> |
| COs for all courses (exemplars from Glossary) | <a href="#">View Document</a> |

### **2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution**

#### **Response:**

Program outcomes (PO), program specific outcomes (PSO) and course outcomes (CO) are informed to the students at the starting of each semester. course outcomes are discussed in class at starting of semester as well as the end of the semester.

Course outcomes are assessed through direct and indirect assessment methods

#### **Direct assessment:**

Direct assessment is done through following methods:

- Course outcomes are mapped with program outcomes and program specific outcomes
- Internal Tests
- Savitribai Phule Pune Savitribai Phule Pune University Practical/Oral Examination.
- Assignments and Tutorials.

#### **Indirect assessment:**

- Indirect assessment is executed through questionnaires' given to students.
- Students Survey
- From Alumni

### **2.6.3 Average pass percentage of Students**

**Response:** 76.61

2.6.3.1 Total number of final year students who passed the university examination

Response: 321

2.6.3.2 Total number of final year students who appeared for the examination

|   |                               |
|---|-------------------------------|
| Response: 419                           |                               |
| <b>File Description</b>                 | <b>Document</b>               |
| Institutional data in prescribed format | <a href="#">View Document</a> |

## 2.7 Student Satisfaction Survey

|   |                               |
|---|-------------------------------|
| <b>2.7.1 Online student satisfaction survey regarding teaching learning process</b> |                               |
| <b>Response:</b>  |                               |
| <b>File Description</b>   | <b>Document</b>               |
| Database of all currently enrolled students   | <a href="#">View Document</a> |

NAAC

## Criterion 3 - Research, Innovations and Extension

### 3.1 Resource Mobilization for Research

**3.1.1 Grants for research projects sponsored by government/non government sources such as industry ,corporate houses, international bodies, endowment, chairs in the institution during the last five years**

**Response:** 0

3.1.1.1 Total Grants for research projects sponsored by the government/non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year wise during the last five years(INR in Lakhs)

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 0       | 0       | 0       | 0       | 0       |

| File Description                  | Document                      |
|-----------------------------------|-------------------------------|
| List of project and grant details | <a href="#">View Document</a> |

**3.1.2 Percentage of teachers recognised as research guides at present**

**Response:** 3.85

3.1.2.1 Number of teachers recognised as research guides

Response: 4

| File Description                        | Document                      |
|---|-------------------------------|
| Institutional data in prescribed format | <a href="#">View Document</a> |
| Any additional information              | <a href="#">View Document</a> |

**3.1.3 Average number of research projects per teacher funded by government and non government agencies during the last five years**

**Response:** 0.16

3.1.3.1 Number of research projects funded by government and non-government agencies during the last five years

Response: 5

| File Description                              | Document                      |
|---|-------------------------------|
| List of research projects and funding details | <a href="#">View Document</a> |
| Supporting document from Funding Agency       | <a href="#">View Document</a> |
| Funding agency website URL                    | <a href="#">View Document</a> |

## 3.2 Innovation Ecosystem

### 3.2.1 Institution has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of knowledge

#### Response:

The measures taken by the institution to facilitate smooth progress and implementation of research schemes/ projects.

Institute has research committee which gives recommendations, decides policy and also looks into financial aspect.

**Research committee comprises of Principal, Professors and all HODs. \***

**\*Note: Attached in Supporting Documents**

#### The Principal Investigator

Principal Investigator (PI) has complete autonomy for successful completion of Research Project. PI decides research topics. Research Associates assist PI to implement the Research Project. PI has authority to mention specifications of purchase material and call for quotations. PI suggests the required reference Books and Journals in Library.

#### ◦ Adequate Infrastructure and Human Resources

Adequate Infrastructure is made available to PI. Laboratories with computing and internet facilities, Library are made available.

#### ◦ Support in Terms of technology and Information Needs

Project In charge and all teachers have access to the entire technology and information infrastructure available in the college.

1) Institute has 24X7 dedicated Internet Leased Line of TATA DoCoMo ( 50 Mbps) connectivity with contention ratio 1:1 It is distributed among all departments, library, and labs through campus wide optical fiber cable and CAT 6 network connectivity with gigabit Cisco and D link manageable switches connectivity. All campus is now under Wi-Fi.

2) Institute has state of the art servers



3) Central Library with reference books, titles, volumes, print National & International Journals, NPTEL videos.

Prioritized research areas and the expertise available with the institution

| Name of faculty | Specialization area |   |
|-----------------|---------------------|---|
| First year      | 8                   | Physics, Chemistry, Mathematics                   |
| E & Tc          | 12                  | VLSI, Embedded systems, Power Electronics         |
| Mech            | 12                  | Design , Thermal, Production, Robotics            |
| Civil           | 8                   | Structural, Const. Mgmt., Emt, Foundation         |
| Computer        | 10                  | Cloud Computing, S/W Development, Networking, and |

**The efforts of the institution in attracting eminent researchers to visit the campus and interact with teachers and students**

- 1 Interactions of students and faculties with eminent researchers always help them to be focused.
2. Institution understands that such expert talks always instill a strong desire to pursue research.
3. Institute invites eminent researchers, industry experts and academia to visit and interact with the students.
4. Various workshops and conferences are regularly organized, where eminent personalities from respective fields interact with students and faculty.
5. In addition to that students and faculty members are encouraged to directly visit the industries, research organizations and interact with the eminent persons related to the funded projects.
6. Institute is member of various Technical Societies or Associations. Institute organizes various workshops/conferences/seminar programs in association with these societies.
7. These societies also help the institution to identify the experts in the domain and to arrange workshops/conferences/seminar/training programs.
8. Prof. Tiwari conducted seminars on IPR. Our students get encouraged and Mr. Waichal successfully registered for patent.

**The financial provisions made available to support student research projects by institute.**

Institute provides financial assistance to student for perusing research work, carrying project, to attend workshops and seminar, symposia as and when required.

| File Description           | Document                      |
|----------------------------|-------------------------------|
| Any additional information | <a href="#">View Document</a> |

### 3.2.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the last five years

**Response:** 7

3.2.2.1 Total number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 2       | 2       | 2       | 0       | 1       |

| File Description                                   | Document                      |
|--|-------------------------------|
| List of workshops/seminars during the last 5 years | <a href="#">View Document</a> |
| Report of the event                                | <a href="#">View Document</a> |

### 3.3 Research Publications and Awards

**3.3.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research**

**Response:** Yes

| File Description                        | Document                      |
|---|-------------------------------|
| Any additional information              | <a href="#">View Document</a> |
| Institutional data in prescribed format | <a href="#">View Document</a> |

**3.3.2 The institution provides incentives to teachers who receive state, national and international recognition/awards**

**Response:** Yes

| File Description                   | Document                      |
|------------------------------------|-------------------------------|
| List of Awardees and Award details | <a href="#">View Document</a> |
| e- copies of the letters of awards | <a href="#">View Document</a> |

**3.3.3 Number of Ph.D.s awarded per teacher during the last five years**

**Response: 0.25**

3.3.3.1 How many Ph.Ds awarded within last five years

Response: 1

| File Description   | Document                      |
|--|-------------------------------|
| Any additional information   | <a href="#">View Document</a> |
| List of PhD scholars and their details like name of the guide , title of thesis, year of award etc | <a href="#">View Document</a> |

**3.3.4 Number of research papers per teacher in the Journals notified on UGC website during the last five years****Response: 0.2**

3.3.4.1 Number of research papers in the Journals notified on UGC website during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 11      | 17      | 28      | 26      | 7       |

| File Description   | Document                      |
|--|-------------------------------|
| List of research papers by title, author, department, name and year of publication | <a href="#">View Document</a> |

**3.3.5 Number of books and chapters in edited volumes/books published and papers in national/international conference proceedings per teacher during the last five years****Response: 0.01**

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 1       | 1       | 1       | 1       | 2       |

| File Description  | Document                      |
|---|-------------------------------|
| List books and chapters in edited volumes / books published | <a href="#">View Document</a> |

### 3.4 Extension Activities

#### 3.4.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years

##### Response:

**Institution promote institution-neighborhood- community network and student engagement, contributing to good citizenship, service orientation and holistic development of students**

Institution concentrates on “think globally and act locally” principle. Keeping overall personality development of students at center point, different activities are planned and conducted. These activities help students to nurture the sense of responsibility towards society. These activities are scheduled uniformly throughout academic year. NSS unit is actively involved as mediator between society and Institute. NSS helps to develop good citizenship values among students and also ensures holistic development of students through participation in different activities. Some of the activities conducted are as follows:

**Road Safety Awareness and Traffic Control:** Institute has organized guest lectures by officials from RTO, Pune in last year. Students of different colleges from Siddhant Group have attended these lectures. Speakers emphasized on precautions to be taken by commuters, riders and drivers. Along with this session RTO Pune organized exhibition related to Road Safety containing posters, banners, vehicle models.

**Digital India:** In order to support Digital India programme, volunteers explained the procedure to the citizens of adopted village about opening Jan-Dhan account in bank. Volunteers also informed the importance of having email account of each person. They helped citizens to enroll for Aadhar card which is the gateway for Government’s online services.

**Cashless India:** During camp volunteers spread awareness about cashless India among citizens. Volunteers introduced different modes of payment to the people of village. Citizen can make use of plastic money which includes debit card, credit card. Citizens are made aware about significance of net banking. This facility can be utilized through a smart phone, computer or any other electronic gadget. Volunteers emphasized that internet banking is one of the safe way of doing payments online.

**Blood Donation Camps:** NSS unit organized blood donation camps. Medical officers also suggested volunteers a diet to increase the Hemoglobin level.

##### **Visit to Orphanage, old age home and residence school of under-privileged students:**

Institute has active NSS unit. Student along with in charge faculty regularly visited orphanage, residence of under-privileged orphans. They distributed sweets, fruits, stationary to them. Group members not only played games with them but also conducted session on computer knowledge and its usage. Group members

financially supported a needy student to meet her educational requirements. Students visited old age home, spent time with inhabitants happily.

#### **Tree plantation:**

NSS volunteers have planted trees in adopted villages and ensured that school children will water it on regular basis. Group members have planted trees in surrounding area of college and school.

#### **Clean India:**

Students and faculty are made aware of clean environment and their active participation is sought.

### **3.4.2 Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years**

**Response: 0**

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 0       | 0       | 0       | 0       | 0       |

#### **File Description**

#### **Document**

Number of awards for extension activities in last 5 years

[View Document](#)

### **3.4.3 Number of extension and outreach programs conducted in collaboration with industry, community and Non-Government Organisations through NSS/NCC/Red cross/YRC etc., during the last five years**

**Response: 22**

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 13      | 9       | 0       | 0       | 0       |

| File Description   | Document                      |
|--|-------------------------------|
| Number of extension and outreach programs conducted with industry, community etc for the last five years | <a href="#">View Document</a> |
| Reports of the event organized   | <a href="#">View Document</a> |

### 3.4.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

**Response:** 18.52

3.4.4.1 Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. year wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 400     | 364     | 0       | 0       | 0       |

| File Description  | Document                      |
|---|-------------------------------|
| Average percentage of students participating in extension activities with Govt. or NGO etc. | <a href="#">View Document</a> |
| Report of the event   | <a href="#">View Document</a> |

## 3.5 Collaboration

### 3.5.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc during the last five years

**Response:** 7

3.5.1.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 1       | 0       | 3       | 3       | 0       |

| File Description  | Document                      |
|---|-------------------------------|
| Number of Collaborative activities for research, faculty etc. | <a href="#">View Document</a> |
| Any additional information                                    | <a href="#">View Document</a> |

**3.5.2 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. during the last five years (only functional MoUs with ongoing activities to be considered)**

**Response:** 10

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 7       | 1       | 1       | 1       | 0       |

| File Description   | Document                      |
|--|-------------------------------|
| e-copies of the MoUs with institution/ industry/ corporate house   | <a href="#">View Document</a> |
| Details of functional MoUs with institutions of national, international importance, other universities etc. during the last five years | <a href="#">View Document</a> |

## Criterion 4 - Infrastructure and Learning Resources

### 4.1 Physical Facilities

**4.1.1 The institution has adequate facilities for teaching- learning. viz., classrooms, laboratories, computing equipment, etc.**

**Response:**

The Institute has adequate classrooms with green boards, Smart board, LCD projection system, OHP and Wi-Fi facility with LAN connectivity. The classrooms have sufficient and good quality furniture's. The college has tutorial rooms for discussion on Projects, seminar and completing assignments. All laboratories are well equipped. The practical's are performed as per the SPPU syllabus. The Charts and models are also displayed in laboratory for easy understanding of practical's, "MyExamo" online test series is conducted in computer laboratories to enhance capabilities of students for better performance in exam. The college has adequately equipped workshop with various machines.

**Library:** Library is equipped with books, journals magazines and e-resources. It has a semi-automated AUTOLIB integrated library management software system. Library has well-furnished reading room with 24x7 Wi-Fi facility.

**Central Library Photo\***

**\*Note: Photos of Central Library added in Additional Information**

**T&P cell:** T&P cell facilitates arranging training session, placement drive. Institute Industry interaction cell arranges site visit, gives guidance to final year students for industrial Projects.

**Seminar Halls:** The College has Three Seminar halls with ICT facility for conducting subject matter expert lectures, paper presentation, conferences and workshops.

**Details of Area Required and Area Available**

| Type                         | Available Area (Sq.Mtr.) |
|------------------------------|--------------------------|
| Class Room (UG) - 24         | 1640.88                  |
| Tutorial Room (UG & PG) - 05 | 165.00                   |
| Laboratories - 40            | 2734.8                   |
| Work Shop UG & PG -01        | 1164.00                  |
| Drawing halls - 02           | 264                      |
| Seminar hall - 03            | 396                      |



| File Description           | Document                      |
|----------------------------|-------------------------------|
| Any additional information | <a href="#">View Document</a> |

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

##### Response:

For over all development of the students, SCE encourages students to participate in various sports/ tournaments at university level and state/National level, cultural activities, NSS etc.

**Sports:** To nurture the talents of students in different fields and for their overall development, a number of sports activities are conducted to shape their personality, health and fitness. The institute provides facilities for both indoor and outdoor games to the students. Spacious playgrounds like for cricket and football we have a ground having **5000 sq.mtrs** area, for basketball, we have a basketball court having area **608 sq.mtrs** and a volleyball court with area **162 sq.mtrs** and kabaddi ground with an area **130 sq.mtrs**. The institute also has an indoor area for playing chess, table tennis, and carom.

Various functions like fresher's parties, farewell functions, yoga day, and celebration of festivals, are held in college Auditorium having capacity 500 persons and area **80 sq.mtrs**. An open space is also available having area **917 sq.mtrs** having capacity 4000 persons.

**Gymnasium:** Institute has a gymnasium equipped with all the standard equipment's with an area of **47 sq.mtrs**. which gives students an opportunity to develop Fitness skills.

##### Photos of Sports & Yoga Activity\*

**\*Note : Photos of Sports & Yoga Activity added in Additional Information**

| File Description           | Document                      |
|----------------------------|-------------------------------|
| Any additional information | <a href="#">View Document</a> |

#### 4.1.3 Percentage of classrooms and seminar halls with ICT - enabled facilities such as smart class, LMS, etc

**Response:** 66.67

##### 4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 18

| File Description   | Document                      |
|--|-------------------------------|
| Number of classrooms and seminar halls with ICT enabled facilities | <a href="#">View Document</a> |

#### 4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.

**Response:** 14.86

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year wise during the last five years (INR in Lakhs)

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 0       | 10      | 60      | 55      | 275     |

| File Description  | Document                      |
|---|-------------------------------|
| Details of budget allocation, excluding salary during the last five years | <a href="#">View Document</a> |
| Audited utilization statements  | <a href="#">View Document</a> |

## 4.2 Library as a Learning Resource

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

**Response:**

SCE Library services are partially automated through Library Integrated Management Software Autolib version 1.0.0, library material are bar-coded and issued by using Autolib software. The software handles circulation, cataloguing, reports, search and master. Software has an inbuilt OPAC (Online Public Access Catalog) which can be viewed by staff members and students on Library as well as remote place. OPAC has enabled members of library to get detailed information about collection of books, books issued etc.

**Library collection:**

SCE library has good collection of books, journals, Magazines, Newspapers, CDs. As on date library holds the collection of 20614 books, 74 Printed National & International Journal, 4623 E-journals, and 1300 CD's

**Library Services:** SCE library provide different types of services to patrons like syllabus, question papers, project reports, open access to the stack room, reading hall, newspaper clipping.

**Library Area:** SCE library area is 645 sqm which includes stack room, digital library and reading room

with 150 seating capacity.

**Digital Library:**

SCE Digital Library is for downloading e-journals, articles and various paid and free databases. There are 12 computers with internet facility. Students and faculty can access to various databases like J Gate, DELNET.

**Autolib Library Management software\***

**\*Note: Screenshots of Autolib software added in Additional Information**

| File Description                | Document                      |
|---------------------------------|-------------------------------|
| Any additional information      | <a href="#">View Document</a> |
| Link for Additional Information | <a href="#">View Document</a> |

**4.2.2 Collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment**

**Response:**

**Rare book and Manuscript:** - The institute Library also made available and accessible to following sources on rare book and manuscript by providing link to the users. Users can get access through the institutional and individual registration on Internet.

- DELNET (Developing Library Network)
- National Digital Library of Indian
- Rare book society of India

**Other knowledge resource**

**Scientology:** - Library has good collection on scientology by American science fiction writer L.Ron Hubbard. From Scientology book students seeking self-knowledge and spiritual fulfillment.

**Editorials:** - Collection of editorials and important articles from all the national newspapers are displayed in library to enrich the general knowledge and on current affairs of students.

**Literature:** - SCE library has good Hindi, English and Marathi Literature collection and also Spiritual Literature like Bhagwat Geeta.

**4.2.3 Does the institution have the following:**

**1.e-journals**

- 2.e-ShodhSindhu
- 3.Shodhganga Membership
- 4.e-books
- 5.Databases

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

**Response:** A. Any 4 of the above

| File Description  | Document                      |
|---|-------------------------------|
| Details of subscriptions like e-journals,e-ShodhSindhu,Shodhganga Membership etc. | <a href="#">View Document</a> |

#### 4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)

**Response:** 5.04

4.2.4.1 Annual expenditure for purchase of books and journals year wise during the last five years (INR in Lakhs)

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 5.44    | 2.29    | 2.36    | 5.03    | 10.1    |

| File Description  | Document                      |
|---|-------------------------------|
| Audited statements of accounts  | <a href="#">View Document</a> |
| Details of annual expenditure for purchase of books and journals during the last five years | <a href="#">View Document</a> |

#### 4.2.5 Availability of remote access to e-resources of the library

**Response:** Yes

| File Description                                       | Document                      |
|--|-------------------------------|
| Details of remote access to e-resources of the library | <a href="#">View Document</a> |

**4.2.6 Percentage per day usage of library by teachers and students****Response:** 15.25**4.2.6.1 Average number of teachers and students using library per day over last one year**

Response: 143

| File Description                                  | Document                      |
|---|-------------------------------|
| Details of library usage by teachers and students | <a href="#">View Document</a> |
| Any additional information                        | <a href="#">View Document</a> |

**4.3 IT Infrastructure****4.3.1 Institution frequently updates its IT facilities including Wi-Fi****Response:**

SCE Computing facility is made available as per the AICTE norms with required IT infrastructure and configuration

**Details of IT infrastructure in the institute**

| Sr.No. | Title   | Remark  |
|--------|---|---|
| 1      | Total Number of PCS with exact configuration of each available system | 617 Nos.  |
| 2      | Stand-alone facility  | yes, Available  |
| 3      | LAN facility  | yes, Available  |
| 4      | Wi-Fi facility  | yes, Available  |
| 5      | Licensed Software's   | Number of System software: 03 (open Source s/w- Linux, Fedora 19/20)<br>Application Software are available : 20 |
| 6      | Number of nodes/computers with Internet facility(Nos.)                | 399 Nodes   |
| 7      | Computer-Student ratio  | 1:2   |

**Configuration Details of the PC's is as follows**

| Nos  | Configuration  | Remark  |
|--|--|---|
| 617  | 3220 i3 HCL desktop infinity LA380 core i3 3220, 8GB RAM<br>500GB HDD, DOS, 18.5" TFT Monitor.                       | PCs are distributed across to various departments of Institute. |
| 2  | D-link wireless router access point  | Wi-Fi router (8,16 Port)  |
|  | NETGEAR wireless router  | N150 Wi-Fi DSL Modem Router.                                    |
| 150  | Quick heal antivirus-Quick Heal Admin Console internet security to quick heal Endpoint Security Business and MACAFEE | Computer security on each PC.                                   |
| 50 Mbps  | Internet wireless leased line 1:1 connectivity from Tata Teleservice Ltd. 1:1 connectivity                           | Internet for entire Campus is available                         |
| All the faculty members have well-furnished cabins with computer and internet facility                         |  |   |
| * Entire campus is Wi-Fi enabled   |  |   |
| * Central computing facility with 100 nodes is available for faculty as well as students for multiple purpose. |  |   |
| <b>Details of Software used in the Institute</b>   |  |   |
| Sr. No.  | Lincence copy  | Type of Lincence Copy   |
| 1  | Windows-7  | System Software   |
| 2  | Microsoft Office-2010  | System Software   |
| 3  | Microsoft Visual Studio.2005   | Applications Developer Tools                                    |
| 4  | Microsoft Office Professional Enterprise Edition -2003   | Applications software   |
| 5  | Microsoft Office Standard Edition -2003 service pack-1   | Applications microsoft Office Family                            |
| 6  | Rational Software Architect Version 7.0  | Applications software   |
| 7  | Turbo C ++ Suite   | Applications software   |
| 8  | Oracle Warehouse Builder 10 g  | Applications software   |
| 9  | Turbo Assembler  | Applications software   |
| 10   | ADOBE PIA PLATFORM RESOURCE KIT  | Internet Application  |
| 11   | MSDN Library Subscription ,Software Development Kits   | Application Programming Interface                               |
| 12   | MatLab 2012 b Mech, E&TC   | Applications software   |

|    |  |                       |  |
|----|--|-----------------------|--|
| 13 | ANSYS-13   | Applications software |  |
| 14 | PRO-E WILDFIRE-5.0   | Applications software |  |
| 15 | MASTER CAM -XS   | Applications software |  |
| 16 | AUTOCAD-2009   | Applications software |  |
| 17 | MATLAB-2013  | Applications software |  |
| 18 | XILNX VLSI Design S/W Logic Edition VHDE ISE Log 25              | Applications software |  |
| 19 | MICRO WIND 3.5 Package 10  | Applications software |  |
| 20 | AUTO LIB   | Applications software |  |
| 21 | ADCC InfocadPvt Ltd MatLab-2013b                                 | Applications software |  |
| 22 | ADCC InfocadPvt Ltd MatLab- Renewal 2013b                        | Applications software |  |
| 23 | Sintel make LAN simulation software (Netsys) Module single user  | Applications software |  |
| 24 | Design & simulation software Multisim version -10                | Applications software |  |
| 25 | Silicon Automation System EMPIER educational simulation software | Applications software |  |
| 26 | TALLY  | Applications software |  |

#### 4.3.2 Student - Computer ratio

**Response:** 2.09

| File Description         | Document                      |
|--------------------------|-------------------------------|
| Student - Computer ratio | <a href="#">View Document</a> |

**4.3.3 Available bandwidth of internet connection in the Institution (Lease line)**

&lt;5 MBPS

5-20 MBPS

20-35 MBPS

35-50 MBPS

**Response:** 35-50 MBPS

| File Description   | Document                      |
|--|-------------------------------|
| Details of available bandwidth of internet connection in the Institution | <a href="#">View Document</a> |
| Any additional information   | <a href="#">View Document</a> |

**4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)****Response:** Yes

| File Description   | Document                      |
|--|-------------------------------|
| Facilities for e-content development such as Media Centre, Recording facility, LCS | <a href="#">View Document</a> |
| Link to photographs  | <a href="#">View Document</a> |

**4.4 Maintenance of Campus Infrastructure****4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years****Response:** 23.5

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 31      | 81.5    | 64.9    | 119.2   | 94.7    |



| File Description   | Document                      |
|--|-------------------------------|
| Audited statements of accounts.  | <a href="#">View Document</a> |
| Details about assigned budget and expenditure on physical facilities and academic facilities | <a href="#">View Document</a> |

#### **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:**

SCE allocates sufficient funds for regular maintenance of college facilities. SCE reviews requirements regarding building, furniture laboratory equipment, computers before commencement of academic session and budget allocation is done taking into consideration all academic needs.

(i) In case of laboratory, the following stock registers have to be maintained

A. Consumables stock register

B. Non-consumables stock register

C. Other register(s) based on the requirement of the Department concerned.

(ii) The staff in charge for each lab is responsible for the proper upkeep of the material in the lab besides maintaining the consumable and non-consumable stock register of each lab. Each entry is signed by the staff in-charge of the laboratory, Lecturer in charge of verification and the HOD concerned.

(iii) Similarly, loss of any item should also be recorded in the register and reported to the Principal for recovery of the cost from person responsible for the loss.

(iv) After the recovery of the costs and on the specific orders from the Principal, the item lost / damaged has to be removed from the stock register.

(v) The maintenance of water coolers is carried out by an annual maintenance contract. The institute has appointed In-house Electrician Team. For repair and maintenance of electrical works. Laboratory equipments are serviced and repaired by the technical assistant, so the irrespective departments for minor repair or by the concerned manufacturers for major repairs. The maintenance of computing facility is carried out by the system administrator and the technical assistants of the respective departments Library maintenance is done by management by providing a provision of budget, Material Acquisition, Material Withdrawn, Library software is maintained by AMC from concern vendor. Dis-infecting and keeping Library clean is done by Library housekeeping staff. The sports department of the college is meritorious, the facilities used by staff and students and the maintenance is done with the help of management. SCE garden is maintained by the gardener appointed by the institute.

## 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 the last five years

**Response:** 20.98

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 215     | 192     | 285     | 274     | 264     |

#### File Description

#### Document

Upload self attested letter with the list of students sanctioned scholarships

[View Document](#)

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

[View Document](#)

#### 5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

**Response:** 4.05

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 116     | 46      | 6       | 4       | 0       |

#### File Description

#### Document

Any additional information

[View Document](#)

Number of students benefited by scholarships and freeships besides government schemes in last 5 years

[View Document](#)

**5.1.3 Number of capability enhancement and development schemes –**

1. For competitive examinations
2. Career counselling
3. Soft skill development
4. Remedial coaching
5. Language lab
6. Bridge courses
7. Yoga and meditation
8. Personal Counselling

**A. 7 or more of the above**

**B. Any 6 of the above**

**C. Any 5 of the above**

**D. Any 4 of the above**

**Response:** A. 7 or more of the above

| File Description  | Document                      |
|---|-------------------------------|
| Details of capability enhancement and development schemes | <a href="#">View Document</a> |
| Link to Institutional website                             | <a href="#">View Document</a> |

**5.1.4 Average percentage of student benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years**

**Response:** 4.12

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 44      | 0       | 145     | 0       | 80      |

| File Description  | Document                      |
|---|-------------------------------|
| Number of students benefited by guidance for competitive examinations and career counselling during the last five years | <a href="#">View Document</a> |

**5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years****Response:** 0

## 5.1.5.1 Number of students attending VET year wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 0       | 0       | 0       | 0       | 0       |

**File Description****Document**

Details of the students benefited by VET

[View Document](#)**5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases****Response:** Yes**File Description****Document**

Details of student grievances including sexual harassment and ragging cases

[View Document](#)

Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee

[View Document](#)**5.2 Student Progression****5.2.1 Average percentage of placement of outgoing students during the last five years****Response:** 19.52

## 5.2.1.1 Number of outgoing students placed year wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 55      | 49      | 142     | 76      | 82      |

| File Description  | Document                      |
|---|-------------------------------|
| Details of student placement during the last five years | <a href="#">View Document</a> |
| Self attested list of students placed                   | <a href="#">View Document</a> |

### 5.2.2 Percentage of student progression to higher education (previous graduating batch)

**Response:** 5.31

#### 5.2.2.1 Number of outgoing students progressing to higher education

Response: 11

| File Description                                   | Document                      |
|--|-------------------------------|
| Upload supporting data for student/alumni          | <a href="#">View Document</a> |
| Details of student progression to higher education | <a href="#">View Document</a> |

### 5.2.3 Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: NET/SLET/GATE/ GMAT/CAT, GRE/ TOFEL/ Civil Services/State government examinations)

**Response:** 23.98

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 0       | 16      | 5       | 3       | 0       |

#### 5.2.3.2 Number of students who have appeared for the exams year wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 30      | 36      | 11      | 10      | 4       |

| File Description  | Document                      |
|---|-------------------------------|
| Number of students qualifying in state/ national/ international level examinations during the last five years | <a href="#">View Document</a> |

### 5.3 Student Participation and Activities

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

**Response:** 3

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 0       | 0       | 0       | 1       | 2       |

| File Description   | Document                      |
|--|-------------------------------|
| Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years | <a href="#">View Document</a> |
| e-copies of award letters and certificates   | <a href="#">View Document</a> |

#### 5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

**Response:**

All the departments are having their students associations. The objective of the association is to encourage and motivate the students in co-curricular and extra-curricular activities apart from academics. The Students' Council organizes many activities through its representative's viz. Sports coordinator, cultural coordinator and NSS coordinator.

The associations conduct the activities under the guidance of the faculty representatives. The College makes budgetary allocations for student activities as follows:

- Organizing various association programmes.
- Participation as volunteers in intercollegiate competitions and conferences, workshop, career fair, prize distribution ceremony organized by the college.
- Celebration of Teachers' Day,

- Participation in various national and state level project and presentation competitions.

The following are the activities generally undertaken by the departmental associations:

- Expert Lectures
- Technical Talks
- Aptitude Tests
- Group Discussions

The student coordinator perform various tasks such as making announcement in the class to encourage the students for participation in various events, collecting names of the student from the class, programme planning, stage arrangement, comparing, organizing the events etc for smooth and sound conduct of various activities of the college.

Student coordinators are appointed different committees:

**The activities of student council includes:**

- To organize national or university level technical symposium like SPANDAN TECNOTSAV in each year to motivate students to participate in technical and nontechnical events.
- To organize the college level event annual social gathering each year which include cultural and sport events.
- Celebration of Nationally important days like Independence day, Republic day etc., to develop the feeling and sense of nationalism
- To celebrate Teacher day & Engineers Day.
- To organize blood donation camp, tree plantation, voter's awareness programs etc.
- To organize above events, funds are given by institute and some sponsors.

**Cultural event includes:**

- Ganesh Festival
- Shiv Jayanti
- Eassy competition
- Quiz competition
- Funny games
- Fashion show
- Traditional day

· Social activities under NSS.

Organization of programs on environmental pollution, blood donation, HIV/AIDS awareness, physical fitness program etc. There is no funding from any Government body. Budgetary provisions are made in the annual budget to take care of all activities conducted by the student council.

**5.3.3 Average number of sports and cultural activities/ competitions organised at the institution level per year**

**Response: 16.4**

5.3.3.1 Number of sports and cultural activities / competitions organised at the institution level year wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 10      | 10      | 20      | 20      | 22      |

| File Description   | Document                      |
|--|-------------------------------|
| Number of sports and cultural activities / competitions organised per year | <a href="#">View Document</a> |

## 5.4 Alumni Engagement

**5.4.1 The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years**

**Response:**

**Major contributions and activities-**

Students' Alumni Association is a body of ex-students of the college. This Association will be acting as a link between the industries / organizations they are working with and the Institution. Moreover they will also work to strengthen the network of alumni of this institution who are serving in different parts of the world. They will be visiting colleges for guiding existing students about the recent trends in industries, skill enhancement and for sharing their experiences. They will work for the better of their alma mater and its stakeholders.

The aim of the Alumni Association is to provide a forum for former students to make invaluable contributions.

- To build and maintain positive relationship between the college and Alumni by serving the needs and interests of Alumni and encourage Alumni to play an active role in the future pursuits of the college.
- To keep track of the achievements of its Alumni, one of the senior faculty members is appointed as the coordinator of Alumni association.
- The college has decided to give an award to its alumni, who have shown a high level of achievement in their respective field. All the outgoing students are the members of the Alumni Association.
- The alumni members are helping in the student's recruitment process.
- The institute has its own Alumni Association which look after all the activities related to the Alumni of college. Even the records are maintained by this committee. Following committee members are deputed for alumni-



The institution is in process of registration of Alumni Association. The first alumni meet was organized and body members of the association has been finalized and application is submitted to Charity commissioner for registration.

**Inspite of the above, An alumnus contributes to the development of the college in the following ways:**

- Provide feedback on infrastructure development and other academic related matters of the college.
- Alumni members residing in various parts of India and abroad share their experiences with staff and students whenever they visit the institution.
- An alumina supports placement activities of the students.

**Network with the Alumni:**

- The members of college administration and the senior faculty of all the departments participate in the annual alumni meetings on invitation and support for the development of the institution.
- The departments seek the opinion / suggestions of alumni on various developmental activities by sending mails to them and requesting them to fill the Performa supplied in this regard.

| File Description           | Document                      |
|----------------------------|-------------------------------|
| Any additional information | <a href="#">View Document</a> |

**5.4.2 Alumni contribution during the last five years**  
**<1 Lakh**

**1 Lakh - 3 Lakhs**

**3 Lakhs - 4 Lakhs**

**4 Lakhs - 5 Lakhs**

**Response: <1 Lakh**

| File Description                      | Document                      |
|---------------------------------------|-------------------------------|
| Alumni association audited statements | <a href="#">View Document</a> |

**5.4.3 Number of Alumni Association / Chapters meetings held during the last five years**

**Response: 1**

5.4.3.1 Number of Alumni Association /Chapters meetings held year wise during the last five years

|         |         |         |         |         |
|---------|---------|---------|---------|---------|
| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
| 1       | 0       | 0       | 0       | 0       |

| <b>File Description</b>  | <b>Document</b>               |
|--|-------------------------------|
| Number of Alumni Association / Chapters meetings conducted during the last five years. | <a href="#">View Document</a> |
| Any additional information   | <a href="#">View Document</a> |

NAAC

## Criterion 6 - Governance, Leadership and Management

### 6.1 Institutional Vision and Leadership

#### 6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the institution

##### Response:

Chaudhary Attar Singh Yadav Memorial Education Trust was established in 2005 and Siddhant College of Engineering initiated in the year 2005. The institute has its strong vision for social transformation of masses through education, training and research. The atmosphere with green surroundings provides conducive environment for education. The Governing body of the institute guides regularly in line of vision and mission. The Governing body meets regularly to evaluate the past performance and give overall direction for the future development.

The institute is govern by two bodies viz. Governing Body and Local management Committee. These two bodies are chaired by the Chairman of the Trust. The roles of Governing Body (GB) and Local Management Committee (LMC) are given below:

##### Governing Body (GB)

- GB is the apex body of the Institute, which is constituted by the paren trust and Industrial Expert, Adviser, Account Expert, Faculty.
- The GB provides guidelines and strategic direction for aligning the programs, policies and processes of the institute with the changing environmental contexts and demands of business world.
- The GB meets once in six months to provide insights on priorities and focus areas for the Institute.

##### Local Management Committee (LMC)

- LMC is responsible for deliberations and decision making at the institute level.
- LMC has been constituted as per the Maharashtra University Act 1994.
- To discuss budget and financial statements and forward it to the GB for approval.
- To study workload and recommend to the GB the requirement of faculty, staff and other posts.
- Consider and make recommendations for compliance of the report of local inquiry committee appointed by the Savitribai Phule Pune University.
- To prepare detailing for expenditure which is not covered in the budget.

The Principal is the key member of the GB and LMC. He is responsible to implement the policies decided by the GB and LMC.

##### The Roles of the Principal is as follows

- An active member in deciding the quality policy and making the action plans.
- Leads the faculty, implementation of decided plan of action and provide directions to faculty and coordinates them wherever necessary.
- Communicates opinions of top Management to faculty and staff regarding on responsibilities and duties assigned to each component of Institute, on implementation of quality policy

- In order to fulfillment of mission, policies and action plans are developed and executed under the leadership of the Principal along with involvement of faculty.

## VISION

Empowering through technical economic and social development.

## MISSION

- To impart quality education through dedicated efforts
- To develop entrepreneurial attitude and values amongst learners
- To inculcate ethical values and technology to serve social needs
- To create conducive environment suitable for research and innovative ideas

| File Description                | Document                      |
|---------------------------------|-------------------------------|
| Link for Additional Information | <a href="#">View Document</a> |

### 6.1.2 The institution practices decentralization and participative management

#### Response:

The management of SCE comprises of

1. Governing Body (GB)
2. Local Management Committee (LMC)
3. Principal
4. Head of Department (HOD)

There are two types of policy decision:

- 1) Institute Policy Implementation
- 2) Statutory Bodies' Policy Implementation

The institute follows systematic decentralization of the work while implementing these policies. The management is also gets involved in many activities where major decisions are required to take.

**1) Institute Policy Implementation** – There are different committees formed for effective implementation of policies laid down for the overall development of SCE by GB and LMC and support of head of department (HOD) and faculty. Deliberations of these policies are made initially at department level where inputs of stake holders are also considered. All decided activities further discussed with Department Advisory Board (DAB) which comprises of HOD, senior faculty, representatives from industry, alumni, parent and students for their suggestions. Such approved plan is executed with help of staff of the institute. Example – Implementation of the batch wise Guardian Faculty Mentor (GFM) scheme.

**2) Statutory Bodies' Policy Implementation** – There are three statutory bodies viz. All India Council for

Technical Education (AICTE), Directorate of Technical Education (DTE), Savitribai Phule Pune University (SPPU) which lays different mandatory policies like infrastructural norms, admission process, university examination etc. Work is distributed among different committees for effective implementation. One of such example of University examination is given below –

College Examination Officer (CEO) is appointed by the Principal for conduction of all University examinations. As per University Academic calendar, institute academic calendar is prepared. Academic calendar includes list of pre-planned programs of departments and examination schedules. Academic calendar is brought to the notice of all concern including CEO. CEO recommends faculty for Sr. Supervisor and Assistant Sr. Supervisor which is approved by the Principal. CEO then appoints the duty of Jr. Supervisor, peon and various clerks for smooth conduction of the examination.

Following are the committees for smooth conduction of academic as well as administration activities –

1. Anti-Ragging Committee
2. IQAC Committee
3. SC/ST Committee
4. OBC Committee
5. Grievance Redressal Committee
6. Internal Compliant Committee
7. Women’s Grievance Committee
8. Systems and IT support committee (ERP Control)
9. Examination Committee
10. Academic monitoring committee
11. Research and development committee
12. Library Committee
13. Entrepreneurship Development Committee
14. Hostel and Canteen committee
15. Maintenance committee

| File Description                | Document                      |
|---------------------------------|-------------------------------|
| Link for Additional Information | <a href="#">View Document</a> |

## 6.2 Strategy Development and Deployment

### 6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution

**Response:**

SCE has a perspective plan under the leadership of Principal with assistance of HOD’s from departments under the guidance of LMC and GB.

Provision of adequate annual budget is the part of the development plan. The aspects to be included in the perspective plan are drawn from the following committee recommendations.

1. Governing Body
2. Local Management Committee
3. IQAC
4. Head of Department
5. Different committees

SCE prepares following three perspective plans for its multi-dimensional growth.

1. **Academic Excellence** – SCE is known for its Academic discipline. SCE plans to achieve Academic Autonomy in order to cater the needs of Industry and Society at large by creation of flexibility in curriculum.

SCE focuses on empowering experienced faculty in achieving academic excellence by means of practical oriented and project based learning.

1. **Research and Innovation-** SCE working towards attaining research center in all departments. Meet industry expectations, collaborative research to be enhanced which will result into Centre of Excellence in all departments. SCE wishes to establish PhD research center, wherein Industry based research projects are undertaken with involvement of PhD and PG students. SCE has marked its presence in Field of Research and Innovation by publishing more than 200 research papers in the past four years span and filing more than 04 Patents in the last 3 years. SCE hosted one IEEE conferences in two years to provide platform for researchers.
2. **Professional Competence-** Professional competency being the requirement of industry. SCE plans to create an environment that encourages professional and personal growth and disseminate knowledge to coming generation of students. Improve requisite skills and knowledge in the technical and managerial front, SCE has initiated training students from second year level. SCE has signed MoU with professional organizations for providing add-on training to the students to build up required skill sets. To impart professional competency among faculty and students SCE has membership of various professional bodies such as ISTE, IETE, IEEE, QCFI, ACM, ISH, ISHRAE, IWS etc. Professional competency of students is developed through various student development and welfare activities at department and institute level. Active participation of Alumni has began in form of sharing their professional experience with students.

| File Description                                       | Document                      |
|--|-------------------------------|
| Link for Additional Information                        | <a href="#">View Document</a> |
| Strategic Plan and deployment documents on the website | <a href="#">View Document</a> |

**6.2.2 Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism**

**Response:**

Policy decisions are made by Governing body and dissemination is done by Principal, Vice Principal and HODs and Committee in-charges through LMC.

Following tree diagram shows the structure of the organization.

**Organization chart:\***

**\*NOTE: Organization structure of the institution is attached in additional information.**

SCE has framed service rules, recruitment and promotional policies for all employees, which is followed. SCE has own grievance redressal committee for staff and students. The committee reviews grievances received and resolves it. Based on severity of complaints, it is resolved in time limit suggested by management. Identity of person filing complaint in suggestion boxes are kept confidential. Solution/decision with regard to suggestion is communicated to related departments or individual of SCE for further action.

| File Description                | Document                      |
|---------------------------------|-------------------------------|
| Any additional information      | <a href="#">View Document</a> |
| Link for Additional Information | <a href="#">View Document</a> |

**6.2.3 Implementation of e-governance in areas of operation: 1.Planning and Development 2. Administration 3. Finance and Accounts 4. Student Admission and Support 5.Examination**

**A. All 5 of the above**

**B. Any 4 of the above**

**C. Any 3 of the above**

**D. Any 2 of the above**

**Response: A. All 5 of the above**

| File Description   | Document                      |
|--|-------------------------------|
| Details of implementation of e-governance in areas of operation Planning and Development, Administration etc | <a href="#">View Document</a> |
| Any additional information   | <a href="#">View Document</a> |
| Screen shots of user interfaces  | <a href="#">View Document</a> |
| ERP Document   | <a href="#">View Document</a> |

#### 6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions

##### Response:

All Committees submit six month reports to Principal. These reports comprises of activities performed, activities required for to do and suggestions. The Governing Body of SCE meets twice a year where Principal presents half yearly report, showcasing activities and achievements of SCE based on the committee and HOD reports. The GB gives guideline for further line of action. The detailing of these actions are done by LMC. The Principal prepares the annual report comprises of the Student Admissions, University result analysis, awards, Infrastructural additions, Quality policies outcomes of GB meeting etc. Based on this report resolution is made by the Governing body for implementation.

Some of the outcomes of such meetings are mention below:-

##### Example 1 -

- Financial Assistance to staff to attend Conferences / Seminars / Workshops was raised in GB meeting. This was resolved by instructing to make the policy and put for approval.
- Medical facility for students and staff members was raised. This was resolved by signing an MOU the nearby Hospital for regular visit of doctors to SCE.
- Medical Insurance for Staff Members. As recommended by LMC, this should be reviewed and shall be considered for approval further.
- Approval of the expenses incurred from January 2017 to June 2017. It was informed that Expenses were within Budget
- Faculty requirement based on Students Teacher Ratio and AICTE guidelines for the year 2017–2018 was discussed and approved the for further action.

##### Example 2 -

- **Safe drinking water facility:** The issue raised by Grievance redressal cell in the GB meeting. SCE provides constant supply of safe portable water in the campus including all departments and hostels. The campus buildings are provided with the underground water storage and overhead Tanks. Water purifiers along with water coolers are provided in campus buildings. Maintenance has been streamed lined by appointing an external agency for maintenance of these water purifiers at regular intervals through an Annual Maintenance Contract.

| File Description           | Document                      |
|----------------------------|-------------------------------|
| Any additional information | <a href="#">View Document</a> |

### 6.3 Faculty Empowerment Strategies

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

##### Response:



**Welfare Measures –**

It comes under the practice of SCE and management to promote the staff by providing study leave, special leave, on duty and other kind of support.

The management of SCE provides benefits to the staff as allowances, staff quarters, medical camps, good quality food, insurance etc. Such generous benefits make staffs life worth living. This helps keeping the moral and motivation of the staff high so as to retain them for longer duration.

***List of welfare measures***

| Sr. No. | Title                    |
|---------|--------------------------|
| 1       | Maternity Leave          |
| 2       | Higher Education Support |
| 3       | Provident fund           |
| 4       | Fees Concession          |
| 5       | Study Leave with pay     |
| 6       | Medical Checkup Camp     |
| 7       | Canteen Facility         |
| 8       | Staff Quarters Facility  |
| 9       | Leaves as per UGC norms  |
| 10      | Medical fund             |
| 11      | On duty death claim      |

**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:** 16.48

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 9       | 8       | 19      | 26      | 14      |

**File Description****Document**

Details of teachers provided with financial support to attend conferences, 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: 15.2**

6.3.3.1 Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 18      | 19      | 20      | 14      | 5       |

**File Description****Document**

Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff

[View Document](#)

**6.3.4 Average percentage of teachers attending professional development programmes viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programme during the last five years**

**Response: 9.7**

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 3       | 13      | 12      | 11      | 4       |

**File Description****Document**

Details of teachers attending professional development programs during the last five years

[View Document](#)

**6.3.5 Institution has Performance Appraisal System for teaching and non-teaching staff**

**Response:**

Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.

- A well-defined performance appraisal system exists.
- Performance appraisal is done annually at the end of each Academic Year.

- To evaluate the staff performance, staff feedback & Confidential Reports from HOD is considered.
- Appreciations & rewards are given to the staff members.
- For better appraisal the counseling of staff members is carried out time to time. Staff Self appraisal process is followed in the Institution. Self appraisal forms are also filled by each faculty, which are reviewed by HODs/Section In charges and further by the Principal.
- The performance appraisal is done annually by the end of each academic year.
- The performance is measured based upon well-defined performance appraisal system giving due weightage for academics, research and consultancy, self-development and self-discipline, contribution towards Student, Department and College development.
- The performance is communicated through appreciation letter to the staff members having good performance.
- The performance is also communicated to staff members having performance below satisfaction.

## 6.4 Financial Management and Resource Mobilization

### 6.4.1 Institution conducts internal and external financial audits regularly

#### Response:

The institute has External Audit mechanism. External Audit / Statutory Audit are done by M/S Mehra and Sharma Associates, Chartered Accountants, Pune every year. They submit Audit Report and Audited Financial Statements to the college authorities. Necessary compliance is done by the college management. The procedure of External audit is given below:-

#### External Audit:

- The accounts and procedures of internal control of finance are carried out by the head of the accounts team on a day to day basis and annual audit is done by the statutory auditor.
- The audit of accounts and submission of income tax returns are carried out regularly each year.
- External Audit was conducted in 24th December 2016 for the period 01.04.2015 to 31.3.2016

There are no audit objections since the institution follows a good system of internal controls like calling quotations, comparison of rates, preparation of purchase order and approvals at every stage of such implementation and due verification of goods and services that are obtained after delivery or completion of works. No expenses are incurred without proper approval or sanction by the Head of the institution.

#### Table: Dates of External Audit

| Year of external audit | Date of audit |
|------------------------|---------------|
| 2011-12                | 25/06/2012    |
| 2012-13                | 31/03/2013    |
| 2013-14                | 28/07/2014    |
| 2014-15                | 30/07/2015    |
| 2015-16                | 24/12/2016    |

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

**Response:** 0

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 0       | 0       | 0       | 0       | 0       |

| File Description   | Document                      |
|--|-------------------------------|
| Annual statements of accounts  | <a href="#">View Document</a> |
| Details of Funds / Grants received from non-government bodies during the last five years | <a href="#">View Document</a> |

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

**Response:**

The institute is a self-financed, so the major source of fund is from students as a Tuition Fee and other charges. Other source is Donation received from respective heads and University grants. The Income and Expenditure is certified by the Chartered Accountant regularly. Whatever deficit encountered in finance. The management is in a position to meet the deficit, if any.

- The Institute prepares the yearly budget covering receipts and various expenditure.
- All Departments prepare the budget for development of laboratories, Students Activities, minor purchases for their departments.
- The Institute maintains bills and records regarding the fees collection from students and accounts is maintained which is audited by CA.
- The money allocated as per budget sanction by Management and the review of the same is done periodically.

| File Description           | Document                      |
|----------------------------|-------------------------------|
| Any additional information | <a href="#">View Document</a> |

## 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 IQAC has been constituted in the month of May 2017; however the quality assurance strategies were in practice before that. SCE has taken major steps to improve quality of education in many areas such as infrastructural development, transport facility, hostel, equipment maintenance, library, internet, qualified and experienced faculty etc. The institute played major role to improve quality in the areas like academic monitoring, ICT based classrooms, technical events etc.

Two examples of best practices which are followed showing improvement are given below:

#### Best Practice 1 -

##### Title of the Practice: Faculty Development Schemes

#### Objective:

The objective of the practice is to motivate the faculty members to conduct research, organize and attend conferences, workshops, and seminar to keep abreast of emerging technology trends and to update their domain knowledge.

#### The Context:

For effective teaching as well as research engagements, faculty members are expected to have holistic idea of their area of specialization. To accomplish this, they require exposure to various inter-faculty interactions taking place via conferences, workshops, seminars, symposia etc. This situation is addressed by introducing various faculty development schemes.

#### The Practice:

Research and Development Committee of SCE promotes and facilitates research undertakings of the faculty members. Faculty members are sponsored by SCE to attend the national / international conferences. To encourage quality research work by faculty members, various monetary incentives are in place. Faculty members pursuing Ph. D. programs are encouraged by sanctioning On-Duty Leave.

#### Evidence of Success:

1. Enhancement in the number of quality publications by faculty members.
2. Enhancement in the number of faculty members registering for Ph.D. programs.

3. Increase in the number of workshops, seminars attended by the faculty members.

**Problems encountered and resources required:**

Study leave of faculty members perusing Ph.D. are preferably given by accommodating their classes and work load. Fund allocation is required for supporting research activities and Ph.D. programs.

**Best Practice 2 -**

**Title of the Practice: Financial assistance schemes for students**

**Objective of the Practice:**

The aim of this practice is to provide the financial support to the meritorious and the needy students.

**The Context:**

The students admitted to the institute are from different backgrounds. Students, who are economical weaker of paying tuition and other fees are supported to continuing their education. In view of this, desired students are supported financially by management.

**The Practice:**

At beginning of every academic year, students apply for financial assistance. At time of application, they need to submit their academic progress report as well as proof of their family income. Based on the submitted documents, students are shortlisted for providing financial assistance through management.

**Evidence of Success:**

For the financial year 2017-18, sixty students are benefited for financial assistance.

| File Description           | Document                      |
|----------------------------|-------------------------------|
| Any additional information | <a href="#">View Document</a> |

**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**

**Response:**

Internal Quality Assurance Cell (IQAC) conducts the audit of all institutes once in a semester. Based on the outcomes/feedbacks, corrective actions are taken in structure and methodologies of operations of teaching learning process.

**Example 1 –**

### **Teaching /Learning -**

1. Classroom sessions are made more interactive involving group discussions showing PPT, Audio-Video lectures, animations etc.
2. Teaching is made interactive and basic concepts oriented.
3. Tutorial and Laboratory contact hours are increased.
4. Remedial classes are conducted for slow learner.
5. Industrial Visits are arranged.

### **Evaluation:**

- Heads of Departments and senior faculty continuously review teaching learning process in SCE.
- Provision of supplementary examination along with supportive classroom sessions to be conducted in the week ends to give additional opportunity for the weak students to clear the doubt.
- Implementation of innovative methods such as crossword, quizzes, poster making, etc. for evaluation of students.
- The question papers are set by inclusion of some questions of higher levels of cognition such as apply analyses, evaluate and creative.

### **Methodologies of Operation and Outcome -**

SCE academic monitoring committee collects students' feedback on teaching-learning process for all courses every semester. Regular students and faculty-mentor meetings are conducted. In these meetings informal feedback on teaching-learning process is received. Both these feedbacks are reviewed by the IQAC and suggestions for improvement are conveyed to the concerned faculty members, if required. The academic monitoring committee also reviews the performance of students in the In-Semester and End-Semester examinations. If required, conduction of additional lectures and laboratory practice sessions are recommended.

### **Example 2 –**

#### **Academic and Professional growth -**

Academic monitoring committee provides guideline for framing question papers by taking into account the cognitive structure provided by the SPPU, conduction of laboratory sessions, designing and reviewing course contents. The committee has been instrumental in defining the perspective plan of academics.

This committee gives feedback to IQAC. IQAC then gives valuable suggestions to the committee in consultations with their members which are industrialist, Alumni, Parents etc. Some of the suggestions are as follows –

1. To reduce gap between classroom teaching and industry.
2. To encourage interactive learning.
3. To enhance Industry-Institute Interaction.
4. To strengthen entrepreneurship development activities.
5. To enhance communication skill and ethics.

**6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year****Response: 1****6.5.3.1 Number of quality initiatives by IQAC for promoting quality year-wise for the last five years**

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 5       | 0       | 0       | 0       | 0       |

| File Description   | Document                      |
|--|-------------------------------|
| Number of quality initiatives by IQAC per year for promoting quality culture | <a href="#">View Document</a> |
| IQAC link  | <a href="#">View Document</a> |

**6.5.4 Quality assurance initiatives of the institution include:**

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements**
- 2. Academic Administrative Audit (AAA) and initiation of follow up action**
- 3. Participation in NIRF**
- 4. ISO Certification**
- 5. NBA or any other quality audit**

**A. Any 4 of the above****B. Any 3 of the above****C. Any 2 of the above****D. Any 1 of the above****Response: D. Any 1 of the above**

| File Description  | Document                      |
|---|-------------------------------|
| Details of Quality assurance initiatives of the institution | <a href="#">View Document</a> |

**6.5.5 Incremental improvements made during the preceding five years (in case of first cycle) Post accreditation quality initiatives (second and subsequent cycles)**



**Response:**

- SCE has an active internal quality assurance cell (IQAC) formed in the year 2017. IQAC conducts regular meetings to review and improve the quality of the overall functioning of the institute.
- SCE has a well-defined perspective plan involving focus areas, action plan to achieve the goals and measures to verify their achievements.
- Weekly meetings of the Principal and the Heads of the departments are conducted to review the working of the administrative and academic of the departments.
- Monthly departmental meetings by the Heads are conducted to review the progress and performance of the department.
- Subject in-charges conduct periodic meetings with the subject teachers to review teaching-learning processes.
- The Principal and HODs and Senior Faculty member conduct meetings to review on-going research.
- The Principal collects feedback from all the students on teaching, curriculum and support services.
- The feedback from employers and alumni are used to improve the overall performance of the institute.
- Under the leadership of the Heads, the departments plan and execute their academic and administrative activities.
- SCE, being self-financed, the tuition fees is the main source of the income. The institute makes budgetary provision for recurring and nonrecurring expenditure in advance. As per the budget financial resources are made available for the functioning of the institution.

Based on above feedback following incremental improvements are made:-

1. Higher Education of faculty: - All faculties working in the institution have minimum qualification PG, and others are encouraged to register for Ph.D.
2. There are 11 no. of PhD qualified faculties in the institute.
3. ERP implementation is started
4. MOUs are signed with industries
5. Institution promoting faculties to attend FDP's, Conferences and Workshops for their specialization subject.
6. All Departments started remedial classes for slow learner students and bridge courses for newly admitted students.
7. Use of teaching aids effectively.
8. Use of ICT, NPTEL lectures, video lectures, animation and PPT presentation is introduced by faculties to the students to understand the concepts of subject.
9. Use of solar panel to save energy in the hostel
10. Hostel quality is improved in all sense
11. Industry training and visits are arranged to give industry exposure to the students.
12. Expert lectures from industry are arranged.

## Criterion 7 - Institutional Values and Best Practices

### 7.1 Institutional Values and Social Responsibilities

#### 7.1.1 Number of gender equity promotion programs organized by the institution during the last five years

**Response:** 7

7.1.1.1 Number of gender equity promotion programs organized by the institution year wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 1       | 2       | 2       | 1       | 1       |

#### File Description

#### Document

Any additional information

[View Document](#)

Report of the event

[View Document](#)

List of gender equity promotion programs organized by the institution

[View Document](#)

#### 7.1.2

##### 1. Institution shows gender sensitivity in providing facilities such as:

1. Safety and Security
2. Counselling
3. Common Room

**Response:**

Gender equality means male and female, enjoy the same rights, resources, opportunities and protections. SCE being a co- education system and has same uniform and buses for girls and boys. College has formed women's counseling committee. Where girls can share their problems with committee members. Committee has total six members including one from girl's student and other ladies from staff members. Sometime counseling is also done for those students who are experiencing challenges in their studies. SCE has separate common room for both boys and girls. Girl's common room contained with two bed and medical aids. Exterior is under CCTV surveillance constantly. Campus is totally enclosed by 12 feet high brick wall with single entry gate. High level security is appointed at the gate. All are safe, secure and harmonious at the institute due to environment maintained amongst the students. SCE provides value education to students so they understand their responsibility towards society. Students live like a family at institute and celebrate all festivals together. SCE has organized rally for several program such as women empowerment ,save girl child, health care, women's day celebration etc. Institute encourag girls students to participate in sports activity.

SCE conducts NSS camp every year for girls and boys students where they work together on out-door programs. SCE regularly conducts expert lecture to spread the awareness about women empowerment from medical, legal and social background.

### 7.1.3 Alternate Energy initiatives such as:

#### 1. Percentage of annual power requirement of the Institution met by the renewable energy sources

**Response:** 20

7.1.3.1 Annual power requirement met by the renewable energy sources (in KWH)

Response: 72000

7.1.3.2 Total annual power requirement (in KWH)

Response: 360000

| File Description  | Document                      |
|---|-------------------------------|
| Details of power requirement of the Institution met by renewable energy sources | <a href="#">View Document</a> |

### 7.1.4 Percentage of annual lighting power requirements met through LED bulbs

**Response:** 30

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

Response: 36000

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 120000

| File Description   | Document                      |
|--|-------------------------------|
| Details of lighting power requirements met through LED bulbs | <a href="#">View Document</a> |

### 7.1.5 Waste Management steps including:

- Solid waste management
- Liquid waste management
- E-waste management

**Response:**

- **Solid Waste**

Solid waste is divided into two parts organic and inorganic material. Organic materials include vegetables, Fruit waste, canteen waste food, tress leaf etc. Inorganic includes plastic carry bags, plastic, water bottles, chocolate rappers etc. At SCE campus we collect all waste separately. For organic material we used trench, method this method involve excavation of trenches into which waste is deposited and covered with layer of soil after fermentation, its reopened and the fertilizer of which is used in campus landscape. Inorganic solid waste are removed by local Gram Panchayat.

- **Liquid Waste**

All type of liquid waste system are collected in water collection tank. In this system waste water passed from soak pit to water collection tank, and reused for gardening.

- **E-Waste Management:**

Tremendous growth in use of ICT devices and services, faster change of technology and frequent innovations in ICT sector, huge challenge for Institution to handle e-waste in responsible manner and protect the environment.

SCE has taken steps useful for better environment. An awareness lecture, seminar on waste management has been organized. SCE hazardous waste produce less. Adequate numbers of special dustbins are kept at various places for disposal of E-wastes. Various environment - related activities, seminars, invited talks, and programmers have been organized by NSS. Our institute organized lecture on 9th November 2017 for all staff and student in association with Cummins India Limited. Their experts guided us on E Waste management and shared their valuable experiences. Mr. Sampat Khaire and their team members Mr. Santosh Jadhav and Miss Merri Veidehi sensitized on E-Waste management in Pune City. Currently there are 14 centers on E- waste management which is manage by Cummins India limited.

### **7.1.6 Rain water harvesting structures and utilization in the campus**

**Response:**

SCE has implemented rain water harvesting project which conserve significant amount of water expenses and also maintains the campus geology SCE is located in Maval- Taluka in this region rainfall is 1500 mm/season, hence water availability is more and we can utilize this water for institution purpose. Our campus have 22 acre of land and available rain water is 122676 m<sup>3</sup> in every monsoon. To preserve rain water an underground storage tank is being constructed to increase ground water table. The project is divided in to three phase implementation. 1st phase is completed storing rain water with a capacity of 100 Lakh liters per monsoon season and 2nd phase constructed 10mx10m2m of storage tank for every day to store water .It has observed that ground water level in campus has increases significantly. This water is utilized for entire campus which has reduced dependency on local gram panchayat fresh water supply.

### **7.1.7 Green Practices**

- **Students, staff using**
  - a) **Bicycles**
  - b) **Public Transport**
  - c) **Pedestrian friendly roads**
- **Plastic-free campus**
- **Paperless office**
- **Green landscaping with trees and plants**

**Response:**

SCE has initiated Energy Conservation Program for the entire campus. Following activities has been taken care in place

- Labs uses a LCD screen monitors instate of traditional CRT screen.
- Order is placed for implementing a ERP system to maintain documentation like students attendance, results, progress record etc .Use of ERP definitely going to help for paperless work.
- In some places LED lights are fixed in the campus
- In order to minimize the energy consumption, instructional notice is fixed below each and every switch board indicating **“Save Energy”**
- Instructional notices are also given to canteen and hostels to minimize the use of plastic bags, bottles etc.
- Solar systems of 5000 lit capacity are installed in both girls and boys hostel to meet the hot water requirements. Total capacity of SCE Hostel is 400 students. (250 Male and 150 Female)
- In order to reduce the pollution level institute encourages students to use bicycle in college campus which is appreciated trough rewards.
- Institute had a public transport system in which around 30 buses are available. With the help of which maximum students are travelling daily from different parts of Pune city thus avoiding accidents and also reducing pollution levels.
- To make the campus ecofriendly a huge plantation of verity of big and small tress, plants, and bushes has done. To increase awareness about Ayurvedic plants and their advantages, some medicinal plants are also there .
- NSS plays an vital role by conducting social activities such as tree plantation camps in neighboring areas ,Swatch Bharat Abhiyan arranged in rural areas to increase awareness about cleanliness , Patha Natyaarranged by students on importance of Digital India.

**7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years**

**Response:** 3.14

7.1.8.1 Total expenditure on green initiatives and waste management excluding salary component year wise during the last five years(INR in Lakhs)

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 0       | 18      | 15      | 13.5    | 13.5    |

| File Description  | Document                      |
|---|-------------------------------|
| Details of expenditure on green initiatives and waste management during the last five years | <a href="#">View Document</a> |

#### 7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:

1. Physical facilities
2. Provision for lift
3. Ramp / Rails
4. Braille Software/facilities
5. Rest Rooms
6. Scribes for examination
7. Special skill development for differently abled students
8. Any other similar facility (Specify)

A. 7 and more of the above

B. At least 6 of the above

C. At least 4 of the above

D. At least 2 of the above

**Response:** B. At least 6 of the above

| File Description                                       | Document                      |
|--|-------------------------------|
| Resources available in the institution for Divyangjan  | <a href="#">View Document</a> |
| Any additional information                             | <a href="#">View Document</a> |
| link to photos and videos of facilities for Divyangjan | <a href="#">View Document</a> |

#### 7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years

**Response:** 5

7.1.10.1 Number of specific initiatives to address locational advantages and disadvantages year wise during the last five years

|         |         |         |         |         |
|---------|---------|---------|---------|---------|
| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
| 2       | 0       | 0       | 0       | 3       |

| File Description  | Document                      |
|---|-------------------------------|
| Number of Specific initiatives to address locational advantages and disadvantages | <a href="#">View Document</a> |

### 7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)

**Response:** 20

7.1.11.1 Number of initiatives taken to engage with and contribute to local community year wise during the last five years

|         |         |         |         |         |
|---------|---------|---------|---------|---------|
| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
| 14      | 4       | 1       | 1       | 0       |

| File Description   | Document                      |
|--|-------------------------------|
| Details of initiatives taken to engage with local community during the last five years | <a href="#">View Document</a> |
| Report of the event  | <a href="#">View Document</a> |

### 7.1.12

**Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal / Officials and support staff**

**Response:** Yes

| File Description   | Document                      |
|--|-------------------------------|
| URL to Handbook on code of conduct for students and teachers , manuals and brochures on human values and professional ethics | <a href="#">View Document</a> |

### 7.1.13 Display of core values in the institution and on its website

**Response:** Yes

| File Description                                 | Document                      |
|--|-------------------------------|
| Provide URL of website that displays core values | <a href="#">View Document</a> |

**7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations**

**Response:** Yes

| File Description  | Document                      |
|---|-------------------------------|
| Details of activities organized to increase consciousness about national identities and symbols | <a href="#">View Document</a> |
| Any additional information  | <a href="#">View Document</a> |

**7.1.15 The institution offers a course on Human Values and professional ethics**

**Response:** Yes

| File Description           | Document                      |
|----------------------------|-------------------------------|
| Any additional information | <a href="#">View Document</a> |

**7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions**

**Response:** Yes

| File Description  | Document                      |
|---|-------------------------------|
| Provide URL of supporting documents to prove institution functions as per professional code | <a href="#">View Document</a> |

**7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years**

**Response:** 17

| File Description   | Document                      |
|--|-------------------------------|
| List of activities conducted for promotion of universal values | <a href="#">View Document</a> |

**7.1.18 Institution organizes national festivals and birth / death anniversaries of the great Indian**



## **personalities**

### **Response:**

God has made humans as a combination of vices and virtues, to live harmoniously in the society. Human values are the virtues that guide to take into account human element when interacts with other human being. These are the feelings for the human essence of others. These human values give the effect of bonding, comforting and reassuring, one must strive to cause as less inconvenience to others as possible.

Whereas ethics means ideal human character filled with human values. To this account, SCE is designed to provide value education, enabling students to stand on their own feet with a real character of a complete citizen farming the society.

The institute has a human value cell, that take care of all the things related to students issues as well as also organize birthdays of great peoples like Chatrapati Shivaji Maharaj, Mahatma Gandhi, by keeping in mind their role in society, SCE organizes many programs like tree plantation, blood donation, gender equity program, science exhibition, project competition, speech of the expert and short drama plays etc. These all things help the students to inculcate the deep sense of their character in their own life.

### **7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions**

#### **Response:**

#### **AICTE**

- Promotion of Quality in Technical Education.
- Planning and Co-ordinated Development of Technical Education System.
- Regulations and maintenance of Norms and Standards.

#### **DTE**

- To develop necessary knowledge and skills among the principals on Enhancement of Entrepreneurial Development Ecosystem
- To develop and strengthen entrepreneurial quality and motivation in their institutions.
- To Encourage & nurture the growth of the Technical Entrepreneurship with the intervention of academia.

#### **SPPU**

- To propose a structured and pragmatic solution to address the lack of relevant skills amongst the current and potential workforce of India.
- To design a structured and scalable framework to impart skills to the students in order to empower them with the set of skills for a specific job role in alignment with National Skill Qualification Framework

- To subsequently extend the skilling initiatives to the most vulnerable sections of community as identified from time to time.

## 7.2 Best Practices

### 7.2.1 Describe at least two institutional best practices (as per NAAC Format)

#### Response:

#### Best Practices-I

SCE, always takes initiative towards the overall development of students and their academics. This practice is sustained, in view to achieve the following objective.

#### Objective of the practice

- To liberate the weaker sections of the rural areas from the shackles of the perennial, economic, social, political and educational constraints

#### The Practice -

Students admitted to SCE are generally from rural and low income group. They belong to different spatial locations of the country or state, so their academic standard varies a lot. It is observed that these students lack in communication skill, leadership quality and entrepreneurship quality. These lacunas are taken care by conducting short term sessions for the students like personality development program, skill development program etc.

It is also observed that, there is big gap between the previous education of students and the Engineering Curriculum. For this, bridging gap course are conducted for first year students and second directly admitted students.

These students require proper mentoring in the college for which the guardian faculty scheme is implemented. One faculty is assigned a group of 15 to 20 students. He is mentor for these students. He conducts regular meeting with them to understand their problems and give appropriate solutions to that.

#### Best Practice-II

The main focus of the higher education in India is to promote research. In accordance with the growing need for the up gradation of the faculty and the students in higher education, efforts are taken by the management of the institute to inculcate research culture in the staff and the students to arouse curiosity, develop objectivity and improve critical thinking.

It ensures continuous professional growth on the part of teachers and of problem identifying, systematic planning, careful implementing and solution finding abilities on the part of students. Research Committee in the college takes initiatives for all activities related to research.

## Objectives of the Practice

- To keep pace with the relentless wheel of change and update the intellectual caliber of the faculty
- To encourage the faculty to pursue Ph.D.
- To acquire guide ship to produce more research scholars
- To motivate the faculty to apply for the major and minor research projects by providing guidelines and details of funding agencies
- To fulfill the requirements to promote the research departments into research centers
- To encourage the faculty and the students to organize and present research papers in the national / international seminars / conferences / workshops
- To publish quality research articles in reputed journals, edit study materials for the prescribed syllabus and author books of high originality
- To provide seed money for research activities
- To take steps for publishing a Research Journal

| File Description           | Document                      |
|----------------------------|-------------------------------|
| Any additional information | <a href="#">View Document</a> |

## 7.3 Institutional Distinctiveness

### 7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

#### Response:

SCE is located in Asia's biggest industrial belt. Located in the area of Talegaon, Chakan, Ranjangaon, Hinjawadi, Pimpri and Chinchwad. Pune is hub for automobile, mechanical and IT industries from last 15 years. To take advantage SCE has scheduled Friday of every week for industry-institute interaction. Number of industrial visit, industry based project, expert lecture from industries are outcome of this system. Large industries out-source their part of work. This helps the passed out students to start their own business. SCE has arranged entrepreneurship development workshop for the students to make them self-employed.

SCE campus is located in Maval -Taluka in the vicinity of Lonavala –Khandala. This offers pollution free environment. The campus is away from city crowd, making it calm and quiet. SCE was established in 2005 on 24 acres of non-cultivated rocky land. After lots of efforts, it has been converted into lush green campus beautified with plantation. In addition to this Fruit plants are also planted which gives fruits throughout the year. This also attracts the birds editing pleasant environment and save a crops of nearby fields. Due to plantation water table level is also considerable increased and institute has sufficient water. Due to lush green campus the whole surrounding has become very healthy and fresh. Our campus is one of the most beautiful campus in SPPU.

Nearest railway station is Talegaon which is at a distance of 12 km from the institute. SCE has transport facility for all the students and Faculties, in an around Pune city with reasonable rate. SCE has adequate number of hostels for students and staff.

NAAC

## 5. CONCLUSION

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### **Additional Information :**

The strength of SCE lies in picturesque environment, excellent infrastructural facility, qualified and experienced faculty, commitment to personal attention, motivation to excel in academics, extracurricular activities and continuous interaction with Industry.

### **Concluding Remarks :**

SCE way of enriching students with latest updates of industries and technologies. Students are made aware of industry needs, latest technical updates. Faculty and students are encouraged to attend workshops/conferences in order to enhance their technical skills and keep themselves updated with industry good practices. SCE has MoUs with industry to develop skills in students & staff as per the industry requirements and make the student industry ready which is helpful in placements. The feedback is key tool which triggers in continuous improvement in quality of education. Feedback is taken from students, parents, alumina and student feedback is collected.

SCE has highly motivated faculty having passion for teaching and self-development for improvement of quality of education, team spirit among senior and junior faculty members and students as learners and researchers.

Customized ERP system is used for effective administration and data. Mentoring sessions for faculty and students are effectively conducted in SCE. SCE strive continuously to impart knowledge and skills of the highest standard limiting the cost of education to attract highly meritorious students. Focus on research grants from government bodies to be developed, increasing R&D activity, create a center of excellence in terms of Quality Education & Placement.