Sinhgad Institutes

SINHGAD TECHNICAL EDUCATION SOCIETY's

SKN SINHGAD INSTITUTE OF TECHNOLOGY & SCIENCE, LONAVALA

SELF STUDY REPORT

Submitted

To

National Assessment and Accreditation Council, Bangalore

STES's
SKN SINHGAD INSTITUTE OF TECHNOLOGY AND SCIENCE

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SELF STUDY REPORT

(SSR)

for Assessment & Accreditation of

STES's SKN Sinhgad Institute of Technology & Science

submitted to

National Assessment and Accreditation Council, Bangalore

Submitted by

SINHGAD TECHNICAL EDUCATION SOCIETY'S

SKN SINHGAD INSTITUTE OF TECHNOLOGY AND SCIENCE

Gat No.309, Off. Mumbai – Pune Expressway,

Kusgaon (Bk), Lonavala – 410401, Tal – Maval, Dist – Pune, Maharashtra

Website: www.sinhgad.edu

ABBREVIATIONS

AAU	Aalborg University, Denmark
AICTE	All India Council for Technical Education
AIEEE	All India Engineering Entrance Exam
AMC	Academic Monitoring Committee
AMCAT	Aspiring Minds Computer Adaptive Test
BCUD	Board of College & University Development
BE	Bachelor of Engineering
BHK	Bedroom Hall Kitchen
CAP	Centralised Admission Process
CEO	College Examination Officer
CET	Common Entrance Test
COMP	Computer Engineering
COs	Course Outcomes
CPC	Central Placement Cell
CSR	Corporate Social Responsibility
CTA	Computer Technocrats Association
CTC	Corporate Training Centre
DSA	Second Year Direct Admissions
DST	Department of Science and Technology
DTE	Directorate of Technical Education
E&TC	Electronics and Telecommunication Engineering
EBC	Economically Backwards Class
EDC	Entrepreneurship Development Cell
ELECT	Electrical Engineering
ERP	Enterprise Resource Planning
ES	Engineering Sciences
ET	Employability Test
FDP	Faculty Development Programme
FE	First Year Engineering
GATE	Graduate Appetite Test for Engineering
GB	Governing Body
GD/PI	Group Discussion/Personal Interview
GEMS	Governing Educational Management System
GISFI	Global ICT Standardisation Forum for India
GOM	Government of Maharashtra
GR	Government Rule
GRE	Graduate Record Examination
HOD	Head of Department
IEEE	Institute of Electrical and Electronics Engineers
IETE	Institute of Electronics and Telecommunication Engineers
IIIC	Industry Institute Interaction Cell
IIT	Indian Institutes of Technology
IQAC	Internal Quality Assurance Cell
ISTE	Indian Society for Technical Education
IT	Information Technology
ITSA	Information Technology Students Association
J & K	Jammu and Kashmir
JEE	Joint Entrance Exam
LAN	Local Area Network
LMC	Local Management Committee

ME	Masters of Engineering
MECH	Mechanical Engineering
MESA	Mechanical Engineering Students Association
NA	Not Applicable
NCACN	National Conference on Advance Computer Networking
NEXUS	Electronics & Tele-Communications Students Association
NPTEL	National Programme on Technology Enhanced Learning
NSS	National Service Scheme
NT	Nomadic Tribe
OBC	Other Backwards Class
OPAC	Online Public Access Catalogue
PBL	Project Based Learning
PEOs	Programme Education Objectives
PG	Post Graduate
PhD	Doctorate of Philosophy
POs	Program Outcomes
PTC	Primary Teacher Concession
QA/LR	Quantitative Aptitude and Logical Reasoning
QIP	Quality Improvement Program
R&D	Research & Development
RHTC	Rural Health Training Centre
SAE	Society of Automotive Engineering
SC	Scheduled Caste
SCADA	Supervisory Control and Data Acquisition
SE	Second Year Engineering
SETU	School of Enterprise Tie Up
SIT	Sinhgad Institute of Technology
SKNSITS	SKN Sinhgad Institute of Technology & Science
SLS	Self Learning Session
SPPU	Savitribai Phule Pune University
ST	Scheduled Tribe
STES	Sinhgad Technical Education Society
STP	Student Training Programs
STTP	Short Term Training Program
SWO	Student Welfare Officer
SWOC	Strength Weakness Opportunity Challenges
SWT	Student Welfare Team
T&P	Training and Placement
TAP	Teacher Advancement Program
TE	Third Year Engineering
TESLA	The Electrical Students Legitimate Association
TFWS	Tuition Fee Waiver Scheme
TG	Teacher Guardian
T-L-P	Teaching Learning Process
TOEFL	Test of English as a Foreign Language
TPO	Training and Placement Officer
TTT	Train The Trainer
TUS	Technical University Sofia, Bulgaria
UG	Under Graduate
UGC	University Grants Commission
VAP	Value Addition Program
VJNT	Vimukta Jati, Nomadic Tribes

NAAC STEERING COMMITTEE

Sr. No.	Name of Staff Member	Designation	Designation for Steering Committee
1	Dr. M. S. Rohokale	Principal	Chairman
2	Mr. N. K. Gavade	Assistant Professor & Head, Mechanical Engineering	Coordinator
3	Mr. P. D. Tambe	Assistant Professor Mechanical Engineering	Member
4	Mr. D. V. Dandekar	Assistant Professor Mechanical Engineering	Member
5	Mr. S. D. Datey	Assistant Professor & Head, Electrical Engineering	Member
6	Mr. V. D. Thombre	Assistant Professor & Head, Computer Engineering	Member
7	Mr. G. M. Kadam	Assistant Professor & Head, Information Technology	Member
8	Ms. R. M. Thadi	Assistant Professor & Head, Electronics & Telecommunication Engineering	Member
9	Mr. G. V. Khandekar	Assistant Professor & Head, Engineering Sciences	Member
10	Mr. G. A. Kadam	Assistant Professor Mechanical Engineering	Member
11	Mr. J. R. Shaikh	Assistant Professor & Dean R & D	Member
12	Mr. G. S. Sharma	Training & Placement Officer	Member
13	Mr. S. S. Navale	Registrar	Member

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COVERING LETTER

Sinhgad Institutes

SINHGAD TECHNICAL EDUCATION SOCIETY'S ®

SKN SINHGAD INSTITUTE OF TECHNOLOGY & SCIENCE

(Affiliated to Savitribai Phule Pune University & Approved by AICTE)

Gut No 309, Kusgaon (Budruk), Off. Mumbai - Pune Expressway, Lonavala, Dist. Pune - 410401.

PROF. M. N. NAVALE	DR. (MRS.) SUNANDA M. NAVALE	DR. M.S. ROHOKALE
M.E. (Elect.) MIE, MBA	B.A., M.P.M., Ph.D.	M.Tech.,M.B.A.,Ph.D.
FOUNDER PRESIDENT	FOUNDER SECRETARY	PRINCIPAL

Ref. No.: SKNSITS/2017-18/3393 Date: 22nd April 2017.

To,
The Advisor,
National Assessment and Accreditation Council,
P. O. Box No: 1075,
Nagarbhavi, Bangalore – 560 072.

Sub: Submission of Self Study Report (SSR)
Ref: LOI Bearing Track ID **MHCOGN27400**

Respected Sir/Madam,

With reference to our LOI Bearing Track ID **MHCOGN27400** submitted on 30/04/2017 and acceptance of the same by the NAAC on 21/04/2017, please find herewith the Self Study Report (SSR) is updated on our institute website www.sinhgad.edu on 30/04/2017 for your kind perusal. The complete URL is as follows:

http://cms.sinhgad.edu/SKNSITS/NAAC_SSR_SKNSITS.pdf

The institute is ready for assessment and accreditation by the peer team from NAAC. You are kindly requested to consider the SSR of this institute for further processing.This is for your kind information and consideration please.

Thanking You.

With Kind Regards

DR. M. S. ROHOKALE
PRINCIPAL
SKN SINHGAD INSTITUTE OF TECHNOLOGY & SCIENCE
Kusgaon, Lonavala-410 401

SKN SINHGAD INSTITUTE OF TECHNOLOGY & SCIENCE ★ KUSGAON (Bk.) LONAVALA

PREFACE

Sinhgad Technical Education Society (STES), Pune was established in the year 1993 under the able and dynamic leadership of Prof. M. N. Navale with an objective of providing quality education in the field of Engineering, Management, Architecture, Pharmacy, Medical Sciences, Hotel Management, Law and the basic school education from kindergarten onwards. SKN Sinhgad Institute of Technology and Science (SKNSITS) was established by STES in the year 2011. It is private unaided institute.

SKNSITS offers five undergraduate engineering programmes of four-year duration namely: Mechanical Engineering, Electrical Engineering, Computer Engineering, Information Technology, Electronics & Telecommunication Engineering, and two post-graduate programs namely Mechanical Engineering (Mechanical Design Engineering) and Computer Engineering. It has an intake of 480 undergraduate and 48 postgraduate students. The institute has state-of-the-art infrastructure to impart quality engineering education. It has qualified and experienced faculty. The laboratories are equipped with modern equipments and experimental setups.

Besides conventional teaching, Institute promotes the use of e-learning, subject-oriented Value Addition Programs (VAP), experimental and industry-oriented project work. It has an established system of feedback from the stakeholders. Teacher Guardian (TG) scheme is developed to mentor the academic and overall progress of the students. The Institute promotes a research culture amongst faculty and the students.

The faculties continuously strive for imparting technical and soft skills to enable the students globally competent. Applying for NAAC is a step towards self-introspection leading to further development of the institute towards excellence.

Principal

EXECUTIVE SUMMARY

Criterion I : Curricular Aspects

SKNSITS is affiliated to the Savitribai Phule Pune University (SPPU), Pune. The institute follows the curriculum designed by respective Boards of Studies (BOS) with inputs from various stakeholders. Faculty members contribute to the curriculum design during the workshops conducted by the University. In line with the curriculum, the Course Education Objectives (CEOs) and Course Outcomes (COs) are prepared by the faculties of the respective course. The institute's academic calendar is prepared in line with the academic calendar of the University. The institute strictly implements the same.

The institute organises training programmes for the faculty like Train The Trainer (TTT) and Teachers Advancement Program (TAP) for effectively transacting the curriculum and improving teaching practices.

The students are given a choice to choose elective subjects in the final year. All students are encouraged to take up academic projects in collaboration with industries. Feedbacks from the stakeholders received through formal and informal mechanisms are used to design and enrich the curriculum. The curriculum is also enriched by designing Value Added Programmes (VAP) and Student Training Programmes (STP). Additionally, various certificate courses are conducted for the professional development of the students. Participation in seminars, workshops, conferences and various technical activities, enhance the student's academic progress. The industry-institute interaction is encouraged through Industry Institute Interaction Cell (IIIC). The curriculum is designed and enriched so as to have the holistic development of the students.

Criterion II : Teaching – Learning and Evaluation

The institute follows the Centralised Admission Process (CAP) as per the guidelines given by the All India Council for Technical Education (AICTE), Maharashtra State Government and Directorate of Technical Education (DTE). Reservation policies as per the guidelines of the Government are implemented. The admitted students come from the diversified background. Utmost transparency is maintained in student's enrollment.

The institute has developed facilities to cater the needs of differently-abled students. It sensitises the staff and students on issues such as gender, inclusion and environment. The institute constituted different cells like Anti-ragging Committee, Internal Complaint Committee (ICC), Grievances Redressal Cell, etc. Various activities and social awareness contests are organised by the committees. National Service Scheme (NSS) is implemented in the Institute. Induction Programs are arranged for newly admitted students. TG Scheme is designed and implemented to monitor and support the progress of students.

Institute designs academic calendar in line with the University academic calendar. Departments follow this academic calendar and design action plan which is meticulously implemented for the effective transaction of the curriculum. The institute strives for achieving excellence by developing effective models of Teaching-Learning-Process (T-L-P) to cater the needs of diversified students. Various T-L-P models are developed in line with principles of active and experiential learning. These models mainly include implementation of Project Based Learning (PBL), Lab Innovation, project and design competitions. In these models, students work on innovative and industrial projects. These models are developed to enhance problem-solving, critical thinking and scientific temper. The objective of above models is to improve employability and academic results. The Institute also encourages the use of ICT-based T-L-P in which National Programme on Technology Enhanced Learning (NPTEL) has been extensively used. The Institute works within the framework of NME-ICT to promote blended learning. The institute

promotes students and staff to participate in National and International conferences, workshops, seminars, National level technical events, design competitions, etc. Due recognition and appreciation is given to faculty and students for achieving excellence in such events.

All the students get academic and personal guidance and livelihood counselling from the concerned TG, Class Coordinator and Head of Departments (HODs). All the departments ensure the full coverage of the syllabus at the end of the semesters. The quality of the T-L-P is monitored and governed by Academic Monitoring Committee (AMC) right from the inception of the Institute. AMC was working on the guidelines similar to Internal Quality Assurance Cell (IQAC). Institute has established IQAC recently.

The Institute nurtures the students with well qualified, experienced and competent faculty. The Institute encourages and supports faculty to organise and participate in different recharge programmes. The institute provides study leaves and financial assistance for improving faculty qualification. Faculty retention ratio is satisfactory. The institute strives to appoint qualified and experienced faculty. It adheres to AICTE, University Grants Commission (UGC), State Government and University norms to recruit the faculty. Attempts are made to recruit the sanctioned posts. The Institute organises induction, In-service academic development programmes for the faculty on a regular basis. Teachers are encouraged and trained to adopt creative and innovative T-L-P. The mobility of the faculty is ensured through inter-institute interactions within SPPU and outside.

The Institute has adopted the reforms in assessment and evaluation patterns of the SPPU. The Institute ensures the effective implementation of the assessment reforms of University in the form of online examinations, in-semester and end-semester examinations. Accordingly unit tests, mock online test, prelims, mock oral practical examinations are designed and conducted on a regular basis to prepare students for assessment. University provides

examination schedule, and the same is displayed on the notice boards, well in advance. Complete transparency is maintained for all examinations. All the rules and guidelines of SPPU are strictly followed. All examinations are conducted under the supervision of Principal, College Examination Officer (CEO).and external senior supervisor appointed by the SPPU. SPPU provides all question papers online, an hour before the commencement of theory examination. For security purpose, we inform to the local police station beforehand and the institute security guards are deputed at the time of examinations. CCTVs are fitted at the examination centre. CEO handles all grievances pertaining to examinations and same are communicated to SPPU through Principal.

The Program Education Objectives (PEOs) and Program Outcomes (POs) are defined by each department in line with graduate attributes. SPPU defines these for certain programs and defined by the remaining departments. To achieve the POs, various programs and activities are arranged in each department like mid-lecture activities, Value Addition Program (VAP), Lab Innovations, Student Training Program (STP), etc. The Institute has mapping mechanism in which, the intended learning outcomes and the achieved learning outcomes are mapped. Through mapping, exercise shortfalls are identified, and stakeholders suggestions initiate corrective measures and actions. Use of modern tools and software is extensively promoted by the institute to enhance the students' learning.

Criterion III : Research, Consultancy and Extension

The institute has the vision to inculcate research culture among faculty and students. Accordingly, Institute has established R&D cell and constituted research committee. It has come up with innovative concepts like Research Club and Research Convention for students and staff. The Institute has formulated guidelines and rules for smooth conduction of research activities. This committee looks after the promotion of research as well as creating the

research infrastructure and facilities in the institute. The faculty members are supported with financial assistance, writing proposals and liaison with the research institutes of eminence. Institute promotes faculty members to regularly organise and attend programs for the promotion of research. The state of art research conducted by the faculty is recognised and appreciated.

Research contribution is considered in the career advancement scheme, and appropriate study leaves are awarded for the further research. Adequate provisions are made in the annual budget of the institute. The institute conducts workshops and seminars on filing patents. It encourages to work on sponsored projects. Applying for the research grants is a regular practice adopted by the Research & Development (R&D) cell through various research groups in the institute. Board of College and University Development (BCUD) of SPPU supports research activities of the institute by providing research grants in addition to the provision of seed money in the annual budget of the institute. As and when required the infrastructure improvements are made. Adequate residential and reprographic facilities are available on campus.

The institute promotes faculty members to write and publish the papers in the reputed journals of high impact factor. The faculty members involved in the active research regularly interact with the research bodies and help to improve the research culture of the institute. The framework for the code of the conduct for the research is established in the form of plagiarism check, etc. Faculty members are involved in interdisciplinary projects. Some faculty members have received awards and recognitions for their research at national level. The prototypes and patents are few significant contributions made by the students and faculty members for the society. Recent improvements in the quality of the research papers published in proceedings, journals and books is a good indicator for the promotion of the research culture in the institute.

The Institute publicises the facilities and expertise available through the website and informal modes. Different services which can be provided to the industry and government may be obtained on demand. Apart from this, faculty

regularly visits as a resource person for seminars, workshops and conferences. School of Enterprise Tie Up (SETU) is a unique platform for conduction of industrial project and consultancy. Contribution to the industry through industrial projects and in-house product development is a regular practice of the institute. The policies are in place for distribution of the finances generated through such activities.

The Institute conducts the extension activities. Different technical clubs works on a need-based extension programs. Faculties and students participate in NSS activities like Swachchata Abhiyan, the Cashless transaction for Society, Blood donation camps, Tree plantation, Wall of Humanity (Manuskichi Bhint), etc. Students worked as volunteer to support General Elections. The NSS team has received appreciation and recognition from the concerned authorities. Due to such activities, social awareness is created amongst students and staff. In addition advancement of techno-social skills is visibly seen through such activities. NSS program officer plans and executes various extension activities. He also tracks the record of student's involvement in such activities. The outcomes of extension activities are displayed on the notice board and are available with the institute.

The institute has collaboration with various industries and training institutes for improving student employability and proficiency along with the enhanced academic profile. Elite Technology has conducted need based hands-on training on Vehicle dynamics. Such training programs are regularly conducted. IIIC organises various internship programs, industrial visits, invited talks through various industrial collaborations.

Criterion IV : Infrastructure And Learning Resources

Institute has adequate infrastructure such as ICT-enabled classrooms, state of the art laboratories, workshops, seminar halls, tutorial rooms, etc as per the AICTE norms and for the effective transaction of the curriculum. The

laboratories are upgraded and equipped with modern equipment, machinery, computer hardware and software required for both academic and research activities. The institute has sports and recreational facilities to augment physiological needs of staff and students. A Rural Health Training Centre (RHTC) provides free health services for everyone on campus and off campus. Barrier free environment conducive for learning is provided.

The institute has central library having a rich collection of books, references, journals, magazines, e-learning resources and reprographic facilities augmented according to changes in the curriculum. It is networked with National Digital Library (NDL), British Council Library, Jaikar Library (SPPU). Library services are made user-friendly by computerisation through AutoLib software. The library advisory committee recommends books, titles, etc. and monitors functioning. The feedback and suggestions from the users are considered to improve the library services. Also, each department has a library.

All the departments of the Institute have adequate computing facility both regarding hardware and software. ICT facilities of the Institute are upgraded periodically. Appropriate provisions are made in the annual budget for purchasing, upgrading and maintenance of the ICT infrastructure. The institute has sufficient academic, administration, residential and recreational infrastructure on campus. For upkeep and maintenance of the infrastructure sufficient budgetary provision are done. For maintenance well defined organisational structure is designed and operations are done smoothly.

Criterion V : Student Support And Progression

The Institute provides financial assistance, scholarships, freeships and insurance to the deserving students, as per the government norms. The institute arranges special coaching for competitive examinations and soft skills. For personal enhancement and counselling of students, TG scheme is

followed. Institute conducts several extracurricular, co-curricular activities and sports for the overall development of the students, throughout the year. Students have representation in various association as well as central students council, student associations.

The Training & Placement (T&P) cell of the institute provides career guidance and organises campus recruitment drives for the students. The T&P cell guides and counsels the students for placement activities through various initiatives such as online assessment tests, STP, VAPs and foreign language courses. Development of entrepreneurial skills is encouraged in the students through Entrepreneurship Development Cell (EDC).

The institute has a well-established registered alumni association. Alumni meets are regularly arranged, in which alumni provide suggestions and feedback on the development of the Institute. Institute has framed various bodies such as Anti-ragging committee, SC/ST Cell, ICC, etc. to address students' grievances in time.

Since its inception, the Institute has a track record of the students qualifying the competitive examinations annually. Such progression and growth is due to continuous monitoring through well-established schemes such as TG Scheme and various cells and clubs of the Institute. The conducive environment of the institute highly favours in reducing dropouts and improving the pass percentage.

The institute promotes students to participate in various sports and cultural activities along with technical activities to ensure overall growth of the students. Student's participation and feedback through students council is considered while developing such activities. The students have good representation in various committees of published material. All relevant information is available on the Institute website.

Criterion VI : Governance, Leadership And Management

The mission and vision of Institute are designed in harmony with higher education policies of the Government. The institute has the Governing Body (GB) works under the STES, which is lead by the academician. Faculty members on the management committee are actively involved in the decision-making process at various levels. Periodical interaction is made with all stakeholders for strategic planning and monitoring of policies. The various institute level committee comprises of the Principal, HODs, senior faculty, and student's representative for grooming the leadership at different levels.

The Institute is autonomous in the decision-making process and planning for strategic development and deployment for perspective plan document. The functioning of the institute is at four different levels such as student, faculty, HOD and the Principal. The institute has a well-defined quality policy, displayed at prominent places in the institute. The impact of strategic decisions is reviewed and considered for futuristic developments. Recently the exit survey is initiated to assess the students' satisfaction levels.

The institute has well-defined strategies for faculty recruitment and promotion. Institute facilitates advancement in qualification improvement programme. Through the performance appraisal, Institute reviews the performance of the faculty. These appraisals are designed considering various parameters of T-L-P. Improvement in the qualification is appropriately appreciated through scale improvement and promotion. TTT; skill enhancement programme is a trademark of the Institute. In addition to this, staff is encouraged to participate in the staff development programmes. Various welfare mechanisms like Employee Provident Fund, gratuity, medical insurance, free medications, etc. are available for the staff. The institute has adequate budgetary provision for academic activities, and its mobilisation is monitored by the institute to ensure optimum utilisation. The regular internal audit is carried out.

The Institute has implemented the concept and functioning of IQAC through the AMC of STES. The committee visits each department and takes feedback on the teaching and learning process at various departments in every semester. The suggestions for improvement, if any, are immediately given to the faculty and HOD. Contribution from external members along with recommendations from IQAC members is considered to decide action plan for improving the academic and administrative environment.

Criterion VII : Innovations And Best Practices

The Institute is committed to adopting environment-friendly policies about the plantation, waste management, use of hybrid solar water heating system, use of renewable energy resources and water harvesting. The green audit is carried out by the competent agency. To generate the awareness among the staff and the students, the institute displays posters at prominent places on issues like climate change and the environment. The different types of e-waste generated in the Institute are collected and dispensed to an external e-waste recycling agency.

The innovative practices which have resulted in a positive impact on the academic and administrative environment include, VAP, Earn and Learn scheme, ERP and IIIC. The use of ERP software (paperless) for the academic-administrative purpose has shown our commitment to the green environment. The formation of IIIC has added impact on the industry-institute interactions and placement.

The foremost best practices are the implementation of PBL and STP to enhance the employability of students. The PBL is implemented through Lab innovations, design experiments, major and minor projects, research projects, industrial projects and SETU initiative. The STP is spread over seven semesters spanning the areas from soft skills, technical expertise and interview skills.

SWOC ANALYSIS OF THE INSTITUTE

Strengths:

- Competent faculty and their retention
- Rankers in the list of SPPU Pune
- Innovative teaching-learning practices
- State-of-the-art laboratories and infrastructure
- Effective implementation of VAPs, and STPs
- Project Based Learning (PBL) approach
- Entrepreneurship Development Cell
- Good placement record
- Teacher guardian scheme
- Transparent, conducive and collaborative work environment
- Fully residential campus
- Sports complex of international standards
- Active NSS Programme leading to successful extension activities

Weaknesses:

- Lack of faculty with Ph.D.
- The paucity of research grants.
- Less number of publications in indexed journals
- Moderate institute-industry interaction
- Less number of patents and consultancy work.
- Amateur alumni association

Opportunities:

- There is scope for an inter-disciplinary and collaborative research
- Development of e-learning resources
- Strengthening Industry Institute Interaction Cell.
- To establish a research centre of good repute.
- Joint research and Ph.D. programmes with international universities

Challenges:

- Induction and retention of faculty with Ph.D.
- Qualitative improvements in the academic result.
- Attract meritorious students
- Adaptability to globally changing industry scenario

PROFILE OF THE INSTITUTE

1. Name and Address of the Institute:

Name	Sinhgad Technical Education Society's SKN Sinhgad Institute of Technology and Science
Address	Gat No.309, Off. Mumbai – Pune Expressway, Kusgaon (Bk), Lonavala - 410401, Tal – Maval, Dist- Pune, Maharashtra, India
Website	www.sinhgad.edu http://cms.sinhgad.edu/sinhgad_engineering_institutes/sknsits_lonavala/about_us.aspx (Home Page)

2. For Communication:

Designation	Name	Telephone	Email
Principal	Dr. M. S. Rohokale	02114-304393 +91 9552569863	principal.sknsits@sinhgad.edu
Steering Committee Coordinator	Mr. N. K. Gavade	02114-304632 +91 9764355860	hodmech.sknsits@sinhgad.edu

3. Status of the institution:

a.	Affiliated Institute	✓
b.	Constituent Institute	
c.	Any other (specify)	

4. Type of Institution:

a. By Gender

a.	For Men	
b.	For Women	
c.	Co-education	✓

b. By Shift

a.	Regular	✓
b.	Day	
c.	Evening	

5. Is it a recognised minority institution? No

6. Sources of funding:

1.	Government	No
2.	Grant-in-aid	No
3.	Self-financing	Yes
4.	Any other	No

7. a. Date of establishment of the Institute: 03/08/2011

b. University to which the institute is affiliated:
Savitribai Phule Pune University, Pune.

c. Details of UGC recognition:

Under Section	Date, Month & Year	Remarks (If any)
i. 2 (f)	NA	-
ii. 12 (B)	NA	-

d. Details of recognition/approval by statutory/regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, etc.), Details of the First affiliation for existing courses:

A. Under Graduate courses

Sr. No.	Course	Year of Affiliation	AICTE Approval No.	Government G.R. No.	University Affiliation Letter No.
1	Mechanical Engineering	2011 – 2012	Western 2011 1-459215421 Date: 03rd Aug 2011.	TEM 2011 Q No.-162 Tanshi-4 Date: 30th June 2011	CA /2516 Date: 23rd Nov 2011.
2	Electrical Engineering	2011 – 2012	Western 2011 1-459215421 Date: 03rd Aug 2011.	TEM 2011 Q No.-162 Tanshi-4 Date: 30th June 2011	CA /2516 Date: 23rd Nov 2011.
3	Computer Engineering	2011 – 2012	Western 2011 1-459215421 Date: 03rd Aug 2011.	TEM 2011 Q No.-162 Tanshi-4 Date: 30th June 2011	CA /2516 Date: 23rd Nov 2011.
4	Information Technology	2011 – 2012	Western 2011 1-459215421 Date: 03rd Aug 2011.	TEM 2011 Q No.-162 Tanshi-4 Date: 30th June 2011	CA /2516 Date: 23rd Nov 2011.
5	Electronics & Tele-Communication Engineering	2011 – 2012	Western 2011 1-459215421 Date: 03rd Aug 2011.	TEM 2011 Q No.-162 Tanshi-4 Date: 30th June 2011	CA /2516 Date: 23rd Nov 2011.
6	Mechanical Engineering IInd Shift	2012 – 2013	F.No. Western/1-1449649907 / 2013/EOA	TEM 2012 Q No.-98(part-1)/Tanshi –4 Date: 30th June 2012	CC/310 Date: 17th Jan 2013.

B. Post Graduate

Sr. No.	Course	Year of affiliation	AICTE Approval No.	Government G.R. No.	University Affiliation Letter No.
1	Computer Engineering (Computer Engineering)	2012 – 2013	F. No. Western / 1-1449649907 / 2013 / EOA	TEM 2012 Q No.-98(part-1)/Tanshi – 4 Date: 30th June 2012	CC/310 Date: 17th Jan 2013.
2	Mechanical Engineering (Mechanical Design Engineering)	2012 – 2013	F. No. Western / 1-1449649907 / 2013 / EOA	TEM 2012 Q No.-98(part-1)/Tanshi – 4 Date: 30th June 2012	CC/310 Date: 17th Jan 2013.

8. Does the affiliating University Act provide for conferment of autonomy (as recognised by the UGC), on its affiliated institutes?

Yes [✓] No [ ]

If yes, has the Institute applied for availing the autonomous status?

Yes [ ] No [✓]

9. Is the institute recognised?

a. By UGC as an Institute with Potential for Excellence (CPE)?

Yes [ ] No [✓]

For its performance by any other governmental agency?

Yes [ ] No [✓]

10. Location of the campus and area in sq.mts:

Location	Rural
Campus area in sq. mts.	101171
Built up area in sq. mts.	19045

11. Facilities available on the campus:

- Auditorium/seminar complex With infrastructural facilities [✓]
- Sports facilities
  - Playground [✓]

- Swimming pool ✓
- Gymnasium ✓

➢ Hostels

- Boys' Hostel
  i. Number of hostels 05
  ii. Number of inmates 04
  iii. Facilities: Water coolers with the purifier, hybrid hot water system, security, CCTV, generator backup, firefighting system, intercom, television, first aid, housekeeping, Wi-Fi connectivity, newspapers, guest room, tables, chairs, beds, mess, laundry, etc.
- Girls' Hostel
  i. Number of hostels 03
  ii. Number of inmates 04
  iii. Facilities: Water coolers with the purifier, hybrid hot water system, security, CCTV, generator backup, firefighting system, intercom, television, first aid, housekeeping, Wi-Fi connectivity, newspapers, guest room, tables, chairs, beds, mess, laundry, etc.

➢ Cafeteria — Yes (05 canteens including one Café Coffee Day)

➢ Residential facilities for teaching and non-teaching staff:

Sr. No.	Type of Facility	Total Numbers	Category of staff
1	3 BHK	01	Principal/Professor
2	2 BHK	02	HOD/Associate Professor
3	1 BHK	29	Assistant Professor/Lab Assistant
4	1 RK	9	Peon/ Supporting Staff
5	Guest Rooms	10	VIP Guests

- Health Centre – Yes
- First aid, In-patient, Out-patient, Emergency care facility, Ambulance
- Health Centre Staff –

Qualified Doctor	Full time
Qualified Nurse	Full time

- Facilities like banking, post office, book shops : **YES**
- Transport facilities to cater to the needs of students and staff : **YES**
- Animal House : **NA**
- Biological waste disposal : **YES**
- Generator or other facility for management/regulation of electricity and voltage : **YES**
- Solid waste management facility : **YES**
- Waste water management : **YES**
- Water harvesting : **YES**

12. Details of programmes offered by the Institute (AY 2017-18)

Sr. No.	Programme Level	Name of the Programme / Course	Duration	Entry Qualification	Medium of instruction	Sanctioned/ approved Student strength	No. of students admitted
01	UG	Mechanical Engineering	04 Years	12thPass	English	120+7*	58
		Mechanical Engineering (IInd Shift)	04 Years	12thPass	English	60	09
		Electrical Engineering	04 Years	12thPass	English	60+4*	24
		Computer Engineering	04 Years	12thPass	English	120+7*	104
		Information Technology	04 Years	12thPass	English	60+4*	29
		Electronics & Tele-Communications Engineering	04 Years	12thPass	English	60+4*	07
02	PG	Computer Engineering (Computer Engineering)	02 Years	Graduation Pass	English	24	02
		Mechanical Engineering (Mechanical Design Engineering)	02 Years	Graduation Pass	English	24	02

(* through TFWS and J & K Quota)

13. Does the institute offer self-financed programmes? **No**

14. New programmes introduced in the institute during the last five years if any?

Yes	✓

Number	03

15. List of the departments:

Faculty	Departments	UG	PG	Research
Engineering	Mechanical Engineering	Y	Y	-
	Electrical Engineering	Y	-	-
	Computer Engineering	Y	Y	-
	Information Technology	Y	-	-
	Electronics & Tele-Communications Engineering	Y	-	-

16. Number of Programmes offered under

a.	Annual system	00
b.	Semester system	07
c.	Trimester system	00

17. Number of Programmes with:

a.	Choice Based Credit System:	00
b.	Inter/Multidisciplinary Approach:	00
c.	Any other:	00

18. Does the institute offer UG and/or PG programmes in Teacher Education? No

19. Does the institute offer UG or PG programme in Physical Education? No

20. Number of teaching and non-teaching positions in the Institution:

Positions	Teaching faculty							Non-teaching staff		Technical staff	
	Professor		Associate Professor		Assistant Professor		Adjunct Faculty				
	*M	*F	*M	*F	*M	*F		*M	*F	*M	*F

Sanctioned by the UGC/ University / State Government Recruited	08	03	14	06	55	23	19	40	11	19	09
Sanctioned by the Management or other authorised bodies Recruited	07	00	00	01	75	28	17	40	11	19	09
Yet to recruit	01	03	14	05	-20	-5	02	00	00	00	00

*M-Male *F-Female

21. Qualifications of the teaching staff:

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
Ph.D.	07	00	00	01	00	01	09
M. Phil.	--	--	--	--	--	--	--
PG	00	00	00	00	75	27	102
Temporary teachers							
Ph.D.	00	00	00	00	00	00	00
M. Phil.	--	--	--	--	--	--	--
PG	00	00	00	00	00	00	00

22.Number of Visiting Faculty /Guest Faculty engaged with the Institute: NIL

23. The number of the students admitted to the institute during the last four academic years.

Categories	UG Programme							
	2017-18		2016-17		2015-16		2014-15	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	06	02	14	00	19	02	16	01
ST	00	00	00	00	02	00	02	00
OBC	65	10	63	05	77	09	70	03
General	79	21	109	21	192	19	147	24
Others	30	01	14	05	26	05	34	03
Total	180	34	200	31	316	35	269	31
	PG Programme							

Categories								
	2016-17		2015-16		2014-13		2013-14	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	00	00	00	01	02	00	01	03
ST	00	00	00	00	00	00	00	00
OBC	00	00	00	00	02	00	01	02
General	03	01	14	02	16	07	09	13
Others	00	00	00	00	01	00	00	01
Total	03	01	14	03	21	07	11	19

24. Details on students enrollment in the Institute during the current academic year (2017-18):

Type of students	UG	PG	M. Phil.	Ph.D.	Total
Students from the same state (M.S.)	190	00	-	-	190
Students from other states of India	23	00	-	-	23
NRI / Foreign students	-	-	-	-	-
Total	213	00	-	-	213

25. Dropout rate in UG and PG (average of the last two batches):
UG = 5.42% , PG = 0%

26. Unit Cost of Education:
a) Including the salary component: Rs.58,845/-
b) Excluding the salary component: Rs.17,681/-

27. Does the Institute offer any programme/s in distance education mode (DEP)? No

28. Provide Teacher-student ratio for each of the programme/course offered

Sr. No.	Programme	Teacher-student ratio	
		UG	PG
1	Mechanical Engineering	1:15	1:12
2	Electrical Engineering	1: 14	NA
3	Computer Engineering	1:15	1:12
4	Information Technology	1:15	NA
5	Electronics & Tele-Communications Engineering	1: 14	NA

29. Is the institute applying for Accreditation? : Yes, for 1st cycle

30. Date of accreditation* : NA

31. Number of working days during the last academic year : 220

32. Number of teaching days during the last academic year : 180

33. Date of establishment of Internal Quality Assurance Cell (IQAC) IQAC / AMC: The AMC was established on 3rd August, 2011 and IQAC is established on 10th August, 2016.

34. Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC: NA

35. Any other relevant data (not covered above) the Institute would like to include. (Do not include explanatory/descriptive information): NIL

CRITERION I : CURRICULAR ASPECTS

1.1 Curriculum Planning Implementation

1.1.1 State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teachers, staff and other stakeholders.

Vision :

उत्तमपुरुषान् उत्तमाभियंतॄन् निर्मातुं कटीबद्धाः वयम् ।

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

Mission :

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

Objectives :

- To build a personality with technical and non-technical skills, which are globally at par.
- To implement the effective T-L-P so as to achieve excellent academic performance in the university examination.
- To provide the opportunity to the students to participate in various co-curricular and extra-curricular activities for their overall development.
- To upgrade the staff qualification.
- To make the students employable by introducing various skill development programs like Student Training Programs (STPs) and Value Addition Programs (VAPs).
- To introduce various Faculty Development Programmes (FDPs), TTT, TAP etc.
- To inculcate the research culture among students and faculties.

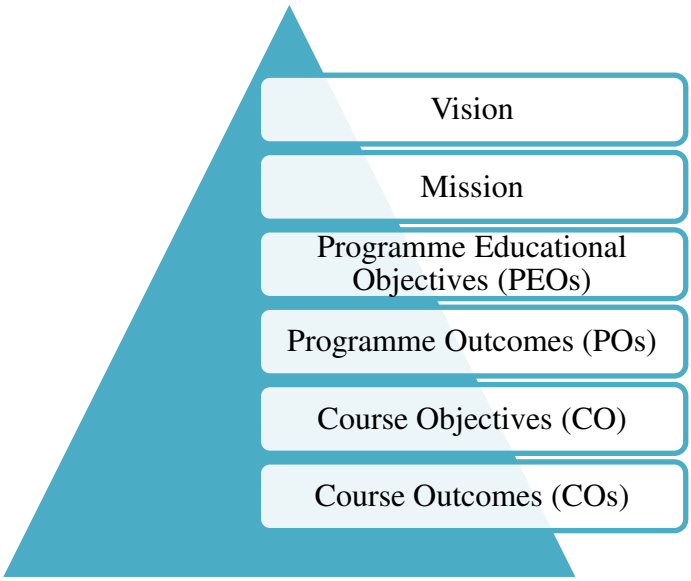


Figure 1.1.1 Vision, Mission, Objectives

Communication to Stakeholders:
The mission and vision statements of the Institute are displayed on the college website (http://www.sinhgad.edu), at prominent locations of the college building such as principal office, HOD office, training and placement cell, EDC, library, notice boards and Institute brochure. It is also communicated to all First Year Engineering (FE) and Direct Second Year Engineering students and their parents through induction programs at the beginning of every academic year. It is printed on all attendance record books. It is communicated to the industry during conferences, workshops, seminars, placement drives and through other programs at Institute level.

1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific example(s).

At the start of each semester, every department prepares an academic calendar concerning the academic calendar of SPPU. Each department prepares their action plan according to university curriculum along with co-curricular and extra-curricular activities.

Development of Action Plan:

- The overall development and deployment process is outlined in Figure 1.1.2
- Before the commencement of every semester, academic calendar is prepared by every department in line with SPPU academic calendar which is having all the pre-planning of various activities that are planned to be conducted throughout the semester. The activities

like unit tests and prelim examination, mock practical/oral exams, STP, VAP, Quantitative Aptitude and Logical Reasoning (QA/LR) test, Midterm submissions, Aspiring Minds Computer Adaptive Test (AMCAT) and university examination schedules, etc. are reflected in the academic calendar.

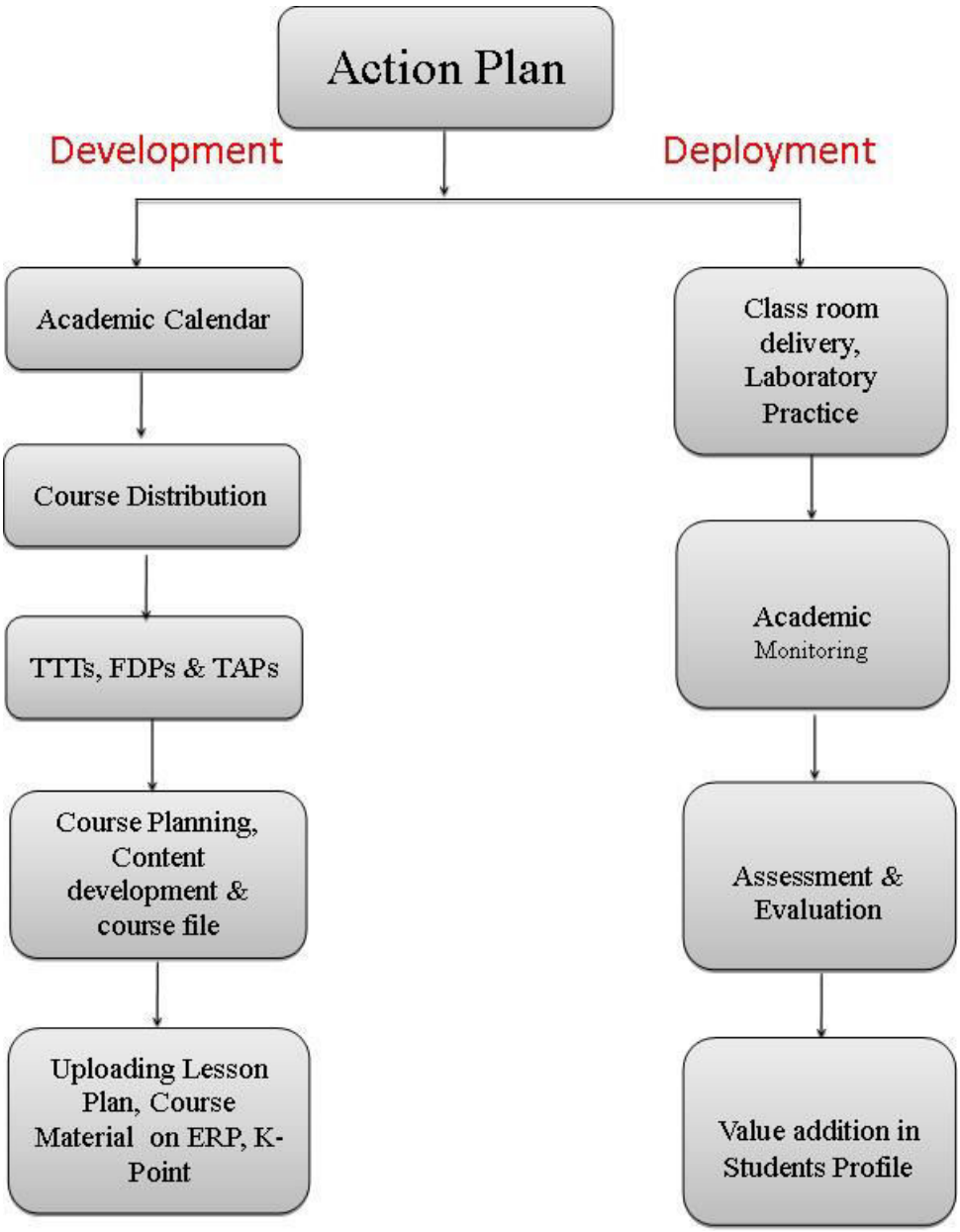


Figure: 1.1.2 Overall development and Deployment Process

- As per the specialisation and experience of the faculties, subject choices are collected, and teaching load is distributed by the Head of Department (HOD) in consultation with faculties and Principal.

- As per the course distribution, the departmental master timetable is prepared. It includes a class timetable, lab timetable, classroom timetable, individual faculty timetable. For difficult subjects, one Self Learning Session (SLS) per week is allotted in the time table of FE and SE.
- Before the start of the semester, TTT and TAP are conducted for the faculty members.
- Individual faculty prepares and uploads the Lesson Plan / Practical Plan and subject notes of his/her respective allotted subject by referring the Institute academic calendar.
- Before the start of the semester, every faculty prepares the course file of the subjects allotted to them as per the content template provided by the Institute. It is to be approved by HOD.
- All timetables along with lesson plan and course notes are uploaded Governing Educational Management System (GEMS).
- Attendance registers are provided to every faculty member before starting the semester. These registers also contain the record of student's assessments.
- Institutional infrastructure made ready for the execution of action plan.

Deployment of Action Plan:

- The faculty fully equipped, effectively deliver the content in the classroom, by using ICT facilities and other teaching aids as per the schedule.
- Simultaneously, the faculty also provides hands-on experiments during the practical sessions correlating, with the theory.
- Department office maintains the Daily Attendance Report File which includes the number of absent students for the individual lecture. The individual TG checks the daily attendance file for making phone call/SMS to the students and parents of the absent students.
- After delivering a lecture or practical on a particular class, individual faculty submits the delivery report on GEMS.
- All the HODs of respective departments continuously monitor the proper conduction of lecture and practical sessions as per the scheduled timetable.
- Individual Faculty's feedback from the students is collected periodically through software. AMC/IQAC analyse the feedback for corrective actions.
- Internal unit test and preliminary examinations scheduled in the academic calendar which helps the faculty to decide the corrective actions that they can take for better results of the subject.

- University In-Sem and End-Sem Exam results are analysed for any remedial action. If required, corrective measures are taken for weak performer students.
- Before appearing for the university practical/oral examinations, students appear for internal mock practical/oral examinations to get an idea of possible assignment and questions that can be asked by the external examiner.
- The process of a monthly review of student's attendance and reporting the defaulters to respective parents is carried out to maintain the discipline of continuous evaluation.
- After every month student, overall attendance is monitored, and defaulter student's parents are informed so that student's performance can be improved.
- Every semester Institute organises some invited talks for the students. The resource person for that invited talk is the area expert on any recent technology (mostly industry person). These sessions help out the students for selecting their project topics in a final year.
- Different STP modules are scheduled in every semester for the personality development of the students so that they can be able to fulfil all the requirements of the corporate world.
- AMCAT examinations are regularly conducted by the institution in every semester that helps out the students to do their SWOT (Strengths Weaknesses Opportunities Threats) analysis so that they can work on their overall development.
- Principal awards letter of appreciation to the faculty members, those who got good results for their subjects in final university examinations.

1.1.3 What type of support (procedural and practical) do the teachers receive (from the University and/or institution) for effectively translating the curriculum and improving teaching practices?

The university and institute provide active support to empower faculty for effective translating the curriculum and improving teaching practices. It is summarised in the Figure: 1.1.3.

- Faculties use different teaching aids for effective delivery of lectures like LCD projector, multimedia, K-point capsules.
- For the preparation of course materials, faculties are provided with round the clock internet facility (via LAN and Wi-Fi).
- The library is equipped with all the standard reference books, e-journals, NPTEL, National Digital Library (NDL), British Council

Library, Jaikar Library SPPU and Aalborg University, Copenhagen, Denmark. For better preparation of the content.

- E-exam portal (www.sknsits.myexamo.com) provides facility to conduct online multiple choice questions (MCQ) test and are being extensively used by the students.
- For details of faculties supported by the institute to upgrade their qualification refer the Annexure VI, Table 1.1.3.

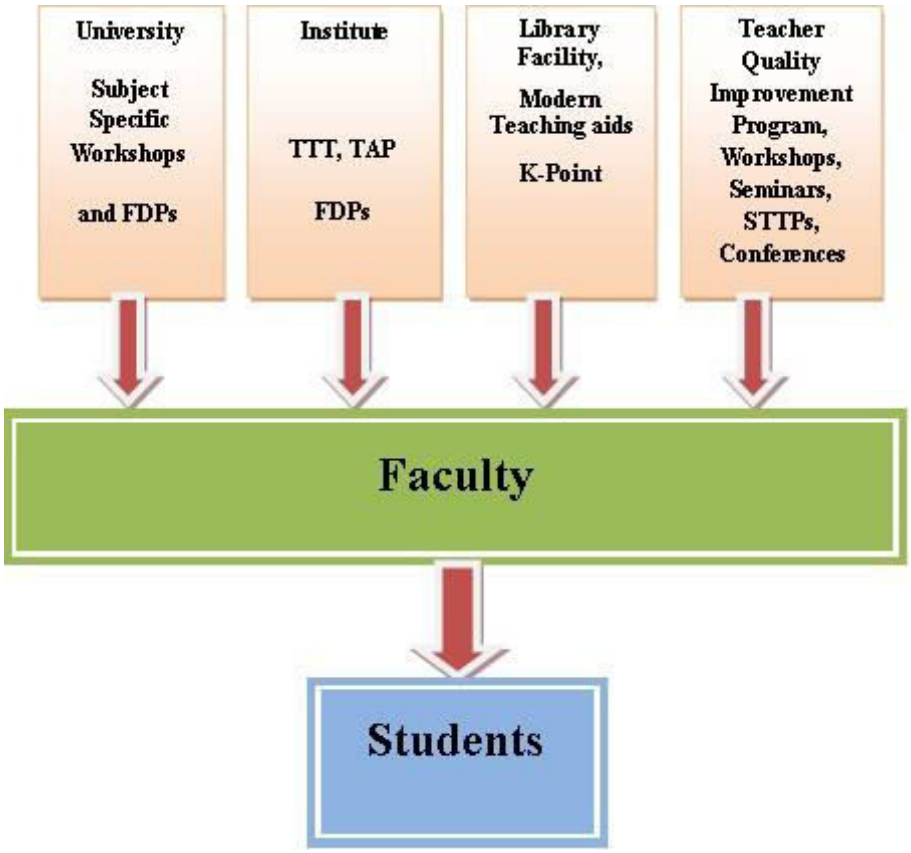


Figure 1.1.3: Support given by the Institute to the Faculty

1.1.4 Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the Curriculum provided by the affiliating University or other statutory agency.

- STES conducts TAP regularly to enhance the capabilities of the teaching faculty. This program includes personality enhancement, teaching skills development, use of modern teaching aids and motivational case studies, etc.
- In TTT programme teachers dealing with a given course of all streams meet before the start of the semester and evolve the best

course material. This resource is then shared with all the teachers. It is a continuous process year after year.

- A further useful resource is provided in the form of Audio Lectures on the K-Point Platform. These lectures are accessible to all the students and teachers in the institute.
- Library and labs are kept open in the evenings enabling both the faculty and the students to extend work on their passions.
- The students are taken out for industrial visits such as industries/trade fairs, exhibitions and to places of historical importance.
- Invited Talks by industry experts are arranged on the latest technologies for the students.
- At the department level, the platform is provided to the students to complete online courses like Indian Institute of Technology (IIT) spoken tutorials.
- Being a residential campus, VAPs are conducted on latest technologies and programming languages by reputed external agencies to bridge the gap between industry and academia.
- To motivate and enhance student's confidence in the subject, SLS are included in the timetable of first and second year.
- Remedial classes are arranged for the needy students.
- Institute has GEMS for effective curriculum delivery.

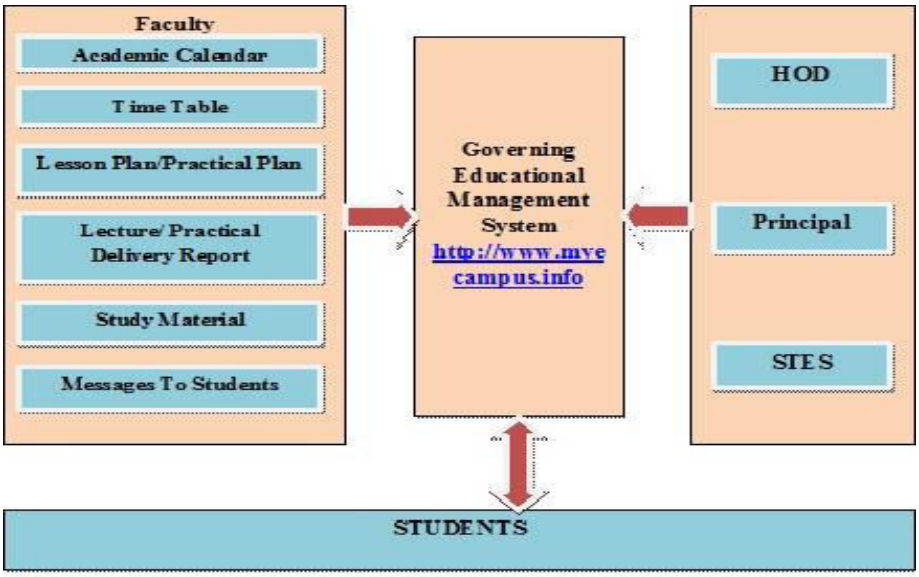


Figure 1.1.4: Governing Educational Management System (GEMS)

1.1.5 How does the institution network and interact with beneficiaries such as industry, research bodies and the ineffective university operationalisation of the curriculum?

The institute lays major emphasis on networking with industry, research bodies, and university. IIIC is constituted at the Institute in coordination with Training and Placement (T&P) department. Each department has a representative in this cell.

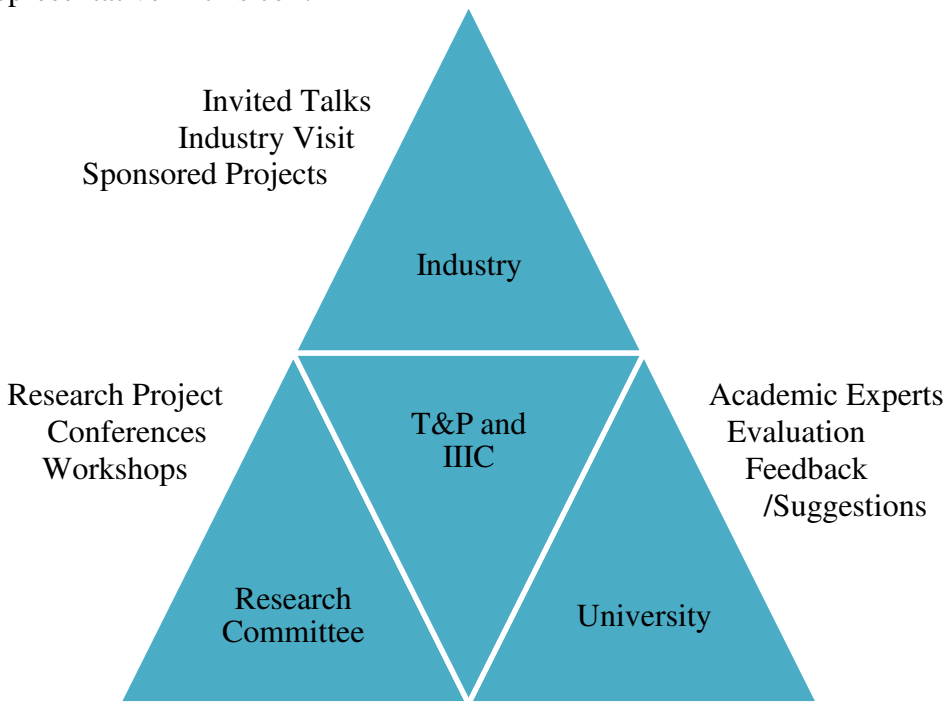


Figure 1.1.5: Network with Industry, Research Committee, University

Interaction with Industry:

- Each department is having Training and Placement (T&P) coordinator and working collaboratively with centralised Training and Placement Officer (TPO). The main objectives are, to communicate with industry people for placement activities and to bridge the gap between industry and academia.
- Institute has IIIC to bridge the gap between industry & institute.
- Institute organises industrial visits for the students.
- Institute has an alumni association, which is also a platform for industry interaction.
- Institute organises various seminars, workshop, invited talks, webinars, etc by industry experts on current technologies.
- Undergraduate and postgraduate students are motivated for sponsored industry projects.

- Institute allows students for industrial training / Internship/projects to strengthen the industry institute network.

Research Committee:

IIIC members are regularly invited for invited talks and seminars to encourage students as well as faculties for undertaking research projects and enhancing their research capabilities.

University:

Institute network and interact with SPPU through activities such as curriculum development workshops, syllabus implementation workshops, and BCUD, SPPU projects.

1.1.6 What are the contributions of the institution and/or its staff members to the development of the curriculum by the University? (Number of staff members/departments represented on the Board of Studies, student feedback, teacher feedback, stakeholder feedback provided, specific suggestions, etc.)

- University upgrades the syllabus and structure by considering employability, entrepreneurship, the pursuit of higher knowledge, overall development of students are major considerations in the design and development of the curriculum.
- HODs and senior faculty members participate and contribute to the development of the curriculum.
- Faculty members as a representative of faculties, students, and other stakeholders gives feedback and corrective suggestions to the university bodies for designing the curriculum.
- The contribution done by some of the faculty members in the academic curriculum design and development is shown in the Annexure VI, Table 1.1.6.

1.1.7 Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating university) by it? If 'yes', give details on the process ('Needs Assessment', design, development and planning) and the courses for which the curriculum has been developed.

All the courses offered in Institute are affiliated to SPPU. The University develops the curriculum in consultation with members of Board of Studies and suggestions incorporated from academic experts, industry,

employment sector, alumni and other stakeholders within and outside the institution. In addition to this, the institution strives towards the overall development of students and quality enhancement of learners through various, orientation and life skill enrichment programs.

- Along with the university syllabus, the Institute offers a specific program for student training like STP, VAP. STP has its semester wise schedule that covers Aptitude test study; technical study varies on different departments and communication skills.
- Institute introduced STP programs conducted by every department for five semesters. The main objective of STP is to make the students employable by enhancing their personality.
- The overall content of STP is delivered to the students by trained faculties and some industry experts.

1.1.8 How does institution analyse/ensure that the stated objectives of the curriculum are achieved in the course of implementation?

The institute periodically analyses performance and impact of curriculum implementation and maps with targeted PEOs and POs to ensure effective transaction of the curriculum. The sampling procedure is depicted below:

- Each Program has PEOs and POs
- The POs are mapped and attained with the PEOs
- The COs achieves PEOs.
- The University syllabus revised time to time, PEOs also get revised as per the need of new contents.
- Various invited talks, industrial visits, Lab innovations are also organised in department level to cover up the content beyond the syllabus.

Program Educational Objectives (PEOs):

I. **Preparation:** To provide opportunity to learn and acquire knowledge of basic mathematical, professional and technical fundamentals, so as to prepare students to succeed in technical profession at global level and to enable them to excel in further education.
II. **Core competence:** To develop an ability among students to innovate, communicate, analyse, interpret and apply technical concepts to solve real life problems and to create novel products.
III. **Breadth:** To aware and achieve scientific and engineering breadth amongst student through various curricular, co-curricular and extra-curricular activities.
IV. **Professionalism:** To inculcate professional and ethical attitude in students, to enable them to excel in engineering profession.

V. **Learning Environment:** To accomplish overall development of the students; with the aid of activity and project based learning environment.

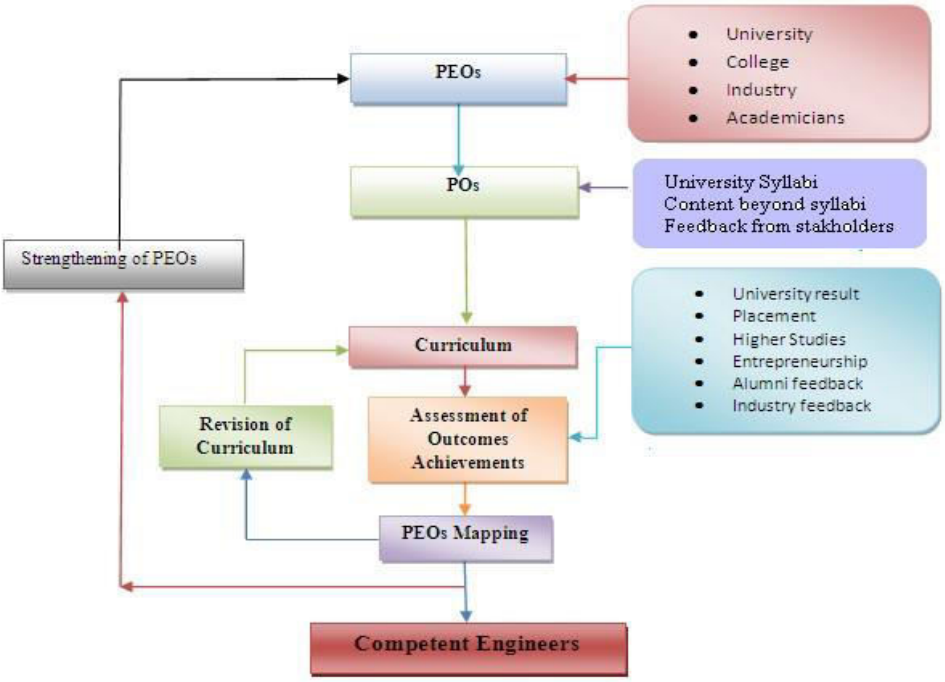


Figure 1.1.8: Process of Revision of PEOs

Programme Outcomes (POs):

a. Graduates will demonstrate knowledge of mathematics, science and engineering
b. Graduates will exhibit an ability to identify, formulate and solve engineering problems.
c. Graduates will prove an ability to design module and conduct experiments with existing systems, analyze and interpret data.
d. Graduates will demonstrate an ability of analysis and interpretation of data and synthesis of information to provide valid conclusions.
e. Graduates will show an ability to visualize and work on the laboratory for the design of lab innovation in multidisciplinary tasks.
f. Graduates will adopt skills to use modern engineering tools, software and Equipment to analyze problems.
g. Graduates will make evident knowledge of professional and ethical responsibilities.
h. Graduates will be able to communicate effectively in both verbal and written form.
i. Graduates will show the understanding of the impact of engineering solutions on the society and also will be aware of contemporary issues.
j. Graduates will demonstrate knowledge and understanding of engineering principal to apply to one's own work, as a member.

k. Graduates will develop confidence in self-education and ability for life-long learning through higher education.

1.2 Academic Flexibility

1.2.1 Specifying the goals and objectives give details of the certificate/diploma/ skill development courses etc., offered by the institution.

Apart from the programs affiliated to SPPU, the institute offer courses which serve the purpose of value addition. These courses are specifically for third year and final year students to enhance the employability skills, equip them with technical skills under industry-academia interactions. These include Short Term Training Programs (STTP), Certificate Courses, Aptitude Tests, Group Discussions and others in relevance to the core subjects of respective departments.

- **IIT Bombay Spoken Tutorials:** IIT Bombay's Spoken Tutorials Project is about teaching and learning appropriate free and open source software. The students are encouraged to undertake these courses and achieve proficiency by utilising this platform.
- **Microsoft Certification:** ATS InfoTech has conducted Microsoft certification program (.net) for enhancing competency necessary as a skill set for both academics and employment.

For overall skill development expected by industry, the institute has introduced various courses in the form of VAP, workshops. The details of VAPs conducted by the Institute are given in Annexure VI, Table 1.2.1.a to Table 1.2.1.e. For the details of workshops organised by the Institute refer Annexure VI, Table 1.2.5.a to Table 1.2.5.e.

1.2.2 Does the institution offer programs that facilitate twinning /dual degree? If 'yes', give details.

No, the institute is not offering any program that facilitates the students for the dual degree.

1.2.3 Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability. Issues may cover following and beyond.

The academic flexibility that exists at the Institute and offered by the SPPU in the following form:

Range of Core/ Elective options offered by the university and those opted by the college-

To develop generic attributes relevant to a career for the students, the SPPU offers core subjects that are mandatory along with a wide range of electives from which the college opts for selective elective subjects based on the prospects to acquire knowledge and have a potential for benefitting academic development culminating into a career of their choice. Further in lieu with the market demand, some electives are preferred by the students who are also given due weight age during the selection of electives. This provides the student with the foundation necessary to achieve a competitive advantage in attaining their career goals. The student's choice of elective classes is always discussed beforehand by arranging a brief lecture on the content of syllabi of electives prescribed by the university from which the student chooses an option which is further approved by the respective department and finalised two in each semester depending on the majority of students who opt for it to form a batch. The elective subjects offered by the institute are given in Annexure VI, Table 1.2.3.a.

Choice based credit system and range of subject options

The choice-based credit system (CBCS) provides choice for students to select from the prescribed courses for both core and elective subjects. The semester system under CBCS accelerates the T-L-P providing flexibility to adopt an interdisciplinary approach to learning. The choice based credit system is a facility available in the University curriculum. This provision is not availed for the core subjects by the students. However, it applies to the electives which are optional and are supportive to the discipline under study. The electives offered by the respective departments for the fulfilment of the curriculum are mostly selected by the students by the current requirement of the industry.

Also institute allows the student to change the branch in Second Year as per the guidelines of DTE, Maharashtra. The list of students changed their branch is given in Annexure VI, Table 1.2.3.b.

Skills development

Student Training Program (STP):

- The aim of STP is “To build a personality equipped with exquisite technical and non-technical skills which are globally at par.”
- Training incorporated into the curriculum to help prepare and evaluate the students in technical and non-technical skills.
- Training provided is based on the need of the student.
- A good blend of classroom and hands-on training provided by expert faculty.

- Training need and outcome assessed using, AMCAT, a job test preferred by many industries, and, Employability Test (ET).
- Students will be provided with a three-year presence on AMCAT portal to seek placement.
- The program is spread over seven semesters (STP- I to STP-V).
- The total duration of the program is 120 hours.
- The STP program is summarised in Figure 1.2.3.a, 1.2.3.b and 1.2.3.c.

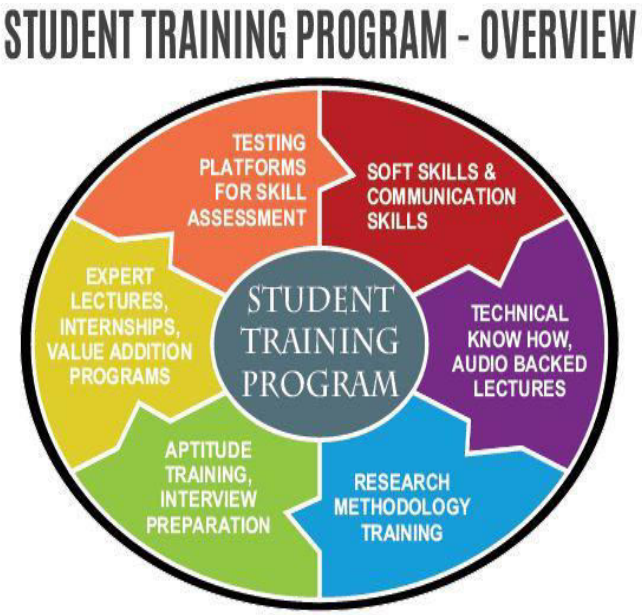


Figure 1.2.3.a: Student Training Program Overview

For better opportunities to the students, the institute provides flexibility of developing the projects with the collaboration with R&D department of core industries. Institute is also encouraging the students for interdisciplinary work as well as entrepreneurship.

- Institute is providing the facility of VAP and STP for enhancing the skills of the students.
- Many different enrichment courses like invited talks, industry-institute interaction, workshops, seminars and add-on modules, offered by the Institute to the students to enhance their skills.

Progression to Higher Studies:

- A significant number of students opt for higher studies.
- Programme departments offer special coaching for competitive examinations such as Graduate Aptitude Test for Engineering (GATE), Graduate Record Examination (GRE), and Test Of English as Foreign Language (TOEFL).

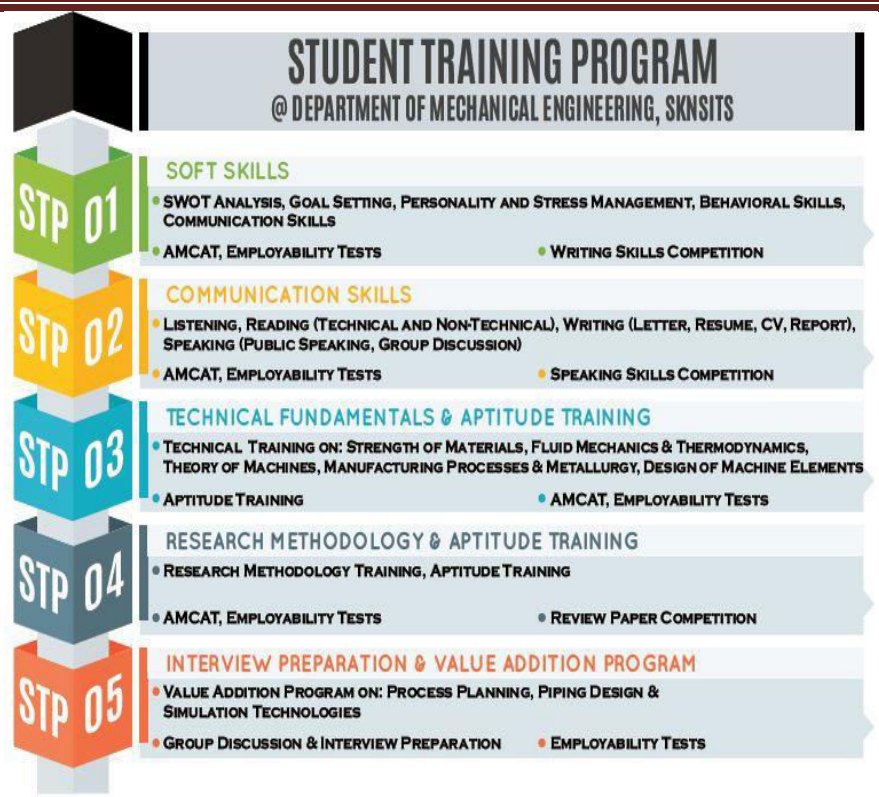


Figure 1.2.3.b: Student Training Program

Figure: 1.2.3 c: Student's Progression under STP

- The resource people for the same are organised by the T&P and Departments to boost the student‘s confidence to go for higher studies in various specialisations.
- Every department arranges the industrial visit for every class based on the relevant subject.
- The institute also encourages students to go for internship training in various industries

1.2.4 Does the institution offer self-financed programs? If‘ yes’, list them and indicate how they differ from other programs, with reference to admission, curriculum, fee structure, teacher qualification, salary, etc.

No, the institute is not offering any self-financed Programs.

1.2.5 Does the college provide additional skill oriented programs, relevant to regional and global employment markets? If ‘yes’ provided details of such programs and the beneficiaries.

For preparing the students to compete in a highly demanding market, various skill oriented programs are arranged by providing a facility for special training and advanced certification courses in the college premises. Some of the programs conducted are enlisted below:

- IIT spoken tutorials are conducted for the students to achieve proficiency, in which IIT Bombay shares the material through video conferencing related to computer languages and report writing tools. The students appear for the exam and get certification for the same. This additional training about open source technology is an advanced skill development which is an add-on for employability.
- All departments of the institute offer different Value Addition Programs for students through external agencies for enhancing the employability. These programs are in line with the requirement of student’s interest as well as the industry needs.
- MOUs have been signed with various industries for enhancing competency necessary as a skill set for both academics and employment.
- Student Internships have been provided to offer industrial exposure.
- Institute has T&P cell which arranges skill oriented programs as per needs of the employment market. The institute also has industry interaction programs where students get a chance to work with industry for enhancing their employability skills.

- T&P cell conducts various skill oriented programs. In these programs, activities such as GD/PI sessions are conducted by the experts.
- ET are designed and conducted based on requirements of the employers.
- Invited talks are arranged by the industrial, academic experts on recent trends in the relevant area.
- A major statistical assessment platform to assess employability in the form of AMCAT is undertaken which is well accepted by top Multi-National Companies.

Additional skill areas like soft skill and add-on technical skill are covered for student development through exclusively designed STP, VAPs, Workshops, Seminars and conferences are organised for student skill development. For the details of Workshops, Conferences & seminars organised by the Institute refer Annexure VI, Table 1.2.5.a to Table 1.2.5.e

VAP Program Details:
As per the need, each department has developed VAP according to requirements of the program. For the details of VAP programs organised by the Institute please refer Annexure VI, Table 1.2.1.a to Table 1.2.1.e.

1.2.6 Does the University provide for the flexibility of combining the conventional face-to-face and Distance Mode of Education for students to choose the courses /combination of their choice" If 'yes', how does the institution take advantage of such provision for the benefit of students?

No. SPPU Pune does not provide flexibility of combining the conventional Face-to-face and distance mode of education for students

1.3 Curriculum Enrichment

1.3.1 Describe the efforts made by the institution to supplement the University's Curriculum to ensure that the academic programs and Institution's goals and objectives are integrated?

There is an opportunity for faculty to introduce a new skill development program into the curriculum looking at fast changing industry scenario.

The existing curriculum is enriched through following modules and activities:

- VAPs and STPs are arranged for students.

- Institute conducts invited talks from industry and academicians to help students to enrich their knowledge beyond the curriculum.
- Institute arranges Seminars, workshops, conferences on recent topics.
- Every year, 'Techtonic' a national level technical festival is organised by Institute.
- Institute organizes National/International conference and paper presentations.
- To make the student more suitable for industrial job profiles, institute organises the AMCAT tests and QA/LR tests.
- Students are encouraged to participate in the research projects competitions like Aavishkar and e-PGCON.
- Students are encouraged to take part in the research projects competition and exhibition such as SKNINNOTECH.
- Alumni interactions and industry visits are arranged recurrently.
- Institute conducts remedial classes for weak students.
- SLS is added in the timetable.

1.3.2 What are the efforts made by the institution to enrich and organize the curriculum to enhance the experiences of the students so as to cope with the needs of the dynamic employment market?

- Research Club is established at each department organises invited talks on Research Methodology and research topics for students.
- Each department has a well-established Business Club. Business club is a forum where multidisciplinary students are putting their innovative ideas together and developing new technology. A distinguished person having experience in that particular field is invited to give valuable guidance to the students.
- Institute has EDC through which students are motivated to become an entrepreneur through various awareness programmes.
- STP is organised by the institute in the curriculum. The basic objective of STP is to train the students so that they can develop their overall personality. The various modules of STP are designed with the aim to give step by step training to the students in every semester and develop the skills that can be helpful for the placement purposes.
- ET, QA/LR, AMCAT test sessions is conducted at central level through which students are trained to face the aptitude test. Pre-placement training and job fair planning is also conducted for more career opportunities.
- All the departments constitute Student associations to inculcate the leadership and managerial skills. These associations are actively involved in arranging various activities throughout the year.

- Institute has signed MoUs with various organisations like Zensar, Seed InfoTech, Mersion, etc.
- Institute organises Technical Events like Techtonic, Technical paper presentations, Project Exhibition, Quizzes, Poster presentation, gaming and Robotics competitions for the student to get acquainted with state of the art technology.

1.3.3 Enumerate the efforts made by the institution to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum?

- The Internal Complaint Committee conducts meeting regularly to resolve the Grievances of Female staff and students. The Institute also regularly organises seminars on gender awareness, women empowerment and also celebrates International Women's Day.
- Institute also has Grievance Redressal Committee to resolve the complaints of the students, parents and employees.
- The college organises various programs under Student Welfare Officer (SWO) and NSS for social awareness.
- TGs are assigned as mentors for a group of students for 4 years. It is tracking every student for their academic performances as well as to understand and counsel their personal problems if any.
- Different programs like poster presentation competition, street-play, etc are organised to generate the awareness about the environment.

Human Rights:
The College provide barrier-free infrastructure for differently abled persons. The institute has formed an Anti-ragging Committee to ensure a ragging free environment. Invited talks are organised to generate awareness among the students about human rights.

ICT: For effective teaching learning process all classrooms are equipped with LCD Projectors and LCD Screens. The classrooms are also facilitated with LAN. The institute premise is equipped with Wi-Fi connectivity.

1.3.4 What are the various value-added courses/enrichment Programs offered to ensure holistic development of students?

To inculcate the moral and ethical values, the institute organises blood donation camps, spiritual talks, art of living sessions, yoga meditation, etc for students as well as faculties.

Table 1.3.4 a: Activity Details: Moral and ethical values

Sr. No.	Activity Details: Moral and ethical values
1	Support to Yes + team for tree plantation
2	Personality Development & Improving Attention through Yoga Meditation.
3	Motivational Seminar
4	Cultural Festival — Spandan

Table 1.3.4 b: Activity Details: Employable and life skills

Sr. No.	Activity Details
1	Students Training Program (weekly two hours for STP) SE - STP-I & STP-II TE - STP-III & STP-IV BE – STP-V
2	Training & Placement Activities conducting regularly (QA/LR) Aptitude Sessions & Test Practice for TE Aptitude Sessions & Test Practice for BE GD/PI Sessions for TE & BE
3	IIIC has formed for every department, in which Industry employee, Alumni, TPC and HOD are included who guide to students once in a month.
4	Zensar is giving training to our students by selection process
5	Barclays provides training for our students

Table 1.3.4 c: Activity Detail: Better career options

Sr. No.	Activity Details
1	Training & Placement Cell is working for students
2	Job Fair Opportunity
3	Internship
4	Some companies are offering their industrial project to a group of students by selection process and giving them opportunities to work on the live project.
5	Zensar provides the opportunity of placement after finishing of training.
6	BE Projects are evaluated during the exhibitions by people from industries. The best projects are rewarded accordingly.

Table 1.3.4 d : Activity Details: Community Orientation

Sr. No.	Activity Details
1	Blood Donation Camp

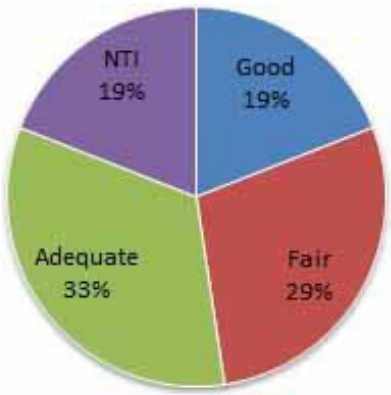
2	Tree plantation Activity
3	Swaccha Bharat Abhiyan Program
4	Computer literacy to rural people through NSS
5	Cashless Transaction awareness for rural people.
6	Road safety awareness
7	Save Electricity Awareness

1.3.5 Citing a few examples enumerate on the extent of use of the feedback from stakeholders in enriching the curriculum?

The institute collects feedback and document responses on curriculum from the stakeholders through various channels. The institute collects feedback from the stakeholders in enriching the curriculum in the following manner:

- Feedbacks are taken from students during the semester
- Feedbacks are taken during alumni meet.
- During parents meet and placement activities, Parents and Employer's feedbacks are collected.
- External examiner appointed by SPPU gives feedback regarding projects and academics.
- Another source of feedback for the Institute authorities is Student's Council. Areas of concern, if any, from the student's point of view, is noted by the council and places them before the Principal for necessary action.
- Exit surveys are conducted
- Inputs received from all the stakeholders are used to improve the quality of curriculum and enrichment programme. A summarized table of feedback collected from industry and alumni is shown in the Annexure VI, Table 1.3.5.a and Table 1.3.5.b.

Soft Skills **Technical/Domain Knowledge**



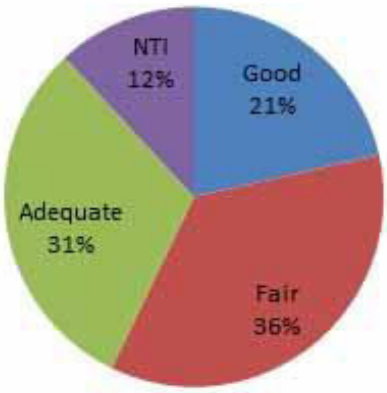


Figure1.3.5.a Feedback from Industry

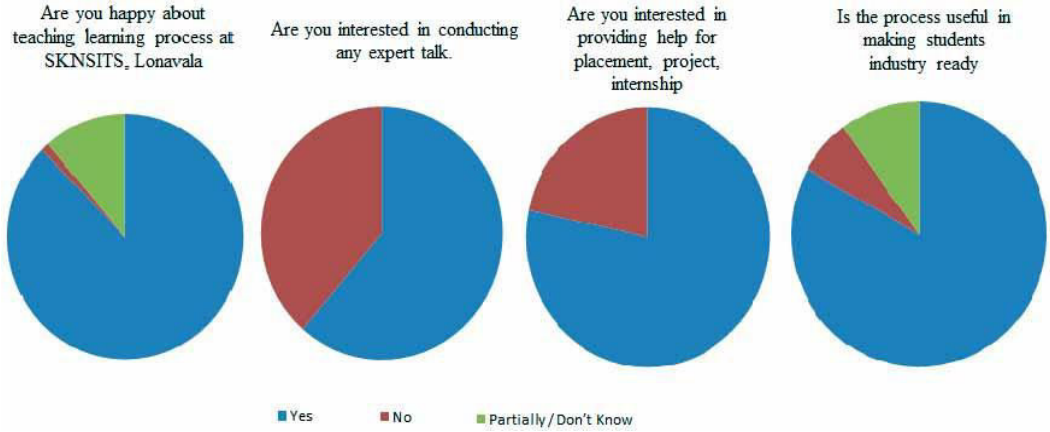


Figure1.3.5.b Feedback from Alumni

1.3.6 How does the institution monitor and evaluate the quality of its enrichment programs?

The quality of various enrichment programs is assessed and overseen by the institute in a very transparent way. A specially constituted committee analyses the feedback in the form of interactions, discussions, suggestions and a report is submitted to the HOD.

To enrich curriculum institute has defined VAPs and STP, evaluation of which is done in following ways.

Table 1.3.6 Evaluation Process

Enrichment Programs	Monitoring process	Evaluation Process
VAPs	Attendance at courses Reviews by HOD and VAP coordinators	Feedback from students Assignments, projects, and Tests Certification
Seminars & Workshops	Participation in events	Feedback from students
STP	Attendance at courses. Feedback from students. Reviews by HOD and VAP coordinators	Placements Progression to Higher Education
Paper Presentation and project competition	Participation in events	Assessment by external experts on specially designed rubrics
Industrial Visits	Participation in industrial visits	Visit reports

1.4 Feedback System

1.4.1 What are the contributions of the institution in the design and development of the Curriculum prepared by the University?

The institute is affiliated to SPPU. The course syllabus is revised after every five years. SPPU organises syllabus revision workshops for curriculum design. Faculties of the Institute attend the FDP as well as syllabus review meeting organised by University. Valuable suggestions are given by the faculties & also share feedback received from stakeholders. During the implementation of the curriculum, if there are any difficulties, they are communicated to the concerned body of the university. Faculty provides suggestions regarding syllabus design. The faculty also prepares online Question Bank. Refer the Annexure VI, Table 1.1.6 for the details of the contribution of faculties for curriculum design.

1.4.2 Is there a formal mechanism to obtain feedback from students and stakeholders on the curriculum? If 'yes', how is it communicated to the university and made use internally for curriculum enrichment and introducing changes/new Programs?

The Institute has a formal mechanism to obtain feedback from students and other stakeholders like Alumni, Parents, Industry and faculty. It has a well-designed feedback form with defined criteria to get feedback from each category of stakeholder. A Course Feedback on curriculum and examination/evaluation pattern is taken from students periodically. The Alumni feedback is taken for revising the pedagogy and including the concepts as per industry requirement. The Parent Feedback Form is used to know their opinion about Institute, Infrastructure, Professional expectations. IIIC is used to understand and bridge the gap between the institute and industry. The summary based on the feedback is used for the revision of syllabus at University. This summary is communicated to the University through faculty to Board of Studies (BOS).

1.4.3 How many new Programs/courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/Programs? Any other relevant information regarding curricular aspects which the Institute would like to include.

No, The institution introduced no new programmes/courses during last four years.

CRITERION II : TEACHING - LEARNING AND EVALUATION

2.1 Student Enrollment And Profile

2.1.1 How does the college ensure publicity and transparency in the admission process?

The admission process and publicity at SKNSITS is completely transparent. The details are as follows,

Publicity: The schedule is displayed on the DTE - Maharashtra's website and accordingly, advertisements in various newspapers, websites, brochures, magazines, and social media are published. The institute organises and participates in exhibitions at major cities across the nation. In addition to above, mouth publicity of the current students and alumni also helps in advertising.

The information of all the UG and PG programmes is available on official Institute website as mentioned below,
http://www.sinhgad.edu/sinhgad-engineering-institutes/SEI-Admission.html

Transparency: UG and PG admission processes are completely transparent based on the respective admission criterion set by AICTE, DTE and Government of Maharashtra (GOM). Out of the programme-wise intake of the institute, 80% seats are filled through CAP. The admissions are made strictly by the Inter-se merit of the candidates. 20% seats are allocated to be filled by the institute strictly by inter-se merit as per the rules of DTE Maharashtra in this behalf. All the statutory reservation rules are followed. The admission process is carried out online through admission portal. Therefore, the process is transparent to all stakeholders. This process is shown in Figure 2.1.2

2.1.2 Explain in detail the criteria adopted and process of admission (Ex.(i) merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) (any other) to various programmes of the Institution.

Fig. 2.1.2 Admission Process

The criteria adopted and the process of admission is according to AICTE, DTE and GOM, rules and regulations. The representative model for the eligibility criteria for admission in programmes at different levels which were used in the 2016-17 admission process is explained below. 80% of the admissions are done through CAP, while the rest 20% are through institute level quota for UG & PG admissions. The detailed procedure of admission process is shown in Fig.2.1.2

The admission criteria adopted for UG admissions are:

- A score of MHT- CET/JEE/AIEEE.
- The aggregate score of Physics and Mathematics along with one of the technical or vocational subject marks in Higher Secondary Certificate (HSC) Examination. 50% for Open Category and 45% for Reserved Category.
- Direct Second Year Admissions are based on qualifying examinations.

The admission criteria adopted for PG admissions are:

- GATE score.
- Percentage of marks in qualifying examination.
- Inter-se merit list generated by the Institute.

2.1.3 Give the minimum and maximum percentage of marks for admission at the entry level for each of the programmes offered by the college and provide a comparison with other colleges of the affiliating university within the city/district.

The comparison is based on the data made available by DTE, Maharashtra. The selected institutes are from the common affiliating university, SPPU and situated in the close vicinity (radius of 50 km) of the Institute. Table 2.1.3 shows the data for last three years of CAP admissions for all branches of three institutes. The other two institutes considered are

- Sinhgad Institute of Technology, Lonavala (SIT)
- Indira College of Engineering and Management, Pune (ICEM)

Table 2.1.3. Details of minimum and maximum marks at admission at entry level.

Sr. No.	Programme	Year of Admission	Minimum and Maximum Entrance Test Marks of Admitted Students					
			SKNSITS		SIT		ICEM	
			Min	Max	Min	Max	Min	Max
1	MECH	2017-2018 (MHT CET out of 200)	48	90	38	96	44	108
	E&TC		53	82	30	87	-	-
	COMP		50	88	53	115	43	99

	IT		48	86	52	87	-	-
	ELECT		53	74	44	106	-	-
2	MECH	2016-2017 (MHT CET out of 200)	30	121	47	125	34	94
	E&TC		37	75	40	93	39	83
	COMP		45	116	42	149	50	94
	IT		43	93	48	101	-	-
	ELECT		48	99	44	108	-	-
3	MECH	2015-2016 (Composite Score out of 100)*	8.87	87.65	15.38	92.57	19	99
	E&TC		24.63	92.91	15.81	80	11	94
	COMP		10.23	74.96	13.96	83.27	19	72
	IT		16.71	74.26	27.19	78.05	-	-
	ELECT		18.58	82.87	27.14	78.95	-	-
4	MECH	2014-2015 (Composite Score out of 100)*	13.77	83.43	38	89	23	97
	E&TC		20.80	98.87	10	84	26	92
	COMP		15.54	75.56	21	88	15	74
	IT		16.69	75.55	21	85	-	-
	ELECT		13.63	74.57	26	85	-	-
5	MECH	2013-2014 (MH CET out of 200)	37	109	40	130	49	114
	E&TC		43	81	44	102	45	91
	COMP		34	95	46	111	43	98
	IT		50	83	41	90	-	-
	ELECT		44	94	46	118	-	-

*Composite score out of 100 is calculated by using 50% marks from JEE (Main) and 50% marks from the qualifying examinations.

2.1.4 Is there a mechanism in the institution to review the admission process and student profiles annually? If 'yes' what is the outcome of such an effort and how has it contributed to the improvement of the process?

Yes, the institute has a mechanism to review the admission process, periodically. Student profiles are generated annually with the aid of qualifying examination marks, as shown in the Table 2.1.3

The members of the admission committee review the current year admission status. Strategic decisions are made to enhance admission performance regarding some admissions against intake. Few of the important outcomes are listed below.

- An induction program of first year and orientation programme for direct second year, newly admitted students along with their parents is arranged at institute level before the commencement of

academic session. In these induction programs, student profiles are generated on the following basis.

- Background of student (Rural / Urban)
- Medium of education (English)
- Educational background of family

- Considering the admission scenario in recent years, the institute frames a policy to make name and fame of the institute at the national level by organising admission drives in the main cities of India. The institute has well established admission cell which contributes towards improvement the quality of student's admission profile. Improvement in the performance of admissions of the institute in the recent years clearly reveals the success of the above review process.

2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion?

- **SC/ST**
- **OBC**
- **Women**
- **Differently abled**
- **Economically weaker sections**
- **Minority community**
- **Any other**

The admission process is transparent and merit based on rules and regulations/norms set by AICTE, DTE and GOM. Reservation rules as per DTE and GOM apply to the admission process and are strictly adhered by the Institute. Hence, the Institute is committed to the diversity and inclusion of SC, ST, OBC, Women, Differently-abled, economically weaker sections-EBC, SBC, Minority community, NT, VJ, etc. as per the Government norms.

The talent in economically weaker sections is attracted through the quota under Tuition Fee Waiver Scheme (TFWS) which is over and above the sanctioned intake. Institute Management offers complete fee waiver to economically weaker students.

There is a special quota for the candidates of Jammu and Kashmir (J&K) students as per the rules, regulations and national norms and administered by DTE, Maharashtra.

To attract the best talent from all the sections of the society and students from other states of the nation, the institute carries out the special campaign in the form of brand building through national and state level cultural and technical events for students. Events of state, national and international levels for faculty are also organized throughout the year. Table 2.1.5 shows categories of admitted students for last four years.

Table 2.1.5. The number of students admitted to the Institute in the last four academic years.

Year	2017-18		2016-17		2015-2016		2014-2015	
Categories	Male	Female	Male	Female	Male	Female	Male	Female
SC	06	02	14	00	19	02	16	01
ST	00	00	00	00	02	00	02	00
OBC	65	10	63	05	77	09	70	03
General	79	21	109	21	192	19	147	24
Others	30	01	14	05	26	05	34	03
TFWS scheme	13	02	13	03	15	04	15	03
Special quota for J & K	00	00	02	01	02	02	03	02

2.1.6 Provide the following details for various programmes offered by the institution during the last four years and comment on the trends. i.e. reasons for increase/decrease and actions initiated for improvement.

The details of various programmes offered by the institute during the last four years are mentioned in Tables 2.1.6.a – 2.1.6.b.

Table 2.1.6.a Details for UG Programmes offered by the institution during the last four years.

UG Prog.	2017-18			2016-17			2015-16			2014-15		
	NOA	NSA	DR	NOA	NSA	DR	NOA	NSA	DR	NOA	NSA	DR
COMP	120	94	78.33	120	104	85.83	120	104	86.66	120	73	60.83
IT	30	20	66.66	60	29	41.66	60	28	46.66	60	11	18.33
EXTC	30	10	33.33	60	7	11.67	60	20	33.33	60	16	26.66
MECH	120	55	45.83	180	67	37.22	180	165	91.66	180	166	92.22
ELECT	60	34	56.66	60	24	40.00	60	34	56.66	60	34	56.66

Table No. 2.1.6.b various PG Programmes offered by the Institution

PG Prog.	2016-2017			2015-2016			2014-2015			2013-2014		
	NOA	NSA	DR	NOA	NSA	DR	NOA	NSA	DR	NOA	NSA	DR
ME (M)	24	02	8.33	24	14	58.33	24	18	75.00	24	6	25.00
ME (C)	24	02	8.33	24	3	12.5	24	10	41.66	24	24	100.00

*NOA – No of applications [Intake],
NSA – No of students admitted,
DR - Demand Ratio = NSA*100/NOA
ME (M) – ME Mechanical (Design Engineering), ME (C) Computer Engineering.

Reasons for decrease in admissions are as follows:

- In recent past, most of the engineering institutes have been granted an increase in intake for various programmes in Maharashtra. Also, numerous new institutes are recently established in Maharashtra as well as other states which directly influence the inflow in admission. Thus, it is a stiff task to fill all seats or 100 % admission for certain branches.
- There are other job oriented courses also available at low cost, which can give global and national employment.
- In certain programmes, demand is decreased due to slack in the requirement of graduates in the respective core companies. Thus, most of the students are opting for IT profession. The same case has happened with other postgraduate courses.

Action initiated for improvement:

- Students reporting to admission cell are counselled, before and during admission process for the importance of engineering and to choose the proper stream of engineering.
- Institute has strengthened Training and Placement activities by incorporating STP, GD/PI, QA/LR and Job Fair.
- Since 2011, the Institute has been conducting VAPs in consultation with industry people to improve the employability of the students. To tune with changing needs of stakeholders, the Institute has continuously refined VAPs.
- The institute has signed Memorandum of Understandings (MOU's) with industries and institutions at national & international levels. This initiative helped us to create a dynamic learning environment which strengthens educational experience of faculty & students. Thus, students are exposed to the gradual and planned holistic development as an engineer. It helps us to attract students for admission.
- Advertisement in regional and national level newspapers, news channels and extended admission centre at Khopoli, Kolhapur, Parbhani, etc.
- Institute has initiated admission campaigning programme since 2014, which starts from September every year.

2.2 Catering To Student Diversity

2.2.1 How does the institution cater to the needs of differently-abled students and ensure adherence to government policies in this regard?

The Institute understands the needs of differently-able students. Various facilities and comfort zones are created to serve this purpose. The institute is fully adhering to government policies regarding the needs of differently abled students. The prominent of them are –

- Ramp at the entrance.
- Customised water closet.
- Special considerations in examinations as per guidelines of SPPU.
- Health Services.
- Wheelchair.
- Priority services are given to such students in the library.

2.2.2 Does the institution assess the student's needs regarding knowledge and skills before the commencement of the programme? If 'yes', give details on the process.

Yes, from the experience and continuous interactions with students and parents, we realised that, students have different perception towards technical education. The aim of the students behind pursuing the technical education is to become, either competent for placement or a good entrepreneur. To fulfil these expectations of students, the institute organises the induction programme for the students before the commencement of the programme.

The overview and review of skill sets and liking of the students are considered through department wise induction programs for FE as well as SE directly admitted students. The Principal as well as TPO give a detailed presentation to the students and make them aware of the need of skill sets they should gain during four years. Similarly, HODs gives detailed presentation to the newly admitted students of the respective program.

The skill set status and the needs of the students are identified after these programs. Based on the above interactions, MHT-CET/JEE and HSC scores slow, weak and fast learners are identified as shown in Figure 2.2.2.

2.2.3 What are the strategies adopted by the institution to bridge the knowledge gap of the enrolled students (Bridge/Remedial/ Add-on/Enrichment Courses, etc.) to enable them to cope with the programme of their choice?

The institute organises following activities to bridge the knowledge gap so that the enrolled students can cope up with the programme and become employable -

- Bridge
  - VAPs
  - STP - Core subject enrichment, latest technical courses, communication skill development.
  - AMCAT & QA/LR tests
- Remedial
  - Classes for weaker students.
  - Extra lectures for SC/ST students.
- Add-on
  - Workshops, with hands-on training
  - Paper presentations and quiz competition
  - Faculty assistance for students opting GATE examination
  - Foreign Language Courses
- Enrichment
  - Invited Talks/Seminars of eminent personnel.
  - Technical competitions and programs under professional bodies, like Society of Automotive Engineering (SAE), Institute of Electronics and Telecommunication Engineers (IETE), etc.
  - Internship Programs for students at TUS, Bulgaria and Aalborg University, Copenhagen, Denmark.
  - Research Club Activities
  - Sponsored Projects from industry

Table 2.2.3 Summary of VAPs & Invited Talks

Academic Year	Value Addition Programmes	Invited Talks
2017 - 2018	5	10
2016 - 2017	18	34
2015 - 2016	10	22
2014 - 2015	12	22
2013 - 2014	08	18
2012 - 2013	11	06

2.2.4 How does the college sensitize its staff and students on issues such as gender, inclusion, environment, etc.?

The Institute understands the need of comfort based on gender and environment. There is no discrimination on these issues. On the other hand, institute sensitises staff and students on these issues through the following mechanism

- Anti-ragging Committee.
- Internal Complaint Committee
- Grievances Redressal Committee
- Induction Programs for newly admitted students.
- TGs for all the departments.
- Organization of Social Awareness Contests and Activities under Institute Social Responsibility (ISR).
- National Service Scheme (NSS) – supported by SPPU
- Management Body interacts with the college policies and vision in the creation of good working environment.
- HOD regularly monitors academic and discipline environment by visiting individual classes, and the TG assures the communication through phone calls/SMS/postal letters with the guardians or parents.

Following images highlights the events organised by NSS SKNSITS.

2.2.5 How does the institution identify and respond to special educational/learning needs of advanced learners?

The Institute identifies the special educational/learning needs of advanced learners through - Student's feedbacks, discretion and recommendation of respective subject teaching faculty, identification by external agencies/trainers, the suggestion by respective TG and the result analysis.
The needs of such advanced learners are fulfilled through the following measures,

- Special efforts by subject teachers in extra hours.
- VAP, based on the student's choice.
- Assistance for higher studies like GATE, GRE, etc.
- The inclusion of such students in technical forums like, SAE, IETE, ISHRAE, CSI, ACM, etc.
- Internship programs for students at TUS, Bulgaria and Aalborg University, Copenhagen, Denmark.
- Provision of internship for special hands-on experience at industry
- Allotment of industry-sponsored/supported projects.

2.2.6 How does the institute collect, analyze and use the data and information on the academic performance (through the programme duration) of the students at risk of drop-out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc. who may discontinue their studies if some support is not provided)?

Collection of Data

- The office and respective TG maintains information of the students who are economically weak, slow learners or belonging to socially disadvantaged sections.
- Each department conducts regular tests (unit and prelim, mock exams) & TG meetings through which needs of weak students are identified.
- Also, results of internal exams help to get information about students who are running the risk of being a dropout.
- The result analysis is done for the examinations conducted by SPPU to identify weak students.
- The mentoring system is implemented in which each teacher is assigned a batch of students with whom they regularly interact. From this interaction, Institute gets information and identifies slow learners, physically challenged and economically weaker students and their needs.
- A medical check-up is carried out for all the students and faculty members to check their physical fitness.

The institute takes care of such category of students as follows -

- Economically weak students are taken care through Earn and Learn scheme of Institute, under SPPU.
- Relaxation in fee payment through instalments.
- Concession in fees by management.

The concession in fees by various agencies such as AICTE and GOM, etc. are given. These schemes are scholarships, freeships, EBC, SBC, TFWS, Minority State Govt., Minority State Central Govt., Secondary Teacher Concession, Primary Teacher Concession, Handicap Student Scholarship, Central Sector Merit Scholarship, Merit Scholarship, and Prime Minister's Special Scholarship Scheme for Jammu and Kashmir. The institute plays vitally in the provision of necessary documents and the ease in availing the above-mentioned monetary assistance.

Analysis of the performance of the students to be done based on –

- Attendance.
- Test Results.
- Continuous Evaluation throughout semester.
- One to one interaction thru TG meetings
- Co-curricular and extra-curricular activities.

Slow learner and academically weak students –

- Additional makeup classes.
- Counselling through TG.
- Practical - extra practice session during mid-term submission week
- Provision of learning material e.g. multimedia, Kpoint and notes on GEMS, etc.

2.3 Teaching Learning Process

2.3.1 How does the Institute plan and organise the teaching, learning and evaluation schedules? (Academic Calendar, Teaching Plan, Evaluation, Blue Print, etc.)

Plan of teaching and learning process:

To improve the quality of teaching-learning, college prepares academic calendar for entire semester of fourteen-week duration. All the faculty members prepare their teaching plan. Teaching, learning and evaluation schedules are planned and organised through the following mechanisms -

- **Academic calendar:** As per the curriculum circulated by SPPU, all the departments prepare the academic calendars to cope-up with the cutting edge technology consisting of following activities –
  - Theory and Practical Sessions

- Unit Test, Prelim Exams and Mocks
- Mid Term submission
- Parent Teacher Meet
- Remedial classes
- AMCAT, ET Tests
- STP & several VAPs
- Invited talks
- Industrial visits

- **Preparation of course objectives and outcomes:** Course objectives and outcomes are framed/reframed by respective faculty by considering the feedback from stakeholders such as students, alumni, industry personnel, parents, resource persons, etc.
- **Teaching plan with additional contents:** Teaching plan for entire semester content delivery is prepared along with the content beyond syllabi to map with course objectives and outcomes with the consent from the subject in-charges and HOD.
- **Class tests:** Regular unit wise class tests are planned and carried out for all the students. Retests are also conducted as scope for improvement if necessary.
- **Prelim examination:** Prelim Examinations are conducted to summarise and conclude the T-L-P of the entire semester. It helps the students as mock of end semester university examinations.
- **Mock practical and oral examination:** To help students to face real-time external examination conducted by University, a mock session is carried for every subject to improve the performance and hence results.
- **Assignments:** Regular assignments after the completion of every unit are given to monitor the understanding of content delivery.
- **Project presentation and evaluation schedule:** Committee is constituted to evaluate the project performance of students in completing their project work time to time and to avoid difficulties if any.
- **Mock on-line examinations:** To enable the students with a realistic environment of university web based digital online examination, respective internal online mock examinations are planned and conducted.
- **Continuous assessment:** The assessment of the academic progress of the students is on a continuous basis, the internal term work marks are allotted based on parameters like attendance, understanding and journal write up. SPPU online, practical, oral, term-work examination planning: These examinations are planned and conducted as per the dates and schedule provided by respective subject chairman and competent authorities of University.

Typical academic calendar are added to Annexure VI, Figure.2.3.1.a and Figure.2.3.1.b. The Continuous Assessment and Internal Assessment Norms are also added to Annexure VI, Figure 2.3.1.c

2.3.2 How does IQAC contribute to improving the teaching – learning process?

Since its establishment, Institute has AMC. This committee frames the guidelines for quality assurance in all the aspects of institutional activities such as academics, administration as well as student welfare.

Function:

- Development of quality parameters and benchmarks for the academic and administrative activities of the institution.
- Creation of a student-centric environment conducive to quality education and faculty empowerment to adopt the required knowledge and technology for participatory teaching and learning process.
- Acquiring feedback from stakeholders on quality parameters
- Suggest remedial actions/ plans to improve academic and administrative activities of the institution.
- Dissemination of information of expected quality in education systems by AICTE/ UGC/ DTE/ SKNSITS.
- Document verification of quality parameters/activities leading to quality improvement.
- Acting as a nodal agency of the institution for imparting quality-related activities.
- Performance appraisal and counselling of faculty.
- Governing all the academic and administration process.
- Keenly monitoring the academic process and execution of teaching plan, taking corrective measures.
- Evaluating the online student's feedback and takes the required corrective measures.
- Provision of the support in the implementation of all the academic policies.
- Acting as an interactive platform for faculty, management and stakeholders to improve the overall progress of Institute.

Mechanism:

AMC aims to maximise the quality outcomes of the institute in terms of:

- Academic performance.
- Placement scenario.
- Research contribution by faculty and students.

- Overall satisfaction of stakeholders: Society, Industry, Alumni, Parents, etc.

While doing so the AMC works in a close loop system with faculty, staff, students and management in developing a unique work culture in the institute. Figure 2.3.2 gives an overall idea of this closed loop system.

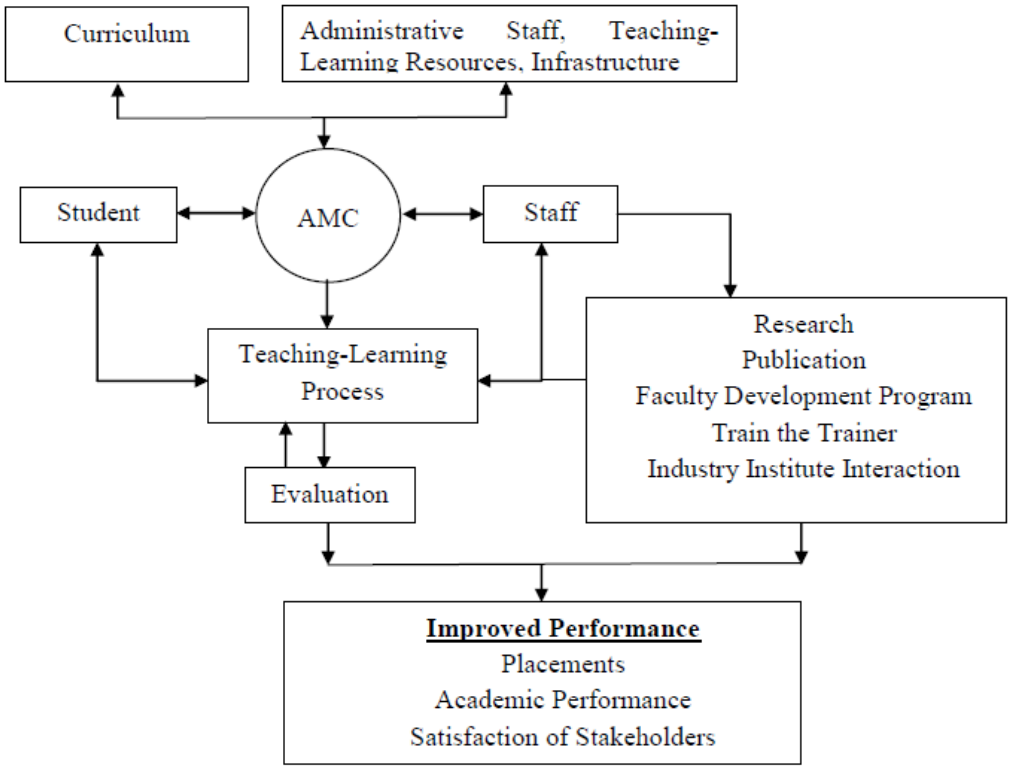


Figure 2.3.2: AMC Closed Loop System

AMC committee consists of two STES Directors as advisors. AMC monitors all the academics, student feedback and overall T-L-P to achieve the maximum academic performance of the students, as well as administration. Guidance of AMC advisors regarding teaching load distribution, new faculty recruitments and procurement of new equipment also helps in building academics. Library books are always helping the individual department to improve their performance. Faculty and staff appraisals are looked after by AMC where it not only monitors the performance of individual faculty but also guides them to achieve their own objectives. AMC also keeps an eye on critical subjects from FE to BE and advise HODs to perform in the best possible way.

Table 2.3.2.a: Members of AMC

Sr.	Name of Staff Member	Designation	Designation
1	Mr. M. G. Bhat	Director, Engineering	Advisor
2	Mr. S. B. Pharkute	Director, Academic	Advisor

Recently, the institute constituted the Internal Quality Assurance Cell (IQAC) in accordance with AMC, on 10th August 2016, which comprises of peer members, as mentioned in the Table 2.3.2.b, below.

Table 2.3.2.b: Members of IQAC

Sr. No.	Name of the Member	Designation
Chairperson		
1	Dr. M. S. Rohokale	Principal
Members of the Management		
2	Dr. M. S. Gaikwad	Member – Campus Director -STES Lonavala
3	Prof. M. G. Bhat	Member – Director (Engg.) STES
4	Prof. S. B. Pharkute	Member – Director (Academics) STES
Teaching Member		
5	Mr. N. K. Gavade	Head – Mechanical Engg.
6	Mrs. R. M. Thadi	Head – Electronics & Telecommunication
7	Mr. V. D. Thombare	Head – Computer Engg.
8	Mr. G. M. Kadam	Head – Information Technology
9	Mr. S. D. Datey	Head – Electrical Engg
10	Mr. G. V. Khandekar	Head – Engineering Sciences
11	Mr. G. A. Kadam	Asst. Professor – Mechanical Engg.
Administrative Officers		
12	Mr. G. S. Sharma	Coordinator – Training and Placement
13	Mr. S. S. Navale	Registrar
14	Mr. S. S. Chavan	NSS Officer
Alumni & Students		
15	Mr. Rohit Dongare	Alumni Representative
16	Mr. Palash Mane	Student Representative
17	Mr. M. G. Shinde	Parent Representative
Industry Representatives		
18	Mr. Sandeep Gujran	Asst. Manager, Jacobs Engineering India Pvt Ltd.
19	Mr. Ashok Divekar	Sr. Software Engineer, Allscripts.
Coordinator		
20	Mr. S. L. Shinde	Asst. Professor – Mechanical Engg.

2.3.3 How learning is made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?

Students are the most important stakeholders of the institute. All efforts are being taken to groom them as social engineers. The Institute has evolved its learning environment in line with Active and Collaborative Learning principles. To design and exercise these student-centric learning activities effectively, the faculty is trained by using various platforms which mainly include TTT and TAP and various short term and long term faculty development courses. Also, the faculty is specialized in PBL and effective teaching-learning methodologies.

Teachers are empowered through workshops on PBL and effective teaching-learning methodologies such as Mission 10X. During these workshops, the following activities are evolved to make learning student-centric.

Interactive Learning Environment

- It consists of the interaction between students and interactive e-learning platforms.
- Detailed course objectives are notified to the students through teaching plans uploaded on ERP platform at the start of the semester. Study material and periodic assignments are also made available to the students of ERP platform. This enables students to come prepared for the classes. This practice has led to better interaction in the classrooms and laboratories.
- Invited talks by experts from the industry and academia; and add-on courses are organised by the departments, to cover contents beyond the syllabus and recent trends.
- MOUs are signed with leading industries to bridge the gaps in the curriculum.
- K-point platform and e-learning.

Collaborative Learning

- PBL is exercised to facilitate collaborative learning. In PBL, students work in group projects throughout entire semesters.
- The Institute also promotes industry sponsored projects and research projects.
- In activity based learning students are encouraged to participate in project competitions, design contests, and various technical festivals.
- Arranging industrial visits and field visits for special surveys, if any.

- Conducting sessions like group discussion, seminar, and quiz, poster presentation to make the learning more interactive and collaborative.
- Inter-collegiate events
- Lab Innovations.
- Complex Laboratory Experiments.
- Paper writing.

Independent Learning

e-learning platforms are provided to facilitate independent learning wherein students can access course contents online. Thus e-learning platforms bridge the gap from classroom learning, and also supplement advanced learning. Available e-learning platforms include - K-point platform, ERP, learning resources through CDs and DVDs.

- Wi-Fi facility is available on campus to allow students to access technical resources such as NPTEL Lectures, video clips, etc.
- VAPs and foreign language courses.
- Coaching for competitive examinations by professional experts.

2.3.4 How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators?

Various activities and forums held by the institution for nurturing critical thinking, creativity, and scientific temper among the students to transform them into life-long learners and innovators are as follows:

- The institute organises intra and inter-collegiate technical competition -TECHTONIC in respective departments under various students associations like Mechanical Engineering Students Association (MESA), Computer Technocrats Association (CTA), The Electrical Student Legitimate Association (TESLA), Electronics & Telecommunications Students Association (NEXUS) and Information Technology Students Association (ITSA).
- The faculty encourages the students to participate in different technical paper writing and poster competitions organised by various reputed institutes like IITs, COEP, SCOE, etc.
- Awareness seminars are organized in the institute for building entrepreneurship skills among the students, thru EDC.
- Students are often encouraged to undertake the mini projects and lab innovations, for e.g. making of physical and virtual prototype models.
- The Research Club makes sure that the students are aware of the state of the art technologies and current happenings in the field of science and engineering.

- Students who are interested in R&D work are continuously motivated and encouraged to present their project/research work in different national/international project competitions/seminars /conferences/ workshops and publish their work in national/international journals and conference proceedings.
- Industrial training and internships are imparted and levied to students, and they are prepared to undertake industrial problems as a part of their final year projects.
- Participation of students in various activities is making them lifelong learners and innovators due to which self-study attitude developed while handling live problems and their possible solutions.
- Industrial visits, site visits and seminar series are organised for students on a regular basis to bridge the gap between current syllabus and industry requirements, thru IIIC. This also helps the students in understanding new technologies and industrial culture for a better solution of live problems.
- Faculty members engage with their research work in association with potential students and they always try to share their innovative concepts in different areas of multidisciplinary engineering fields with the students.
- Along with the course teaching, teaching learning includes workshops, group discussions, skill acquisition, paper presentation, etc.
- Every department strives to interact with industry to get an idea about live problems and promote their students to take projects on these problems to think innovatively for its optimum solution.
- Departmental visits of alumni and industry people also help the students in deciding their domain area and possible career opportunities at an early stage of their student life. This also helps them in preparing themselves for the new corporate era.
- Lab Innovations are undertaken by innovating or improvising the equipment in the respective labs for the students.
- PBL was introduced for students to gain knowledge and skills to investigate and respond to an authentic, engaging and complex question, problem, or challenge.
- SLS are extra sessions for FE and SE students, which will help them to resolve any problem encountered during the regular teaching lectures
- Entrepreneurship Development Cell and Business Club come together to organise skill development activities in the college encouraging budding entrepreneurs.

2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? e.g. Virtual laboratories, e-learning - resources from National Programme on Technology Enhanced Learning (NPTEL) and National Mission on Education through

Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc.

The institute has technologies and facilities available for the effective teaching. They are as follows:

E-learning Resources: K-point technology used in the Institute is helping the students and faculty to take their lessons online. The K-point software can help the students to access the PPT of various subjects along with the audio explanation. K-point is the need of the age as it saves time and money of the learner. It also provides a multi-media archive that offers self-paced learning for every class. Teachers can use it to teach online or give presentations before the class and can publish it online. The institute has developed K-point presentations for all FE subjects as well as SEM-I subjects of all the branches. Students, as well as newly joined faculty members, are taking the advantages of these e-learning resources during their T-L-P.

NPTEL: The NPTEL program implemented for all students and faculty in the Institute through our computer network and internet facility to enhance the quality of education through video and web courses. All the courses designed and developed by experienced professors of seven IITs, IISc. Bangalore, and other premier institutions as a collaborative project. At IIT Madras, the project is evolving, and it is our intent to provide learning materials, digitally taped classroom lectures, supplementary materials, and links to state of the art research materials in every subject possible.

Open educational resources: IIT Bombay's spoken tutorials project is about teaching and learning appropriate free and open source software. The students are encouraged to undertake these courses and achieve proficiency by utilising this platform. The Microsoft Certification has been signed with ATS Infotech, New Delhi, to conduct Microsoft Certification program for enhancing competency necessary as a skill set for both academics and employment.

E-journals: Science Direct (a website operated by the Anglo-Dutch publisher Elsevier) is available with the help of this platform, one can access nearly 2,500 academic journals and over 26,000 e-books. The journals are grouped into four main sections: Physical Sciences and Engineering, Life Sciences, Health Sciences, and Social Sciences and Humanities. For most articles, abstracts are freely available; access to the full text (in PDF and, for newer publications in HTML) is also available through a subscription. IEEE e-journal subscription is available at the central library from where any student or faculty can demand PDF of a specific paper.

Wi-Fi facility: The entire campus is Wi-Fi enabled with world-renowned D-link router access points and wireless controller. There are total 11 access points situated at different locations within the campus through which students can access the internet. Hostel, Canteen, and areas around the institute have been Wi-Fi enabled 24X7 for all the students and faculty.

Advanced Software: Every department is equipped with necessary advanced software to cope up with new technologies. For example, use of high-end software for projects such as CATIA, Creo Parametric, ANSYS, Mastercam X6, MSC Nastran Patran, FEA Motion bundle is done by the students to design, analyse and evaluate the results.

Library Access: The institute's library has access to the Jaykar Library, SPPU, Pune, The British Council Library, Pune and ARAI Library, Pune. Books are made available in the Reference section. User can also browse the database of books available and request for a particular book by making an entry in the register. The books can be borrowed for 14 days.

2.3.6 How are the students and faculty exposed to an advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops, etc.)?

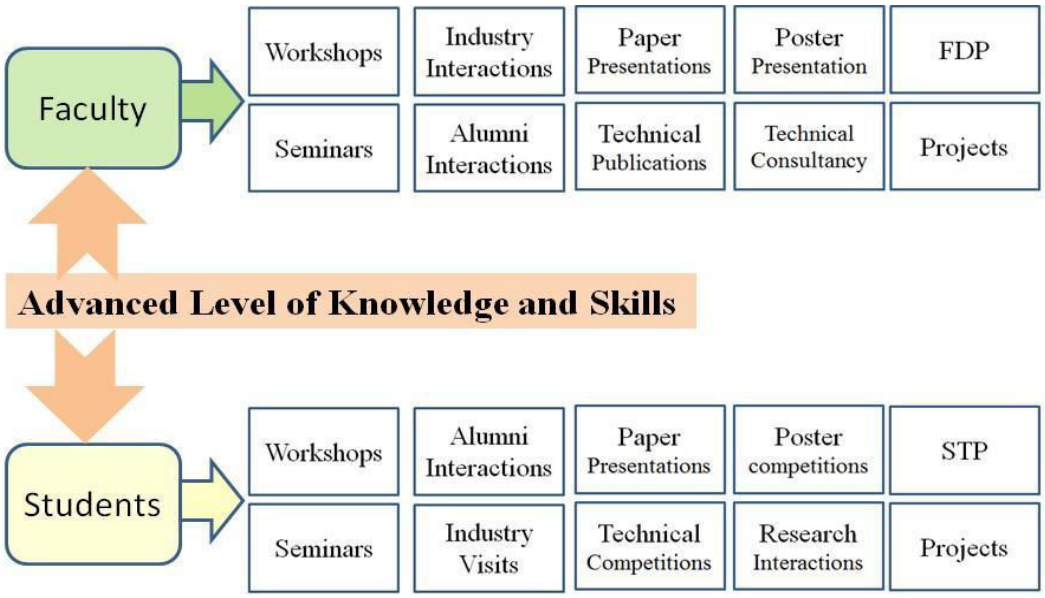


Figure 2.3.6 Advanced Level of Knowledge and Skills by Faculty and Students

Students and faculties exposed to an advanced level of knowledge and skills by various means such as workshops and seminars on advanced

topics, alumni interaction, industry interactions, technical paper and poster presentations at conferences, research interactions and project design, etc. The details of these various exposures for faculty and students are as shown in Figure 2.3.6.

Students:

- The institute organises various technical competitions such as project competitions, quiz competitions, paper and poster presentation competitions, etc.
- The institute promotes students to participate in National/International competitions.
- Eminent speakers invited from the industry to deliver expert lectures to expose the students to the current developments in the corporate world.
- The faculty encourage students to undertake projects on advanced technologies, industry sponsored projects and R&D projects.

Faculty:

- The institute promotes the faculty to participate in different technical conferences/ workshops at State, National, and International levels.
- The institute provides faculty the latest available technical information through memberships of reputed journals like Science Direct and IEEE.
- The institute organises different FDPs in collaboration with well-known organisations and SPPU.

2.3.7 Detail (process and the number of students\benefitted) on the academic, personal and psycho-social support and guidance services (professional counseling /mentoring/academic advice) provided to students?

For every class, TG scheme is adopted. The concept of TG scheme is: A batch of 20 students is assigned to a teacher who acts as a mentor or simply that teacher work as a local guardian for these students.

The role of TG:

- To give moral support to the students
- To develop a platform to entertain common difficulties of students
- To focus on hidden qualities of students
- To develop positive attitude among students

Students are also guided by any career field as per his/her interest. HOD reviews reports of the meeting and the same are communicated to the

Principal. HOD counsels the students and advises them from time to time about career guidance, competitive examinations, etc.

Guidance Services

The following processes/schemes are executed to support students in academic, personal and psycho-social way -

- Different awareness sessions are organized for students such as the personality, professional development, entrepreneurship guidance.
- Those students who are interested in higher education; for them, expert professionals and counselling are arranged for guidance.
- The training and placement cell provides professional counselling to the students.
- Students are supported and counselled by teacher guardian in regards of their homesickness.
- Class Coordinator and HOD interact with the students regularly to understand the need of students regarding infrastructure, teaching and personal.
- Resolution of complaints and support by Grievance Redressal Committee, Internal Complaint Committee for sexual harassment, Anti-ragging Committee and community development program.
- Earn and Learn Scheme for the needy and economically disadvantaged students (31 students are benefitted per year)
- Regular visit of psychiatrist for counseling of needy students

2.3.8 Provide details of innovative teaching approaches/methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?

The Institute provides financial assistance and motivates to upgrade their skills and technical knowledge. The deserving faculty is rewarded and appreciated.

Innovative teaching practices adopted are

- K-Point resource usage.
- Webinars for faculty.
- Live presentations on various practical setups using audio/video techniques.
- Organisation of quiz.
- Role-play activity.
- SLS.
- Lab Innovation.

- Model making.
- Animations.
- PBL
- Innovative teaching process through Harvard cases.

Impacts of innovative practices

- Student attendance in the class is improved because of student-centric pedagogical methodology.
- T-L-P gets strengthened.
- Increases the visualisation power needed to solve engineering problems.
- Train them to work in a team to solve given case studies.
- Hands-on to explore the capabilities to solve real-time social issues.

2.3.9 How are library resources used to augment the teaching-learning process?

In the institute, library resources help to enhance the knowledge of faculties and students with the help of following:

- The Institute library has ample collection of various reference books, text books and handbooks.
- Also to have up to date knowledge about the recent technologies, Institute library provides online journals, hardbound journals and magazines.
- The Institute library has a collection of previous year project reports with a soft copy so that student can refer it for their research work.
- Institute library has maintained previous year university question papers of all the subjects.
- Various newspapers like Times of India, Navbharat Times, Sakal, Loksatta, etc. are made available in the Institute library, and all the students and faculties can avail this facility anytime.
- Faculties and students can avail the library and reading room facility. The institute library is open from 8:15 am to 8:30 pm and reading room is available for students beyond working hours.
- Reading rooms are provided with proper seating arrangement, fans, tubes, ventilation facilities and Wi-Fi connectivity.
- Institute library is also equipped with internet and Wi-Fi facility so that faculties and students can access NPTEL videos, various e-learning sites, e-journals and magazines.

2.3.10 Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If yes, elaborate on the challenges encountered and the institutional approaches to overcome these.

Yes, there are some challenges in completing the curriculum within the planned time span and calendar, challenges encountered and the solution for the same is as follows,

Challenges:

- First year and second year direct admissions (DSA) affects the academic calendar of FE and SE.
- Some topics require more time depending upon the difficulty level of the topic and understanding level of the students.
- The invited talks and seminar sessions for students often consumes the pre-planned lecture hours.
- Invited Talks and extra-curricular activities are conducted on the holidays and inclusion of these activities affects the academic calendar.
- VAPs are often conducted after the college hours & holidays.

To overcome the Challenges:

- Extra lectures and practical are scheduled.
- For direct second year students, separate divisions are formed and lectures are conducted to cover the syllabus for the third semester only.
- Usage of ICT helps in reduction of time, thereby ensuring almost 100% coverage of the syllabus.
- Hands-on sessions with PPTs during practical sessions to give live demos.

2.3.11 How does the institute monitor and evaluate the quality of teaching learning?

The institute level AMC is responsible for monitoring day to day academic calendar. Result analysis of every subject is made and compared with previous years result. Measures are taken to improvise the results. The quality of teaching learning is monitored, evaluated and maintained at the department level, institute level as well as management level.
Following processes are carried out to ensure the quality –

- Periodical online feedback from students.
- Institute level AMC/IQAC.
- Evaluation of feedback and counseling of faculty by HOD/Principal/AMC/IQAC.

- Motivation and appreciation of well-performing faculty.
- Analysis and remedies based on class tests, prelim and end semester results.
- Monitoring and corrective measures were taken by AMC committee.
- HOD evaluates the course file of individual faculty containing study material, assignments, question bank, previous question papers etc.
- AMCAT and QA/LR tests are conducted for every student to achieve good placement ratio.

2.4 Teacher Quality

2.4.1 Provide the following details and elaborate on the strategies adopted by the college in planning and management (recruitment and retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the curriculum.

The recruitment of faculty and staff is as per the AICTE/UGC/SPPU guidelines. The Institute appoints teachers based on student strength and workload calculation. The selection process is as follows:

- The roster is verified by the Assistant Commissioner, Reservation Cell Pune and Mantralaya Maharashtra State; it is for-
  - To implement the reservation policy of the Government for the welfare of reserved category candidates.
  - To collect data regarding the implementation of the policies in respect of admissions, appointments to teaching positions in the university and the affiliating colleges.
  - To provide reservation for SC, ST, VJ/NT, SBC and OBC candidates in services as well as to improve the status of these people socially and educationally so that they can take their rightful place in the mainstream of society.
- After approval from the Reservation Cell and SPPU, the advertisements are published in leading and local newspapers.
- Few applications are also received from reservation cell of SPPU.
- Applications for recruitment are scrutinized as per the AICTE/UGC/SPPU norms.
- Technical and personal interviews of the candidates are carried out by the selection committee appointed by SPPU.
- Upon selection of qualified candidates, the appointment letters are issued to them.
- List of selected candidates and their documents are submitted to the SPPU for Further Process and approval.

- For appointments on a temporary basis, the applications are invited, demo lectures and walk-in interviews are carried out to select a qualified and well-deserved candidate as a faculty. The appointment order of such faculty for an academic year is issued. Table 2.4.1 shows current faculty position.

Table 2.4.1: Current Faculty Position

Highest Qualification	Professor		Associate Professor		Assistant Professor		Adjunct Faculty	Total
	M	F	M	F	M	F		
Permanent Teachers								
Ph.D.	07	00	00	01	00	01	-	09
M. Phil.	-	-	-	-	-	-	-	-
P. G.	00	00	00	00	75	27	-	102
Temporary Teachers								
Ph.D.	-	-	-	-	-	-	-	-
M. Phil.	-	-	-	-	-	-	-	-
P.G.	-	-	-	-	-	-	-	-
Part Time Teachers								
Ph.D.	-	-	-	-	-	-	-	-
M. Phil.	-	-	-	-	-	-	-	-
P.G.	-	-	-	-	-	-	-	-
Grand Total	7	-	-	1	75	28	17	128

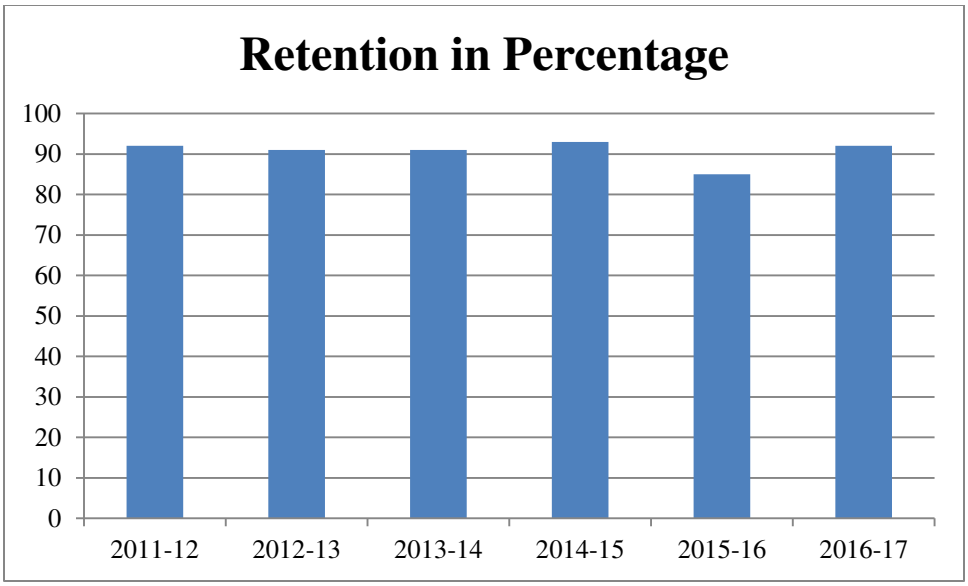


Figure 2.4.1.a Faculty retention ratio

Strategies adopted by the institute for retention of its human resource:

Institute maintains good faculty retention ratio. Retention of faculty and staff at SKNSITS is due to:

- The ideal working environment in the campus with great respect and value to teachers and staff.
- Salary, DA and other allowances paid as per the state government policies with immediate effect time to time.
- Cognizance of performance appraisal and qualification improvement of the employees by the respective HOD and Principal for annual increment and higher post.
- Faculty are encouraged to write and publish articles, books, as well as research papers based on research experimentation which is very well supported by the institute.
- Financial help is provided to faculty for participating in FDPs, workshops, seminars and conferences.
- FDPs are organised to enable the teachers to adapt to changing needs of society.
- Invited Talks by experts from various sectors are arranged to motivate faculty and staff.
- Encouragement and appreciation of participation in international conferences and training programmes.
- Allocation of theory and practical subjects as per their area of specialisation and preference.
- Freedom and transparency in every department because of which there is a feeling of ownership in every faculty and staff.
- Flexibility in working load is provided for higher education.
- Financial support for higher education [Complete sponsorship for Ph.D. at Aalborg University, Denmark (AAU) & Technical University of Sofia, Bulgaria (TUS)].
- The medical treatment for faculty and their family is provided at free of cost at Smt. Kashibai Navale Medical College and General Hospital, Pune.
- Admissions to the eligible wards of the employee are given to schools and institutes on a priority basis.
- Leaves and vacation given as per government rules and regulations particularly maternity leave for lady faculty and staff.
- Staff welfare through group insurance of all faculty and staff, provident fund, gratuity, service book maintenance, etc.
- Transparent policies and decisions of the management are always in favour of staff and followed rationally.
- The management very well appreciates innovative ideas given by any faculty or staff.

- Transport facility is available for staff.

2.4.2 How does the institution cope with the growing demand/ scarcity of qualified senior faculty to teach new programmes/ modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics, etc.)? Provide details on the efforts made by the institution in this direction and the outcome during the last three years.

The institution understands its pivotal role in providing a well-developed human resource to cater the industrial needs. It is also aware of global technological advances and worldwide changes in the field of engineering and technology. In response to growing demand for qualified senior faculty to take care of more industry oriented courses and subsequent advances in the curriculum in the field of engineering and technology, It is striving rigorously. The institution believes in Exposure, Induction and Adaptation.

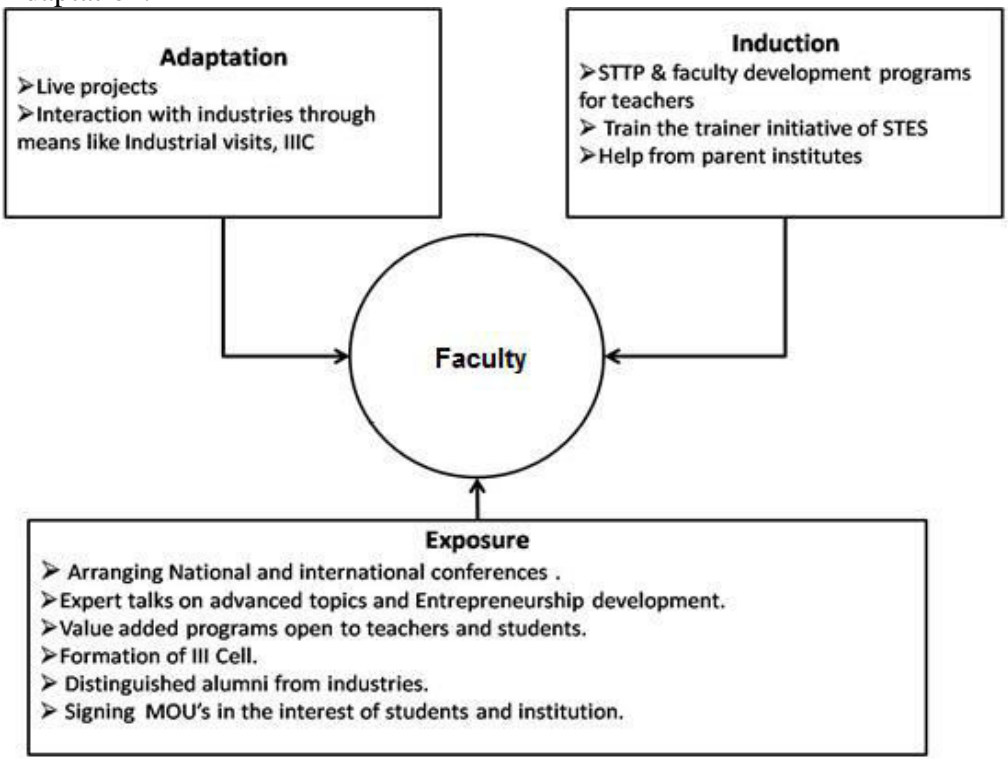


Figure 2.4.2. Adaptation, Exposure, Induction Policy of Institution

Exposure policy: Helps to gain broad exposure from different mechanisms as depicted in the figure.
Induction policy: It mainly focuses on Faculty Induction.
Adaptations policy: It mainly deals with adapting certain good practices by various mechanisms as shown below.

- The knowledge of new courses and recent trends are imparted on the faculty, through the TTT, at the start of the semester.
- Hands-on practical sessions are arranged through workshops on the emerging technology.
- Information about the on-going research are shared through conferences.
- Technical books are made available in the library as per the requirements made by faculty.
- Faculty are motivated to apply for funding from various organisations.
- Promoting the faculty to get associated with industries of their interest domain.

2.4.3 Providing details on staff development Programmes during the last four years elaborate on the strategies adopted by the institution in enhancing the teacher quality.

a) Nomination of staff development programmes:

Table.2.4.3.a Staff Development Programme

Academic Staff Development Programme	No. of Faculty nominated
Refresher Courses	05
HRD Programmes	59
Orientation Programmes	138
Staff training conducted by the University	63
Staff training conducted by other institutions	32
Summer/Winter Schools workshops	41

- Communication skill and teaching skills of faculty.
- According to needs of industry updating Technical knowledge.
- Culture of Research oriented innovation.
- More industrial exposure and Practical skills.
- Managerial skills and make faculty as a leader.
- Ability of faculty to understand the students of today's generation.
- Understand today's corporate world and inputs to be given to students for their overall development.
- The value ethics to make them good citizens in the society.

b) Faculty Training Programmes organised by the institution to empower and enable the use of various tools and technology for improved teaching-learning

The management has a positive attitude towards the professional development of the faculty in acquiring knowledge of recent developments and engaging them in research activities.

Teaching learning methods/approaches

- Induction and Orientation programmes for FE and Direct SE students are arranged at the beginning of the semester, respectively.
- TTT is devised by organisation especially for the faculty's continuous improvement.
- TAP is organised to enhance the leadership qualities amongst the faculty.
- Faculty are trained for e–learning tools/ techniques.

Handling new curriculum

- Faculty are deputed to attend syllabus implementation workshops conducted by University.
- E-learning material viz. NPTEL lecture series, books animation, video, journal proceeding, etc are referred.

Content / knowledge management

- Use of modern teaching aids such as presentations, NPTEL video lectures, Online courses, Technological Animations, etc.
- Free access to e-resources like DVDs, journals and reference books through Institute library.

Selection development and use of enrichment material

- MOUs are signed with institutions, industries and abroad universities.
- Institute invites experts from other organisation to impart knowledge about new developments.

Assessment

- Practical hands-on sessions are conducted for students and feedback is taken at the end of that session.
- Institute gets benefited through; self-appraisal for staff development, and students are benefitted by the feedback systems for continuous improvisation of faculty.

Cross-cutting issues

- FDP imparted self-motivation and improved retention rate of a faculty member.
- Gender biasing has been eradicated with good team work which helped in T-L-P.
- Faculty are trained for different e-learning tools through audio-visual aids and multimedia in the classrooms.

Teaching learning material development, selection and usage

- Capable faculty are updated with new teaching aids which makes them possible to collect information from various resources.

c) Faculty invited as a resource person in W/S, Seminar/FDP, participated in W/S, Seminar/FDP, presented papers in conferences.

The faculty of SKNSITS is also offering their expertise services as a resource person in W/S, Seminar, and FDP. They are also participating in various W/S, Seminars, and FDPs as well as presenting their research work in conferences.

Table.2.4.3.b. Faculty invites as Resource Person

Sr. No.	Activity	Academic Year			
		2016-17	2015-16	2014-15	2013-14
1	Invited as Resource Person in Workshops /seminar /conferences	6.42%	7.61%	4.25%	3.57%
2	Participated in Workshops /seminar / conferences	23.36%	40.0%	19.14%	21.42%
3	Presented paper in Workshops / seminar / conferences	16.51%	23.80%	10.63%	7.25%

2.4.4 What policies/systems are in place to recharge teachers? (e.g.: providing research grants, study leave, support for research and academic publications teaching experience in other national institutions and specialised programmes industrial engagement, etc.)

The Institute extends full support for the professional development of the faculty in many ways, like

- The institute encourages and supports faculty for pursuing higher studies, by granting them study leaves. It also motivates faculty by providing project funding to their research work. Mr. J. R. Shaikh and Mr S. M. Patil are benefitted with the same with their on-going Ph.D. at TUS, Bulgaria. Dr. Mrs. V. M. Rohokale had completed her Ph.D. from AAU, Denmark, by getting the study leaves and financial support.
- The Institute provides financial assistance for presenting papers at national and international conferences.
- The Institute provides financial support to organise seminars, workshops and FDPs for the enrichment of faculty knowledge.
- The Institute deputes faculty members to attend short term refresher courses, seminars and workshops for upgrading their skills.

- The institute subscribes to reputed journals like Science Direct for the reference of all faculty.
- The Institute having several MOUs with organisations, through which the faculties are encouraged to interact with industries, which benefits them during their research work.
- Faculty are encouraged for writing academic textbooks and reference books.

2.4.5 Give the number of faculty who received awards/recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance/achievement of the faculty.

Institute encourages the faculty for the better and efficient teaching environment and creates the research culture amongst the faculty. The efforts taken by the faculty are recognised by the institutes as well as by the international levels. Following list introduces names of some faculty who prove their excellence in teaching at state, national and international level.

Name of Faculty	Awards and Recognition Received
Dr. S. P. Narote	Best Teacher Award of SPPU
Mr. G. V. Khandekar	Best SWO of SPPU
Mr. G. A. Kadam	Best Paper Award
Mr. D. V. Dandekar	Best Paper Award
Mr. G. S. Datar	Best Paper Award
Mr. M. D. Bhagwat	Best Paper Award
Dr. P. H. Patil	Morya Gosavi Award

2.4.6 Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching-learning process?

Yes, the institute has introduced evaluation of teachers by the students and external peers. Evaluation of teacher's performance is done every semester.

Evaluation of Teachers by Students

Feedback system:

- The assessment of teachers is one of the significant facets used for refining the quality of T-L-P. The institution has a feedback system to assess the teachers by students.
- The feedback system is a thorough, transparent online system for taking feedback of teacher based on the number of constraints related to teaching after one month of commencement of the semester.
- The feedback is evaluated and teachers are instructed with the necessary guidelines by AMC/IQAC, Principal along with the HOD.
- Appreciation letters are given to the faculty and staff based on their feedback.

Evaluation of Teachers by External Peers

Dr. S. P. Narote was awarded Best Teacher Award by the SPPU in the academic year 2014-15 for his immense work in the field. It was judged by the panel members appointed by the University.

Self-appraisal of Faculty Members:

- The faculty members are required to submit self-appraisal report every year in the recommended format. The HODs with their annotations on various performance constraints validate the forms.
- The AMC/IQAC also gives specific comments to individual faculty member for the enhancement of T-L-P thru feedback analysis.
- The institute has a tradition to apprise the teachers on teacher's day every year.
- The appreciation letters are given to the faculty members centred on academic results and student's feedback, monumental contribution in research, leadership quality in handling various responsibilities, upgrading the qualification, etc.
- The institute also assesses all the departments regarding academic performance, placements, accomplishments, student feedback and involvement of department in the development of Institute to honour as 'best department of academic year'.

2.5 Evaluation Process And Reforms

2.5.1 How does the institution ensure that the stakeholders of the institution especially students and faculty are aware of the evaluation processes?

The Institute is liable to the stakeholders like students, academicians, industry, parents and alumni. The Institute conveys about the evaluation processes to the students and faculty through:

- The induction and orientation programmes are conducted for students and parents. Schedule and structure of institutional and SPPU's examination evaluation system, academic calendar, examination and assessment system along with extra-curricular activities scheduled in that academic year are acquainted with the students, during the induction program.
- The academic calendar is prepared and displayed on the notice board, website and GEMS; in perspective with the dates given by SPPU for start and end of the semester along with a schedule of online/ in-semester, end-semester and practical examinations.
- The academic calendar also includes the teaching schedules, unit tests, mid-term submissions, prelim exams and mock online and practical exams.
- The results of all the internal tests are displayed and communicated to all the students and parents according to the academic calendar.

For TE and BE students, in-semester theory examination is of 30 marks centred on first three units and end semester theory examination is of 70 marks. These facts are well simplified by faculty to all TE and BE students at the commencement of the semester. The constraints based on which seminar and project term work are specified to the students are also well defined. The enactment of student is assessed by continuous assessment, midterm submission and internal examination.

Institute conducts unit tests and prelim examination.

- The term work marks are given with appropriate weightage as per the internal assessment norms, consisting of various parameters, like
  - Attendance of student.
  - Internal examination performance.
  - Continuous assessment.
  - Mock practical oral examination.
- The criterion is informed to the students well at the commencement of every semester.
- All this information is given to the parents through teacher-parent meeting.
- The letters are posted to the parents after the unit test with details of marks and attendance of their ward.
- Regular phone calls and SMS are sent to the parents, informing about the progress of their ward.
- The evaluation factors and approach is confirmed in the faculty meeting. Recommendations from the faculty are incorporated in concluding the policies.
- The suggestion from the alumni, taken in alumni meeting, is also reflected while deciding the tactics.
- The policies are reviewed in every semester.

2.5.2 What are the major evaluation reforms of the University that the institution has adopted and what are the reforms initiated by the institution on its own?

The institution implements all the evaluation reforms as prescribed by the SPPU. In addition, the institute has introduced measures on its own.

University Reforms:

Appointment of Single Point of Contact: As per SPPU directives, the institute has appointed a senior and experienced faculty member as CEO. The Examination Committee consists of the Principal as the Chairman and CEO as the Member Secretary along with central examination section, senior supervisor, and invigilators of the Institute.

SPPU Examination Pattern: SPPU has introduced an examination pattern and a concept of continuous evaluation through in-semester examination and end-semester examination per semester. The institute has smoothly adopted all the rules and procedures of the university. The revised examination structure is as follows.

Table 2.5.2 SPPU Evaluation Pattern

Year	Exam by SPPU		Marks	Exam by SPPU	Marks
FE	Phase I [25Marks]	Phase II [25Marks]	50	End-semester	50
SE	Phase I [25Marks]	Phase II [25Marks]	50	End-semester	50
TE	In - semester		30	End-semester	70
BE	In - semester		30	End-semester	70
ME	In - semester		50	End-semester	50

Computerization: SPPU has introduced online examination for evaluation of first and second year engineering students. The institute conducts online examinations during every semester. The marks of term work, practical/oral examination and in semester exams are submitted online to the University.

Appointment of Internal Examiners: The Institute appoints internal examiners for the practical/oral examinations as per the guidelines of the University.

Credit system: As per the SPPU guidelines, credit system has been introduced for the PG Programmes recently.

Institutional Reforms:

- Conduction of mock online examinations, prelim examination and mock practical/oral examinations. The performance of all such examinations is considered while giving the Term Work (TW) marks.
- Institute also conducts project competitions, AMCAT, ET, QA/LR, GD/PI, quiz and soft skill development activities for the students to prepare them for the placement.
- Institute conducts makeup and remedial classes for weak students for particular subjects.
- Extra classes are also arranged for the SC ST students.
- TG scheme is strictly followed to monitor student attendance and academic problems. They also maintain the student's personal record file (White File) to keep track of the academic and all activities.

Research Component:

It is decided by the Institute to inculcate research culture among the students. Research Component is added to the STP IV in TE Semester II in the form of Training on Research Methodology, and it includes submission of the review paper.

- The seminar and mini-project activity as per university syllabus is coupled with this activity.
- The institute has taken following measures to ensure the effective implementation of research activities: Institute has organised several STTPs, Workshops, FDPs, Conferences, Symposia, etc. periodically.
- For the submission of the dissertation of ME students, it is compulsory to present a research paper related to their dissertation work.
- Faculty guides and encourages the BE students for paper presentation/publication related to their project topics.
- Research club has been initiated in every department to make sure the students are in sync with the new technologies and trends with the new era.
- The Institute has provided the Internet facility to students and faculties, and open access is available to Science Direct, IEEE journals.

2.5.3 How does the institution ensure effective implementation of the evaluation reforms of the University and those initiated by the institution on its own?

University Evaluation Reforms:

The institute conducts all SPPU examination as per its schedule. To conduct the online examination, the institute has well-equipped infrastructure. The examination conduction is effectively monitored as per the guidelines are given by SPPU.

The institute has taken following measures to ensure the effective implementation of the evaluation reforms introduced by the University:

- The institute has examination coordinators from each department for smooth conduction of the online and in-semester examinations.
- The examination committee meets periodically to discuss all the examination related matters.
- The institute ensures an effective implementation of in-semester and online examinations by displaying their results at the earliest. The students can see their evaluation and discuss the same with concerned faculty.
- Continuous assessment of practical, project, and seminar is carried out by the faculty. The marks are entered through university online portal, of which the term work marks are authenticated by the head of the Institute, and displayed on notice boards to maintain transparency.
- Final year term-work is jointly evaluated by internal and external examiners appointed by the university, and the marks are entered through university on-line portal. This is authenticated by the head of the Institute.
- For smooth conduction of university theory examination, an internal squad of senior faculty members is appointed.
- CCTV cameras are used for monitoring the online examinations.

The Principal, CEO, HOD and examination coordinator of departments monitors the:

- Completion of term work.
- Conduction of oral and practical examinations.
- Submission of term work marks based on continuous evaluation scheme and assessment of in semester examination answers sheets.
- Conduction of on-line, in-semester and end-semester examinations.
- SPPU exam supervision duties.
- Assessment of answer sheets at CAP centre.

Institutional Evaluation Reforms:

The Institute evaluates its self-implemented reforms by conducting various mock exams before the actual university exams. The institute also organises one STP per semester to imbibe more knowledge beyond the syllabus.

The said examinations are also prepared, conducted and monitored as per the guidelines are given by SPPU. The institute has taken following measures to ensure the effective implementation of the evaluation reforms on its level.

The term work marks are given to the students based on continuous evaluation process with the distribution of marks as shown in Annexure VI, Figure 2.3.1.c.

2.5.4 Provide details on the formative and summative assessment approaches adapted to measure student achievement. Cite a few examples which have positively impacted the system.

The performance and achievement of every student is closely monitored by the TG, CC, and HOD. The academic performance of a student is measured based on the periodical tests conducted by the department. Formative and summative assessment of the students is done by using following different methods developed in the Institute.

Formative Evaluation Process:
The goal of formative evaluation of the students is to monitor their learning. The formative evaluation system is further added with various parameters. These parameters are as follows:

- Monthly attendance.
- Attendance of STP sessions.
- Mock on-line and practical/oral examinations.
- SPPU In-Semester examination.
- Unit test, Prelim exams and assignments if applicable.
- Participation in industrial visits, lab innovations and projects.
- Involvement in workshops and seminars.
- Participation in organising technical events.
- Participation in Professional Society Activities.
- Participation in curriculum-based training and social activities.
- Involvement in inter-collegiate competitions.
- Participation and involvement in VAP.

Summative Evaluation Process:
The goal of summative evaluation is to evaluate student's performance at the end of the semester. Summative evaluation helps students to gain confidence and to achieve good results. The institute facilitates the university to conduct a summative evaluation at the end of each semester by following ways.

End semester theory examination, Practical/Oral examination, Seminars given by students. End Semester Project work demonstration and presentation.

In addition to the university examinations, the institute also evaluates the students using QA/LR, ET, GD/PI, and AMCAT as a part of summative

evaluation which are helpful for placement activity and self-development of students.

2.5.5 Details on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightage assigned for the overall development of students (weightage for behavioural aspects, independent learning, communication skills etc.)

The institute has made significant improvements in ensuring rigour and transparency in the internal assessment during last four years by adopting following strategies:

Transparency:

- Transparency in internal assessment system of the students. Discussing the test answers and marking scheme by the faculty with the students. The academic record of each student is maintained and due weightage is given in TW for attendance in theory/practical sessions, performance in tests, timely submissions, and participation in extra-curricular activities.
- In-semester examination answer papers are masked before its evaluation as per the guidelines given by SPPU.
- Through on-line examination, every student gets different questions with equal difficulty level which avoids any malfunctioning.
- Internal squads and CCTV also monitors the examinations.

Behavioural aspects:

- The overall behaviour of student is governed by TG, CC and HOD.
- The overall development of students gets reflected in developing the personality and confidence amongst the students due to acquired knowledge and skills.

Independent learning:

- Independent learning of the student is tested during execution of mini – projects, final year projects, and completing their independent tasks of assignments, for which SPPU has given suitable weightage in the marking (evaluation) scheme of the curriculum.
- Students are encouraged for active involvement in lab innovations, VAP, Research club, etc to develop themselves with curricular activities. Apart from these, they are also supported by participation in activities of Business Club, NSS, Hackathon, etc.
- TG also keeps an eye on the independent involvement of the students in extra-curricular activities and recommends over and above marks to HOD for further consideration, in accordance with the documents.

Communication skills:
SPPU has given suitable weightage in the curricula implementation by the student in the semester. It has facilitated for understanding the importance of speaking skills, listening skills, presentation skills, leadership skills, etc.

Teamwork and leadership:
Department is closely monitoring the students during their participation in various events such as TECHTONIC, SAE, NSS, Business Club, etc. final year projects, industrial visits, etc. and suitable weightage in term work marks are allotted to the students.

The sample sheet of termwork mark evaluation is as shown in Annexure VI, Figure.2.5.5.

2.5.6 What are the graduates attributes specified by the college/ affiliating University? How does the college ensure attainment of these by students?

Graduates Attributes from a set of individually assessable outcomes that are the components indicative of the graduate's potential to acquire competence to practice at the appropriate level. The following are the graduate attributes: -

- **To academia**
  The type of students and researchers they are / can be
  - **Engineering Knowledge** to apply fundamental concepts of mathematics, science, engineering to solve engineering application problems.
  - **Problem Analysis** to analyse a problem, to conduct an experiment, interpret and analyse the results with logical reasoning.
  - **Design / Development of Solutions** to design and conduct experiments, model and analyse physical system, components or process to meet desired needs.
  - **Carry out investigations of Complex Problems** to conduct independent research for information required in engineering problem solving, identify, formulate and solve engineering problems.
  - **Modern Tool Usage** to use modern engineering techniques, skills and computing tools necessary for engineering practice.

- **To society/community**
  - **The Engineer and Society** to predict the impact of engineering solutions in a global and societal context.

- **Environment & Sustainability** to incorporate economic, environmental and safety considerations in the design process.
- **Ethics** to execute professional and ethical responsibility.

- **To work and career**
  - **Individual and Team Work** to work on practical assignments, projects to enhance interpersonal and leadership skills.
  - **Communication** to communicate effectively through engineering drawing, written reports and oral presentations.
  - **Project Management and Finance** to understand engineering and management principals and apply this to own work, as a member and leader in a team to manage the project.
  - **Life-long Learning** to recognise the need for and ability to engage in life-long learning.

Attainment of Graduate Attributes specified by Institute: -

- The college ensures the attainment of these attributes by conducting AMCAT and QA/LR in each semester.
- The institute also uses ET to scrutinize the registered students in CPC for specific industry placement.
- The mock GD/PI are also conducted in every department to build confidence amongst the students and enhance their communication skills before they appear for placement drives arranged by CPC. The institute also organizes professional training programmes for placement activities of CPC.
- Usages of modern tools of ERP are widely used in the institute, viz; GEMS.
- Different career oriented programmes such as STP, VAP, AMCAT, QA/LR, etc are organized by CPC and SSC at Institute level to improve the employability in various private and government sectors.
- QA/LR and ET are also responsible for preparing students for cracking Aptitude tests conducted by different industries while shortlisting students in CPC.
- YES+ programme, Heartfulness, NSS activities, Social activities etc. is carried out by the Institute under various student bodies and association.

2.5.7 What are the mechanisms for Redressal of grievances concerning evaluation both at the college and University level?

Redressal of grievances at institute level:

Level 1 - Departmental Level: The continuous evaluation of students is carried out by faculty regarding theory lectures, labs, assignments, unit tests, prelim exam, etc. The term work is allotted based on defined

strategies further displayed on notice board. Query if any is discussed with faculty and HOD. Issues of fewer term work marks were complained due to lack of attendance, which was rectified at the departmental level after necessary corrections.

Level 2 – College Level: The Institute appoints a Senior Supervisor who controls all the online/ theory examinations, displays schedules, instructs to the students for smooth conduction of examinations of SPPU. If students are facing any problems, they are solved by the College Examination Officer (CEO) appointed by the SPPU. The grievances during the conduction of online/theory examinations are considered and discussed in consultation with the Principal and if necessary forwarded to the SPPU by examination section.

Redressal of grievances at University level:
Examination online form filling, exam seat allotment, results, photocopy, revaluations etc. are coordinated by exam section to SPPU. The result queries, printing mistakes of mark sheets, corrections if any are handled at SPPU examination section after forwarding such quires through the college examination section. Any queries of students during online examinations are communicated to the SPPU immediately and get clarified to satisfy the student who is appearing for online examinations. The same policy is also adopted for SPPU theory examination. The queries related to errors in mark sheets, evaluation, photocopy are totally handled by SPPU in which the role of institute is to take the follow – up with SPPU till the student satisfies.

2.6 Student Performance And Learning Outcomes

2.6.1 Does the college have clearly stated learning outcomes? If 'yes' give details on how the students and staff are made aware of these?

Yes, the institute has well defined learning outcomes.

- All the departments have clearly defined their respective PEOs, POs and COs. They have been articulated by taking inputs and suggestions from the stakeholders.
- PEOs and POs are displayed on notice boards, and COs are notified to students through ERP and also discussed by faculty in the classrooms. Also, COs are available in course files.
- The PEOs and POs are aligned with Institute vision and mission statement.
- The institute is affiliated to the SPPU, Pune. The curriculum defined by it, is used to guide the process for defining PEOs. The defined

PEOs are refined and defined in association with the stakeholders periodically.

- Mechanism of continuous improvement in the process of PEOs Mapping and Assessment is done.

2.6.2 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/programme? Provide an analysis of the student's results/achievements (Programme/course wise for last four years) and explain the differences if any and patterns of achievement across the programmes/courses offered.

- Monitoring student's performance and progress thereof is the heart of the T-L-P in the institute. Medium used for this are progressive attendance, continuous lab assessment, unit test, mock online tests, and prelim exams, in-sem exams, and end sem examinations.
- The institute regularly communicates the student's performance in above parameters to students and their parents.
- Progressive performance is assessed on an annual basis. Any downward trends are noted, and corrective actions are initiated to rectify the problems. The same is shown in Table 2.6.2.a
- In parents meet, the performance of students is discussed with their parents.

Table.2.6.2.a Result Analysis: Passing Percentage (%)

Programme	Year	2016-17	2015-16	2014-15	2013-14	2012-13
COMP	SE	88.88	73.40	87.76	92.70	95.74
	TE	83.13	90.56	88.61	70.31	-
	BE	94.92	89.60	100.00	-	-
E&TC	SE	72.72	48.64	95.31	78.37	52.30
	TE	80.95	82.55	79.74	97.50	-
	BE	97.47	97.33	100.00	-	-
MECH	SE	96.06	81.18	93.93	91.26	84.21
	TE	84.17	87.83	99.47	90.00	-
	BE	84.97	78.35	94.64	-	-
IT	SE	82.00	62.96	83.87	94.15	91.66

	TE	64.00	94.02	93.54	96.87	-
	BE	98.27	100.00	100.00	-	-
ELECT	SE	83.08	58.11	94.03	86.57	83.33
	TE	93.02	94.02	96.00	98.24	-
	BE	94.20	82.19	100.00	-	-
ES	FE	70.00	72.00	78.05	77.75	72.80

2.6.3 How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?

Teaching strategies

- Every department in the Institute prepares an academic calendar which is linked to the academic calendar given by the SPPU.
- The class timetables are prepared in such a way that the required numbers of lectures are assigned for all the theory and practical subjects.
- Information and communication technology is effectively used whenever necessary to impart teaching and delivering seminars.
- Special attention is focused on application part of the subject, and extra content is delivered wherever necessary to meet the desired learning outcomes. Invited talks are arranged to give more technical exposure and recent trends.
- The faculty prepares their teaching plans with details such as course objectives, course outcomes, unit objectives and unit outcomes along with well thought out schedule.
- Teaching plans for the faculty are reviewed by HOD at the beginning of the semester and the end of every unit.
- All the teaching materials are made available on ERP.

Learning Strategies

- Tutorials are regularly conducted in analytical / design subjects.
- Assignments are given in the theory subjects as applicable.
- Seminars, workshops, project exhibitions are arranged for the students.
- SLS are allocated for first and second-year subjects.
- Technical quizzes/group discussions/paper presentations/poster and project competitions are arranged through departmental student's associations.

- NPTEL-learning materials and K-point videos are made available in the central library to enhance learning outcomes
- Industrial visits are arranged to expose the students to practical pursuits.

Assessment Strategies:

- Direct Assessment:
  - Internal and external examinations in theory and practical sessions
  - Online examinations
  - Oral Examinations, seminars, assignments and projects.
- Indirect Assessment:
  - Through TG meetings
  - Student's Feedback.
  - Exit Survey.
  - Industry Feedback.
  - Alumni Feedback.

The new technology deployed by the Institute for further enhancing the students learning is as follows:

- Lab Innovations are undertaken by implementing some improvisation or innovation in the respective labs for the students.
- PBL was introduced for students to gain knowledge and skills to investigate and respond to an authentic, engaging and complex question, problem, or challenge.
- STP & VAP modules are designed to improve the employability skills of students and offered at higher levels of the undergraduate program.

2.6.4 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (student placements, entrepreneurship, innovation and research aptitude Developed among students, etc.) of the courses offered?

- The institute conducts STPs, GD/PI, and AMCAT for enhancing the skill sets of students.
- The institute motivates and facilitates students to participate in various research projects, project competitions such as SAE INDIA BAJA, HACKATHON, AVISHKAR, etc.
- The institute organizes research paper presentation competitions, TECHTONIC and National conferences in different areas.
- Students of UG and PG are encouraged to take sponsored projects.
- The institute has PG Programmes to support the research activity.
- The institute has signed MOUs with esteemed companies.

- The Institute organises Programmes on Entrepreneurship Awareness through Entrepreneur Development Cell.
- Foreign language classes are inculcated for the students who are willing to pursue higher education abroad.
- GATE, GRE, TOEFL classes are also arranged for the students who wish to pursue masters in engineering.
- CPC conducts invited talks, pre-placement talks, and guidance for higher studies.
- NSS conducts various social activities such as blood donation camp, celebrating festivals in an orphanage, awareness of cleanliness, health care and child education through street plays, railway station cleaning activity, etc.
- STP IV has been designed to cultivate research attitude amongst the students.

2.6.5 How does the institution collect and analyse data on student learning performance and learning outcomes and use it for planning and overcoming barriers to learning?

The institute collects and analyses data on learning outcomes by various methods. The analysed data is used to take corrective action to overcome the barrier of learners. Data collection methods, analysis, and corrective actions for the betterment of learners are as follows:

Data collection and analysis

- The assessment factors are defined regarding different collective and influential assessment forms
- TG meets are scheduled in time table to interact with students to find the delinquent that they are facing not only in academics but also personal issues.
- The assessment of the course outcome is done by a faculty member using defined assessment factors discussed in meetings.
- The assessment factors include
  - Unit Test and Prelim examination.
  - Assignments.
  - Mock online tests.
- Faculty feedback during the semester.
- Feedback on invited talks, events, workshops.
- Parent feedbacks are taken during parent teachers meet and parent visits.
- The feedback from the alumni is taken during the Alumni Meet.
- Mock practical/oral examinations are conducted to understand students' skill. QA/LR, ET and AMCAT results are also analysed.

- External examiners feedbacks are taken during their visits for oral and practical exams.
- Mock GD/PIs are taken to understand students' ability in communication skill.
- QA/LR, ET and AMCAT results are also analysed.

Remedial Actions

- Special attention is given to lateral entry students with provision of makeup and extra classes.
- Remedial classes are conducted for subjects where the percentage of failure is more.
- Extra-curricular activities are always helpful in overcoming barriers of out of box learning and gives freedom to all students to showcase their talent.
- VAP helps in bridging the gap between industry and current curricula.
- Parent meetings are conducted in every semester for informing the academic performance of their student.
- The corrective measures are decided for planning in the next semester.
- STP-I to STP-V are designed to specialise in communication skill and soft skill inputs along with awareness of research methodology.

2.6.6 How does institution monitor and ensure the achievement of learning Outcomes?

The institute uses various methods to monitor and guarantee the achievement of learning outcomes as shown in Figure 2.6.6.

Monitoring system exaction

The institution monitors and ensures the achievement of learning outcomes by:

- Student attendance is monitored on a regular basis by TG and informed to respective parents through phone call /SMS /letters.
- TG meets are scheduled with students on a regular basis to share feedback about subject teaching.
- Result data analysed through internal examination, and previous university examination is referred to ensure achievement of learning outcomes.
- Based on the previous history, difficult subjects from student point of view are identified and expert lectures are arranged regular tutorials and assignments
- Continuous assessment in both theory and lab for each subject
- Monitoring attendance of students.

- Tests and university examinations.
- Conducting remedial classes for academically weaker students.
- Involvement of students in co-curricular, extra-curricular activities and social activities
- Academic monitoring of T-L-P.
- Discussing the results during meetings held with the Principal and HODs
- History-Card provided to every student during the second year which collects academic data of all semesters to analyse the learning outcomes and overall progress

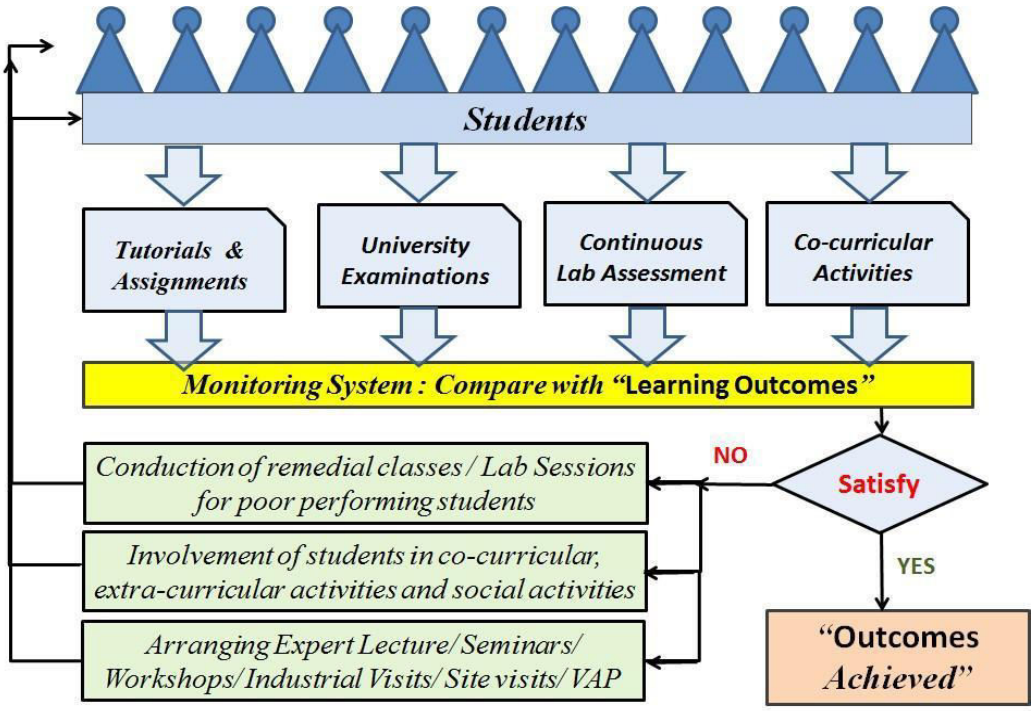


Figure 2.6.6: Monitoring and Ensuring Achievement of Learning Outcomes

2.6.7 Does the institution and individual teachers use assessment/evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning? If yes, provide details on the process and cite a few examples.

Yes, an individual teacher uses assessment/evaluation as an indicator for evaluating student performance. The different evaluation methods are used as per the need of the course:

- Every teacher uses course objectives and outcomes for evaluation of student's performance throughout the semester using marks obtained by the student in unit tests, on-line examination, and performance shown in practical sessions.
- In addition to the objectives and outcomes of the course, emphasis is given on research attitude, innovation and overall behaviour of the students. Online mock exam results help in knowing the students and efforts can be taken by faculty to improve the performance of students.
- Students participate in different academic activities viz. tutorial, mini-projects, a solution of numerical problems, quiz, seminar, oral, etc. These activities help the faculty to assess the learning objective regarding proficiency of students in applying mathematical and engineering concepts while solving the problem.
- Effective communication skills are also tested during the seminar, project demonstration, and presentation which eventually give an idea about the achievement of course objectives and outcomes.
- Evaluation of soft skill, research aspects of the students are done through STP 2 & STP 4.

Example 1

The performance of students of first year engineering in the subject of Engineering Graphics has shown a remarkable improvement during last four years by mapping the learning of student feedbacks and evaluation. The Institute and individual faculty implemented following strategies to achieve the course outcomes.

- The experienced senior faculty is appointed for teaching this subject.
- The teaching plan is developed by considering the feedback remarks from students and AMC/IQAC, learning ability of students, the difficulty level of various topics, etc.
- Innovative teaching methods are adopted by the faculty using PPTs, animated videos and demonstrating models of various objects during the sessions.
- Special counseling through speakers of invited talks for slow learners, extra sessions for hands-on practice of the students to build confidence and increase the speed of drawing are implemented to achieve the course outcomes of the subject.

Example 2

The introduction of QA/LR test and ET for the final year students has shown significant improvement in some students clearing the aptitude test during in- campus placement activity. Students are exposed to QA/LR test and ET multiple times before they appear for actual aptitude test of any

industry. The question bank has been prepared in line with aptitude test of many industries.

Example 3

Since inception SKNINNOTECH, the project competition cum exhibition for the projects of final year engineering students has helped in synthesising the essential elements of their engineering knowledge and sharing them with the rest of the engineering community. It gives an opportunity for students to exhibit the attributes of the learner profile.

The exhibition unit takes place under interdisciplinary theme at the discretion of the Institute. Students are required to engage in a collaborative interdisciplinary inquiry process that involves them in identifying, investigating and offering solutions to real-life issues or problems. The central idea selected must be of sufficient scope and significance to warrant a detailed investigation by all students.

The purpose of SKNINNOTECH

- For students to engage in an in-depth collaborative inquiry
- To provide students with an opportunity to demonstrate freedom and responsibility for their learning
- To provide the students with an opportunity to explore multiple perspectives.
- For students to synthesise and apply their learning of previous years studies and to reflect upon their implementation
- To provide an authentic process for assessing student understanding
- To demonstrate how students can take action as a result of their learning.

CRITERION III : RESEARCH, CONSULTANCY AND EXTENSION

3.1 Promotion of Research

Research promotion process at the institute aims at inculcating research culture among all faculty members and students through various activities such as workshops on Research Methodologies, Scientific Writing for faculty and Research Club activity for students. The research projects receive support from SPPU, STES and other agencies. STES has signed MoU's with AAU for the promotion of research. The faculty is also promoted to pursue their Ph.D. at TUS, Bulgaria collaborated through ViMEET. Institute has sent faculty and students to these Universities to carry out of their research activities and PhD work. Apart from this, faculty and students are encouraged and supported for undertaking various research activities. Table 3.1 shows the details of the number of faculties who have completed PhD and those who are pursuing PhD in the institute. Details of the same are mentioned in Annexure VI, Table 3.1.

Table 3.1: Number of faculties who have completed PhD and those who are pursuing PhD

Sr. No	Department	PhD completed Faculties	PhD Pursuing Faculties
1	MECH	02	04
2	ELECT	02	03
3	E&TC	01	07
4	COMP	01	08
5	IT	01	01
6	ES	02	00

3.1.1 Does the institution have recognized research center/s of the affiliating University or any other agency/organization?

The institute has collaborative research centres at AAU and TUS, Bulgaria. Despite being a very young institute, it has taken small and steady steps towards research and development. The institute has signed MoUs for R&D projects with various industries. Institute runs PG program affiliated to SPPU with specialisations such as Computer Networks and Mechanical Design aiming for research promotion.

Table 3.1.1 PG Programmes

Sr. No.	Name of Department	Specialization
1	MECH	Mechanical Design Engineering
2	COMP	Computer Engineering

3.1.2 Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.

The institute has R&D department for monitoring and managing research activities. The Research Committee members list is as per shown in Table 3.1.2. This committee oversees the smooth and efficient coordination of research and development activities in the institute, thus fostering overall growth.

Table 3.1.2 - Members of Research Committee

Sr. No.	Name of the Faculty	Designation	Position
1	Dr. M .S. Rohokale	Principal	Chairman
2	Mr. J. R. Shaikh	Dean, R&D	Dean, R&D
3	Dr. V. R. Ladde	Asst. Prof. Engineering Science	Member
4	Mr. R. Ranjan	Asst. Prof. in Mechanical Engineering	Member
5	Ms. Swati. Jaiswal	Asst. Prof. in Computer Engineering	Member
6	Ms. K. A. Yadav	Asst. Prof. in Electronics & Tele-Communication Engineering	Member
7	Mr. K. G. Walke	Asst. Prof. in Information Technology	Member
8	Ms. B. Kadu	Asst. Prof in Electrical Engineering	Member
9	Mr. S. S. Dahikamble	Librarian	Member
10	Dr. V. M. Rohokale	Assoc. Prof., SITS, Narhe	External Member
11	Dr. Vivek Deshpande	Professor, VIT Pune	External Member
12	Dr. P. M. Pawar	Assoc. Prof., SKNCOE, Pune	External Member
13	Dr. M. M. Deshmukh	Assoc. Prof., Trinity COE, Pune	External Member

14	Mr. Uday Cherekar	Shree Systems Pvt. Ltd, Pune	External Member
15	Mr. Vivek Menji	Founder, Dream Care Solutions, Pune	External Member

The above committee has recommended that the R&D should focus on

- Submission of research proposals to various funding agencies.
- Identifying the potential industries for collaborative research.
- Need to inculcate research culture among staff and students.
- Identifying the potential research areas.

In line with above recommendations, Research Committee has initiated various activities, and its impacts are:

- Received research project grants from BCUD through research proposals.
- Institute has signed MOUs with industries and research organisations.
- Institute has organised training programs like Scientific Writing, Research Methodologies, Research Convention, Patenting and Intellectual Property Rights etc. for faculty members and students.
- Staff publication in journals and conferences.

3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/projects?

The actions adopted by the institution to facilitate progress and implementation of research projects are as follows:

- **Autonomy to the principal investigator**: The Principal Investigator (PI) is free to select the area and research problem. PI motivates the students to involve in the research projects. Institute deputes the PI to visit various research organisations to avail the special research facilities.
- **Timely availability or release of resources**: The provision of research budget is made in the annual budget and the funds are released as and when required and timely made available for any resources for the research work carried out by the faculty. The institute has signed MOU with the abroad university-AAU and ViMEET in collaboration with TUS, Bulgaria to facilitate the faculty to carry out their research work.
- **Adequate infrastructure and human resources**: The institute has well-equipped labs, infrastructure, and facilities to conduct research projects. The faculties are allowed to go to any research organisation for research interactions, experimentations, or collection of data

needed for their research. The necessary funding is available from Institute budget as well as BCUD research grants.

- **Time-off, reduced teaching load, special leave, etc. to teachers**: This is provided based on request submitted by a faculty, depending upon the urgency of the research work. Faculty and students are encouraged to use the laboratory and library facilities even after the working hours. Teaching load of faculty is suitably adjusted for the perusal of their research work. Special study leaves are also given to complete the research work within time.
- **Support regarding technology and information needs:** The Institute has IT infrastructure with modern configurations. Wi-Fi and adequate internet bandwidth facility supported by subscription of various reputed journals are in place. Various training programs on research methodology are also arranged to encourage and motivate the institute faculty and students. Infrastructure and reprographic facilities are available in institute. The institute allows faculty and students to avail support from research organisations while using advanced technology and equipment.
- **Facilitate timely auditing and submission of utilization certificate to the funding authorities:** Faculty and students are utilising the Institute research budget and grants to complete their projects within time. The accounting department of the institute and SPPU extend their help for timely auditing of research projects and submission of utilisation certificate to the funding authorities. Students are also getting financial and equipment support from industry which they are utilising for their innovative projects while participating at national competitions.
- **Any other:** Institute deputes the faculty for Ph.D. Programs. The organization has MoU with AAU, and ViMEET in collaboration with TUS, Bulgaria wherein the institute gives full sponsorship to faculty to complete their research work. Faculty members are pursuing Ph.D. at different universities under deputation with special study leaves as shown in Table 3.1.3.

Table 3.1.3: List of Faculties allocated with special study leaves

Sr. No.	Name of the Faculty	University	Study Leave Duration
1	Dr. V. M. Rohokale	Aalborg University, Denmark	195 days
2.	Mr. J. P. Dabhade	VJTI Mumbai	20 days
3.	Mr. S. M. Patil	Technical University of Sofia, Bulgaria	180 days

4.	Mr. J. R. Shaikh	Technical University of Sofia, Bulgaria	180 days

3.1.4 What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?

Students work on mini-projects and lab innovations as per their area of interest and ideas in their domain and also participate in various competitions. The final year projects of UG and PG students are implemented as per the guidelines of SPPU. Every year, project, mini-projects and lab innovation competitions and technical paper presentations are held at the institute as well as other renowned institutes. The institute allows, encourages and facilitates the students to participate in these competitions. Every department motivates the students to take industrial projects where the students can take help from industry experts.

Research Club: The institution encourages scientific temper and research culture in the students who shows a keen interest in doing some innovative projects. For this activity, Research Club has been formed in which students actively participate in presenting a topic of their interest. Table 3.1.4.a shows a number of Research Club Activities carried out at the department level for these students. Till now around 50 students from the college have presented their topics of interest under Research Club activity and around 500 students and 50 faculties have attended the same.

Table 3.1.4.a: Research Club Activities carried out at department level

Department	2017-18	2016-17	2015-16	2014-15
MECH	1	7	6	3
ELECT	2	7	6	4
E&TC	1	10	9	4
COMP	2	5	4	2
IT	2	4	3	4

Lab Innovations: Students are given a chance to present their own innovative ideas with implementation under lab innovation. Table3.1.4.b shows the lab innovation record by students.

Table3.1.4.b: Lab innovation by students

Department	2017-18	2016-17	2015-16	2014-15	2013-14
	SEM I & II	SEM I & II	SEM I & II	SEM I & II	SEM I & II

MECH	6		2	5	4	2	2	2	1	2
ELECT	4		3	6	2	2	2	1	1	2
E&TC	5		3	2	2	2	2	1	1	1
COMP	4		2	3	2	1	1	1	2	2
IT	2		2	1	2	1	1	1	1	1

Technical Presentation- Technical Presentation is one of the activities for which SE and TE students have given technical topics for presentations. Here the student has an opportunity to present his/her area of interest in research. Table 3.1.4.C shows Technical presentation on various subjects by students of all departments. This activity is carried out every semester.

Table 3.1.4.c: Technical presentation on various subjects by students of all departments

Department	2017-18	2016-17	2015-16	2014-15	2013-14
MECH	43	109	128	106	52
ELECT	26	56	35	50	50
E&TC	20	51	59	109	20
COMP	56	40	09	06	03
IT	10	52	69	135	08

Encouragement for Workshop, Seminar, Conference Participation

Yes, the Institute promotes faculty for attending conference, workshops and seminar. The Institute encourages students to attend different workshops, conferences and seminars so that, they can enhance their skills. Institute also arranges in-house workshops and seminars for students, workshops on LATEX, Mathematical Modeling, etc. Institute had organised national and international conference named as NCACN'15, IESS'17 in which students of the institute as well as from different institute participated and presented tFheir technical skills in various areas. VAP is an extra activity carried out for developing practical implementation on the latest ongoing topics in industries or research areas. This activity is conducted for students to develop them from industry point of view and to have an industry interaction. Table 3.1.4.d shows the VAP carried by different departments. Details of the same are mentioned in Annexure VI, Table 3.1.4.d

Table 3.1.4.d: VAP Conducted for Students

Department	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
MECH	1	6	2	3	2	2
ELECT	1	5	2	3	1	2
E&TC	1	2	2	3	1	3
COMP	1	3	2	1	2	1
IT	1	2	2	2	2	3

Encouragement for Participation in different technical competitions

Institute arranges events like multiprogramming skill development competition, Business Club, EDC, etc. Students actively participate in various intercollegiate events and secure prizes. Table 3.1.4.e shows student's participation in various events. Details of the same are mentioned in Annexure VI, Table 3.1.4.e.

Table 3.1.4.e: Participation of students in other University and College level competitions

A Y	No. of students
2016-17	28
2015-16	31
2014-15	4
2013-14	2

Students are mentored for the preparation of research paper and they have presented their papers in an international journal or national and international conference. Table 3.1.4.f shows the student's publication details for the past three years.

Table 3.1.4.f- Students Publications.

Department	2016-17	2015-16	2014-15
MECH	18	24	0
ELECT	27	05	7
E&TC	24	19	0
COMP	33	55	14
IT	26	16	0

STES organizes national level technical festival for the students of the institutes under umbrella of STES as well as other institutes. This festival is called Techtonic which includes various brain storming activities including Smart Technocrat, Snippets, Pic-O-Mania, Quizwiz, Open Source, Linux, Call Of Gamers, Engineers Premier League, Beg Borrow

Steal, Engineer's Eye, View, Nanotechnology, Post Your Vision, Do You Know?, Electronic Design Tools, Code Me If U Can, Tech Quiz, Group Management Event, Isographic, Robo Race, Model Making, Project Exhibition, Laser War, etc. These activities provide brainy food for the enthusiasm of the students. Glimpses of these events are mentioned in Table 3.1.4.g. Pretty much details of each program under individual departments are given in Annexure VI, Tables 3.1.4.g-1 to 3.1.4.g-4.

Table 3.1.4.g – Techtonic Departmental Activities

A.Y./ Dept.	MECH	COMP	IT	E&TC	ELECT
2016-17	8	7	3	4	4
2015-16	5	5	4	3	5
2014-15	5	5	4	3	5
2013-14	7	3	5	3	5

3.1.5 Give details of the faculty involvement in active research (Guiding student research, leading Research Projects, engaged in individual/collaborative research activity, etc.)

Faculties are allotted project groups according to student's research area of interest. With the guidance of the faculty, student undergoes training for the development of their project from the theory to practical implementation. It helps the students to develop research attitude.
The faculty is involved in active research in the following ways:

- Guides the UG students for seminars, projects, and technical papers.
- Recognised Ph.D. and PG guides to supervise research work of the students.
- Associated with the industry projects.
- Participation and presentations of research papers in conferences and journals.
- Applies and receives BCUD project grants.

Refer Table 3.1 for the faculty involved in research activity in their PhD program.

Table 3. 1. 5.a: Department wise specialised active research projects under these areas for students

Sr. No	Name of Faculty	Research Area	In coordination with
1	Dr. V. M. Rohokale	Wireless Sensor Network	Technical University of Sofia, Bulgaria
2		Wireless Sensor Network	VTU, Belgaum

3		5G, Cyber Security, IOT	GISFI, ViMEET, India
4		Wireless Communication	I4CT, Khalapur
5		Cyber Security	CDAC-GTU, Gujrat
6		VANET	VIT, Chennai

Individual and Collaborative Research Projects

Under BCUD, individual or collaborative research projects are carried out by the faculty who has been sanctioned with the funds. From the institute, two faculty members as per Table 3.1.5.b have been sanctioned with BCUD fund.

1) **Faculty Funded Projects**

Table.3.1.5.b. Faculty members who have been sanctioned

Sr. No	Project	Name of Staff	Sanctioned amount	Title of the Project
1	BCUD	Mr. V.D. Thombre	Rs.40,000	Student Sentiment Analysis (2014-2016)
2	BCUD	Mr. S.S. Gholap	Rs.60,000	Optimum design of Bio-composite material for automotive application (2014-2015)

2) **Industry sponsored projects of students**

Students are permitted to do their research interest activities or any industrial project to be carried out in industry. Students are working on industry granted projects. Table 3.1.5.c shows the count of students having Industry Projects.

Table 3.1.5.c : Industry Sponsored Projects of students

Dept	2016-17	2015-16	2014-15
MECH	11	7	4
ELECT	1	2	1
E&TC	1	5	0
COMP	3	2	0
IT	4	1	1

3.1.6 Give details of workshops/training programs/sensitization programs conducted/organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and students.

Department wise activities

Institute organises VAP for students wherein students get an opportunity to interact and share knowledge on various industrial and ongoing topics. VAP has been introduced for students in developing the skills required for research activity. Various events and workshops have been organised by departments for the awareness of the recent trends in the industrial field. Please refer Table 3.1.4.d: VAP conducted for students. For developing the research attitude among the students, mathematical modelling workshop, Patenting and Intellectual Property Rights workshop, PCB designing workshop and much more are organised at the institute level. Table 3.1.6.a shows total number of workshops conducted for the students in the institute. Details of the same are available in Annexure VI, Table 3.1.6.a.

Table 3.1.6.a. Workshops organized by all departments at university and college levels

Dept	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
MECH	2	1	1	1	1	0
ELECT	0	3	3	3	1	2
E&TC	0	1	4	3	0	1
COMP	1	5	1	2	1	0
IT	0	3	3	1	2	0

Institute is conducting two PG courses. Institute has organized national conference for the PG students to publish their research work. International conferences are organized for the researchers to disseminate their intellectual work. Table 3.1.6.b shows the national and international Conferences organized in the institute.

Table 3.1.6.b: Conferences Organized

Sr No	Department	Conference	No. of Participants	In Association with
1	COMP, E&TC, IT.	National Conference for Advanced Computer Networking (NCACN'15) 18/02/2015 To 19/02/2015	88	SPPU
2	MECH, ELECT, E&TC.	International Conference on "Advances in Engineering & Technology " 15/5/2013 to 17/5/2013	170	SPJ Center for Multidisciplinary Research and Association of Researchers)

3	MECH	Two Days State Level Conference On"Advanced Computational Techniques" Act-2013 29/3/2013– 30/3/2013	50	SPPU
4		Two Days National Level Conference on Recent Trends in Mechanical Engineering, RTME-2016 11/2/2016-12/2/2016	200	STES
5	COMP	1st International Engineering Sciences Summit (IESS'17) 16/3/2017-17/3/2017	70	STES

Other than this, various events for the quality improvement of the students have been organised by the various departments at the department level. Table 3.1.6.c shows the list of different events organised by departments.

Table 3.1.6.c: List of various webinars and seminars organised by Departments

Sr. No.	Year	Description of Activity	Organising Dept.
1	2016-17	Seminar on Introduction to ANSYS	MECH
2		Industrial Engineering & Automation	MECH
3		Electrical Usage of Agriculture Pumping System	ELECT
4		Wireless Sensor Network	E&TC
5		Aalborg University Internship	E&TC
6		Seminar on Introduction to ANSYS	COMP
7	2015-16	Seminar Geometric Dimensioning & Tolerances	MECH
8		Two Days Seminar on OOSE	COMP
9		Smart Home	E&TC
10		Webinar On Big Data Hadoop	COMP & IT
11		IT Act 2000	IT
12	2014-15	One day seminar on Web technologies	IT

13	2013-14	Seminar on Electronics Components and Design	E&TC & ELECT
14		Seminar on Wireless Sensor Networks	COMP

a) One Day Research Workshop

For helping the faculty in writing their research work publications or thesis, one workshop was conducted on Backbones of Scientific Research dated 23rd July 2015. Table 3.1.6.d shows the Research Activity carried out by resource persons available in institute.

Table 3.1.6.d: Research Activity conducted by resource persons available in college

Sr. No.	Session	Topic	Resource Person	Time
1.	Session 1 : Part 1	Research and its implications	Dr. Mohit Prasad	9.30 to 11.30AM
2	Session 1 : Part 2	Research and its implications	Dr. P. H. Patil	11.30AM to 12.30PM
3	Session 2	Mathematical Modeling	Dr. V. R. Ladde	1.30PM to 3.00PM
4.	Session 3	Scientific Writing	Dr. V. M. Rohokale	3.00PM to 4.30PM

Various FDPs and STTPs are organized in the institute to promote research culture among faculty members and students. Table 3.1.6.e depicts the details of the FDPs and STTPs arranged in the institute.

Table 3.1.6.e: FDPs and STTPs organized at the institute

Sr. No.	Dept	Name of the conference	Speakers	Date	Total no. of participant	Budget (Rs)
1.	MECH	Two Days State Level STTP Efficient Design for Manufacturing and Assembly	Dr. J.J. Regulwar, Dr. N.B. Dhokey, Dr. V. K. Tripathi, Dr. S. N. Deshmukh, Dr. Vijay Rathod	13/2/2015-14/2/2015	50	53573

2.	E&TC	One Week FDP On Network Simulator NS2-NS3	Dr. P Vijayakumar, Dr. P Vetrivellan	7/10/2016-11/10/2016	35	70000
3.	COMP E&TC ELECT	One week FDP on JAVA on	Yatin Bagul	22/8/2016-26/8/2016	46	14900
4.	IT	One week STTP on Python	Mr. Vishal Adhile	06/03/2017-10/03/2017	33	13500

3.1.7 Provide details of prioritized research areas and the expertise available with the institution.

The institution has faculty members who are involved in various areas of research including Wireless Communication, Green Energy, Smart Grid, Cyber Security, 4G and 5G networks, etc. Table 3.1.7.a enlists the faculty members and their research area.

Table 3.1.7.a: Department-wise list of faculties involved in research with their research areas of interest

Sr.No	DEPT	Name of The Faculty	Research Areas
1	E&TC	Prof.Sarang Patil	Integrated on chip Fractal Antenna
2		Prof.Kirti Yadav	Design and Analysis of VANET and its Security Aspects
3		Prof.Payal Tayde	Design and Analysis of LTE and LTE-A Wireless Network towards Security Aspects
4		Prof.Mahesh Bhagwat	Detection, Identification and Proactive Prevention of Phishing Website using Fuzzy Logic and Data Mining Techniques
5		Prof.Amol Satpute	Microwave Medical Imaging for Breast Cancer Detection
6		Prof.Prashnt Karkalle	Speech Regonistion
7		Prof.Priyanka Halle	wireless security in smart grid
8		Prof.Abhijeet Chavan	Security and Privacy Preserving Communication for Smart Grid using SCADA
9		Prof.Javed Shaikh	Design of Unified Security Mechanism to provide end to end security to E-commerce
10	COMP	Prof.Vikas Thombre	Architecture Level Performance Model for Dynamic Workload of CRM System

11		Prof.Supriya Sarkar	Confidentiality and Privacy with Improveing Computation Time in Internet of Things (IoT) Networks against MITM
12		Prof.Swati Jaiswal	Security Aspects of Wireless Sensor Networks
13		Prof.Bagyashree Patle	Big Data
14		Prof.Jacob John	Energy Efficiency Enhancement for Wireless Sensor Networks
15		Prof.Mahesh Gosavi	Cyber Physical system
16	IT	Prof.Ganesh Kadam	Design of Dynamic Machine Learning Model for Concept Level Sentiment Analysis of OSN using NLP
17	ELECT	Prof.Jaysheel Dabhade	Bifurcation Analysis in Power System
18		Prof.Satya Prakash	High voltage Engines
19		Prof.Ankit Choursiya	Power System
20	MECH	Prof.Namdev Gawde	An Experimental investigation of Combustion in CI Engine to Formulate set of guidelines to modify conventional CI engine to work on Soybean based Bio-Diesel for its Commercialization
21		Prof.Sunil More	Productivity Enhancement of Stepped Solar Still
22		Prof.Girish Khope	Finite Element Analysis for Fibre Post used in Endodontic Treatment of Tooth under Mascillatory Loading Conditions
23		Prof.Balasao Kasure	Solar Energy

3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?

Eminent personalities from institutes and industries are invited to have an interaction with students to develop research culture. The expert members are invited to deliver their expertise on latest topics.

Table 3.1.8.a : Invited Talks organised for students on a various research topic

Department	2017-18	2016-17	2015-16	2014-15	2013-14
MECH	3	5	6	6	5
ELECT	3	7	5	3	2
E&TC	1	10	7	6	4

COMP	1	7	2	2	2
IT	2	5	2	5	5

The institute organises many visits to different industries so that the students can be made aware of the industrial environment. Table 3.1.8.b shows the industrial visits organised for students to have industry institute interaction.

Table 3.1.8.b: Industrial Visit organised for students

Department	2017-18	2016-17	2015-16	2014-15	2013-14
MECH	1	6	6	8	5
ELECT	1	8	6	6	4
E&TC	0	2	1	2	1
COMP	0	2	1	1	0
IT	0	2	1	1	0

3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?

The facility of availing study leaves for research activities is available at the Institute. Most of the faculties have utilised these leaves for their research related activities. The details are as mentioned below:

- Institute has given full sponsorship to Mr. J. R. Shaikh and Mr. S. M. Patil, Department of E&TC Engineering to do their research work at TUS, Bulgaria. The entire expenses including registration fees, accommodation and travel expenses are given to them by the institute. They are utilising special study leaves for research activities since March 2016.
- Institute gives on duty leaves for the faculty for the perusal of research projects, attending workshops, invited talks, and Ph.D. work. It also grants special leaves for completion of PG work.
- Long duration leaves are also provided for faculty for their research work. Figure 3.1.9.a shows the college wise record of leaves used by the faculty for research activities.

Table 3.1.9.a: Special study leaves for research activities

Sr. No.	Name of the Faculty	University	Study Leave
1	Dr. V .M. Rohokale	Aalborg University, Denmark	195 days

2.	Mr. J. P. Dabhade	VJTI Mumbai	20 days
3.	Mr. S. M. Patil	Technical University of Sofia, Bulgaria	180 days
4.	Mr. J. R. Shaikh	Technical University of Sofia, Bulgaria	180 days

3.1.10 Provide details of the initiatives taken up by the institution in creating awareness/advocating/transfer of relative findings of research of the institution and elsewhere to students and community (lab to land).

The institute regularly initiates awareness drive about announcement of various competitions, call for research projects among faculty and students which will be made available in press releases, posters, notice boards etc. Efforts are made for successful collaboration of Institute with students project sponsoring organizations for possible placements of students. Institute has been instrumental in providing funding to meritorious students for filing patents and support for internships. Institute has been proactively advocating student's placements during their internships at industries.

Workshop and FDP

Institute motivates faculties to participate in research related workshops, STTP, TTT and FDP. Figure 3.1.10.b shows the participation of faculties in various workshops and FDP in last four years.

Table 3.1.10.b: Number of Workshop and FDP and STTP and TTT by faculties of College

Department	2016-17	2015-16	2014-15	2013-14
MECH	10	6	4	1
ELECT	17	5	4	2
E&TC	14	24	20	15
COMP	16	13	27	10
IT	12	22	8	15

Faculty Publications

Faculties are encouraged to publish their research work in various national and internationals journals and conferences. Table 3.1.10.c shows the publications by faculties. All the faculties in our college have cumulatively published 356 papers in national and international journals and conferences. Out of all these publications, around 20% are Scopus indexed, and the remaining is Google Scholar indexed.

Table 3.1.10.c : Publications by Faculties

Dept.	MECH	COMP	E&TC	ELECT	IT	ES	Total
No. of Publications	91	104	87	37	53	03	375

Student's Publications

Students are encouraged to publish their research work in various national and international journals and conferences. Table 3.1.10.c shows the publications by students

Table 3.1.10.d : Students Publications

Dept.	MECH	COMP	E&TC	ELECT	IT	Total
No. of Publications	41	99	43	39	42	264

3.2 Resource Mobilization for Research

Resource mobilization allows organizations to achieve the pre-determined goals using different mechanisms. The organisation motivates the faculties and students for attending and organising various FDPs, conferences, workshops, seminars, etc. Figure.3.2 depicts the resource mobilization for an organization.

Fig 3.2: Research Mobilization

3.2.1 What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.

Every year approximately 10% of the total budget is allocated for research and development related activities. Every department of the institute has its state of the art facilities regarding hardware and software in selected areas of research. The digital library with a subscription to important journal publishers is also made available for both faculty and students. The institute is providing full sponsorship to the faculties for pursuing their PhD from TUS, Bulgaria. The budget for various heads of expenditure of research activity, library activities, e-resources and much more are given, at Institute level and its utilisation in last four years is mentioned in Table 3.2.1.

Table 3.2.1: Total Budget year-wise

Sr. No.	Major heads	Actual Utilisation in (Rs.)			
		2016-17	2015-16	2014-15	2013-14
1	Purchase of equipment and software	17,828	13,29,033	4,70,918	1,07,596
2	Registration fees & TA/DA for attending FDP, Conference, Seminar and Workshops	24,850	16,300	34,106	11,889
3	Stationary & Consumables	2,32,534	8,90,149	8,90,149	5,63,785
4	Financial assistance to Ph.D. scholars	5,71,136	5,72,874	0	0
5	Subscription and Publication of Journals, E-resources	4,20,523	2,54,947	0	0

3.2.2 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?

Yes, the seed money provision is there. The seed money is utilized in following ways:

- Participation and arrangement of FDPs, Workshops and conferences.
- Providing scholarships to faculty members those who are pursuing PhD programs from various foreign universities.

- Also, faculty research work is supported by BCUD research fund scheme.
- Total seed money disbursed is mentioned in Table 3.2.2.Details about disbursement to individual faculty is mentioned in Annexure VI, Table 3.2.2

Table 3.2.2: Seed money disbursement

Year	Total Seed Money Disbursed (Rs.)
2016-17	5,70,000
2015-16	5,87,474
2014-15	33,806
2013-14	10,547

3.2.3 What are the financial provisions made available to support student research projects by students?

- The financial plan for supporting student's research action is allotted under student welfare fund.
- Each department allocates a finite proportion of their budget towards research projects of students. Purchases are made in the form of books, hardware and software based on the project requirements.
- Providing invited talks, courses, workshops, industrial visits, STP-IV are sorted out to advance exploration for students.
- The institute encourages and offers backing to the students for presenting and publishing their papers in various national and international conferences and journals.
- The STES sorts out some technical events, on semester basis that gives a stage to the students to showcase their creative thoughts and knowledge.
- Students are motivated to go for internships, and the organisation provides support for the same.
- Various social events are organised by the institute for students to show their ability in all directions.
- Institute provides financial support to students for participating in SAE- BAJA and ROBO Model.

3.2.4 How does the various departments/units/staff of the Institute interacting undertaking inter-disciplinary research? Cite Examples of successful endeavours and challenges faced in organizing interdisciplinary research.

The major challenges faced by the institute were the intercommunication link between different disciplines, which had been resolved by setting up the process mentioned below-

- The students of various departments embrace interdisciplinary tasks with the earlier consent of individual HODs and project coordinators.
- Every department of the college is having final year project co-ordinator.
- Guides from both the departments associate with each other while outlining the framework and checks the practicality of arrangement in their particular domain.
- Industrial Automation workshop is often organised for the students to go for the inter-disciplinary projects during their final year.
  The branches of the institute cooperate in undertaking inter-disciplinary projects in various ways.

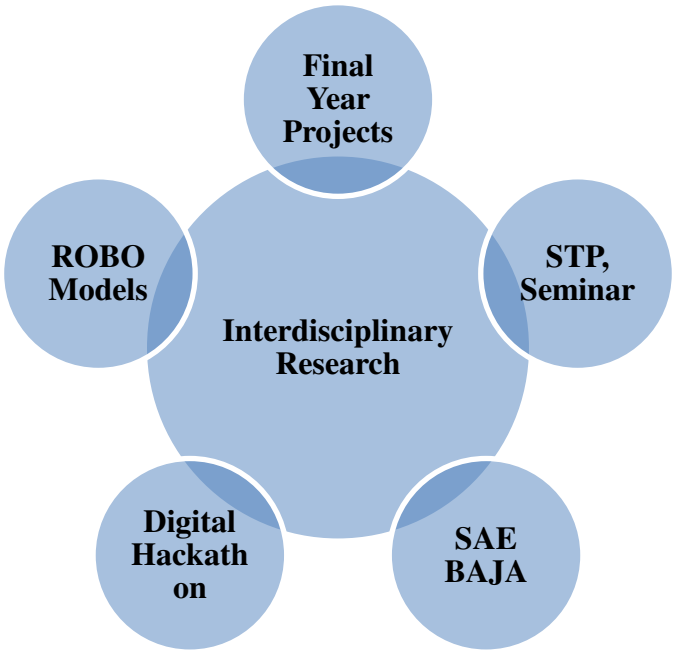


Fig 3.2.4: Research mobilization

SAE BAJA- SAE BAJA is an intercollegiate level competition run by the Society of Automotive Engineering (SAE). Teams of students from different colleges all over the world will build off-road cars. This competition provides a platform to students so that they can design, fabricate and validate a single sitter four-wheeled car to take part in SAE competition.

The details of projects and their interdisciplinary areas are given in below Table

Table 3.2.4 (a): Interdisciplinary Projects

Sr. No	Projects	Department Involved	No. of Student	A.Y.
1	SAE INDIA BAJA 2017	MECH	23	2016-17
2	Smart Garbage Monitoring System with Crushing Mechanism	ELECT, MECH, E&TC	3	2016-17
3	Enhancement of Heat Transfer Rate by addition of Surfactants	ES, MECH	4	2015-16
4	An Experimental Approach to Validate the Application of Biodiesel for CI Engine	ES, MECH	4	2014-15

Hackathon- It is also known as a hack-fest or code fest. It is an event in which computer programmers, students and others involved in software development process, including graphic designers, interface designers and others collaborate intensively on software projects. The goal of the hackathon is to create software's that help the individual as well as society. This event provides platforms to students to explore their knowledge and also use their knowledge for social purposes. The details are mentioned in Table 3.2.4.(b).

Table 3.2.4 (b): Hackathon

Sr. No.	Title	Team members (in No.)	Department	A.Y.
1	Student Voice	6	COMP, IT	2016-17
2	Ministry of Road Transport & Highway	6	COMP	2016-17
3	Ministry of Tourism	6	COMP, IT	2016-17
4	Student Voice	6	IT	2016-17
5	E-citizen	6	COMP, IT	2015-16
6	Transportation of bus	5	COMP	2015-16
7	Garbage Management in Pune City	5	COMP	2015-16
8	Public Security	4	COMP	2015-16

9	Garbage Management using RFID	4	IT	2015-16
10	Electronic Energy Meter	4	IT	2015-16
11	Smart grid system	5	E&TC	2015-16

This year, two Hackathon projects are already selected for national level Hackathon competition.

Various challenges faced during interdisciplinary research are as follows:

- Difficulties in integrating various designs and modules of different areas.
- Project slots are provided for project work in the timetable schedules for all the departments so that student can work on projects.
- Coordination between faculties, students and labs timings are required.
- Understanding of principle ideas and use of these ideas to get the arrangement for interdisciplinary students.
- Change the mindset of the students as well faculty members and propel them to handle interdisciplinary work and start their out-of-box considerations.
- Inter-disciplinary departmental faculties are directing the students on a one-to-one basis.

3.2.5 How does the institution ensure optimal use of various Equipment and research facilities of the institution by its staff and students?

- To guarantee ideal utilisation of different hardware and exploration offices accessible in the institute taking after strategies are received.
- Special consent is given to students to work in research centres and library.
- Reference books, diaries, e-journals and magazines of national and international are available in the library.
- The timetables of labs are additionally advised to all.
- Research Committee is framed at institute level.
- Guidelines are given by the Research Committee to students and staff for doing the research related activities.
- Research related ideas are given to students by taking lectures on various domains.
- Faculty steps up with regards to connecting with exploration association or industry to get functional introduction to the students while finishing their examination exercises.

- Financial arrangements through BCUD, institutional spending plan are made accessible to all students and staff.
- Industry helps the students to finish their project exercises.
- Laboratories are kept open beyond college hours as per the project needs.

3.2.6 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If Yes, Give details.

Yes, the faculties are getting funds from the university for research projects. Refer Table 3.1.5.b. for SPPU, BCUD projects. These grants received are primarily used to encourage staff for their research ventures, attending workshops, conferences and to make them mindful of exploration.

- The seed money is made available to the faculty to complete their projects, getting reference books and benefiting them with transportation while gathering the information required for the experimentation.
- Students are likewise getting sponsorship from industry regarding projects and their deployment.

3.2.7 Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organizations. Provide details of ongoing and completed projects and grants received during the last four years.

The institute encourages all entities in securing research facilities from various subsidising offices are as per the following:

- The faculties are roused to apply for grants from different subsidising offices, associations and industry.
- Information in regards to dates for application, qualification criteria and so on is conveyed to all by the Principal through the R&D.
- The faculty is allowed on duty to attain various types of activities.
- Motivates the faculty for attending and giving research related training and making them aware of cutting edge technologies.
- The administrative office of the institute gives important rules and backing to PI to finish BCUD customs to get portions of the endorsed financing.
- The Institute has research committee to monitor research activities.
- Institute additionally provides money to faculties to attain workshops, conferences, FDP to begin the exploration ventures. The details of

grants and finances received from SPPU BCUD are provided in Table 3.2.7.

Table 3.2.7: Grants and Finances Received from SPPU BCUD

Nature of the Project	Duration	Title of the Project	Name of the funding agency	Sanctioned (Rs)
Project grant	2014-2016	Student Sentiment Analysis	BCUD	40,000
Project grant	2014-2015	Optimum design of Bio-composite material for automotive application	BCUD	60,000

3.3 Research Facilities

3.3.1 What are the research facilities available to the students and research scholars within the campus?

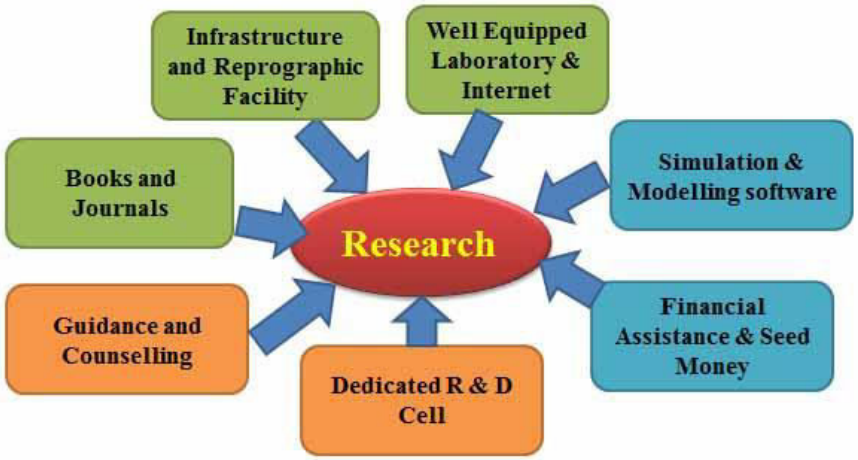


Fig 3.3.1 Research amenities inside the Campus

Research amenities accessible to the students and research scholars inside the campus are as presented in figure 3.3.1 and Table 3.3.1.

- To submit research proposals faculties are exhilarated to the various funding agencies and project specific equipments are acquired in different departments.
- The institution has started and initiated many activities to obtain equipment and restoration works in various departments.
- The library is facilitated with various reference books, manuals, periodicals, encyclopaedias, national and international journals, e-books and handbooks.

- Renovation works are carried out to offer required space and environment for the department of research actions as and when required.
- Faculties and students are provided with a separate facility in the budget for research activities and seed money provision.
- Students and faculty are provided with laboratory and computer facilities with necessary internet facility, simulation, modelling software, reprographic facility, etc.
- Wi-Fi facility is accessible in the campus.

Table 3.3.1 Department wise table containing major equipment for research

Dept.	Name of Equipment	Cost (Rs.)
ELECT	PLC Kits	5,21,606
E&TC	Spectrum Analyser with tracking generator 3Ghz	3,02,400
	Agilent Make MSO 100Mhz, 2 Analog plus 16 digital channel	2,29,610
	Xilinx ISE System Edition 14.1	92,400
	Spartan VI Board with on-board device XCS6LX9-TQG144 and features as USB, RGB LED, VGA, PS2 etc	32,000
	Multisim's Education (10 user) version 11	2,62,500
	Network Analyser Model	8,76,750
	Antenna Training Lab PLL Synthesized 40MHz - 4.3GHz,10 SMA Antennas (AMITEC)	2,61,225
	OTDR FDSU France/ MTS 4000 Fibre Platform TFT Colour Screen	2,67,750
MECH.	DEWE -43 FFT Analyser	10,75,964
	Advanced Hydraulic Trainer with Gear Pump	2,20,500
	Advanced Customized Electro-Pneumatic Trainer	1,35,000
	Universal Testing M/c. computerised Model - TUE-C-100	4,72,044
COMP	Research Laboratory (Open source software such as Libcap, OpenMPI, Java Beans, Turbo C, Turbo C++,.Net, Apache Hadoop, MongoDB, SBCL, Eclipse, Android Studio)are available for M.E students and Research Scholars.	4,52,106

3.3.2 What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?

Obligatory infrastructure regarding space, equipment and support facilities are accessible on the campus for undertaking research. The institution collaborates with other agencies, institutions and research bodies for partaking research services and undertaking co-operative research.

- **Strategies for planning for creating research infrastructural facilities:**
  Every department is planning for the research infrastructural facilities required before the beginning of academic year. While planning, every department tries to share the infrastructural facilities from the other institutes of STES.
- **Identification of emerging areas of research:**
  R&D cell is identifying new research areas and updating and communicating the same to faculties and students on a periodical basis.
- **Identification and association of potential funding agencies**
  - Researchers are motivated to ask for infrastructural improvement to be included in their budget proposal.
  - The research committee is in an incessant process of identification of funding agencies at governmental and non-governmental levels within India and abroad.
  - Funds have been obtained from organisations like SPPU and STES, Pune.
  - Efforts are made to fetch funds from such agencies for research in different departments as well as interdisciplinary research.
- **Faculty training**
  - Awareness sessions are conducted to enhance research atmosphere in the campus.
  - Research skill is strengthened among faculty.
  - Through periodic review courses or motivational speech on research methodology.
  - Workshops, conferences, seminars and invited talks on emerging research areas.
- **Facility up gradation**
  - Information regarding different research funding agencies is gathered and disseminated.
  - The institute is always ahead in providing funds for facility up gradation in the emerging areas in different disciplines.
  - The institution has strategies for planning, upgrading, and creating infrastructural facilities to meet the needs of researchers.
    Please Refer Table 3.3.1 for more details.

3.3.3 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities?? If 'yes', what are the instruments/facilities created during the last four years.

Yes, the Institute has received a special grant from SPPU for the development facilities in the college. The support has been provided in the form of making available equipment and training set-ups at subsidised affordable price to the college. Table 3.3.3 shows the details of the special grants received for procurement of new facility for research.

Table 3.3.3 Grants Received from BCUD, SPPU for Research Tool

Sr. No	Industry/SPPU	Research Facilities	Amount (Rs)
1	BCUD, SPPU	Printing and Presentation Facilities	1,00,000
2	BCUD, SPPU	Pool Boiling Apparatus	32062
3	BCUD, SPPU	Sony LCD projector (Quantity-2)	1,00,000

3.3.4 What are the research facilities made available to the students and research scholars outside the campus/other research laboratories?

Students are encouraged to use facilities of various agencies like NIT's IITs, CDAC, Government College of Engineering Pune (COEP) and industries. Through UG and PG-sponsored projects students avail facilities from the industries. Students visit various organisations like Borse India, Opulent Infotech, Cognizant, Persistence, Zensar, power plant Engg, MQC, etc to understand industry work culture, calibration of instruments and testing; Institute arranges visits to leading industries organisations for the students. These visits enrich the knowledge of students and make them familiar with the recent happening research in industry. The research facilities made available to the students and research scholars outside the campus are as shown in figure 3.3.4.

- Institute inspires students and research scholar's to visit different research laboratories, IITs and other organisations for research activities.
- Institute organises industrial visits for students
- Institute supports for students and faculties for research competitions and exhibitions.
- Supporting students to develop projects for industries.

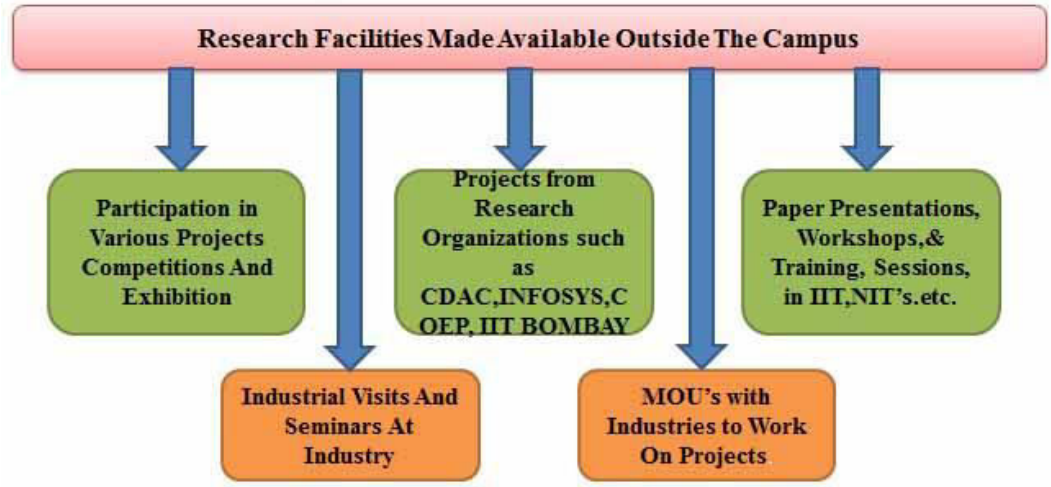


Figure 3.3.4 – Research facilities made available outside the campus

3.3.5 Provide details on the library/information resource center or any other facilities available specifically for the researchers?

On the basis of changes in curriculum, research requirements, recommendations from staff and on student's demand the librarian raises the requirement of book titles, journals, codes and standards, etc. Library Committee takes a decision on the provision of allocation of these requirements so that the research resources should be produced and students and staff will be benefitted through this. Facilities such as Central Library, Digital Library, Online journals, NPTEL online video lectures, Project Research section, Reference Sections are made available for researchers. Wi-Fi network is available in the campus. Also, the Table 4.2.6 and Annexure VI, Table 3.3.5.b, elaborates the research facilities available in our library.

Institute has dedicated research labs in addition to that of library facilities. Reference books and thesis on various research topics and projects along with, research journals, magazines and competition magazines are available in the library. Fig 3.3.5 depicts available research journals, competition magazines, general knowledge magazines, in library.

Table 3.3.5.a: Research Journals Available in the Library

Particulars	Available titles
National Journals	38
International Journals	14
General Magazines	04

3.3.6 What are the collaborative research facilities developed/ created by the research institutes in the College.

To complete joint research projects students and faculty are coming together. Two departments have created research laboratories and procured specified equipment, software and hardware in the respective labs to augment the research facilities. With the ongoing and completed research projects, various research outcomes have been achieved in the two R&D labs of the institute. Fig 3.3.6 and Table 3.3.6 shows collaborative research facilities developed and created in the Institute.

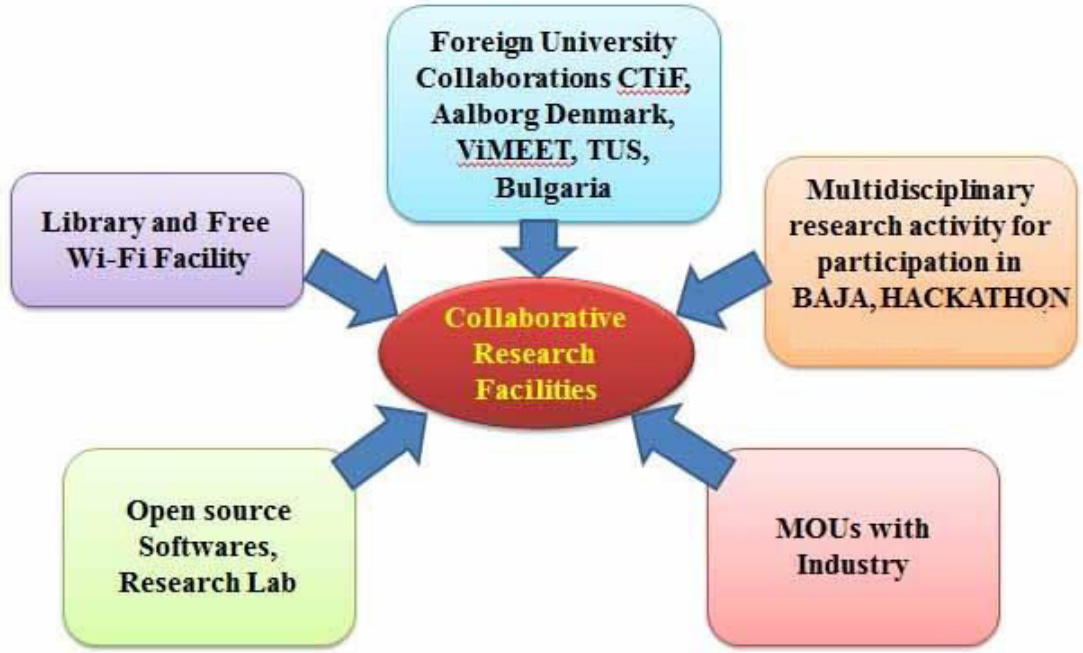


Fig 3.3.6- Collaborative research facilities

Table 3.3.6 Collaborative Research Facilities developed and created

Dept.	Research Facility
COMP	Computer Network with the latest version of computers, necessary software, and dedicated leased line to perform research experiments on various databases. The campus is also equipped with Wi-Fi facility.
Library	Central Library has adequate number of books. Necessary e-books, e-journals, periodicals, data sheets are available for the researchers for their literature review and research experimental source material.
Other University Tie-Up	STES has Tie-up with AAU, ViMEET in collaboration with TUS, Bulgaria. The entire expenses including registration fees, accommodation and travel expenses are given to eligible faculty. Faculty can utilise their study leave for their research activities.

MECH	Mechatronics Lab to perform multidisciplinary research activity and develop projects like innovative electro-mechanical vehicles, robots, etc. for competitions like BAJA, ROBOMODEL

Institute deputes the faculty for Ph.D. Programs. Institute has MOU with AAU and TUS, Bulgaria wherein the institute gives full sponsorship to faculty to complete their research work. Faculty members are pursuing Ph.D. at different universities under deputation with special study leaves. Please refer Table no. 3.1.3.

- All the departments in the institute have state of the art instruments, laboratories and computer access.
- There is a centralised library, and individual departments also have departmental libraries. Besides this, the faculty who have received grants from external funding agencies have acquired equipment, software and spares and accessories, etc.
- The institute provides a stage for each department in association with another department, industry or any further research organisation to organise seminars, conference and workshops beneficial for interdisciplinary study.
- The records from other organisations are made available for collaborative research activities.
- Any faculty or students can share all the laboratory facilities available in every department for their innovative research projects and activities.

3.4. Research Publication and Award

3.4.1 Highlight the major research achievements of the staff & students in terms of Patents obtained and filed (process and product). Original research contributing to product improvement Research studies or surveys benefiting the community or improving the services. Research inputs contributing to new initiatives and social development.

The faculty members at our Institute are actively involved in research in various fields of engineering and technology. The faculty also safeguards their authentic research outcomes by obtaining and filing the patents. The workshop on Patenting and Intellectual Property Rights was organised to encourage the faculty and students for patent filing. The highlights of major research and achievements of staff and students are as below in Table 3.4.1.a.

Table 3.4.1.a.: Highlights of major research & achievements of staff & students

Sr. No.	Name	Patent	Project and Product
1	Dr. M.S. Rohokale *et al*	3578/MUM/2015 Dated 21/09/2015	Duster detaching mechanism for automated motorised whiteboard

Research work of faculty along with the students which has contributed to the product improvement are as shown in Table 3.4.1.b.

Table 3.4.1.b.: Original research contributing to product improvement and Development

Sr. No.	A.Y.	Name of the faculty	Title of the Project	Description of the Research Work contributing to product improvement (Name of Industry)
1	2016-17	Dr. V. M. Rohokale	Smart Grid Security using Honeypots	This project aims at providing security to Smart Grid Networks by making use of honeypot concept. **(C-DAC-GTU Pune)**
			Fog Computing for Security in mmWave 5G Wireless Communication	Next generation 5G wireless networks are suffering from malicious activities through heterogeneous interfaces. Mm Wave is the emerging radio spectrum for 5G. This project aims at providing security in mmWave using Fog Computing. **(C-DAC-GTU Pune)**
			RSS and Vehicle Node Communication Security for VANETs	Vehicular Adhoc Networks are essential for Intelligent Transportation System. This project work proposes RSS and Vehicle Node Communication Security for VANETs. **(C-DAC-GTU Pune)**
			Malicious Behaviour Analysis for Security in Darknets	This research work considers DDoS, BOTNETs and Flooding attacks and proposes to provide the detection of malicious activity through analysis of the traffic in the darknets. **(C-DAC-GTU Pune)**
2	2015-16	Dr. V. M. Rohokale	Cloth Tester Using Image Processing	This project detects the faults in the manufactured cloth such as some stains; it also detects whether the cloth is torn or good quality. (**Yevala Cloth Industry**)
			IoT Based	This project aims at informing the

			Smart Garbage and Waste Collection Bins	central municipal agency about the level of the filled dustbins in the municipal coverage area and also informing the garbage collecting vehicle autonomously for the collection of garbage if some pre-defined level is crossed. (**Hackathon, Pune**)
			Costing Model for HPCaaS on the Cloud	This project work explores the costing model for the High-Performance Computing services in the cloud environment. **(C-DAC-GTU Pune)**
			SDN Control Plane Security in Cloud Computing against DDoS Attack	A novel method for mitigation of DDoS attack using the benefits of software define networking, which enhances the network security. Combination of the existing detection methods and management of SDN from a new way of DDoS mitigation in future work. **(C-DAC-GTU Pune)**
			Network Forensics for detection of malicious packets in Internet of Things (IoT)	Proposed a model of the IoT network forensics investigation. This proposed model consists of many different phases of network forensics investigation. **(C-DAC-GTU Pune)**

Research of faculty along with the students contributed to find the solutions to various techno social issues and to improve the social life are as shown in Table 3.4.1.c.

Table 3.4.1.c: Research studies beneficial for techno socials issues.

Sr. No.	Name of the faculty	Research Study	Benefiting the Society for improving the services
1	Mr. N. K. Gavade	Combustion Chemistry of Jatropha BioDiesel & Hi-Speed Diesel in CI Engine.	Will reduce the burden of extra demand of fuel and also helps in reducing pollution. This will also help in improving efficiency.
2	Dr. V. R. Ladde	Validation of Applicability of BioDiesel for CI	Can be used in fuel cells to generate electricity for vehicles and domestic appliances. Energy efficient and cost-

		Engines.	effective biodiesel reforming system is technically possible due to advanced system integration.
3	Dr. V. M. Rohokale	5G Wireless Communication Cyber Security Smart Grid Security & Privacy	Through Global ICT Standardization Forum for India, giving presentations on these topics and contributing to the scientific growth of India. Working as a core group member of the work group on Security and Privacy.
4	Mr. G. S. Datar	Modification and Fabrication of three axis modern trailer	The efficiency of dumping trailers will increase. Also, helps in decreasing the workforce and time.
5	Mr. S. S. Babar	Heat transfer enhancement	Heat transfer enhancement in the tube in tube heat exchanger making use of tangential entry through the pipes.

Research of faculty along with the students contributed to new initiatives, and social development are as shown in Table 3.4.1 d.

Table 3.4.1.d: Research inputs contributing new initiatives & social development

Sr. No.	Name of the faculty	Research Initiative	Contributing to New Initiatives And Social Development
1	Dr V. M. Rohokale	Research Club for Students	Creating awareness about new and upcoming technologies among the students.
2		Research Convention for Staff	Platform for faculties to present their research work and get it analysed by the Research Committee.
3		Cyber Security Research Group	Faculty in this group are working on various cyber security issues as their PhD work. It helped them in research topic finalisation.
4	Mr. Shiva Reddy	Business Trend in Farming (A new method in farming and agriculture)	Providing new ideas related to farming or agriculture.
5		Tunnel lighting system (A lighting system which can be used in tunnels)	Giving knowledge about lighting system which could be used in tunnel to have proper visibility and to reduce accidents.

3.4.2 Does the Institute publish or partner in the publication of research journal(s)? If 'yes', indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?

Yes. The Institute contributed toward the research journal titled "Journal of Advances in Engineering Science" (JAES) in collaboration with our sister institute, Sinhgad Institute of Technology. The frequency of journal was bi-annually. The composition of the editorial board is as shown in Table 3.4.2.a. ISSN No is 0973-9041.

Table 3.4.2.a: Editorial board for publication policies

Patron	Chief Editor	Sub Editors	Editorial Board
Mr. M. N. Navale. Founder President, STES, Pune. Dr.(Mrs.) S. M. Navale. Secretary STES, Pune	Dr. D. K. Singh Professor & Dean (R & D) Sinhgad Institute of Technology Lonavala, Pune (MS)	Mr. A. G. Kamble, Mr. D. S. Mantri Mrs.Geetika Narang Mrs. P. P. Ahire Mr. A. A. Kalage Dr. V. M.Rohokale Dr. P. H. Patil	Dr. M. S. Gaikwad, Principal, SIT
			Dr. D. D. Chaudhary,
			Dr. V. N. Bapat
			Dr. M .S. Rohokale, Principal SKNSITS
			Dr. V. V. Shinde
			Dr. S. D. Babar,
			Mr. V. V. Deotare,
			Mr. N. A. Dhawas,
			Dr. P. S. Patil,

The institute also publishes newsletter named INNOVISION annually which covers all the activities conducted by the Institute along withresearch activities. The details of the newsletter publications are listed in the Table 3.4.2.b.

Table 3.4.2.b: Newsletter Publication Details

A Y	Academic Activities from Institutional News Letter
2016-17	FDP, Invited Talks ,Workshops Training, Placement Cell, MOU, Data mining for IOT Applications, Topology Control in WSN, Cyber Security for Smart Grid, Smart Cities and Smart Villages, Arrival of Solar Impulse, Metalworking Fluids.
2015-16	Invited talk, Industrial Visit, Mathematical Modelling, PLC Workshop, PCB Workshop, Microsoft Club, Robotics Club, Project competition, Software Performance Engineering, Security Challenges in IOT, Green Energy, Shape Alloys.

Every department has the faculty coordinator to look after the newsletter contents. The faculty coordinators details for departmental newsletter are provided in the Table 3.4.2. (c).

Table 3.4.2.c: Departmental News Letters

Sr. No.	Name of the department	Faculty-in-charge	Name of the News Letter
1	MECH	Mr. S H. More	MECHWAR
2	ELECT	Ms. A. S. Ramteke	ELECPRESS
3	E&TC	Ms. P. D. Halle	ETIOS
4	IT	Ms. K. G. Walke	TECHTIMES
5	COMP	Mr. N. N. Jamdar	TECHNOVATION
6	ES	Dr. V. R. Ladde	PHOTON

3.4.3 Give details of publications by the faculty and students

Faculty and students are motivated to publish their research work on regular basis. Faculties publish papers based on their research work and the students publish papers based on their project work. The summary of publications by the faculty and students is shown in Table 3.4.3.a.

Table 3.4.3.a: Faculty and Student Publications

Sr. No	Title	Student Publications	Faculty Publications
1	International Journals	243	257
2	National Journals	01	04
3	Books	00	04
4	International Conference	10	65
5	National Conference	14	43
6	Article and Book Chapter	00	04

The faculty members of the Institute are actively involved in research. The research outcomes are shared with outside world through publication in reputed national, international journals and conferences. Such faculties are recognised and awarded for their research contributions. Our faculty members have published numerous papers in various national and international conferences and journals. Also, their publications have received good citations from the research community. The details of the papers published by faculty members and students are enlisted in Table 3.4.3.b.

Table 3.4.3 b: Department wise Faculty Publications

Dept.	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
MECH	00	20	57	08	06
COMP	00	36	32	16	18
E&TC	02	30	38	09	07
ELECT.	00	25	05	05	02
IT	00	16	14	05	22

3.4.4 Research awards and recognition received from reputed Professional bodies and agencies, nationally and internationally

The research awards and recognition received from reputed professional bodies and agencies, nationally and internationally by faculty and students are as follows.

Sr. No	Name of Faculty	Awards and Recognition
1	Dr. V. M. Rohokale	Awarded Ph.D. in Wireless Communication by CTIF Aalborg University, Denmark.
		She has worked as keynote speaker, session chair and reviewer for various reputed International and National Conferences such as GWS 2015 B^2TCM.
		She has received an active member of GISFI, and she has given number of presentations under various International Workshops and Conferences organised during GISFI meetings organised at various cities of India.
		Recognised as a resource person. She has conducted sessions on advanced topics such as 5G Spectrum Management and Internet of Things during IETE Apex Forums at LIT, Wapi, Gujrat and AISSMS IoIT, Pune, India.
		She is guiding three PhD students in Indian and European Universities. Recognised as a referee member for PhD assessment committee for two candidates at Nagpur and Jodhpur University.
		Working as a research committee member at Vellore Institute of Technology, Chennai.
		Designed a syllabus for PhD course work Elective subject in Telecommunication for Solapur University.

3.5 Consultancy

3.5.1 Give details of the systems and strategies for establishing institute-industry interface?

The Institute promotes industry interaction with the help of various activities conducted in every department under IIIC. Students can be better engineers only when they can experience the theories they read, applied in real world.

1) System and Strategies

The policies to promote institute-industry interface in every department are as follows:

- Various gatherings of industry people are organised in the form of conferences, workshops, seminar, etc. as these are a great spot for networking, as well as co-working spaces, where people meet and exchange their ideas.
- Give special certificates and recognitions to faculty who interacts with industry and utilise their talent while consulting for a specific project.
- Industry experts are invited for guest lectures.
- Alumni meet is arranged to understand and share the current needs of industry.
- Share knowledge of faculty for the consultancy and development of student and staff.
- Various MOUs are signed with different industries.
- Industrial visit is arranged so that students can experience the theories they read, applied in real world.
- Students are encouraged to do their project in collaboration with industry.

Different components are formed to perform all these activities smoothly:

- Industry Institute Interaction Cell (IIIC)
- Training and Placement Cell (TPC)
- Entrepreneurship Development Cell (EDC)
- Business Club
- Professional Bodies

Various industries involved in this activity are mentioned in Table 3.5.1.a.

Table 3.5.1.a: Industry Institute Interaction

S. No.	Dept	Name of the Company
1.	MECH	Elite Techno Groups
		ELEATION Element Simulation Academy

		IFS Academy, Pune
2.	ELECT	AEDIFICO Tech. Pvt. Ltd.
		ABLAB Solutions
		EIE Project India Ltd.
		Prolific, Pune
		N. Kenin Transformers
3.	COMP	Seed Infotech
		Zensar ESD
4.	IT	Seed Infotech
		ecoRise Software Solutions
		Zensar ESD
5.	E&TC	Chelsio Communication
		P. S. Technology

2) Industry- Institute- Interaction Cell:

The III Cell is formed in all the departments, and the members are from industry, internal faculty members and alumni. The III Cell members include HOD, and minimum one member from following category:

- Entrepreneur,
- Employee with designation of Project Manager and above,
- Established Alumni,
- TPO and Departmental T&P Coordinator,
- Faculty, involved in placement cell

The detail information about III cell is given in Table 3.5.1.b

Table 3.5.1.b: Industry Institute Interaction Cell

Sr. No.	Dept.	Name of Member	Organization	Designation
1	MECH	Mr. N. K. Gavade	SKNSITS	HOD
		Mr. A. S. Gadhave	SKNSITS	T&P Coordinator
		Mr.S. U. Kalaskar	Premium Transmission Ltd Aurangabad	Dy Manager Quality
		Mr. Prashant Khairnar	ITC Ltd	Manager PDD Cell
		Mr. Rohit Dongare	Freelancer	Alumni
		Mr. Amol Walekar	Furious Travels	Entrepreneur

2.	ELECT.	Mr. S. D. Datey	SKNSITS	HOD
		Mr. B. P. Kadu	SKNSITS	T&P Coordinator
		Mr. J. P. Dabhade	SKNSITS	Asst Professor
		Mr. Manoj Landge	Essel Utilities Ltd	Sr. Manager
		Mr. Ashutosh Shitole	Ashlesha Electricals	Owner
		Mr.Sanket Fasale	Variate Consultants	Technical Manager
3	COMP.	Mr. V. D. Thombre	SKNSITS	HOD
		Mr. Venkatesan N	SKNSITS	T&P Coordinator
		Ms. S. A. Agrawal	SKNSITS	Asst Professor
		Mr.Vivek Mengji	Dream Care Developers	CEO
		Mr.Satyanarayanan	AKAMAI Technologies	Team Leader
		Mr.Pravin Gaikwad	Cummins India Ltd	Software Engineer
		Mr.Sandesh Balgude	Virtusa	Software Engineer
4	IT	Mr. G. M. Kadam	SKNSITS	HOD
		Mr. S. B. Kothari	SKNSITS	T&P Coordinator
		Mr. A. K. Bone	SKNSITS	Asst Professor
		Mr.Anirudha Mangore	Codeest Software Factory	Entrepreneur
		Mr.Wasif Makadam	Tech Mahindra	Senior Engineer
		Ms. A. N. Ambala	Cognizant	Alumni
5	E&TC	Mrs. R. M. Thadi	SKNSITS	HOD
		Ms. P. P. Tayade	SKNSITS	T&P Coordinator
		Mr. R. S. Musale	SKNSITS	Asst Professor
		Mr.Kalpesh Hiwase	Shootin Stars (Training & Counselling Centre)	CEO (Entrepreneur)
		Mr. Shreesh Basatwar	John Deere	Senior Tech Lead
		Mr.Aditya Kulkarni	Barclays Technology Centre India	Business Analyst
		Ms. Siddhi Ghare	Cognizant	Software Engineer (Alumni)

3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?

In this innovative world, the institute has planning for consultancy which offers a broad range of valuable services for the benefit of students and staff. The research team of the institute has always been a connector, bringing people and policies together from different departments within the organisation for a bigger goal. The Institute has always promoted consultancy, and the strategies are as below:

- Faculty members are continuously encouraged towards promotion of consultancy by utilising their expertise in their respective areas of interest as per the data available on institute website.
- Various workshops, invited talks and seminars are held time to time to make the students and faculty aware of the latest trends and technologies.
- Faculty regularly visits as a resource person for seminars, workshops and School of Enterprise Tie Up.
- The income and revenue generated through consultancy programs are utilised for the betterment of the students, faculty and institute as per the policy of STES.
- Share knowledge of individual faculty for the consultancy and development of student and staff.
- Give acknowledgement and recognition to the faculty who invest their time and efforts for interaction with various industries and utilise their talent while consulting for a specific project.

Various areas for consultancy services provided by all the departments is given in Table 3.5.2.

Table 3.5.2: Industry Institute Interaction

S.No.	Department	Area of Consultancy	Name of Industry or Institution
AY 2016-17			
1	Computer	Web Technology	Bhargav Enterprises
2	IT	Cross Platform Development and API Support for Kalpataru Application	EcoRise Software Solution, Pune
3	E & TC	Security with Darknets, VANET Security, Smart Grid Security WSN Routing Security	CDAC- Gujarat Technological University (GTU)
AY 2015-16			
4	MECH	Hardness Testing	Sinhgad Institute of Technology, Lonavala
5	ELECT	H. V. E. Lab	Dattakala IoET, Bhigwan
6		SGP Lab	Dattakala IoET, , Bhigwan
7	IT	Database Development and Payment gateway interface development for NDIonline.in	EcoRise Software Solution, Pune
8	E&TC	IoT Forensics, SDN Plane security, Coasting Model for Cloud Computing	CDAC- Gujarat Technological University (GTU)
9		Design and implementation of	Opulent Infotech Pune

		universal charger for wireless charging between low power	

3.5.3 How does the institution encourage the staff to utilise their expertise and available facilities for consultancy services?

- The faculty members are encouraged to utilize their expertise for consultancy and they get credit in their annual self-appraisal, which is published on website.
- Financial assistance is given to attend various workshops, on duty leaves are provided to staff for knowledge up gradation.
- Dr. V. M. Rohokale is working on CDAC Consultancy since the academic year 2015-16. Under this consultancy, she is guiding master's students at CDAC Pune who are from Gujarat Technological University (GTU) Gandhinagar.
- She is a member of GISFI and working as an external senior scientific member for International Institute for Innovation in Information and Communication Technology (I4CT) Vishwaniketan, Mumbai.
- During GISFI standardisation series meetings, Dr. V. M. Rohokale had given presentations on various topics such as Cyber Security, Smart Grid, Green ICT, 5G Wireless Communications, etc.

Various R&D facilities and infrastructure are available to the faculty for consultancy work:

- Well-equipped labs with dedicated hardware and software.
- Certified computer network with high configuration systems.
- 24X7 internet facility (LAN and Wi-Fi connectivity).
- 24X7 Generator backup.

3.5.4 List the broad areas and major consultancy services provided by the institution and the revenue generated during the last Four years.

The institution has always encouraged the consultancy services. Various areas for consultancy services provided by the industry and institution, along with the respective revenue generated are as given in Table 3.5.4.a.

Table 3.5.4.a: List of Consultancy Services

S.No.	Department	Area of Consultancy	Name of Industry or Institution	Revenue Generated(Rs)
1	Computer	Web Technology	Bhargav Enterprises	4500
2	E & TC	Security with Darknets, VANET Security, Smart	CDAC- Gujarat Technological University (GTU)	36000

		Grid Security WSN Routing Security		
3	MECH	Hardness Testing	Sinhgad Institute of Technology, Lonavala	5000
4	ELECT	H. V. E. Lab	Dattakala IoET, Bhigwan	25000
5		SGP Lab		

3.5.5 What is the policy of the institution in sharing the income generated through consultancy (staff involved: Institution) and its use for institutional development?

The Institute has the policy to share the revenue generated through consultancy.

- Revenue generated is shared either with the Institute and faculty involved, or it can be utilised for the departmental student association.
- If the revenue generated is shared with the Institute and faculty involved, the fees sharing structure is shown in Fig 3.5.5.

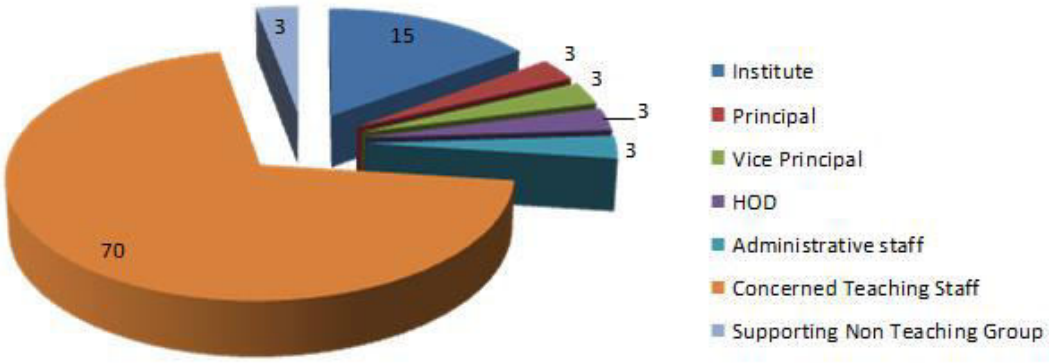


Fig. 3.5.5: Share of income generated in between staff and institute

- With prior permission of the management, various equipment, tools and related software can be purchased for the department from the generated revenue.
- Account section and department both have a copy of all the bills and records of the generated income.
- A dead stock register is maintained for any hardware or software purchased through the generated income.

3.6 Extension Activities and Institutional Social Responsibility (ISR)

The vision of the institute is to produce not only good engineers but good human beings also. Therefore, we are taking efforts to add values of good

citizenship in our students by the teachers and student peer groups. The institute has active NSS with a large number of student members. They participate in various NSS activities with a lot of passion. The institute believes that ISR is one of the backbones that supports our academic and the research work. Our aim is to find the solutions to the socially related problems such as the shortage of electricity, cleanliness, human errors, the requirement of blood to the hospital, help to poor and needy people, garbage disposal, the need of potable water, green technology, etc.

3.6.1 How does the institution promote institution- neighborhood-community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?

- Institute involves the faculty and students in community work. This helps the students to learn ethical values and understand their responsibilities and develop as good citizens.
- Social activities like blood donation camps, tree plantation, and road safety camps are organised.
- Faculty members and students visit the orphanage in the vicinity of the Institute, provide support and interact with them.
- Financial aid and the direct help in kinds are provided by students in the drought-hit villages of Marathwada, Maharashtra.
- Faculty and students actively participate in Swachh Bharat Abhiyaan on campus and in and around Lonavala city.
- Institute implements the Earn and Learn scheme of the university. It helps the students to understand the value of hard work.
- Institute has an active NSS cell through which different social activities are planned and executed for each academic year.

3.6.2 What is the Institutional mechanism to track students' involvement in various social movements/activities which promote citizenship roles?

Extension activities for social cause are carried out through NSS and departmental students associations. Faculty co-coordinators are instrumental in giving their guidance and support while conducting such activities. While handling the responsibilities during various social movements' students gets an opportunity to play citizenship role.

- Activities of NSS are well structured. A faculty coordinator and student coordinators take the initiative to schedule and carry out the activities. Once they get inspired, the detailed plan of execution is prepared, and activities are conducted with full energy and zeal. During the process, students not only get a platform to highlight their

leadership qualities but also get awareness about their social responsibilities.

- All activities are carried out under the guidance of the faculty coordinator who takes necessary permissions and financial support from the Institute. The detailed report of such activities along with photographs is prepared and submitted to the Principal. The social work of dedicated students is appreciated in the student council meets, and they are honoured with appreciation certificates.
- The social work exhibited by the student is also acknowledged in terms of weight given to them in their continuously evaluated term work marks. The special certificate given to the student acts as a value addition for the student during their placement.

Table 3.6.2 below gives idea about the social activities taken place in the institute. The database about detail information regarding social activities is mentioned in Annexure VI, Table 3.6.2.

Table 3.6.2 - Social activities conducted in the Institute

AY	No. of Social Activities conducted	No. of Participants
2017-18	03	128
2016-17	17	542
2015-16	08	329
2014-15	02	60
2013-14	01	20

3.6.3 How does the institution solicit stakeholder perception on the overall performance and quality of the institution?

The Institute solicits stakeholder perception on the overall performance and quality of the institution as mentioned below:

- Students are giving their online faculty feedbacks during the semester. The analysis of these feedbacks gives the opportunity to faculty to understand their performance and also helps in understanding the weaker sections to improve upon.
- Parents meetings are conducted in every department on a regular basis. Parents are also forwarding their feedback transparently to HODs and TGs. Understanding and corrective actions based on these feedbacks are helpful in overcoming the drawbacks and increase the performance and quality of the department.

- Many times, parents meet Principal and faculty to give informal feedback on overall performance and quality of the Institute.
- Regular SMS updates regarding the performance of their ward are sent to parents. The parents can also get in touch with TG for improvements in the academic performance of their ward.
- Interaction of alumni with current students gives an idea about dos and don'ts to increase the employability of the students as per the need of the corporate world. Frank and transparent interaction of alumni with faculty also talk about performance and quality shown by the department and various avenues that are open for the improvement.
- Formal employer's feedback taken by Central Placement Cell (CPC) also helps in understanding the quality of students to fit for the jobs. These feedbacks are usually forwarded to HODs through Principal for better performance.

3.6.4 How does the institution plan and organize its extension and outreach programmes? Providing the budgetary details for last four years, list the major extension and outreach programmes and their impact on the overall development of students.

At the beginning of every year, various extension and outreach programmes are chalked out along with the necessary budget. Programmes such as STP, VAP and NSS activities are an integral part of AC to foster the students to understand key performance areas for the improvement of their skill sets.

The possible area of extension activities is identified, and such activities are arranged in a planned manner. These activities are arranged through NSS. Every year institute receives good amount for conducting NSS camps and related activities. Also, the Institute provides financial support to carry out these activities. Karmaveer Bhaurao Patil Earn and Learn Scheme Budget and Expenditure Details are as shown in Table 3.6.4 below:

Table 3.6.4 SWO and NSS Seed Money and Expenditure Details

Activity	AY	No. of Students	Expenditure (Rs)	SEED Amount Received (SPPU) (Rs)
SWO	2016-17	47	95,820	87,238
	2015-16	43	98,070	83,047
	2014-15	31	91,345	77,256
	2013-14	13	48,550	37,163
	Total	**134**	**3,33,785**	**2,83,704**
NSS	2016-17	50	52,797	47,931
	2015-16	95	18,412	16,695
	Total	**145**	**1,25,001**	**97,500**

The major extension, outreach programs, and their outcome are shown in Table 3.6.3. In these activities, students get awareness of social problems, develop a helping attitude and learn how to solve these problems and help a needy person. With this, they develop skills which lead to the development of better citizen.

3.6.5 How does the institution promote the Participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International agencies?

The institute has a tradition and culture of social awareness percolated through alumni gives natural motivation to the current students and faculty to participate in various social activities.

- Motivation from faculty coordinators to the students and leadership shown by the enthusiastic students gives a boost for different innovative ideas.
- These ideas are then converted into extension activities through NSS and students associations.
- College magazine also gives wide publicity and encouragement to the entire student community that ultimately resulted in massive participation and satisfaction of conduction of social work.
- Civic Pride Organisation, a registered NGO is formed by alumni student of the institute, Mr. Amol Walekar and the students of the institute on 9th August 2016.
- Various social activities conducted by the students for the benefit of our students and society are evidence of full participation of our students and faculty in various extension activities. Table 3.6.5 enlists different social activities undertaken by NSS team.

Table 3.6.5- Various Social Activities Taken place under NSS

A Y	Name of Activity	Location	Date	No. of students participated
2016-17	Blood Donation Camp	SKNSITS, Lonavala	27/02/2017	50
	Police Mitra	Kusgaon	21/02/2017	5
	Swami Vivekanand Jayanti & Rajmata Jijaoo Jayanti	SKNSITS, Lonavala	12/01/2017	50
	NSS Special Camp	Karunj, Village near Lonavala	24/12/2016 to 30/12/2016	25
	Orphanage cloth donation	Sneh-Sadan Orphanage, Khandala	22/12/2016	25

	Orphanage Visit	Sneh-Sadan Orphanage, Khandala	15/08/2016	30
	Street Play	SKNSITS, Lonavala	12/09/2016	25
	Wall of humanity	Railway station Lonavala	19/12/2016	35
	International Yoga Day	SKNSITS, Lonavala	21/06/2016	310
	Tree Plantation Activity	SKNSITS, Lonavala	01/07/2016	75
	Varsha-Daud	SKNSITS, Lonavala	29/07/2016	300
	Cleaning Camp	Lonavala Railway Station	11/08/2016	60
2015-16	Blood Donation Camp	SKNSITS, Lonavala	26/10/2015	67
	NSS Special Camp	Karunj, Village near Lonavala	28/12/2015 to 31/12/2015	30
	Plastic Kachra Mukta Abhiyan	SKNSITS, Lonavala	13/02/2016	50
	Blood Donation Camp	SKNSITS, Lonavala	18/02/2016	160

3.6.6 Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society?

The institute undertakes campaigns on the subjects like Women Empowerment, the inclusion of underprivileged and weaker sections of the society which include:

- Visit tribal areas for understanding the problem of tribal people.
- Computer literacy programme for rural school students.
- The institute is conscious of its role in campus-community connection, the wellbeing of its neighbourhood and has initiated some community development activities. The survey was conducted in nearby villages to understand social and technical problems faced by the community.
- Institute gives relaxation in fees, prizes to the students from underprivileged and vulnerable sections of society.
- Institute provides free lodging for underprivileged students.
- Students often visit orphanage and arrange various activities with generous donations as and when available.

3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they

complement students' academic learning experience and specify the values and skills inculcated.

Faculty and students realise the importance of good communication skills and knowledge of the subject. They interact with each other because of extension activities organised by the institution. When our students visit villages, schools, hospitals, industries, old age home, etc. then they learn to interact with people from all lifestyles. The basic objectives and the expected outcomes are as mention below:

Objectives:

- To develop the leadership qualities in the students.
- To prepare the students for social disaster management.
- To use the technical knowledge to solve the real life problems.
- To realise the social responsibility for being a citizen of the country.
- To make the students capable of identifying the serious social issues and its solution.

Expected Outcomes regarding values and skills:

- Working in a team and with different team members.
- Management skills
- Leadership qualities
- Social awareness
- Personality development

3.6.8 How does the institution ensure the involvement of the community initiatives reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?

- Institute organises blood donation camp
- Students from nearby engineering colleges come to visit our institute and see the proceedings during our inter-institute technical competitions.
- People from various NGOs come to address our students, who in turn volunteer for their activities.
- Regular NSS camp creating awareness on social issues, primary and basic health awareness needs to be organised in nearby villages. Faculty coordinators and students ensure the involvement of villagers and their leaders while planning and execution of these activities.
- Computer learning programs for the school students are also conducted to make them computer literate.

3.6.9 Give details on the constructive relationships forged (if any) with other institutions of the locality for working on various outreach and extension activities.

- Institute students are taking up various outreach and extension activities for the society such as wall of humanity, blood donation camps, Cleaning Camp-Lonavala Railway Station, orphanage visits and interaction with students over there.
- Students and staff visited the orphanage in Andheri East on the occasion of birthday celebration of our student Ms. Janice Gonsalves. They played various games with the children in the orphanage and gifted them with the utility things. On 3rd May 2016 total, 120 people from SKNSITS Lonavala visited these children and brought some smile on their faces.
- Various activities such as Gad-samvardhan, yoga day, Heartfullness program, etc. are organized by the institute.
- The details of various such activities carried out in the academic years from 2013-14 to 2016-17 are mentioned in Annexure VI, Table 3.6.2.

3.6.10 Give details of awards received by the institution for extension activities and/contributions to the social/community development during the last four years.

The institute is excelling in various social activities. Two of our faculty members have been awarded by the SPPU and Morya Gosavi Pratishthan for their contributions towards social development. The details are mentioned in the table below.

Sr. No.	AY	Name of Faculty	Award Details
1	2013-14	Dr. S. P. Narote	Best Teacher Award
2	2016-17	Dr. P. H. Patil	Morya Gosavi Prestigious Award
3	2015-16	Mr. G. V. Khandekar	Best Student Welfare Officer Award (SPPU)

3.7 Collaboration

3.7.1 How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives-collaborative research, staff exchange, sharing facilities and equipment, research scholarships, etc.

Being in the initial stage of development, the institute is trying to achieve its academic brilliance by institutional collaboration with other institutes and universities. Institutional collaboration with different industries, laboratories and institutes in brief are as shown in figure 3.7.1, with examples given below:

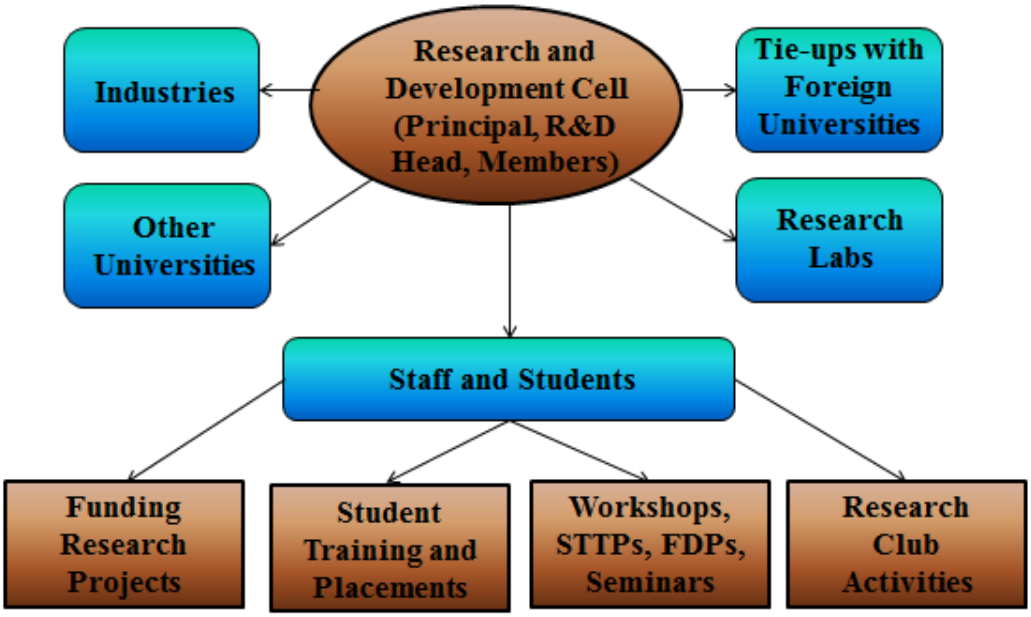


Figure 3.7.1 : Various Institutional Collaboration

- Institute faculty, Dr. Vandana M. Rohokale has received a research grant for her Ph. D. from AAU, Aalborg, Denmark and she has completed her PhD work. Two faculties of the institute Mr. J. R. Shaikh and Mr. S. M. Patil received a research grant for their Ph. D. from TUS, Bulgaria.
- Institute has collaborated with different industries for research work.
- Mr. P. B. Barapatre, was deputed as Assistant Professor in STES, Rwanda, Kigali Campus for the period 21st October 2015 to 12th February 2016.
- Mr. Karan Murkute, a student of Mechanical Engineering Department went for the international internship program at the AAU for the duration of 45 days from 17th June 2015 to 1st August 2015. He worked under Prof. Beyon Petrov for the project titled Control a Rover (Robot) with the help Android Application.
- Mr. Maitreya Pachpute, a student of Electronics & Telecommunications Engineering Department went for the international internship program at the AAU for the duration of 45 days from 5th June 2017 to 23rd June 2017. He worked under Dr. Williams for the project titled Smart Refrigerator using Internet of Things.

3.7.2 Provide details on the MOUs/collaborative arrangements (if any) with institutions of national importance/other universities /industries/ Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.

MOUs signed by the institute with other institutes and universities are helpful for the students and faculties to carry out their research. Details of the MOUs are briefly given in Table.3.7.2.a and Table.3.7.2.b. STES also signed MOUs with Erasmus Mundus External Cooperation Window for faculty exchange, MS, Ph.D. under European Commission funded projects and CTIF, AAU (The AY 2008-09) for Ph.D. program of faculties and TUS (The AY 2016-17) for International Internship for undergraduate students.

The objectives of collaborative agreements are as follows:

- Industry sponsored projects on recent technology oriented problems.
- Experts are invited for delivering sessions on various latest technologies.
- Make available sophisticated and costly equipment to the institute for research.
- Provide financial assistance for the development of a center of excellence at Institute.
- Participate in teaching programs, workshops and training programs organised by the Institute to adopt recent technology in the industry.
- Provide facilities for hands-on training to students.

Table3.7.2.a mentions the MOUs signed by the institute with different industries whereas Table 3.7.2.b gives count of MOUs signed by individual departments. More details of departmental MOUs are mentioned in Annexure VI, Table.3.7.2 b.

Table No. 3.7.2.a: MOUs Signed with Industries

Sr. No	Companies	DATE
1	Adroit Autotech	18-08-17
2	Internshala	27-04-17
3	Opulent Infotech	19-04-17
4	EIE Projects India	24-03-17
5	Robokart	09-01-17
6	Margadarshan_VJTI	02-01-17
7	Mr. Ganesh Khadke	29-12-16
8	Global Dialect language Solutions	03-10-16
9	Ecorise software solutions	28-09-16
10	Aedifico Tech Pvt. Ltd	14-09-16
11	ETA	07-09-16

12	Elite Techno Groups	27-08-16
13	CMI Aalborg University 2016	10-08-16
14	Reliance Jio	10-08-16
15	Educate to Automate, Pune	07-08-16
16	ecoRise Software Solutions	02-08-16
17	Coderoot	02-08-16
18	ecoRise Software Solutions	02-08-16
19	Coderoot	02-08-16
20	Gofigito	01-08-16
21	KENIN TRANSFORMER, LATUR	23-07-16
22	Codeest Software Factory	14-07-16
23	ELEATION Element Simulation Academy	14-07-16
24	Codeest Software Factory	14-07-16
25	Mr.NileshMundphan	15-06-16
26	Mersion	26-05-16
27	SEED Infotech	10-03-16
28	Ms. Bhavana Palrecha, Lonavala	01-01-16
29	TrueCopy	05-10-15
30	EIE Projects India	07-09-15
31	The Chopras	27-07-15
32	Jamboree Education Pvt. Ltd.	14-07-15
33	DeAsra Foundation Pune	06-02-15
34	KENIN TRANSFORMER, LATUR	18-12-14
35	PROLIFIC SYSTEM, PUNE	17-12-14
36	P S Technology	15-12-14
37	Mr. ParthaSarathi	13-09-14
38	N & N CHOPRA , DELHI	03-09-14
39	Zensar ESD	26-05-14
40	IFS Academy, Pune	18-01-14
41	PROLIFIC SYSTEM, PUNE	17-08-13
42	Ms. Bhavana Palrecha, Lonavala	28-01-13
43	Ms. Bhavana Palrecha, Lonavala	10-01-13
44	Synechron Technologies Pvt Ltd	08-08-12
45	Object Technologies	09-07-12

Table No. 3.7.2 b: MOUs with the departments

Department	Institute	MECH	COMP	IT	E&TC	ELECT
Number of MOUs	22	3	4	3	5	8

3.7.3 Give details (if any) on the industry-institution-community interactions that have contributed to the establishment/ creation/up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories /library/ new technology/ placement services, etc.

The institute has been in continual interaction with industry and community. Regular events are held under this linkage. Some of such events are listed below.

- Industry sponsored projects.
- Earn and learn scheme.
- Student training facility is created through industry – institute interactions.
- Placement assistance by the training agencies (Zensar and Persistent)
- GISFI sponsored Ph. D. programs for faculties.

The various industry-institute-community interaction related activities have been conducted every year which help staff and students to upgrade the academic excellence. The institute has signed the different MOUs with the industry and foreign universities. Name of companies and their contribution in supporting the faculty are as follows:

- Elite Techno Groups: Designing of different components of automobile.
- ELEATION Element Simulation Academy: Finite element analysis.
- IFS Academy, Pune: Finite element analysis.
- EIE Project India Ltd.: automation and PLC SCADA.
- AEDIFICO Tech. Pvt. Ltd.: Control System Design.
- ABLAB Solutions : Automation.
- Prolific, Pune: PLC SCADA.
- Zensar ESD: enhancing vocation skills.
- Seed Infotech: leading Training Institute in Information Technology Courses.
- ecoRise Software Solutions: web application development.
- P.S. Technology: design and development of Robots.
- CHELSIO Communication: Internet of things.
- Educate to Automate.
- Reliance.
- Gofigito Educorp LLP.
- True copy Credentials Pvt Ltd.
- Mersion.

Placements:

Success of the institute lies in the placement of the students in good industries. Although the institute is very young, the placement figures are

up to the mark. Institutional placements for the academic years 2014-15, 2015-16 and 2016-17, are given in detail in the Table No. 3.7.3.a.

Table No. 3.7.3.a Institute Placements

Sr. No	Dept.	Name of Company	Number of Students Placed
		AY 2017-18	
		Accenture	01
1	MECH.	**AY 2016-17**	
		Accenture, Tech Mahindra, Amazon, M-phasis	14
		AY 2015-16	
		Cognizant, Accenture, Capgemini, Workz Media, Taj Eduglobe Ltd, TCLS, OFOS Service Pvt Ltd, Mahindra & Mahindra, Tech Mahindra, Creative Tools & Components, Sigma Technologies	28
		AY 2014-15	
		Accenture, Capgemini, Infosys BPO, Enkei Wheel	07
2	COMP	**AY 2017-18**	
		Accenture	02
		AY 2016-17	
		Accenture, OFSS, Cognizant, Duke IT, Epic Research Ltd, FACE	28
		AY 2015-16	
		Cognizant, Accenture, OFSS, Manhattan Associates, M-phasis, Ezest, PC Technologies, Taj Eduglobe Ltd., Web Tech Solutions, Amazon, Augmento Sys Pvt Ltd., Beeinspire Technologies, HEMRI, IBM, Mahindra Bristlecone, SQS India Infosystem Pvt Ltd., TIAA Global Services, Sunguard.	37
		AY 2014-15	
		Accenture, Capgemini, Cognizant, Cummins India, Qed Technology, Tagrem, Virtusa, Zensar Technologies	21
3	IT	**AY 2016-17**	
		Accenture, Epic Research Ltd, M—phasis	03
		AY 2015-16	
		Accenture, Tech Mahindra, Mind Tree, Zensar, Everest Solution, M-phasis, Taj Eduglobe Ltd.	29
		AY 2014-15	
		Accenture, Cognizant, L&T InfoTech, QED Solutions, Focus Softnet	09
4	E&TC	**AY 2017-18**	
		Accenture	01
		AY 2016-17	
		Tech Mahindra, Epic Research Ltd, Amazon, M-phasis	06

		AY 2015-16	
		Cognizant, Accenture, ITC Infotech, iAsys Sol. Ltd., M-phasis, Taj EduGlobe Ltd, Rishbh Instrumentation, Cryoviva, Think & Learn, Amdocs,Wipro.	29
		AY 2014-15	
		Cognizant, Accenture, Airtight Solutions	04
5	ELECT	**AY 2017-18**	
		Accenture	01
		AY 2016-17	
		Cognizant, Accenture	02
		AY 2015-16	
		Capgemini, Accenture, Taj Eduglobe Ltd., Epic, Variate	10
		AY 2014-15	
		Accenture, Infosys BPO, Trident Group, Suzlon, Everest	06

3.7.4 Highlighting the names of eminent scientists/participants who contributed to the events provide details of national and international conferences organised by the college during the last four years.

In the last four years, institute has organised seminars, workshops, and conferences and invited eminent personalities who have interacted with our faculty and students in enriching their knowledge. The Eminent Scientists contributed in National and International conferences detail is given in Table No. 3.7.4.

Table No. 3.7.4: Details of the Eminent Scientists Contributed in Conferences and Workshops

Sr. No.	Eminent Professors/ Persons	National/ International Conferences/ Workshops Organized by the Institute	Name of organizing Department
1	Dr. Gunthi Gunarathne, Director, LabVIEW Academy and Center of excellence or Industrial instrumentation , Scotland, UK	International Conference on Advances in Engineering and Technology Lonavala, Pune, India (ICAET-2013) Organizers"	SPJ Centre for Multidisciplinary Research (SCMR), SCMR's Association of Researchers (SAR), SKNSITS
2	Jaspreet Dhupia, Singapore.	International Conference on Advances in Engineering and Technology4Lonavala, Pune, India (ICAET-2013) Organizers	SPJ Centre for Multidisciplinary Research (SCMR), SCMR's Association of Researchers (SAR), SKNSITS
3	Dr. N.K Uke HOD IT SCOE, Pune.	National Conference on 'Advanced Computer Networking'	Computer

4	Dr. B.R. Patil Principal ViMEET, Mumbai.	National Conference on 'Advanced Computer Networking'	Computer
5	Dr. P. Vijay Kumar, and Dr. P. Vetrivellan, Associate Professor , VIT Chennai.	FDP, Network Stimulator(NS2-NS3)	E&TC
6	Mr. Christian Hujer, CEO, Nelkinda software Craft	Seminar on Object Oriented and Software Engineering (OOSE)	Computer Engineering
7	Dr. A. W Kiwlekar HOD Dr. BATU Lonere	Invited Talks on Software Architecture	Computer
8	Mr.Sharad Tandale CEO, Indiana Technologies & Solutions	Chief guest for EDC workshop	Computer, IT and Electrical
9	Dr. Parikshit Mahalle HOD, SKNCOE, Pune	Invited Talks on higher studies opportunities abroad	R&D
10	Dr. Vishram Bapat	Lecture on "Earthing"	Electrical
11	Dr. R. G. Ratnawat, Director, ITM-SIA Bussiness School, Mumbai	Lecture on "Personality Development"	Electrical
12	Dr. TansenChaudhari, Chief Operating Officer, Fluid Controls Pvt. Ltd. Pune	National Level Conference on "Recent Trends in Mechanical Engineering" in Association with Savitribai Phule Pune University	Electrical
13	Dr. Parag Kulkarni Scientist and CEO, Iknowlation	IESS`17	Computer
14	Dr. Padmaja Joshi, Joint 14Director, CDAC, Mumbai	IESS`17	Computer
15	Dr. Amol Admuthe. Associate Professor and HOD IT, RIT, Isalampure	IESS`17	Computer
16	Mr.Prince Arora, CEO, Technogreeks, Pune	IESS`17	Computer
17	Dr. Jayesh Minase, Sinhgad Overseas Cell, STES	Conducted Invited Talk Study Abroad	R&D
18	Mr. Prashant Dhotre, Asst. Professor, SITS, Narhe.	Conducted Invited Talk on higher study opportunities abroad	R&D
19	Ms. Smriti Dagur, President, IETE, Delhi	Promotion of IETE & Institute Visit.	R&D
20	Khushal Singh Bithu, Senior Research Associate, Elite Techno Group	3 day workshop on "Automobile and Vehicle dynamics"	Mechanical

21	Dr. Pratapsingh K. Desai, President ISTE, Delhi	Institute Visit	Institute
22	Mahesh More, Manager, Infosys, Pune	Project Exhibition	Mechanical
23	Mr. Tulshiram Ingle, Retired Executive Engineer, MSEDCL	Lab visits and Invited talk	Electrical
24	Dr. Rahul More, CEO, Ocean Technology	FE Induction Progarm	Institute
25	Dr. Pranav Pawar, SKNCOE, Pune	Research Convention-16	R&D
26	Dr. Vivek Deshpande, Professor, VIT, Pune	Research Convention-16	R&D
27	Prof. Madhukar Deshmukh, Professor, TCOER, Pune	Research Convention-16	R&D
28	Dr. Vivek Yenkkundi, Principal, Lokmanya Tilak College of Engineering, Mumbai.	Invited Talk	Mechanical
29	Mr. Sangram Deshmukh, Direcotr, ETA, Pune	Invited Talk	Electrical
30	Mr. Ashish Kalambe, Director, Skywings Technology Pvt. Ltd.	Invited Talk	Electrical

3.7.5 How many of the linkages/collaborations have actually resulted informal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated

Several faculties are benefitted due to collaborations with foreign universities for their Ph.D. research work. Also under the MOU signed by AAU, Denmark, Mr. Karan Murkute, and Mr Maitreya Pachpute went through the international internship program. The details of the same are mentioned in Table 3.7.5.a, below.

Table. 3.7.5.a: Faculty and Student Beneficiaries due to Foreign Collaborations

Name of the Faculty/ Student	Collaboration	Educational Benefit
Dr. V. M. Rohokale	CTiF, AAU, Denmark	Completed PhD
Mr. J. R. Shaikh	TUS, Sofia, Bulgaria	Pursuing PhD
Mr. S. M. Patil	TUS, Sofia, Bulgaria	Pursuing PhD
Mr. Karan Murkute	AAU, Denmark	UG Internship
Mr. Maitreya	AAU, Denmark	UG Internship

Pachpute		

Few examples of collaborations with industries which resulted into internship opportunities for the individual department students are highlighted in Table 3.7.5.b. Through this collaboration, students are getting benefitted in TW marks. The internship details are available in Annexure VI, Table 3.7.5.b

Table No. 3.7.5.b: Department wise Internship Record

Department	Number of Students
MECH	37
COMP	23
IT	11
E&TC	21
ELECT	43

- Curriculum development and enrichment - Workshop and Training Programmes, Competition arranged by company
- Internship and On-the-job training- Yes
- Summer placement- Yes
- Faculty exchange and professional development- Yes
- Research- Yes
- Consultancy- Yes
- Extension -Yes
- Publication- Yes
- Student Placement- Yes
- Twinning programmes- Nil
- Introduction of new courses –Yes
- Student exchange- Yes
- Any other – Nil

3.7.6 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/ collaborations. Any other relevant information regarding Research, Consultancy and Extension which the Institute would like to include.

The institute formally implements research and consultancy activity among faculty and students by encouraging them through following different platforms

1. Research and Development Cell
2. Entrepreneurship Development Cell
3. Industry Institute Interaction Cell
4. Collaboration with foreign universities
5. Signing MoUs with various industries (Ref. Table No. 3.7.2)
6. Google Developer Club
7. Microsoft Campus Club

8. IETE student's chapter
9. Society of Automotive Engineers (SAE)

This Institute and Industry collaboration helps in following ways:

- Provides advanced technology to the staff and students to carry out innovative research
- Helps industries to use infrastructure to conduct training programs
- Facilitate to perform interdisciplinary projects and research
- Live projects can be implemented in industries under the guidance of faculty.
- Alleviates Hands-on training facility for student
- Availability of financial assistance to students and staff for innovative research
- Encourage students and staff for research.

Any other relevant information regarding Research, Consultancy and Extension which the college would like to include.

Nil

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Physical Facilities

4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?

The Institute stands for the well-being and educational upliftment of the students. The institute always follow the norms strictly provided by the SPPU & AICTE. The institute has following adequate facilities:

- Use of ICT in academic and administrative activities.
- LCD projectors in classrooms and laboratories.
- Laboratories have requisite equipment.
- e-library facility.
- Sports facilities to fulfil the needs of the sports activities and competitions.
- Corporate Training Center for conduction of seminars/workshops/ conferences.

Policy for enhancement of infrastructure:

- Regular housekeeping and maintenance.
- Periodic inspection and maintenance of equipment.
- Periodic updating of required software and hardware.
- Regular updating of the library.
- Enhancement of e-learning portals e.g. ERP, e-exam portal.

4.1.2 Detail the facilities available for

a) Curricular and co-curricular activities–classrooms, technology-enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal House, specialised facilities and equipment for teaching, learning and research, etc.
b)Extra–curricular activities–sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural events, Public speaking, communication skills development, yoga, health and hygiene, etc.

a) Curricular infrastructure:

The institute has necessary infrastructure to facilitate the curricular and co-curricular activities of the students. All the departments are well equipped with classrooms, seminar halls, tutorial rooms, laboratories, and sufficient space for hosting all curricular and co-

curricular activities.

Also for conduction of seminars/workshops/conferences, the campus has a Corporate Training Center (CTC) of area 4207 Sq. m. The details of institute infrastructure facilities are as shown in Table 4.1.2.a to Table 4.1.2.d

Table 4.1.1.a Details of Infrastructure

Particulars	Description	For existing intake			
		Nos.		Area (in Sq. m)	
		Reqd.	Avail.	Reqd.	Avail.
Classrooms	Equipped with blackboard and LCD projection facilities with good ambiance	21	21	1386	1575
Tutorial rooms	Equipped in all respect to conduct tutorials.	07	07	231	260
Laboratories	Equipped with multiple sets of apparatus and required software/hardware.	48	48	3168	3360
Workshop	Equipped in all respect to conduct workshop activities.	01	01	200	242.25
Additional Workshop	To carry out additional student activities like BAJA, GOKART, etc	04	04	800	850.11
Seminar Hall	Seating capacity of 150 students with LCD projectors, Public Addressing system, and Whiteboard.	03	03	396	528
Computer Centre	Equipped with latest configuration desktops and software	01	01	150	150
Drawing Hall	Seating capacity of 120 students with drawing boards.	01	01	132	331
Library & Reading Room	Well equipped with reference books, journals, technical magazines, IEEE digital library, science direct, newspaper etc.	01	01	400	491.55

Table 4.1.2.b.: Amenities

Sr. No.	Particulars	Area (in Sq. m)	
		Required	Available
1	Boys Common Room	75	75
2	Girls Common Room	75	75

3	Cafeteria	150	150
4	Stationery Store	10	10
5	First aid cum Sick Room	10	10

Table 4.1.2.c. Common facilities

Sr. No.	Particulars	No.	Description	Area in Sq. m
1	Amphitheatre	01	Open Amphitheatre with seating capacity of 3000	1750
2	Corporate Training Centre (CTC)	01	Full-fledged CTC with three conference halls, 52 fully furnished double occupancy rooms with boarding facility.	4207
3	Guest House	01	Fully furnished the guest house with ten rooms.	194
4	Gymnasium	01	Well equipped with necessary fitness equipment.	311
5	Medical health Centre	01	Full-fledged hospital with full-time doctors.	2748
6	Medical and general store	01	Well equipped with wide range of medicines & general day to day commodities	46
7	Canteens	08	Well maintained hygiene canteen for students and staff	800

Table 4.1.2.d. Computational Facilities

Sr. No.	Type	Required	Available
1	Internet Bandwidth	32	32
2	Dot Matrix Printers	15	28
3	Laser Jet Printer		10
4	3 in 1 Printer		08
5	Legal Application S/W	20	38
6	Legal System S/W	03	10
7	Computers	304	443
8	Scanner	01	01

b) Extra-curricular infrastructure:

The institute encourages and provides facilities for students to participate in various extracurricular activities to inculcate team spirit and leadership

qualities. Institute has appointed a team of faculty members to look after these activities.

NSS: As per the guidelines of the SPPU, the Institute has formed an NSS unit of students. The NSS Programme office provided with sufficient space for its functioning. It is a platform to serve the community through extra-curricular activities such as: Tree plantation, Blood donation, Railway station cleaning, Manuskichi Bhint, etc.

Sports: The Institute has a sports complex which includes running track, football ground, cricket ground, basketball court, lawn tennis court, etc. A separate gymnasium facility for boys and girls is provided in the institute campus. Students are encouraged to play and participate in different sports. STES has cricket academy for offering the platform to students who want to develop a career in cricket. The details of institute's sports infrastructure facilities are as shown in Table 4.1.2.e

Table 4.1.2.e: Sport Facilities

Sr. No	Particulars	Number	Area & dimensions
1	Golf course (Upcoming)	01	140000 Sq. m
2	Cricket ground	01	17662.00 Sq. m
3	Football ground	01	6825 Sq. m
4	Hockey ground	01	6825 Sq. m
5	Basketball court	02	1160 Sq. m
6	Volleyball court	02	720 Sq. m
7	Athletic track	01	10560 sq. m (11 track 800 m)
8	Indoor games	01	340 Sq. m
9	Swimming pool	01	L-25 m; W-12.5 m; D-1.5 m
10	Gymnasium	01	340 Sq. m
11	Lawn tennis court	02	1340 Sq. m.

Cultural Activities: Institute organises various cultural events like Spandan, Kojagiri, Dandia Night, Holi Celebration, etc.

Table 4.1.2.f: Cultural Facilities

Sr. No.	Particulars	Number	Area (in Sq. m.)
1	Amphitheater	01	1750
2	Seminar halls	03	528

Health & hygiene activity: Institute has campus level medical center Rural Health & Training Center (RHTC) with residential doctor. Free medical service is provided to the staff and students.

Yoga: Yoga and meditation sessions are conducted for the students and staff in the premises.

4.1.3 How does the institution plan and ensure that the available infrastructure is in-line with its academic growth and is optimally utilised? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution/Campus and indicate the existing physical infrastructure and the future planned expansions if any).

The institute was established in 2011, requisite infrastructure has been added progressively every year with increase in intake and modifications have been made to meet the academic growth for which the details of amount spent in last four year is mentioned in Table 4.1.3 Apart from this, every floor of the Institute is equipped with sufficient number of water purifier, fire extinguisher etc.

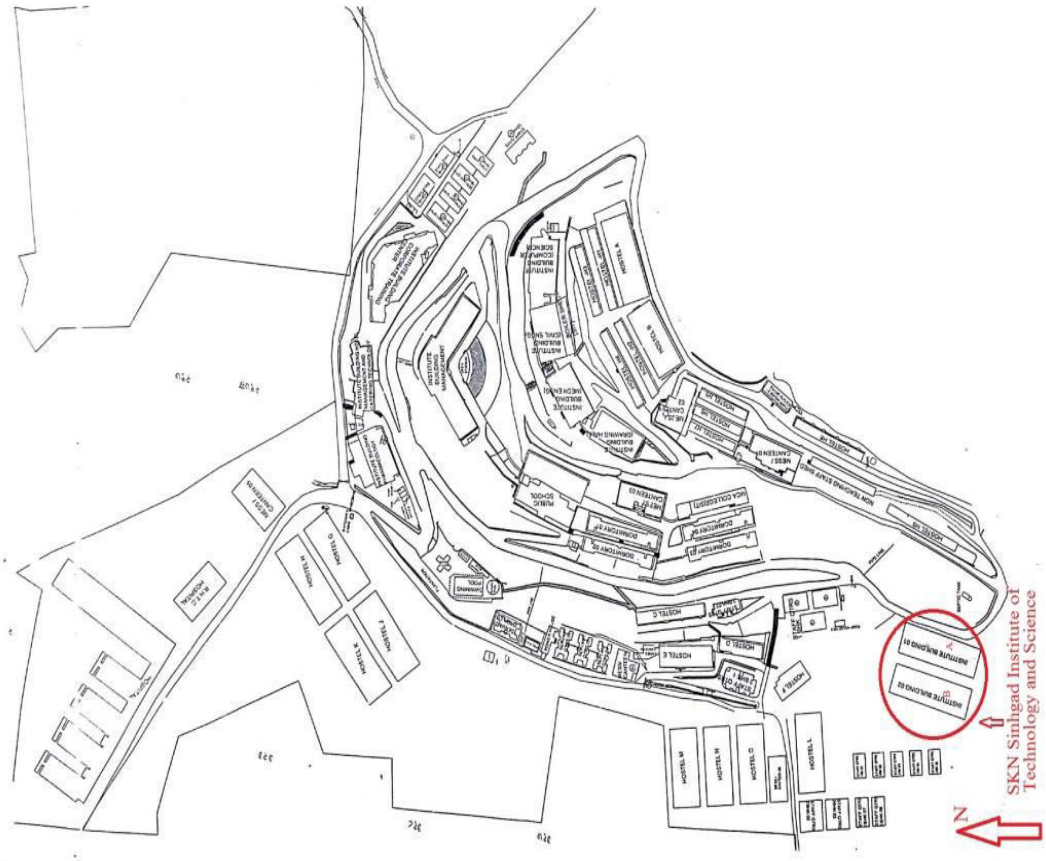


Fig 4.1.3 a: Master Plan of Campus

Table 4.1.3: Details of Amount Spend (In Lakhs)

Items	2016-2017	2015-2016	2014-2015	2013-2014
Building	54.56	44.65	525	3.68
Furniture and fixtures	0.83	9.42	8.09	52.57

Library Books	1.74	2.17	7.03	4.35
Computers & Computer Equipment	0	10.34	22.62	21.37
Software	0.35	4.57	8.24	2.93
Equipment's & Tools	6.63	13.29	47.09	95.36
E Journals	0	2.54	0	0

The master plan of campus and upcoming new central library is shown in figure 4.1.3.a and 4.1.3.b, respectively.

Upcoming new central library detailed plan

No of floors :- Basement + 8

Total area: - 10248 Sq.mt.

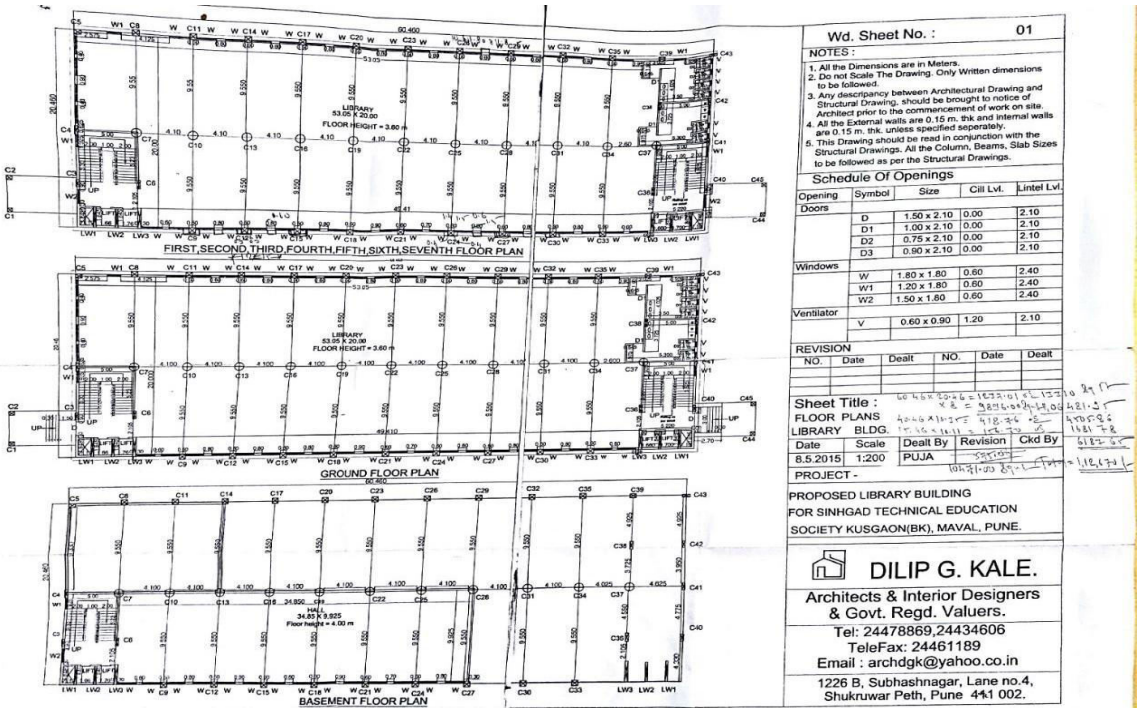


Fig 4.1.3.b: Up-coming New Central Library

4.1.4 How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?

- Ramps at the main entrance of the Institute's buildings.
- Security personnel at various locations in the campus to facilitate the specially abled students.
- Separate Water Closet (WC) available.

- In case of students who are especially abled efforts are made to conduct their classes and examinations in classrooms at ground floor.
- Wheel Chair facility is available.

4.1.5 Give details on the residential facility and various provisions available within them:

Separate hostel facilities have been provided for girls and boys with wardens. Also, teachers are allocated hostel wise to address the student's problem, if any. All the rooms in the hostels are well furnished. The details are mentioned in Table 4.1.5.

Table 4.1.5 Hostel facility details

Sr. No.	Description	Boys' Hostel	Girls' Hostel	Dormitory facility
1	Area (in Sq. m)	40851	1757	6838
2	No. of buildings	04	03	04
3	No. of rooms	337	110	4
4	Students per room	3 or 4	3 or 4	120 beds
5	Total capacity	941	199	480
6	Area of each room (in Sq. m)	55	52	1709

Following services are available with every hostel:

- Well-furnished room.
- Reading hall at girl's hostel.
- Prayer Room.
- TV Hall.
- Recreation room equipped with indoor sports facility.
- Parking area.
- Free Wi-Fi facility.
- Daily newspapers.
- Hybrid hot water systems.
- Water cooler with the purifier.
- Fire-fighter system.
- Induction heaters are provided to girls' hostel.
- Intercom facility.
- For financially weak students, dormitory facility is available with 40% concession in hostel fees.
- Generator backup.
- Canteens.
- CCTV.

- First Aid box.
- House keeping.
- Guest house.
- The well-equipped gymnasium is available for the boys 'hostel.
- Laundry facility and utility shops.
- Round the clock vigilance is available on campus through trained security guards employed by the institution.
- Gymnasium.
- The 24x7 medical facility.
- The medical store.

Residential Facility for the Staff:

- The Institute has also provided residential facility to its staff members, and 45 staff members are availing the facility.
- There are total 26 buildings in the campus accomodating 326 flats admeasuring 18822 sq.m.
- For Principal, three Bedroom-Hall-Kitchen (BHK) staff quarter is provided in the Campus.
- For teaching staff members, 1BHK or 2BHK staff quarters, are provided.
- For non-teaching staff, 1BHK and one Room-Kitchen (RK) staff quarters are provided.
- Children park for kids of residential staff.

4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?

Hospital:

- Insurance facility is available for students and staff.
- A hospital with full-time doctors, specialist doctors and 40-bed capacities is available for staff and students. These services are free for all in the campus.
- Ambulance facility is available 24 x 7 hours.
- Sinhgad medical store is available.
- The institute also provides transportation facility to students who are in need to visit specialist doctors in the nearby area or in Pune.
- In addition to this, a multi-specialty hospital of the promoting society at Narhe Campus, Pune caters to all the health related support free of cost to all students and staff.
- STES insured Medical Policy of all students.

4.1.7 Give details of the Common Facilities available on the campus.

The space has been allocated for special units like IQAC, Grievance Redressal Committee, Internal Complaint Committee, Counseling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc. Their location wise details are mentioned in Table. 4.1.7.

Table 4.1.7. Common facility details

Sr. No.	Facility	Location
1	IQAC	A- 007
2	Grievance Redressal Committee	
3	Internal Complaint Committee	
4	Training & Placement Unit	B-303
5	Health Centre	RHTC
7	Auditorium	CTC conference hall
6	Laundry	Near Cafeteria
7	Aqua guard Water Purifier	Departments & Hostels
8	Students Activity Center	Workshop – G101
9	Mess and Canteens	Near Hostel & College
10	Recreational spaces for staff and students	Amphitheatre
		Professional Sports Ground
11	Hybrid solar water heating system	At Hostels
12	Saloon and parlour	CTC
13	Cafe coffee day	Near the main gate
14	3 ATM (SBI, Central Bank of India, ICICI Bank)	Near to hostels.
15	Stationary shop	Near the main gate

4.2 Library as a Learning Resource

4.2.1 Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user-friendly?

Yes, the institute has library advisory committee which is responsible for the effective functioning of the library.

Procedure for the inclusion of resources in the library:

- All faculty members are requested to give list of books for the inclusion of books based on the syllabus prescribed by the SPPU.
- The committee which comprises of technical experts completely

analyses contents, and the quantity suggested by the faculty.

- The approved proposals are forwarded to the STES management for final approval.
- After the approval, the requested resources will be made available in the library.
- The entire process is rigorous and rapid and usually completes within a week.

Table 4.2.1 Library advisory committee

Sr. No.	Names	College Designation	Dept.	Library committee designation
1	Mr. S. N. Mali	Assistant Professor	ES	Chairman
2	Mr. S. S. Dahikamble	Librarian	Library	Secretary
3	Mr. S. H. More	Assistant Professor	MECH	Member
4	Mr. P. G. Mahajan	Assistant Professor	ES	Member
5	Mr. Vivek Saxena	Assistant Professor	ELECT	Member
6	Ms. R. S. Patil	Assistant Professor	COMP	Member
7	Mr. C.S. Pagar	Assistant Professor	IT	Member

Significant Initiatives for efficient operation of the library:

- Procurement of commercial library software.
- Issuing the library cards with a barcode to the students and staff for the issue of books.
- Digital library. (Online NPTEL video, E-learning CDs)
- Reading hall facility beyond working hours.
- Book exhibitions.
- E-Resource Collection.
- Daily newspapers.

4.2.2 Provide details of the following:

- The total area of the library and reading room : 491.55 Sq. m.
- Total seating capacity : 150
- Days Timings
  - Working days : 08.15 am to 8.30 pm
  - Holidays : 08.15 am to 5.15 pm
  - Before examination days : 08.15 am to 8.30 pm
  - During examination days : 08.10 am to 12.00 Mid-Night
  - During vacation : 08.15 am to 5.15 pm.
- Layout of Library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)

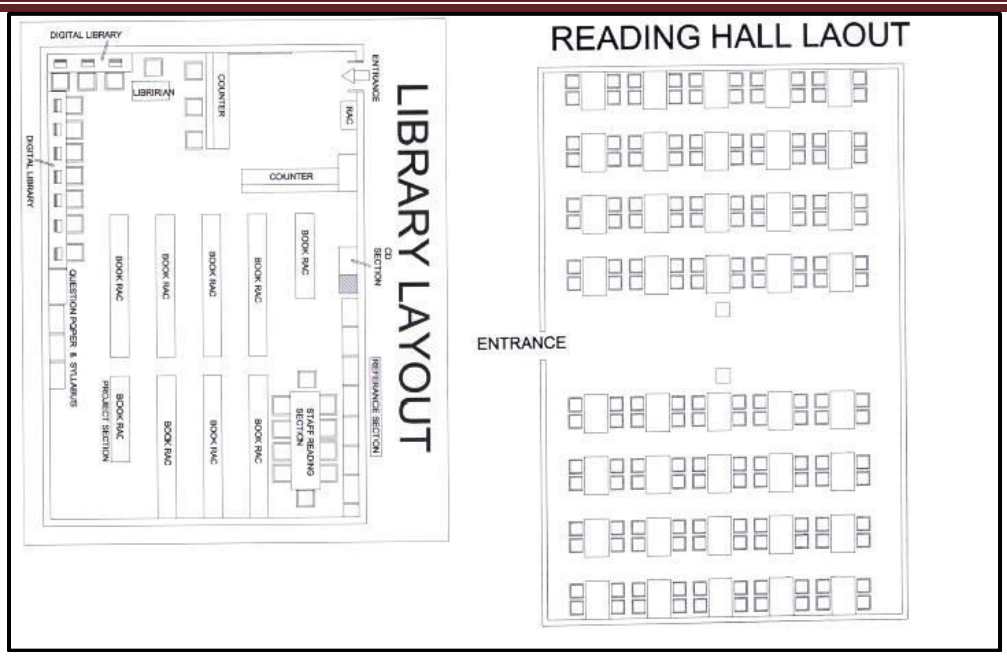


Figure 4.2.2 Layout of the Library

4.2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals, and e-resources during the last four years.

On the basis of changes in curriculum, research requirements, recommendations from staff and on student's demand the librarian raises the requirement of book titles, journals, codes, and standards, etc. and proposes a budgetary requirement for the procurement. Library Committee takes a decision on the provision of allocation of the requirement. Actual procurement is carried out after the allocation of the budget.

Table 4.2.1 Procurement details of past 4 years

Library holdings	2016-17		2015-16		2014-15		2013-14	
	Qty	Cost (Lakh)	Qty	Cost (Lakh)	Qty	Cost (Lakh)	Qty	Cost (Lakh)
Textbooks	12021	58.00	7566	30.47	7142	28.38	5686	21.41
Reference Books	1918		1380		1350		1200	
Journals/ Periodicals	40	0.80	38	0.198	49	0.161	35	0.129
Competitive Magazine	4	0.029	4	0.035	-	-	4	0.023
Newspapers	5	0.012	3	0.043	3	0.061	3	0.065

Total (Periodical & Newspapers)	49	0.84	45	0.27	52	0.22	42	0.21
E-Resources	1	3.7	1	2.5	NIL	NIL	7	13.7
Procurement & Progressive details from start to current year								
Textbooks	4455	27.53	424	2.08	1456	6.97	975	4.32
Reference Books	538		30		150		137	
Periodicals & News paper	49	0.84	45	0.27	52	0.22	42	0.21
E-Resources	1	3.7	1	2.5	NIL	NIL	7	13.77

4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection? OPAC (Online Public Access Catalogue)

- **OPAC:** Online Public Access Catalogue is a digitalize search engine, established in the library for ease of searching the books. The system facilitates the search on the basis of title, author, keywords, publisher, etc. It helps to ensure the availability of the book in the library.
- **Electronic Resource Management package for e-journals:** The centralised e-journals access is available in the library. (IP Base E-Journal access in college)
- **Library website:** Summary of library information is available on institute website.
- **Library automation:** The library is facilitated with AutoLib software and barcode system for the smooth accession of books.
- **Total number of computers for public access : 10**
- **Total number of scanner : 01**
- **Total numbers of printers / Copier for public access : 02**
- **Internet bandwidth/ speed Institutional Repository :2 Mbps**
- **Participation in Resource sharing networks /consortia:** Open access to students after producing the valid I-card in any of the libraries of sister institute and SPPU is available.
- **Institutional Repository**:
  a) Article Repository: Published research paper/article of the faculty members: Yes
  b) Book Repository: Published books of the faculty members: Yes
- **Content management system for e-learning: Library has content management system for e-learning:** Yes
- The library is networked with NDL, British Council Library, Jaikar Library (SPPU), ARAI Pune.

- The library has 505 CDs consisting of the various e-book.

4.2.5 Provide details on the following items:

UG & PG students are allowed to keep the issued books for 7 days; After 7 days they have to return or reissue the books. Faculty members can issue maximum 10 books per semester. The selective titles are available for reference to students and faculty.

Table 4.2.5. Details of Library Usage

Number of Books issued to particular	UG - 04 , PG - 06, Teaching Faculty – 10
Average number of walk-ins per day	100
Average number of books issued/returned per day	75
Ratio of library books to students enrolled	1:4
Average number of books added during last three years	1671
Average number of login to OPAC	50
Average number of login to e-resources per day	50
Average number of e-resources downloaded/printed (per day)	20
Number of information literacy training organized	Once in a semester
Details of Weeding out of books and other materials	1.Acc.No.5493, 5494, 5495, 5496, 5496, 5467, 5498, 5499, 5500, 5501, 5502, 5503, 5504 & 5525 (The account number was allotted by mistake to the above mentioned books, which belongs to SIT Lonavala.) 2.Acc.No.4211, 4822, 2783, 1680, 949, 3403, 2769, 12, 4513, 4521, 4528, 4543, 4544, 4544, 4570 (These books are written–off with permission of Hon'ble President, as few faculties left the college along with issued books without intimation and No Dues; moreover, steam tables were lost during SPPU examination.) 3. Acc.No.979, 2086, 2809 (Theses books has been lost by the student and paid fine for same.

4.2.6 Give details of the specialised services provided by the library.

Reference	Yes, Available
Reprography	Yes, Available
Inter Library Loan Service	Yes, It is used within campus
Information deployment & notification	Yes, Display on boards
Download facility	Yes, Digital library& internet
Printing	Yes, Available
Reading List/Bibliography compilation	Yes, Access from AutoLib
In house /remote access resources	Yes, Available
User Orientation and awareness	Yes, for new students
Assistance in searching Databases	Yes, OPAC

4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the institute.

The library staff members extend their services to the students and teachers in following ways.

- Personal guidance is offered to trace any book.
- Assist students during the digital library hours.
- Reprographic facility extended to the students on request.
- SPPU Syllabus and question papers.
- Overnight issues of reference books
- Assistance in downloading e-content.
- The library provides indexes to UG project reports / PG dissertations of the students and staff.
- Provide the books, journals, periodicals, magazines and other resources.
- Link for all question papers through FTP.

4.2.8 What are the special facilities offered by the library to the visually/physically challenged persons? Give details.

- Priority services are available while using the library resources.
- The required books are made available by the library staff

4.2.9 Does the library get the feedback from its users? If yes, how is it analyzed and used for improving the library services? (What strategies are deployed by the library to collect feedback from users? How is the feedback analyzed and used for further improvement of the library services?)

- Yes. The library collects regular feedback from the teaching staff members and students.
- The suggestion box is kept at the entrance of the library for getting valuable suggestions and feedback from students.
- Suggestions are reviewed and analyzed by library committee.
- Depending on the feedback, the necessity actions are taken e.g. the reading room facility hours are extended before and during the examination period.
- Depending on the students/faculty demand, the addition of books in the book bank facility is made available to all departments.
- Addition in the magazines, general knowledge books, newspapers, books for general reading, competitive examinations, etc. are also done on similar lines.

4.3 IT Infrastructure

4.3.1 Give details on the computing facility available (hardware and software) at the institution.

The Institute has provided the necessary computing facilities. The details of supporting hardware facilities are shown in Table 4.3.1.a to Table 4.3.1.c.

Table 4.3.1.a Hardware facility

Sr. No.	Description	Qty
1	Server	02
2	Desktop Computers	443
3	Laptop	01
4	Printers	38
5	Printer with Scanner	08
6	Scanners	01
7	LCD Projector	31
8	Over Head Projector	02
9	Display Screen	25
10	PA System	08
11	UPS	08
12	Fax machine	01

Server configuration for Central Internet Facility : Server Dell PowerEdge T110 II, Cyberroam Firewall, AC- Blue Star 2Tone, Switch CISCO 2960 24 Port, Switch D-Link DES 1228ME L2, Fibre Media converters, 32 Mbps leased line (1:1)Telephone Exchange 8 PRI lines

Table 4.3.1 b Configuration of computers

SR. NO	PARTICULAR	CONFIGURATION	QTY
1	DELL OPTIPLEX 380	Intel Dual Core Processor, 2 GB RAM, 500 GB HDD	85
2	DELL OPTIPLEX 390	Intel Core i3 Processor, 2 GB RAM, 500 GB HDD	160
3	DELL OPTIPLEX 3010	Intel Core i3 Processor, 2 GB RAM, 500 GB HDD	75
4	DELL OPTIPLEX 3020	Intel core i5 Processor, 4 GB RAM, 500 GB HDD	60
5	HP MT 280 G1 MT	Intel Core i5 4th Gen. Processor, 4 GB RAM, 500GB HDD	30
6	DELL OPTIPLEX 360	Intel Core 2 Duo Processor, 1GB RAM, 160 GB HDD	30
7	HP	PIV, 1 GB RAM, 80 GB HDD	03
TOTAL			**443**

Table 4.3.1.c Software facility department wise

Licensed Software		
Sr.no	**Dept.**	**List of software**
1.	MECH	Microsoft Windows 7 OS, MS Office-2007, CATIA V6, MATLAB, ANSYS 15.0, Pro-E (Creo 1.0),Master Cam X9 version, MSC Fatigue complete package, MSC Software University MD FEA Motion bundle, Quick heal End point Security.
2.	E&TC	Microsoft Windows 7, MS Office 2007, Quick heal End point Security, NI-Multisim -11.0,Keil Version-4,Flash Magic, Microchip, MP Lab, Xilink, MATLAB, TC, Antenna Software,
3.	COMP	Windows 7, Windows 2008 Server, MS. Office-2007, MySQL Server, Netbeans, Flash Magic, Java, Python 3.4, Turbo C7, Adobe Reader, Fedora., Quick heal End point Security,
4.	IT	Windows 7, MS. Office-2007, Staruml, Netbeans, Flash Magic, Java, Python 3.4, Vmware, Turbo C7, Adobe Reader, Fedora, MySQL Server, Ubuntu 14.4, Quick heal End point Security
5.	ELECT	Windows 7, MS Office-2007, MATLAB, , Keil, Mplab, Flash Magic, Rockwell, Quick heal End point Security
6.	ES	Windows XP 2, MS. Office-2007, Eclipse, Turbo C, C++, Java, Quick heal End Point Security, E-exam portal, ETNL Language lab,
7.	Office	Windows 7, Tally ERP 9.0 Version and Aspire for Office

		Automation, Quick heal End point Security, MS Office-2007, APART for accounts
8.	No of computer with Internet.	443
9.	Any Other	ERP Software (GEMS)

4.3.2 Detail of the computer and Internet facility made available to the faculty and students on the campus and off-campus?

- Dedicated servers for downloading several open source software and applications.
- Online access to ERP resources.
- Dedicated 32 Mbps leased line (1:1)
- Almost all computers on the campus are connected to the internet.
- Administrative office, Principal, HOD and faculty cabins have the internet facility.
- The ratio of computers to students is 1:4.6, which is better than the norms , which states 1:6
- Every hostel is equipped with Wi-Fi facility.
- The institute has a digital library for internet access and Wi-Fi facility in the institute and campus.
- recently, campus has signed an MOU with Reliance Jio.

4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

The various plans and strategies of the Institute for deploying and upgrading the IT infrastructure and associated facilities are as follows:

- The institute upgrades the computer systems of the different laboratories as per the requirements of the SPPU syllabus and advancement in the technology.
- All the classrooms of the institute are equipped with ICT facility.
- The institute provides Wi-Fi facility for staff and students.
- Depending on the strength and advancement in the technology institute always strive for better IT infrastructure and associated facilities such as internet facility, printers, scanner, reprographic machines, and required number of software.
- LCD projector is available in selected computer laboratories for on-line demonstrations of teaching and learning for computer languages.
- Institute has responded to the SPPU evaluation patterns by providing online platform to students such as e-Exam portal and K-point portal.
- Internet connectivity facility is available in classrooms for online

demonstration to students.

Table 4.3.3 Year wise internet up-gradation

Sr. No.	Financial Year	Sanctioned Intake	Remarks
1	2017-18	480	32 Mbps
2	2016-17	480	32 Mbps
3	2015-16	480	32 Mbps
4	2014-15	480	12 Mbps
5	2013-14	480	08 Mbps
6	2012-13	480	04 Mbps
7	2011-12	300	04 Mbps

4.3.4 Provide details on the provision made in the annual budget for procurement, up gradation, deployment and maintenance of the computers and their accessories in the Institution (Year wise for last four years)

The details of a provision in the annual budget are shown in Table 4.3.4.

Table 4.3.4 Year-wise details for last four years (Rs. in Lakh)

Items	2016-2017		2015-2016		2014 – 2015		2013 – 2014	
	Allocated Budget	Expenses	Allocated Budget	Expenses	Allocated Budget	Expenses	Allocated Budget	Expenses
Internet Leased Line	3.50	3.43	8	6.32	2.5	2.4	4	3.98
Computer Hardware and Software	0.5	0.35	15	14.91	31	30.86	25	24.3
Repairs, Maintenance on computers & others	0.01	0	0.025	0.02	0.01	0.004	0.01	0.004

4.3.5 How does the institution facilitate extensive use of ICT resources, including development and use of computer-aided teaching/learning materials by its staff and students?

The institution facilitates extensive use of ICT resources including development and use of computer-aided teaching and learning materials by the faculty, staff and students in the following ways:

- Faculty members prepare their lectures with extensive coverage and supportive study material using the multimedia tools. This course

material is available on ERP.

- The online e-Exam portal provides MCQ tests practice for students.
- Faculty and students access the online journal in the institute.
- Faculty members make use of PPTs/videos/audio/spoken tutorials for effective session delivery.
- LCD projectors are available in selected computer laboratories for on-line demonstrations.
- Technical presentations/seminars are conducted.
- Every classroom equipped with LCD projector and internet facility.
- K-point lectures made available to the students.
- Mock online exams conducted to help students in their online examination.
- AMCAT, QA/LR and ET carried out to groom students and prepared them for the placements.
- NPTEL lectures are available for student's reference.
- On GEMS-attendance, marks, placements, etc. data is made available.
- Bulk SMS software.
- IIT spoken tutorial courses are available.

4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching – learning resources, independent learning, ICT-enabled classrooms/learning space, etc.) by the institution place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.

To inculcate the independent learning students are being provided with adequate internet facility and reading room. The student community is strongly involved in the use of ICT through smartphones and laptops. The institute provides the necessary infrastructure to integrate ICT technologies to create learning resources. Faculties have taken efforts to make students independent in availing online resources and preparing study notes. Students actively participate in following activities which have resulted in improvement in academic performances. The institute is precisely focused on student's development in all the dimensions which are reflected in following activities.

Curricular Activities:

- TG scheme.
- Mock online tests are conducted on E-exam portal for F.E. and S.E. students and phase examination conducted by SPPU.
- Student's academic progress is available on the ERP.
- All the learning resources can be found on ERP platform.
- Students are exposed to live industry projects.

Co-Curricular Activities:

- Student Training Program (STP I to V) consists of several online resources being shared with students.
- Value Addition Programs have been conducted for students consisting of awareness of software and hardware necessary for the curriculum.
- AMCAT tests, QA/LR and ET, are being held online.
- Student clubs like Microsoft Campus club, Google Campus Club, Business Club, and EDC have been very active in the campus.
- Invited talks from Industry experts help bridge the industry-academics gaps.
- ICT facilities are used by students in organising technical festivals, workshops, and Seminars.
- Webinars on various topics.

Extra-Curricular Activities:
In Sinhgad Karandak, Neon and Techtonic are mega sports, cultural and technical event annual organised by STES and competitions are held under this banner in both cultural and sports.

4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?

No

4.4 Maintenance of Campus Facilities

4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?

The institute during last four years has utilised the following budgetary allocations for proper maintenance and upkeep of the different assets and its establishments of the institution:

Table 4.4.1: Budget for Maintenance of Campus Facilities (Rs. in Lakh)

Items	2016 – 2017		2015 – 2016		2014 – 2015		2013 – 2014	
	Allocated Budget	Expenses	Allocated Budget	Expenses	Allocated Budget	Expenses	Allocated Budget	Expenses
Building maintenance	50	40.18	30	29.54	10	12.51	15	16.13

Furniture and Fixture	0.75	0.58	0.01	0	0.01	0.008	0.01	0.003
Laboratory repairs & maintenance	15	13.22	12	13.36	0.6	5.51	0.5	2.65
Computer Hardware and Software	0.5	0.35	20	14.91	31	30.86	25	24.3
Vehicles maintenance	3	2.12	5	6.32	2	3.16	2	2.75
Website & maintenance Internet usage	5	3.43	7	6.45	2.5	2.4	4	3.98
Maintenance (Electricity & Telephone)	110	94.72	100	98.24	70	69.94	70	60.34
D. G. set	1.5	0.93	1.5	1.99	1	0.61	1	1.25
Garden maintenance	3	3.17	2.5	3.66	2	1.22	2	1.57

4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the institute?

Maintenance of Equipment:

The institute maintains a department wise deadstock registers to keep the record of all equipment belonging to the Institute. The department wise dead stock verification is being done periodically. In the case of detection of any discrepancies, it is brought to the notice of the HOD of the respective department for necessary action to be taken.

Maintenance of Campus Infrastructure

Estate office is available at the campus level. It takes care of following mentioned points

- The civil work maintenance is taken care of by a Civil Engineer appointed for the upkeep of the building structure and ensures its fitness for use. Constant maintenance works are taken up round the year.
- Electrical Maintenance is taken care by an Electrical Engineer appointed for the purpose. The estate office is monitoring the job of identification of faulty electrical fittings and their replacement throughout the year.
- A Power Substation for electrification of the campus is being monitored and taken care of.
- A System Administrator and technical assistant is appointed to ensure the upkeep of all laboratories and computers in the institute.

- Housekeeping jobs like cleaning, sweeping the corridors and classrooms is maintained by the peon of the college.
- The HODs submit periodic reporting on requirements of repairs and maintenance to the administrative office. The requirements are collectively processed, so as to make the required facilities available.
- Pest control of library books and records is done every year.

4.4.3 How and with what frequency does the institute take up calibration and other precision measurements of the equipment/ instruments?

All the laboratories equipments are maintained and calibrated through standard laboratories. The maintenance and calibration is carried out periodically.

4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (Voltage fluctuations, a constant supply of water, etc.)?

- Power quality analyser is available at power substation from Fluke Corporation which will analyse the frequency and voltage fluctuations in the institution.
- The institute has one operational transformer of 1000 KVA, two operational transformers of 500 KVA.
- The institute has sanctioned 1433 KVA load.
- There is central power backup through one diesel generator capacity of 500 KVA.
- UPS has been installed in office, computer lab and library which ensure that UPS takes the power supply in the case of large voltage fluctuation.
- Water treatment plant of is available.
- The sewage water treatment plant is available.
- Hygienic drinking water is ensured by providing Aqua guard water purifier to the water cooler.
- In the case of scarcity of water, tankers are made available to ensure continuous water supply.
- Fire extinguishers are provided at multiple locations.

CRITERION V : STUDENT SUPPORT AND PROGRESSION

5.1 Student Mentoring And Support

5.1.1 Does the institution publish its updated prospectus/handbook annually? If "yes", what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?

Yes, the institution publishes the prospectus annually. The institute also provides brief history of the Institute, Department wise faculty details, Infrastructural Details, Academic Details, Examinations, Placements, Alumni, Awareness for anti-ragging, achievement of the students, sports, Sinhgad Student Council (SSC), STP, Research activities, Academic calendars, and syllabus through website and ERP of the institute for students.

The data to be published in the prospectus is collected from various Departments. It undergoes the process of authentication by the Heads of Departments. It is then processed centrally and validated before it is published.

The prospectus reflects the following information of the college.

- A brief history of the Institution with Vision and Mission.
- Total intake of UG and PG courses.
- Admission process.
- Best Practices of Institute.
- Information regarding departments.
- Information regarding infrastructure, laboratory facilities, internet facilities.
- Departmental activities.
- University rankers.
- Publications.
- The fee structure and guidelines for the scholarship.
- The contact information of the Anti-Ragging Committee and Internal Complaint Committee.
- Information regarding student development cell.
- Sports facilities.
- Various co-curricular and extra-curricular activities conducted in the institution.

- Common facilities are available in the campus-Hostel, mess and other amenities like ATM, Campus clinic, Transport facility, Shops, Security, Recreational facilities, etc.
- Alumni.
- Training & Placement Cell, placement history and list of recruiters.
- Anti-ragging drive, rules and regulations.
- Rules and regulations of the institute.
- Contact information.

In addition to the above, following information is also available online in the form of a website.

- Institutional & Departmental Profiles.
- Innovation & Research Activities.
- Events, visits of eminent personalities.
- http://www.sinhgad.edu/
- http://cms.sinhgad.edu/sinhgad_engineering_institutes/sknsits_lonavala/about_us.aspx

The Institute is committed to the information provided in the prospectus in all respects and strictly follows the schedule given in the prospectus for ensuring the accountability. The annual academic report shows the execution of the planned activities, and it is approved by College Development Committee (CDC).

5.1.2 Specify the type, number and amount of institutional scholarships / free ships given to the students during the last four years and whether the financial aid was available and disbursed on time?

The institute provides all the scholarships offered by the Government.

- The institute supports the private scholarships like Tata Motors, group scholarship etc. for deserving students with provision of necessary data.
- The institute allows students to pay their fee in instalments.
- Students are offered Earn & Learn facility in which 30% of the funds are contributed by the Institute and 70% by the university.
- The institute provides fee waiver to the students who are not in a position to pay the fees and request for concession with the approval of management.
- The institute honours the toppers with endowment prizes, annually.

5.1.3 What percentage of students receives financial assistance from state government, central government and other national agencies?

- More than 50% of admitted students receive scholarships/freeships from state Government of Maharashtra by categories (SC/ST students) and annual parental income (OBC/SBC/VJNT students). EBC students (with OPEN category) having parental income less than one lakh are awarded tuition fees waiver up to 50%.

- Apart from above, GATE Scholarships are provided by AICTE to PG students.

Table 5.1.3.a: Financial assistance (scholarship/freeship) given to students

AY	Details	Category				
		SC	ST	SBC	OBC	VJNT
2016-17	No. of students	110	3	33	326	112
	Amount (in Rs)	83,33,368	2,29,900	25,26,209	1,23,06,654	84,75,503
2015-16	No. of students	143	6	42	408	141
	Amount (in Rs)	1,05,56,447	4,43,029	31,00,615	1,50,47,603	1,03,74,083
2014-15	No. of students	113	5	32	332	126
	Amount (in Rs)	82,45,804	3,58,837	23,01,425	1,20,61,230	91,02,461
2013-14	No. of students	75	3	90	230	20
	Amount (in Rs)	52,20,377	2,11,405	63,34,556	80,88,834	14,11,305

Table 5.1.3.b: Financial assistance (EBC/Minority/STC/PTC/TFWS) given

Academic Year	Details	Category			
		EBC	Minority	STC/PTC	TFWS
2016-17	No. of students	386	11	6	16
	Amount (in Rs)	1,46,49,887	2,75,000	24,000	2,91,696
2015-16	No. of students	409	16	23	19
	Amount (in Rs)	1,50,82,258	4,00,000	92,000	3,43,729
2014-15	No. of students	355	8	9	18
	Amount (in Rs)	1,28,98,864	1,85,000	36,000	1,99,062
2013-14	No. of students	251	5	6	18
	Amount (in Rs)	88,48,536	1,25,000	24,000	1,34,280

The students are informed about the scholarship when it becomes available in the institution. The registrar and the student section of the office ensure that the above said amounts are disbursed in time to the students.

5.1.4 What are the specific support services/facilities available for Students from SC/ST/OBC and economically weaker sections:

Institute arranges extra lectures for these students

- The students who belong to SC/ST, OBC and the economic weaker sections are identified during the process of admission, and these students are provided with every possible help to get the Government scholarships. The scholarship is also available under EBC scheme.
- **Earn and Learn Scheme:** The college implements this scheme in cooperation with the University, which enables the socially and economically disadvantaged students to earn small amounts of money by working in various college departments.

Table 5.1.4: Earn and Learn Scheme

AY	No of students benefitted
2017-18	49
2016-17	31
2015-16	52
2014-15	31
2013-14	13
2012-13	12

For detailed information about Earn and Learn Scheme and list of benefitted students, please refer Annexure VI, Table 5.1.13.a to Table 5.1.13.d.

Students with physical disabilities

The Institute provides the following facilities to the differently abled students

- Preference is given for hostel accommodation.
- Extra time is provided during theory and practical examination.
- Lecture and Examination halls are provided on the ground floor, if needed.
- Administrative support to avail concessional travel to attend conferences, seminars, industrial visits, etc.
- College provides infrastructure facilities ramp, wheelchair and water closet to meet the requirements of the students with physical disabilities.

Overseas students

Institute does not have a quota for overseas students.

Students to participate in various competitions/National and International

Students are encouraged to participate in extra-curricular and co-curricular activities such as technical fests, cultural events and sports events, etc. which are organised by reputed institutions such as IITs, NITs, Universities and other colleges. All necessary support and services are provided by the Institute for necessary assistance, Wi-Fi facility and library & laboratory facility. Faculty members are deputed to assist and guide the students.

Students are motivated to participate in international competitions like SAE BAJA, HACKATHON, AVISHKAR, etc.

Medical assistance to students: health center, health insurance etc.

Rural Health and Training Center is available on the campus. Residential Medical officers and supporting staff are available for medical check-ups. A complete medical check-up is provided free of cost to all students of college when they get admitted to the college. First aid boxes are available at all the important locations on the campus. Specialist doctors are visiting the RHTC weekly. Insurance facility is also available for all the students.

Organising coaching classes for competitive exams

To prepare students for competing in the GATE, GRE, CAT examinations, the college provides coaching to the interested students. College also provides infrastructural facilities to organise coaching classes for the same. Study material related to GATE, GRE, CAT and other competitive examinations is available in the college library. With the help of T&P cell, Institute arranges coaching classes involving external agencies to help the students to appear for GATE, TOEFL, GRE and other competitive examination like UPSC, MPSC and Engineering services.

Skill development (Spoken English, Computer literacy, etc.)

- The college identifies students with poor communication skills and provides coaching to improve their skills through STP.
- The college conducts various seminars, workshops and invited talks for the students by experts to enhance their skills.
- The college has digital library with internet facility, which helps students stay updated with new technologies and current affairs.
- College facilitates an online spoken tutorial programme of IIT Bombay for skill development of students.
- Students and faculty members are encouraged to use NPTEL learning resources.
- Departments are taking special interest in preparing students to appear for certification through IIT spoken tutorials.

- Students are supposed to appear for AMCAT tests to understand their SWOT and their technical ability to appear for placement for enhancing their employability.
- VAP & personality development courses are conducted every semester to bridge industry - academic gaps.
- College facilitates Microsoft Student Partner, Google developer group and Wipro Mission 10X.

Support for "Slow learners."

- The Institute takes into account basic education needs of one and all. If the students are slow in their learning process, the institute conducts supportive classes in different subjects.
- Unique TG scheme is available in each department where TG acts as Friend – Philosopher – Guide-Mentor to each student identifying slow learners.
- As and when required makeup classes are conducted for slow learners.
- Question Bank & set of question papers of previous university examinations is provided along with model answers.

Exposure of students to other Institution of higher learning/corporate /business house etc.

Various workshops, seminars and invited talks are arranged by the college to guide the students for their career, to motivate them for higher education and getting placed in reputed companies, to let them know about emerging trends in industry. The college also arranges industrial visits for practical exposure. The students are motivated to participate and present research papers in various national and international seminars, conferences and workshops. Students are encouraged to do internship / sponsored projects with different renowned industries/firms, other reputed institutes and organisations. Institute has MOUs with the overseas and domestic organisation.

Publication of Student Magazine

The Institute publishes a college e-magazine annually named as "CHRONICLES". The magazine provides a platform for students to showcase their creative talents. The students of all departments bring out a Newsletter called "INNOVISION" which comprises of activities conducted in the Institute. Each department also publishes a departmental e-newsletter periodically. Apart from the newsletters, departmental wall magazines are also edited by the students, time to time

5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.

The Institute has well established Entrepreneurship Development Cell (EDC), and Business Club which focuses on the following

- Leadership Skills and Marketing Skills
- Business Development Skills and Managerial Skills
- Communication Skills and Public Speaking
- Team Building Skills
- Group Discussions
- World Entrepreneurship Day Celebration

EDC has successfully organised the following activities for entrepreneurship awareness in the past.

Table 5.1.5.a: Activities organized for Entrepreneurship Development

Sr. No	Programme	Date	No. of Participants
1	Entrepreneurship Awareness Programme 2017	09/11/2017	78
2	Expert Lecture on Entrepreneurship	11/01/2017	36
3	World Entrepreneur's Day Celebration and Business Plan Competition	30/09/2016	35
4	Workshop on Entrepreneurship Awareness	30/07/2016	108
5	EDC Business Plan Competition 2016	13/02/2016	39
6	Workshop on Entrepreneurship Awareness.	10-11/09/2015	247
7	Seminar on Entrepreneurship	27/08/2014	88
8	Seminar on Entrepreneurship	30/07/2013	60

Table 5.1.5b: Details of passed out students who became Entrepreneurs

Sr. No	Name	Branch	Name of Company	Year
1	Vivek Mengji	COMP	Dream Care Developers	2015
2	Rohit Dongare	MECH	subkar.com	2015
3	Amol Walekar	MECH	Furious Travels	2015
4	Ashitosh Shitole	ELECT	Ashlesha Electricals	2015
5	Karan Karle	MECH	Dairy farm	2015

6	Mayur Bhangale	COMP	Storekey Solutions Pvt Ltd.	
7	Nehal Kumbhar	E&TC	Fine Technologies	2017
8	Laukik Patil	MECH	ARI Events	2017
9	Aishwarya Yadav	IT	Coderoot	2017

Please refer Annexure VI, Table 5.1.5c, for more details about our alumni entrepreneurs.

5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co-curricular activities such as sports, games, quiz competitions, debate and discussions, cultural activities etc., additional academic support, flexibility in examinations, special dietary requirements, sports uniform and materials, any other.

The institution is promoting students for participating in various extracurricular activities by ensuring consistent encouragement and motivation. The necessary facilities are provided, and adequate funds are allotted. The sports and cultural committees arrange and coordinate the extracurricular activities. The college has several prizes for students showing remarkable performance in extra-curricular activities. These are ceremoniously presented by the hands of an eminent guest during the annual social gathering.

The provisions made for promotion of various activities are given below.

Promotion of Sports

- International level Sports Academy with reputed trainers.
- Playground, Gymnasium
- Participation in competitive events.
- Recognition and rewards for achievers.
- Public appreciation of winners.
- Sports uniforms and material.
- Consideration in term work.

Promotion to Cultural Activities

- The annual cultural festivals like Sinhgad Karandak and Spandan.
- Several cultural festivals like Ganesh Chaturthi, Dandiya, Holi, Diwali Kojagiri Poornima etc are organised by the cultural committee.

- Various bodies are functioning to promote the participation of students such as NEXUS, CTA, MESA, ITSA, TESLA Students Council and NSS, etc. which help the students to improve their skills and work for the community.

5.1.7 Enumerating on the support and guidance provided to the students preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIR- NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL /GMAT / Central /State services, Defense, Civil Services, etc.

The Awareness is created about Civil Services, Defence Services, and other competitive examinations to inculcate the interest in the students. The college faculty provides guidance for admission tests like GATE, GRE, TOEFL, CAT and other competitive examinations. The Institute motivates students for higher studies and research work. Students are allowed to access library facility beyond institute working hours so that they can prepare for competitive examinations. Students are helped by the teachers in matters of study materials and counseling for the right strategies. Academic exemption in attendance is provided to students for such examinations. Students can appear online examinations using internet facilities at our institution. Many students have appeared and qualified in various competitive exams.

Table 5.1.7: Details of students appeared in various competitive exams.

Department	Type of Exam	2016-2017		2015-2016		2014-2015	
		Appeared	Qualified	Appeared	Qualified	Appeared	Qualified
MECH	GATE	4	4	62	03	11	01
	GRE	13	2	--	---	--	--
ELECT	GATE	32	0	28	00	25	00
COMP	GATE	38	1	10	04	5	01
IT	GATE	15	0	3	01	2	00
	Civil services	0	0	3	00	00	00
	Defence Services	0	0	6	3	00	00
E&TC	GATE	9	0	20	00	15	00
	Defence Services	0	0	0	00	10	00

5.1.8 What type of counseling services are made available to the students (Academic, personal, career, psycho-social, etc.)

Academic counseling: The Class Coordinator, TG and subject teacher monitors the student for academic performance. Depending upon the performance, the students are supervised, and extra coaching is provided, and other sufficient measures are undertaken by subject teacher and respective HODs for improving student's performance. Also, the TG sends letters and SMS to the parents if there are performance shortfalls on the part of any student. In some cases counseling is also done during parent teacher meet. The principal, HODs and staff members regularly encourage and counsel the students to improve their academic pursuits.

Personal counseling: TG scheme gives emotional support to the newly admitted students and reduces their anxiety. In this scheme, a batch of near about 30 students is assigned to each TG.

TGs are available all the time to support and advise their students. TG meetings are held weekly and various issues on academic and personal levels are resolved by the TG, if possible. The students are free to contact the TG any time.

Parent- teacher meeting is organised in every semester which includes discussion of the performance of the ward with their parent. The facility will be availed for parents to have interaction with TG, subject teachers, HOD and Principal.

Career counseling: The placement cell provides services to the students in career guidance by inviting special industry trainers to strengthen the domain knowledge and technical skills of the students. Trainers also encourage students in seeking exciting career and employment opportunities. To improve skills such as communication, resume writing, group discussions and personal interviews of students, a special Student Training Program (STP) is conducted. The placement cell extends its services by placement coordinators from each department to work in collaboration with the T&P cell in giving career counseling to students and invites companies for campus recruitment. Mock interviews and group discussions are also conducted to build self-confidence and expertise in students.

5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If "yes", detail on the services provided to help students identify job opportunities and

prepare themselves for an interview and the percentage of students selected during campus interviews by different employers (list the employers and the Programmes).

STES has CPC which consists of Dean, T&P for all engineering colleges and one TPO for each institute. Institute Training and Placement Cell comprises one central TPO and one T&P coordinator from each department who leads a team of student coordinators.

T&P Cell is working for students with different activities. Weekly two hours slot is allocated in Time Table for TE and BE. Placement related activities like aptitude session, extempore, GD/PI are conducted during these sessions by the cell. In each semester, Aptitude tests & Personal Interview sessions, etc. are conducted at Institute level for students.

Institute organises on-campus job fairs, targeted job postings, value added modules for helping the students to identify jobs to enhance student's employability skills. T&P cell organises mock interviews, industry-specific coaching and resumes critiques.

Institute is having STP, which prepares the students to be employable. A separate training module is designed for SE, TE and BE and accordingly the students are trained. Under STP many activities are conducted which helps students for campus placements. Please refer Annexure VI, Table 5.1.9.a for details.

MOU has been signed with Zensar Technologies, and under this Employability Skill Development, Training is conducted for shortlisted students. Extempore, GD/PI sessions are conducted for all BE students as a preparation to face campus recruitment and to match the industry requirements. Student interactions are also arranged with corporate representatives.

ET and QA/LR test sessions are conducted at central level through which students are trained to face the aptitude test of Company. AMCAT test is being carried out for SE to BE students, which gives new opportunity for placement. Pre-Placement Training is also conducted before campus drive. Preparation is also done to attend Job Fair for more opportunities.

Table 5.1.9 a: Percentage of students placed.

	AY	Branch	Total no. of students	Number of Registered Students	Number of students placed	% of placement
Campus Selection	2016-17	COMP	140	140	28	20.00
		MECH	173	149	14	09.4
		IT	58	18	4	22.22
		E&TC	79	25	6	24.0
		ELECT	74	34	2	5.88
	2015-16	COMP	124	115	37	32.17
		MECH	200	164	28	17.07
		IT	64	56	29	51.78
		E&TC	74	69	29	42.02
		ELECT	71	52	10	19.23
	2014-15	COMP	55	55	21	38.18
		MECH	56	56	7	12.5
		IT	26	26	09	34.61
		E&TC	27	27	4	14.81
		ELECT	53	45	6	13.33
Off-Campus Selection	2016-17	COMP	140	140	7	5.0
		MECH	173	149	4	2.68
		IT	58	18	1	5.56
		E&TC	79	25	2	8.00
		ELECT	74	34	2	5.88
	2015-16	COMP	124	115	38	33.04
		MECH	200	164	57	34.76
		IT	68	56	11	19.64
		E&TC	74	69	18	26.09
		ELECT	75	52	7	13.46
	2014-15	COMP	55	55	15	27.27
		MECH	56	56	19	33.92
		IT	26	26	7	26.92
		E&TC	27	27	13	48.14
		ELECT	53	45	5	11.11

Table 5.1.9 b: Summary of Percentage of students placed.

Dept.	2016-17 (%placed)	2015-16 (%placed)	2014-15 (%placed)
COMP	25.00	65.22	65.45
IT	27.78	71.42	61.53
E&TC	32.0	68.12	62.95
MECH	12.08	51.83	46.42

ELECT	11.76	32.69	24.45

Please refer Annexure VI, Table 5.2.1.b to Table.5.2.1.d for students selected during campus interviews by different employers.

5.1.10 Does the institution have a student grievance Redressal cell? If yes, list (if any) the grievances reported and redressed during the last four years.

Yes, the Institute has a student Grievance Redressal cell, which was established under NREG Act. 2005. The list of the members is given in Annexure VI, Table 5.1.10.a. A suggestion and complaint box are placed near to office in the institution. This box is opened periodically, and suggestions/ grievances are discussed in the meeting of the cell, and appropriate action is taken if necessary.

Table 5.1.10.: Record of grievances reported and addressed

Sr. No	Grievances reported	Action Taken
1	Requirement of photocopy centre	Photocopy centre established.
2	Extending of Reading hall timing.	Done.
3	Wi-Fi connectivity to the reading hall.	Done.
4	Boys & Girls Common Room Re-location	Done

5.1.11 What are the institutional provisions for resolving issues about sexual harassment?

The college has an Internal Complaint Committee for combating violence against women employees and students. The committee takes necessary steps if the incidents are pertaining the sexual harassment which requires the intervention of the law. It is headed by a senior lady faculty, and meetings conducted periodically. However, such grievances of sexual harassment have not been fortunately reported during past four years.

Table 5.1.11: Internal Complaint Committee Members.

Sr. No.	Name of the Officers	Designation
1	Dr. V. R. Ladde	Presiding Officer
2	Ms. P. S. Yevale	Staff Member
3	Mr. J. P. Dabhade	Staff Member
4	Ms. B. B. Nagpure	Staff Member
5	Ms. P. P. Yadav	Staff Member

6	Ms. Kajal Fasale	Student Member
7	Mr. Palash Mane	Student Member
8	Ms. Sujata Angdi	NGO Member

5.1.12 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?

Yes, the college has an Anti-Ragging Committee and Squad as well as other Student Counseling Committees as provisioned in UGC/AICTE Regulation 2009. Constitution of the Committee and the progress report sent to the University periodically.

The institute feels proud having maintained the campus ragging-free out of its rigorous efforts to kerb it. The members involved in Anti Ragging committee is as mentioned in Table 5.1.12.

Table 5.1.12: Anti –Ragging Committee Members

Sr. No.	Name of the Officer	Designation	Role
1	Dr. M. S. Rohokale	Principal	Chairman
2	Mr. G. V. Khandekar	Staff Representative	Member
3	Mr. N. K. Gavade	Staff Representative	Member
4	Mr. J. P. Dabhade	Staff Representative	Member
5	Dr. V. R. Ladde	Ladies Staff Representative	Member
6	Mr. A. C. Chavan	Staff Representative	Member

5.1.13 Enumerate the welfare schemes made available to students by the institution.

Earn and learn scheme
The college has appointed a Student development officer to monitor various activities of earn and learn the scheme. Under the Earn and Learn Scheme of the University, College provides financial aid to economically weaker students. Many Students were benefitted from the Earn and Learn scheme during the last four years. Please refer Annexure VI, Table 5.1.13 a to Table 5.1.13.e for more information.

Bank & postal services:
Student and faculties are utilising the facilities of postal services as postman come to college daily to take and deliver the post. State Bank of India, ICICI and Central Bank ATMs are available in College Premises.

Health services & Medical Store:
A health centre in the institution takes care of the basic health problems of the students. The college has hospital & medical store in the campus. The blood donation camp is organised many times under NSS activity.

Student group insurance scheme:
The students are covered under accident insurance policy given by United India Insurance Company Ltd and reimburse maximum up to Rs.25, 000 claims against hospitalisation due to an accident.

Student Counsellor:
Ms Sujata Angdi looks after the personal counselling of students of the institute. She is also a member of a well-known NGO.

Overseas Educational Support Scheme:
Support in preparing students for an internship program in universities, abroad through SOC is done by the society. The e-transcripts are furnished to the students by the institute.

Marking Scheme for extracurricular activities of the students in academics:
Participating students in extracurricular activities gets to benefit regarding Term Work marks. Over and above marks as per the policy guideline set at the Institute level is given. In addition to marks, flexibility is also given in conduction of internal examinations for the students participating in extracurricular activities. Academic guidance, extra practical during mid-term submission facility is extended to such students participating in extra activities.

5.1.14 Does the institution have a registered Alumni Association? If "yes", what are its activities and major contributions for institutional, academic and infrastructure development?

Yes, The Institute has an Alumni Association.

- An alumni meeting is organised annually by the Institute.
- Alumni Association regularly meets and interacts with the management. It is the flag bearer of the developments in the institution.
- The alumni organise lectures on personality development. It has also been helping in holding interactive sessions to motivate students regarding career seeking.
- The alumni also help the institution by influencing industries and other agencies in getting placements for the institution.

- The alumni appear for various activities, and their suggestions are taken into account. The alumni are often selected as guests of honour for awards.
- The institute has a social networking page and a separate link to the website where the alumni can register and connect to share their ideas.

Alumni benefits for students:

- Personality development program
- Career advising
- Industry Institute Interaction
- Mentoring
- Invited talk on recent trends in industry.
- Placement assistance
- Sponsorship
- Project assistance for final year students
- Arranging seminars for students

Alumni Objectives:

- To bring together alumni in every area to act as the representative and coordinate various co-curricular activities.
- To utilise the experience, wisdom, zeal, ability and spare time of alumni for the benefit of the weaker sections of the society.
- To promote and provide education, educational scholarships and medical relief useful to poor and the needy students of the institute.
- To promote sports education, culture & knowledge by arranging seminars of alumni.
- To make the students career-oriented and attained the international standard by sheer professionalism.

5.2 Student Progression

5.2.1 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlights the trends observed.

Table 5.2.1.a. Student Progression

Department	Student Progression	Student Progression %		
		2016-17	2015-16	2014-15
COMP	UG To PG	0	4.68	3.63

	Employed	47.95	65.22	65.45
IT	UG To PG	0	6	8
	Employed	27.78	71.42	61.53
E&TC	UG To PG	0	4	3.70
	Employed	32.0	68.11	62.95
ELECT	UG To PG	0	2.7	1.9
	Employed	11.76	32.69	24.45
MECH	UG To PG	0	2.57	7.14
	Employed	12.08	51.04	46.42

The trends observed in recent years are

- 60 to 80 % of the students are opting for employment.
- 10 to 15% of students are opting for higher education like MS,ME, MBA, etc.
- 1% of students are choosing entrepreneurship and starting their own firm.

5.2.2 Provide details of the Programme wise pass percentage and completion rate for the last four years (College wise/batch wise as stipulated by the University)? Furnish programme wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating University within the city/district.

Table 5.2.2.a: Programme wise pass percentage

Dept.	AY	Students Appeared	Passed	I Class with Distn	I Class	II Class	% of Pass
MECH	2016-17	173	147	75	68	4	84.97
	2015-16	194	152	100	49	3	78.35
	2014-15	56	53	31	18	04	94.64
COMP	2016-17	138	130	73	51	6	94.29
	2015-16	128	114	57	50	7	89.06
	2014-15	55	53	22	30	63	96.36
IT	2016-17	58	57	31	25	1	98.28
	2015-16	67	65	48	16	1	97.01
	2014-15	25	24	22	1	1	96.00
E&TC	2016-17	79	74	30	29	15	93.67
	2015-16	75	73	39	31	3	97.33
	2014-15	27	27	13	14	0	100
ELECT	2016-17	69	65	35	20	10	94.20
	2015-16	73	60	40	14	5	82.19

	2014-15	53	52	17	28	7	98.11

Table 5.2.2.b: Programme wise Completion Rate

Sr. No.	S.E.				B.E.		Completion Rate (%)
	A.Y.	Number of Students from FE to SE	Number of Students from DSE	Total Admitted	A.Y.	Total Passed	
MECH	2015-16	138	84	222	2017-18	---	---
	2014-15	159	50	209	2016-17	125	59.81
	2013-14	172	60	226	2015-16	140	61.95
	2012-13	53	21	74	2014-15	53	71.62
ELEC	2015-16	18	35	53	2017-18	---	---
	2014-15	40	23	63	2016-17	51	80.95
	2013-14	38	23	61	2015-16	48	78.69
	2012-13	18	54	72	2014-15	52	72.22
COMP	2015-16	69	43	112	---	---	---
	2014-15	72	85	157	2016-17	114	72.61
	2013-14	89	60	149	2015-16	99	66.44
	2012-13	44	26	70	2014-15	53	75.72
E&TC	2015-16	17	21	38	2017-18	---	---
	2014-15	34	37	71	2016-17	52	73.23
	2013-14	50	13	63	2015-16	48	76.19
	2012-13	30	37	67	2014-15	27	40.29
IT	2015-16	12	16	28	2017-18	---	---
	2014-15	33	44	77	2016-17	38	49.35
	2013	50	27	77	2015-	61	79.22

	-14				16		
	2012 -13	21	14	35	2014-15	24	68.57

Table 5.2.2.c : Comparison of pass percentage with other institute

Department	Year	University % Passed	SKNSITS % Passed	SIT % Passed
MECH	2016-17	90.46	87.86	85.73
	2015-16	74.00	78.35	85.05
	2014-15	88.00	94.64	91.20
COMP	2016-17	97.46	94.29	93.67
	2015-16	90.00	89.06	88.89
	2014-15	91.00	96.36	96.43
IT	2016-17	96.22	98.28	91.00
	2015-16	90.00	97.01	94.94
	2014-15	94.00	96.00	100.00
E&TC	2016-17	95.23	93.67	94.00
	2015-16	85.00	97.33	94.90
	2014-15	92.00	100.00	94.00
ELECT	2016-17	94.17	94.20	94.87
	2015-16	82.00	82.19	86.11
	2014-15	87.00	98.11	96.92

5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?

Students are advised and encouraged to choose either higher studies or employment depending on their aptitude.

Student progression to a higher level of education:

The progression to higher studies is supported through guidance for GATE, GRE, TOEFL, CAT and foreign language programs. Research Committee motivates students for doing research work in various fields. SOC is an initiative started by the society to help the students who wish to study abroad. They are not only counselled regarding clearing the requisite eligibility test but also are helped in securing admissions to good universities.

Student progression to towards employment:

STP is implemented to enhance the employability of the students. The institute is conducting STP programs from the Second year to final year.

T&P cell conducts various ET through AMCAT, QA/LR, GD/PI. Institute arranges campus drives every year for final year students. The objective of the placement cell is to create maximum job opportunities for students in the market by establishing a good relationship with the Industry. Institute conducts on-campus placement drive for students. MOUs have been signed with various industries to increase liaison between academics and industries. EDC promotes awareness about entrepreneurship through various activities.

5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?

- Remedial classes and practical sessions are conducted for failed students.
- Makeup classes for Direct Second Year admitted students.
- Guidance through TG is provided to students who are at the risk of dropout.
- Previous years university question papers are provided to students on google drive
- Model solutions of previous years university question papers are provided.
- Online e-Exam portal is made available for students for online examination practice.
- Unit by unit preparation and practice, self-simplified internal test questions, SLS, and tutorial benefits are given to such students.

5.3 Student Participation And Activities

5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and programme calendar.

Institute has Sinhgad Sports Academy with expert trainers for all indoor and outdoor games. The institute has following sports facilities for the students:

For outdoor sports the institute boasts the following facilities for students; Cricket ground, Foot-Ball Ground, Basket Ball Court, Khokho/ Kabbaddi Ground, Lawn Tennis Court, Volleyball Court, Running Track, Skating Court, Eight pockets golf course.

For the indoor games, the institute provides facilities like, Badminton Court, Table Tennis Hall, Carrom, Chess, Gymnasium.

Students participate every year at Zonal/ Inter-zonal level, SPPU in the following events: Cricket, Hockey, Volleyball, Table Tennis, Badminton, Chess, Basketball.

Cultural:
Institute organises Annual Social Gathering and Knowledge Series for students like. Spandan, Neon, Sinhgad Karandak

Extracurricular Activities:
The Institute celebrates various days like, Teachers' day, Engineers' day, Annual social gathering , Mismatch day, Traditional day, Chocolate days, Blood donation Camps, NSS Camps.

Festival Celebrations:
The institute maintains the culture by celebrating several festivals like, Navaratri, Dandiya, Ganpati celebration (Ganesh Chaturthi), Khande Nawami (Dasara), Deepavali, Holi.

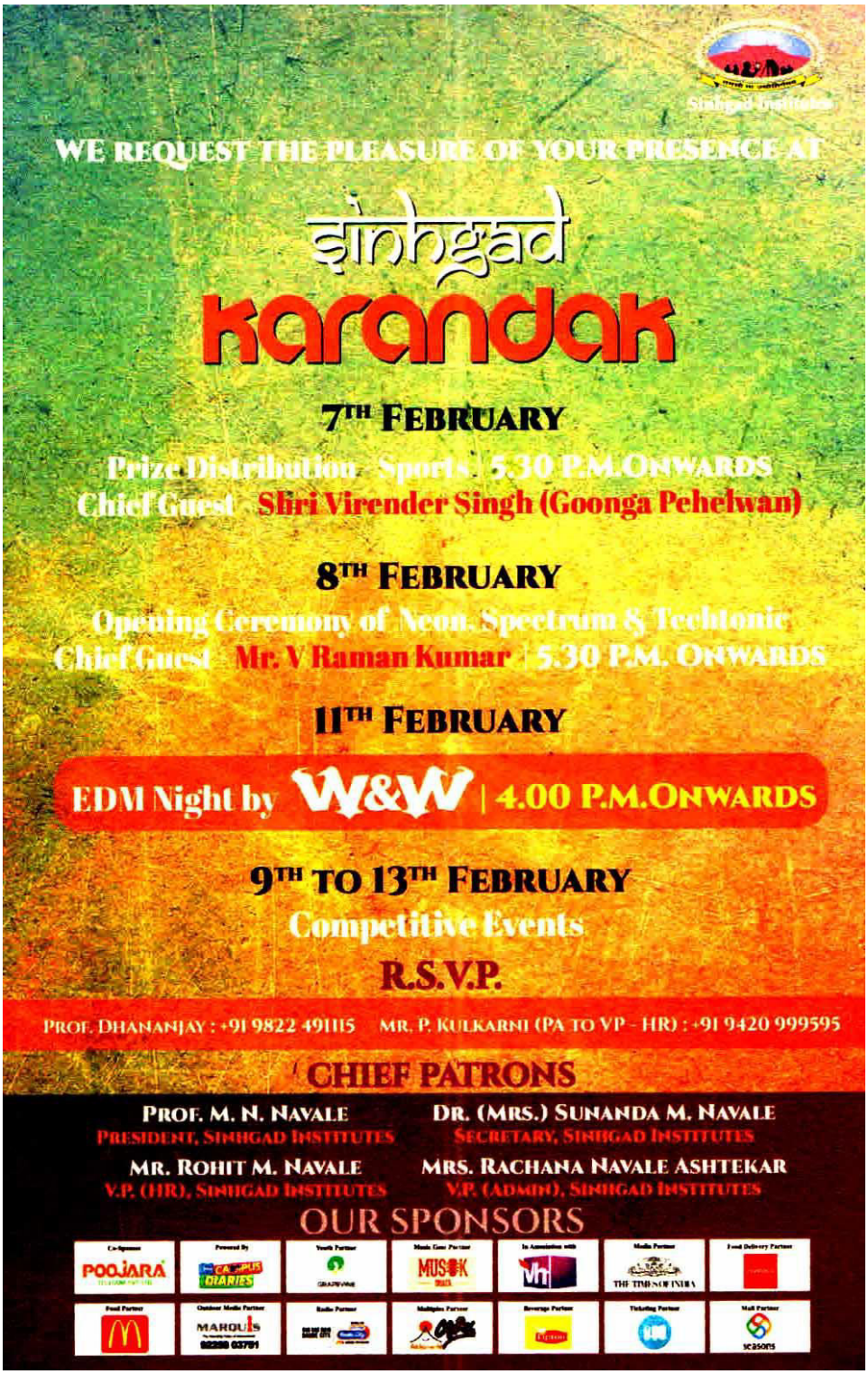
Competitions:
Various competitons are held throughout the year, viz, Poster Painting, Photography, Rangoli, Mehandi, Technical paper presentation, Project competition, Debate, Poster presentation.

The Academic Calendar carries the Program Schedule.

Table 5.3.1: Programme Calendar

AY	Sr. No	Event	Dates
2016-17	1	Spandan-17	05 Jan 2017
	2	Sinhgad Karandak	09-13 Feb 2017
	3	Techtonic 2016	09-13 Feb 2017
	4	Home Coming (Alumni Meet)	18 March 2017
2015-16	1	Dandiya	22 Oct 2015
	2	Sinhgad Karandak	09-12 Jan 2016
	3	Techtonic 2016	13-15 Jan 2016
	4	Home Coming (Alumni Meet)	19 March 2016
2014-15	1	Dandiya	10 Oct 2014
	2	Kojagiri Celebration	11 Oct 2014
	3	Spandan-15	28-30 Dec 2014
	4	Sinhgad Karandak	11-14 Jan 2015

2013-14	1	Spandan-14	6-7 Jan 2014
	2	Pre Sinhgad Karandak	1-2 Feb 2014
	3	Sinhgad Karandak	3 Feb 2014



5.3.2 Furnish the details of major student achievements in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. for the previous four years.

The details of participation of the students in the Inter-University, State and National Tournaments and their achievements in various sports activities for last four years are given in the Table 5.3.2.

Table 5.3.2: Student achievements

Sr	AY	Branch	Name of Student	Class	Achievement
1	2016-17	E&TC	Tushar Savant	BE	State Level Boxing Winner
2	2016-17	MECH	Aditya Lote	TE	Gold Medal in several running competition at COE, Pune
3	2016-17	IT	Aishwarya Yadav	TE	Selected for Smart India Hackathon-17
4	2016-17	COMP	Shruti Joshi	SE	Sinhgad Idol in Sinhgad Karandak-17
5	2015-16	IT	Lalit Sutar	TE	Seed Ideal(IT)
6	2015-16	MECH	Sachin Sirsath	TE	Six Sigma Green Belt
7	2014-15	E&TC	Tushar Savant	TE	District Level Boxing Runner-up
8	2014-15	ELECT	Ravi Prakash	TE	Runner-up in paper presentation
9	2013-14	MECH	Ranvijay Singh	TE	National Level Boxing winner
10	2013-14	IT	Sushil Rajiwade	TE	Second Prize in Blind coding at MIT Pune.
11	2013-14	IT	Bhamini Vispute	TE	Zonal Winner in NNSC Competition.

5.3.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?

- Institute collects feedback from the employers in the prescribed format during campus interviews which are available with TPO in the formal meetings. Feedback contains information regarding institutional provisions about the quality of students, student's performance in the interview, curriculum improvement, etc. Institute collects feedback from alumni during Alumni meets conducted department wise.
- Institute collect feedback and suggestions from graduates during the graduation ceremony.
- The feedback helps in designing the training modules prepared by T&P cell for the students. Employers and alumni give valid suggestions on curriculum development as well as infrastructure facilities.
- Online suggestions are taken from graduates. IQAC/AMC review These suggestions. Adequate measures are taken depending on committee recommendations to improve the performance.

5.3.4 How does the College involve and encourage students to publish materials like catalogues, wall magazines, College magazine, and other material? List the major publications/ materials brought out by the students during the previous academic session.

The institute publishes its yearly e-magazine named "Chronicles". This magazine is a platform to showcase student's creativity. Students submit their literary articles, stories and poetry in different languages like English, Hindi, and Marathi. The editorial board consists of staffs and students.

The wall magazine is a platform for student creativity to showcase their talents and skills. College newsletter named "Innovision" is published at the end of every semester which contains the glimpses of activities conducted in the Institute. Every department publishes their individual newsletter periodically.

Departmental News Letters are as follows

- Computer Engineering: Technovation
- Information Technology: TechTimes
- Mechanical Engineering: MechVision
- Engineering Science: Photon
- Electronic & Telecommunication : ETHOS

- Electrical Engineering: ElectPress

5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.

Yes, the institute has a student council. Concerning circular no. 2015-2016/321 the student's council of the institute is formed as per the provision of section 40 (2) (b) of Maharashtra University Act 1994 as per notification by SPPU. Please refer Annexure VI, Table 5.3.5.a to Table.5.3.5.c, for details about the members of the council.

The objectives of forming student council are to:

Organise institute level/department level events.

- Improve academics, co-curricular, cultural and extra-curricular activities.
- Motivate the students for teamwork.
- Acquire leadership qualities.
- Learn event managements.
- Interact with Institute management to resolve difficulties.

Activities of Students Council are to:

- Organise national or university level technical symposium like TECHTONIC
- Motivate students to participate in technical and soft skill events
- Organise yearly national level cultural activity Spandan, Sinhgad Karandak, Neon.
- Celebrate Independence Day, Republic Day, Teacher Day & Engineers Day.
- Organise blood donation camp, tree plantation, voter's awareness programs, etc.
- To organise University level activities

Funding: There is no funding from any Government body. Institute bares all the expenses of the activities organised under students' council.

5.3.6 Give details of various academic and administrative bodies that have student representatives on them.

Table 5.3.6 a: Student Representatives of Academic & Admin bodies

Sr. No	Academic / Administrative	2017-18	2016-2017	2015-2016	2014-2015
1	Student Council committee	Mr. Gaurav Dongare	Ms. Maithili Khusape	Ms. Asha Kumari	Mr. Siddhesh Shetty
2	Society of Automotive Engineers	Mr. Akshay Shelar (BE Mech)	Mr. Swapnil Godage (BE Mech)	--	--
3	Microsoft Club Committee	Abhishek Patnaik (SE Comp)	Ambu Acharya (BE Comp)	Mayur Bhangale (TE Comp) Anshul Chauhan (TE Comp)	Kanhaya Bodke (BE Comp) Ambu Acharya (TE Comp)
4	Sports Committee	Mr. Sachin Jadhav	Mr. Sachin Jadhav	Mr. Sachin Shinde	Mr. Nilesh Naik
5	Research Club Committee	Maitreya Pachpute (TE E&TC)	Kajal Fasale (BE E&TC)	Gaurav Kumar (TE Elect)	Prathamesh Bhusari (TE E&TC)
6	Newsletter & Wall Magazine	Dhananjay Chandanshive (BE Comp)	Mahesh Umalle (BE IT)	Heram Pawar (BE IT)	Sham Biradar (TE IT)
7	NSS Committee	Mr. Navnath Nale	Mr. Arjun Ingle	Mr. Kishor Bhosale	-
8	Anti-ragging Committee	--	Ms.Maithili Khuspe (BE Comp)	Sumeet Kale Asha Kumari (BE IT)	SiddeshShetty (BE Elect) A. Ambala (BE IT)
9	Business Club Committee/ EDC	Ankit Dabi (TE Comp)	Mayur Bangale (BE Comp) Upendra Borkar (TE Comp)	P. Borkar (BE Elect)	Siddhesh Shetty (BE Elect)
10	Google Developer Group	Gajendra Singh (TE Comp)	Mayur Bangale (BE Comp)	Mayur Bangale (BE Comp)	--
11	IETE Student Forum	Abhiraj Deshmukh (BE E&TC)	Divyansh Varshney (BE E&TC)	--	--

Table 5.3.6 b: Student Associations

Sr. No.	Name of Association	2017 - 2018	2016-2017	2015-2016	2014-2015
1	CTA	Upendra Borkar (President) (BE Comp)	Mayur Bangale (President) (BE Comp)	Akrati Bhatt (President) (BE Comp)	Sushil Kumar Yadav (President) (BE Comp)
2	ITSA	Priyanka Bais (President) (BE IT)	Pratick Shelar (President) (BE IT)	Ashish Bhopchande (president) (BE IT)	Bhamini Vispute (President) (BE IT)
3	NEXUS	Swapnil Dhumane (President) (BE E&TC)	Divyensh Varshmey (President) (BE E&TC)	Suraj Mujawar (President) (BE E&TC)	Akshay Kanungoo (President) (BE E&TC)
4	TESLA	Sainath Misal (President) (BE Elect)	Abhishek Patil (President) (BE Elect)	Arbaj Shaikh (President) (BE Elect)	Siddhesh Shetty (President) (BE Elect)
5	MESA	Lalit Thosare (President) (BE Mech)	Aniruddh Jhudele (President) (BE Mech)	Sachin Shinde (President) (BE Mech)	Atul Patil (President) (BE Mech)

5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the institution.

- The Institute networks and collaborates with the Alumni of the institution through alumni association email, social media and alumni meet conducted every year.
- Alumni are invited as experts, judge, trainer etc for various activities.
- Former faculty members are invited for invited talks, participation in seminars and conferences as reviewers or session chairs.

5.3.8 Any other relevant information regarding Student Support and Progression which the college would like to include.

Nil

CRITERION VI : GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision And Leadership

6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?

Vision :

उत्तमपुरुषान् उत्तमाभियंतॄन् निर्मातुं कटीबद्धाः वयम् |

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

Mission :

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

The engineering students will need strong analytical skills, practical ingenuity, creativity, good communication skills, business and management knowledge, leadership, high ethical standards, professionalism, dynamism, agility, resilience, flexibility, and the pursuit of lifelong learning in future. Comprehensive student development incorporates not only learning academic knowledge and skills, but also other aspects of students as a human being who are growing and maturing in their personal and professional lives.

STES has decided to have valuable efforts in engineering education to create not only good engineers but good human beings, also. While doing so, we as responsible stakeholders of the institute are trying to implement unique value system, transparent work culture, excellent academic and physical environment favourable to learn, create and transfer technical knowledge and induce ethical standards and professionalism using soft skill inputs to students.

6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?

The top management, Principal and faculty work in synergy for implementing its quality policy. The leadership provides the roadmap for achieving excellence in technical education, and the academic and administrative processes are geared towards realising this vision.

The role of top management, Principal and faculty in design and implementation of quality policy and plans is detailed below:

Top Management:

- Sets objectives in consonance with the quality policies and shares its vision through GB, College Development Committee (CDC) meetings.
- Hires competent, dedicated individuals to implement T-L-P effectively to realise the vision and mission of the Institute.
- Creates an atmosphere that is fair, transparent, motivating and conducive to faculty and students to realise their potential.
- Makes financial provision to create the infrastructure and facilities suitable for effective services and to cater to further requirements as per growing needs.

Principal:

- Shares the vision of the management and decisions taken by the management through meetings, notices, emails and sessions to all the stakeholders.
- Motivates and monitors a team of faculty and staff to realise the institute's vision and mission.
- Identifies and hires competent, qualified faculty and ensures technical competency by creating opportunities for faculty to grow professionally.
- Sets up rules & regulations of the institution for effective governance, transparent administration and participatory decision making for collective responsibility.
- Formation of various committees like Academic Calendar and Academic Report, Time Table, Exam, Invited Talk, Library, Co-Curricular & Extra-curricular Committee, Industrial Visit, Internal Complaint Committee, etc.
- Ensures availability of infrastructure and other facilities to satisfy academic and administrative requirements.

Faculty:

- Faculty continuously upgrades themselves to understand innovative teaching-learning method, research and development skills.
- Faculty strictly implements the Institute quality policies and plans and the T-L-P.

6.1.3 What is the involvement of the leadership in ensuring:

i) The policy statements and action plan for fulfilment of the stated mission.

The leadership of the institute which is composed of CDC, Principal, and a team of HODs ensures the implementation of the policies in line with institute's vision and mission.

Role of Principal

The leadership supervises the implementation of the curriculum of the affiliating university and its allied activities. The salient contributions of the leadership are

- Development of academic calendar and activity plans for every semester.
- Planning of STP to enhance employability.
- Planning of staff training and career advancement activities.
- Design of co-curricular and extra-curricular activities.
- Analysing the assessment and evaluation of staff and students.
- Review of student attendance, syllabus coverage through HOD meeting.
- Review of mid--semester online feedbacks from students.
- Planning on budget every semester.
- Appraisal system
- Staff recruitment according to vacancies.

Role of HODs and Faculty

- Planning of smooth conduction of academics.
- Planning of STP to enhance employability.
- Planning of staff training and career advancement activities.
- Implementation of co-curricular and extra-curricular activities.
- Framing the assessment and evaluation strategies.

ii) Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan.

Considering the inputs from all the stakeholders Principal and Heads formulate the action plan under the direction of the top management. These plans are effectively implemented and reviewed through the participation of faculty, staff and students. The well planned academic calendar is prepared, and all the activities are mentioned in it. Timetables and teaching plans are prepared prior to achieve the strategic plan at every department. CDC and GB make sure that every department gets sufficient funds to execute the plan.

iii) Interaction with stakeholders

The management is democratic, inviting transparency in decision making and encouraging participation of all stakeholders. The various interactions maintained by the Institute with all stakeholders is summarised in the following table:

Table: 6.1.3 Interaction with stakeholders

Sr. No.	Name of Stakeholder	Interaction
1	Parents	Parent-Teacher Meetings, TG calls, SMS and letters to parents.
2	Alumni	Alumni meets are scheduled for their experience in industry and placement interactions.
3	Industry	Placement interactions through Industry experts, Industrial visits & Invited talks, VAP, STP.
4	Society	Through extension activities like NSS activities which include blood donation camps, cleaning campaign, etc.

iv) Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders.

By suggestions given by the stakeholders, efforts are made for filling the gap between academics and industry. The departmental progress for continuous improvement is reviewed by the AMC/IQAC in consultation with the Principal. By result analysis and students feedback, corrective and supportive actions are taken such as corrective measures and one to one counseling are initiated for improvement in the result. Proper support for policy and its planning is done by arranging Invited talks, STP, AMCAT QA/LR and ET for students.

v) Reinforcing the culture of excellence:

- Review of result analysis is taken every semester and taking corrective action based on it like practice sessions; remedial classes are conducted.
- Skills and competencies of both faculty and students are developed by identifying Training program, Workshops, Internships, keeping short-term and long-term requirements in mind.
- The Institute inspires and creates a culture of involvement, Entrepreneurship and improvement.

vi) Champion organisational change.

- The leadership of Institute is always open to change in policy for achieving excellence.
- The appropriate plan of action is formulated by Principal and HODs according to current needs of industry and global market.
- At the end of every semester, an academic report and college newsletter 'Innovision' are prepared which includes results, placement percentage, different activities conducted in college and research contribution.
- Suggestions related to the academic report from top management are analysed and required changes are made in the system which will improve the overall performance of the system.
- These changes are communicated to all faculty members through general staff meetings.

6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?

Principal conducts a weekly meeting with all HODs. Also, general staff meetings are conducted periodically. All departmental meetings are conducted between faculties and respective HOD. The TG took student feedback about academic and other activities and discussed with HODs every week. To have effective implementation of the policies and to monitor and evaluate the same, various committees have been formed.

Academic Monitoring Committee/ Internal Quality Assurance Cell:
Committee members regularly monitor the record for conduction of theory classes and practical sessions. Student's feedback is taken and conveyed to the faculty so as to improve the T-L-P. Student's attendance record is monitored, and necessary action is taken if required by informing their parents.

Examination Coordination Committee:
This committee looks after planning, conduction and execution of unit tests, Prelim exams & mock practical's.

Project monitoring committee:
It encourages the students to participate in various project competitions, paper presentation in National and International conferences.

Training and Placement Committee:

STPs are conducted from the second year to final year students. Various industry oriented training, tests are arranged for skill development of students.

Cultural and sports committee:
The Cultural Committee organises annual social gathering, fresher's party and celebrates Navratri Festival, Independence day, Republic day, Teacher's day, Engineers Day, etc.

6.1.5 Give details of the academic leadership provided to the faculty by the top management?

Leadership is provided by setting standards and allowing faculty the freedom to achieve desired levels of knowledge and prepare students to become employable equipped with all graduate attributes. The institute provides various platforms for faculty to develop leadership skills at department, institute and STES level by giving them various portfolios. The details of responsibilities, duties and expected outcomes from the individual are mentioned below:

- The principal has authority to appoint an appropriate person as the HOD who has leadership qualities and good listening ability to understand the students and faculty, their situations and expected outcome.
- HOD allocates specific subjects to appropriate faculty to give justice and get maximum results. In addition to the academic duties, the HOD also assigns administrative duties to the individual faculty based on the ability and the leadership qualities.
- Every faculty has the freedom to decide the suitable teaching methodology of his/her choice by considering the time frame and evaluation mechanism of SPPU.
- Under the leadership of Principal, HODs, various committee coordinators are assigned powers and responsibilities to handle specific task assigned to them.
- To achieve expected outcome the oral or official orders are given to all the faculty members to take remedial actions on the basis of feedback and result in analysis.
- Also, faculty members use their knowledge and ability to percolate the same to the students with the help of freedom given by the heads of the departments with a clear understanding of their responsibilities and expected outcomes.

6.1.6 How does the college groom leadership at various levels?

The institute grooms the leadership at various levels as follows:

At Student level:

- Institute has student council which is formed annually..
- Each department has student's association which is for the students and by the students.
- Students are assigned responsibilities for managing different events during various programs which help them to enhance their event management skills.
- Students are assigned specific tasks to build their confidence with personality development and soft skill enhancement.
- Faculty motivates and encourages students to implement innovative ideas.

At Faculty level:

- Opportunities are given to lead specific committee while conducting different activities at department and institute level.
- Freedom is given to express their thoughts, new ideas, and novel approaches.
- Faculties are encouraged to lead the student's community during the classes, practical, industrial visits, etc.
- Motivate to lead the faculty by organising various university, state, national, international level seminars, conferences, workshops, FDP, STTP, etc.
- All faculty members are encouraged and motivated for the result oriented activities to be conducted for the benefit of the students.

At HOD level:

- Encouragement to visit various organisations to understand their best performances and implementation policies.
- Encouragement to follow best administrative practices to avoid confusion and hurdles in the path of success.
- For Grooming the leadership qualities & Stress Management Workshops are conducted for HODs.

At Principal Level:

- Encouragement to head of the institute to achieve greater academic performance.
- Training sessions at principal level are organised to improve their administration skills.
- Encouraged to attend workshops conducted by DTE, AICTE, etc.

6.1.7 How does the college delegate authority and provide operational autonomy to the departments / units of the institution and work towards decentralized governance system?

Committees are formed for the various curricular, co-curricular and extra-curricular activities to be conducted during the academic year. The administrative office of the College is headed by the Registrar. Registrar in consultation with the Principal coordinates the day to day activities. Every department prepares academic calendar. Principal along with the HOD prepares activity in charge list which includes academic and non-academic responsibilities which are assigned among all the faculties.

Dead Stock Verification Committee: The dead stock verification committee carries out a complete audit of the dead stock of each department.

Faculty Selection Committee
The committee headed by the Head of the Institute, comprises of Senior Faculty Members assisted by a team of non-teaching staff. Its function is to ensure the smooth execution of the faculty recruitment process in line with the directives of AICTE, SPPU and the Institute.

6.1.8 Does the college promote a culture of participative management? If "yes" indicate the levels of participative management.

Yes, there are various committees constituted to manage different institutional activities which require the participation of faculty members be as follows.

Table: 6.1.8 Committees available in the Institute.

Sr. No.	Name of the Committees
1	Governing Council
2	College Development Committee (Earlier LMC)
3	Anti-Ragging Committee
4	Anti-Ragging Squad
5	Internal Complaint Committee
6	Examination Committee
7	Research Committee
8	Cultural Committee
9	Student Council
10	Training and Placement Cell
11	Academic Monitoring Committee /Internal Quality Assurance Cell

12	Library Advisory Committee
13	Anti-Smoking Committee
14	Dead stock verification Committee
15	RTI

The details of all the committees are mentioned in Annexure VI, Table 6.1.8.a to 6.1.8.q.

6.2 Strategy Development And Deployment

6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?

Yes, the management of institute has a quality policy aimed at achieving excellence in technical education. The management is committed to assuring quality service to all its stakeholders, students, alumni, employees, employers and the community.

For this management undertakes to:

- Provide excellent infrastructure facilities.
- Employ highly qualified and experienced faculty.
- Encourage the faculty for improvement in qualifications.
- Promote Industry- Institute interaction.
- Create an environment for R&D activities, Consultation work and getting industries sponsored projects for students.

Quality Policy of the Institute aims to establish Centre of Excellence of Technical Education and Research in Engineering and Technology thru –

- Inducting faculty having sound knowledge in the field of Science and Engineering and to make special efforts to retain them.
- Proven excellent results and admitting quality students.
- Developing excellent T-L-P by establishing a cohesive bond between students & faculty.
- Healthy atmosphere with decent discipline.

The need of industry drives quality policies through an entire organisational structure involving Principal, HOD, faculty and students. All the stakeholders are made aware of the quality policy through Institute website. Quality policies are defined for bridging the gap between industry and academia, empowerment of students, entrepreneurship development, creating research environment, the building of an environment in which teachers could strive for improvement, learn, and grow.

Quality policies are deployed for fulfilment of vision and mission of the Institute for the betterment of stakeholders like students, parents, industry, faculty and staff to give desired outcomes with respect to academic performance, placement, in terms of students excellent academic record, Deployment is done in various ways such as taking remedial classes for weaker students, Invited talks and Expert lectures from industry, industrial visit. STP activities, AMCAT, ET, development of research activities, Value Addition Program, technical events like Techtonic.

Review of quality policies is taken for meeting the industry expectation and copes up with rapid change in technology and global industrial scenario. Review of academic policies is taken by AMC/IQAC which monitors all the parameters needed for achieving the goals. AMC/IQAC study online feedback taken from students and checks the course file, lesson plan, made by the staffs and suggests the corrections if any. T&P department of Institute take a review of weakness and strengths of students and arrange Students Training Programs (STP) for the areas in which they are weak.

6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

Yes, the Institute has a perspective plan focusing on the current position and desired goals to achieve growth and development of Institution. From the perspective of development, the institute has certain plans which include:

- Development of excellent infrastructure for education, research and entrepreneurship.
- Training the employees to improve quality by imparting new skills.
- In cultivating research environment for Promotion of Research to develop innovative perspectives.
- Institute also plan to get approval for Research Center by the affiliating University.
- It is planned to increase the number of faculty with Ph.D. degree.
- Build strategies for enhancement of employability skills by Identifying industry requirement to fill the gaps and to sustain the growth and development.
- Accreditation by national agencies.
- IIIC has been formed to enhance the industry institute interaction, and the cell has started Campus Connect programs with leading industries such as Cognizant, Accenture, Zensar, etc.

6.2.3 Describe the internal organizational structure and decision-making processes.

Principal in coordination with HOD plans academic activities and conduction of various activities at the start of every semester. For smooth conduction of activities several committees are formed by principal containing one member from each department at institute level for appropriate coordination of the activities. Every committee is headed by a faculty member (activity head) appointed by principal and all HOD. Principal keep a check on academics and effective as well as the efficient performance of the department in all aspects. A regular review of the departments is taken by the AMC/IQAC, which evaluates the activities and performance of the departments Institute organizational structure refer Fig 6.2.3

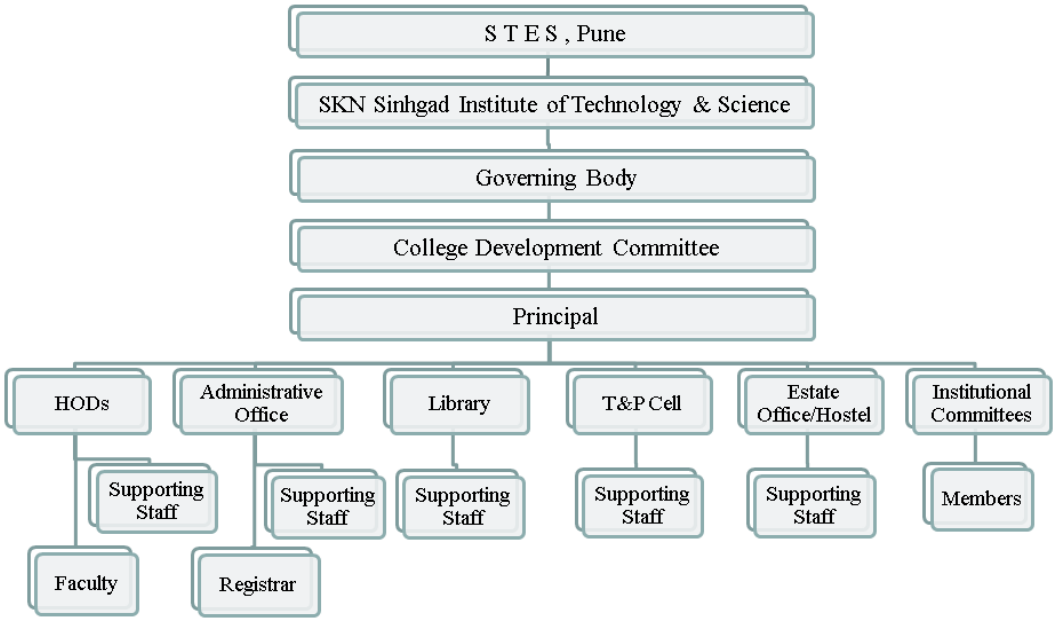


Fig 6.2.3: Organisational Structure of Institute

6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following.

Institute aims for quality education and have perspective plan focusing on the current position and desired goals to achieve growth and development in Institution. A number of students will require support to meet the objectives of the prescribed curriculum. This support may be in the form of changes in teaching strategies, approaches or materials and may require the support of resource. Quality improvement in teaching & learning is achieved by following the academic calendar and processes laid down by the University and the Institute.

Teaching & Learning

Factors that affect its outcomes are like learner abilities, the classroom environment, infrastructure, etc. Teaching & Learning process is not a repeated sequence of events but a dynamic phenomenon and varies as per student's requirement.

The academic steps in the T-L-P broadly comprises of:

- Implementation of outcome based teaching and students centred learning methodology.
- Provision for web-based learning and through multi-media.
- Recruitment of well qualified and experienced staff as per AICTE norms.
- Course allocation to the faculty much before the commencement of the semester to help them prepare lesson plan and notes.
- To bridge the curricular gaps contents beyond the syllabus is developed.
- Emphasis on imparting skills through laboratory experiments and various skill development programmes.
- Promoting professional development of faculty by providing support to undergo refresher courses and improve qualification.
- Review of the academic results of the previous year.
- Online feedbacks from students to assess the teaching skills of the faculty. If the feedback of any teacher is not up to the mark, then suggestions are given to the respective faculty. If feedback still continues to be unsatisfactory then as per AMC/IQAC directions teaching load may be changed.
- Continuous assessment of student's performance on tests, assignments, seminars, and projects.

Research & Development

The institute ensures research in faculty and students by following:

- Providing good infrastructure for the research environment.
- Formation of Research club for students to cultivate the research habit in students and faculty.
- Motivate faculty for research by providing sponsorship for doing research in India as well as abroad.
- Promoting qualification improvement program through research.
- Motivate faculty to attend workshop/seminar/conference/ for quality improvement.
- To make students aware of research by the addition of research in STP.
- Giving sponsorship for faculty participation in the national/international conference.

- Encouraging students to undertake industry projects and present technical papers.
- Signing MOUs with industry / foreign universities.
- Encouraging faculties to apply for research grants given by different entities.

Community engagement

Institute believes in the development of human resources to serve the nation. The management believes in imparting social awareness and is committed to supporting the community through:

- Running various social activities by Student Development Officer of Institute.
- Organisation of Free rural assistance camps under NSS is unique and Innovative Program of the Institute.
- Create awareness of YOGA in youth.
- Running Earn and Learn scheme for economically weak students.
- Organising tree plantation and blood donation camp.
- Summer training program for students.
- Students and Faculty engages themselves for awareness about the current social problems such as traffic, cleanliness, water problem, energy resources, etc.

Human resource management

The Institute has the following mechanisms for optimised management and improvement in Human Resource:

- The performance assessment of the teaching faculty is done regularly through feedback taken from students. Counselling of faculty is done by giving them suggestions based on the feedback to apply corrective measures for improvement.
- The faculties from the various departments are encouraged for higher education.
- Updating knowledge of faculty through FDP, invited talk, Training to non-teaching staff.
- For the convenience of campus non-residential staff Institute also provides transport facility for staff coming from Pune.
- The free medical facility is given to all teaching and non-teaching staff.

Industry Interaction

- Institute has formed IIIC, and it aims to promote industry institute interaction through students training programs.
- Students are motivated to undertake their final year project in the relevant industries of their domain.

- To bridge the gap between industry and institute students are encouraged to participate in an internship program of the industry.
- Industrial tours and training are organised for providing industry exposure and understanding actual working of the industry.
- Invited Talks are conducted by industry expert person on various current technologies and industry requirements.
- The Institute has signed MOUs with well-known industries for students training.
- Enhancement of employability skills of students is done by STP activities, AMCAT, ET, QA/LR, development of research activities, Value Addition Program, technical events like Techtonic.
- Entrepreneurship Development Cell was established with identified objectives.
- Several activities like entrepreneurship seminar for student entrepreneurs, entrepreneurship week, etc. have been conducted and much more are planned by this cell.
- A Business Club is formed for technical business incubation has been formed. A Current affair Club is also established to spread the latest happenings.

6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?

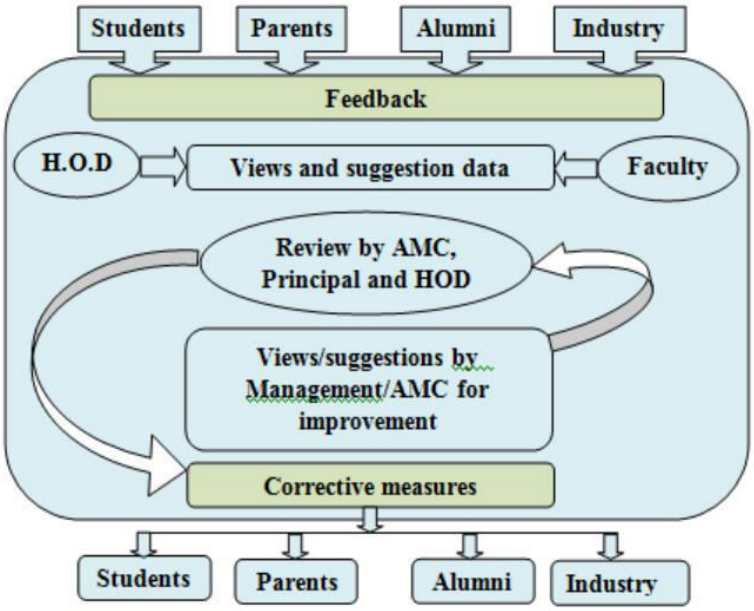


Figure: 6.2.5 Feedback and corrective measures

Head of the institution ensure that adequate information is collected from the following ways,

- Feedback systems from students and parents and Alumni.
- Weekly interaction with students in TG meeting.
- Weekly principal- HOD meeting.
- Weekly Departmental meeting with all faculty.
- General staff meeting with principal twice in month.
- Academic and Activity Report
- GEMS.
- Appraisal system.

6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

Management encourages and supports involvement of the staff by following ways

- Appreciation letters are given to staff members having the satisfactory result of the respective subject.
- Institute gives best teacher award by performance.
- Principal involves HODs and faculty members in the decision-making process.
- Management gives motivation to staff members for enhancement of their qualification, also provides special leaves to the staff members who are perusing their higher studies.
- The management always encourages faculty to involve themselves in ongoing institutional processes.
- Management takes care of sponsorship and on duty leaves for attending faculty development program/workshop /conference which will add value to individual faculty profile which again will help the faculties to improve student performance.
- Adequate funds are made available to faculty for implementation of the new concept.

6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions

Table: 6.2.7 Governing Body -2016-2017

Sr. No	Date	Resolutions	Action Taken

1	**25/06/2016**	To approve the expenses from 1st Oct 2015 to 31st March 2016	Actual Expenses up to 31st March 2016 was discussed, and the same was approved.
2		To consider and approve the budget for the A. Y. 2016-17	Budget Approved.
3		To review staff position (Teaching/ Non-Teaching) in A.Y. 2015-16 (Even Semester and consider faculty requirement for A. Y. 2016-17.	It was noted that additional staff members are required for teaching load for FE, SE, TE and Be classes which was fulfilled.
4		To consider the academic calendar for the academic year 2016-17 (Odd Semester).	The Academic calendar for the odd semester of A. Y. 2016-17 was placed for approval and was approved unanimously.
5		To consider the academic performance of the college (Timetable, Result analysis for the last examination, Extra Curricular/ Co-curricular activities) in A.Y. 2015-16 and plans for next semester.	Time table for all classes for the current semester was noted. Result analysis of University examinations held in May/June-2016 was reviewed. The report on academic Curricular/ Co-curricular activities was appreciated.
6	**21/10/2016**	To consider and approve the revised budget for the A. Y. 2016-17	Budget Approved.
7		To review staff position (Teaching/ Non-Teaching) in the A. Y.2016-17 (Odd Semester and consider faculty requirement for the A. Y. 2016-17 (Even Semester)	It was noted that additional staff members are required for teaching load for FE, SE, TE and Be classes which were fulfilled.
8		To consider the academic calendar for the A. Y. 2016-17.	The calendar was placed for approval and was approved unanimously.
9		To consider the academic performance of the college (Timetable, Result analysis for the last examination, Extra Curricular/ Co-curricular activities) in A.Y. 2016-17 and plans for next semester.	Time table for all classes for the current semester was noted. Result analysis of SPPU examinations held in May/June-2016 was reviewed. The report on academic Curricular/ Co-curricular activities was appreciated.

6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If 'yes', what are the efforts made by the institution in obtaining autonomy?

Yes. The Management is always supportive for autonomy. However, according to the university rules for autonomy, Institute is not eligible for qualifying the autonomy.

6.2.9 How does the Institution ensure that grievances/complaints are promptly attended to and resolved effectively? Is there a mechanism to analyse the nature of grievances for promoting better stakeholder relationship?

The institute has following committees to attend promptly the grievances/complaints and to resolve it immediately.

- Internal Complaint Committee (ICC).
- Students council.
- Grievance Redressal Cell.
- Anti-ragging committee.
- College Development Committee.
- Feedback or suggestion from students to the TGs in weekly TG meetings (every Wednesday).
- Weekly faculty meeting with HOD.

The mechanism of grievance redressal is as follows

- The grievances and complaints from the students and faculty are heard and taken note of. The sorting n prioritising of the grievances are done according to the subject
- If the cases are minor cases, very often the decisions are made after listening to the either sides. The decision made is an optimal decision accepted by both the sides.
- For critical cases, a meeting is called upon and both the parties are asked to be present for the same. The case is analysed thoroughly with effects of the decision analysed and a wise corrective decision is taken after the discussion.

6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?

No court cases are filed by and/or against the Institute, in last four years.

6.2.11 Does the Institution have a mechanism for analysing student feedback on institutional performance? If 'yes', what was the outcome and response of the institution to such an effort

Yes,

- The Institution collects online feedback from students once in a semester and monitored by AMC.
- The suggestion box is kept by the institute to collect student feedback on institutional performance.

- After discussion in AMC/IQAC meeting decisions are taken for the improvement of institutional performance which results in improvement in performance of teachers, university results and facilities. It led to improvement of institutional performance.

6.3 Faculty Empowerment Strategies

6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non-teaching staff?

Teaching Staff

- Supporting for Ph.D. research by paying to fund for tuition fees and providing other facilities along with necessary documentation.
- Providing study leaves for going for Ph.D./PG research.
- Institute organises Conference, Workshop, Seminar, FDP, STTP, etc.
- Institute deputes the faculty to attend Conference, Workshop, Seminar, FDP, STTP, etc.
- Institute assists and encourages faculties to become a member of professional bodies, like ISTE, ASM, IETE, CSI, and SAE, etc.
- Institute grants on duty leave for various training programs, courses, workshop, seminars, conferences, etc.
- Training to teaching staff like TAP, TTT for their excellence.
- The Institute has MOU with Universities in Bulgaria, Sofia University where faculty can pursue a doctoral program at that university. Faculties are completely sponsored for this program.
- The Institute has MOU with Zensar, Mass Technology, Reliance Jio, SEED, ETA, etc. for knowledge sharing.

Non-Teaching Staff

- The Institute arranges need based training programs for their skill improvement and permits them to attend similar programs at other institutes.
- They are encouraged to go for higher studies, and their workload is adjusted if the need arises.
- They are encouraged to participate in the organisation of technical events.

6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?

- Institute enhances academic skill development of staff by organising programs like Conference, Workshop, Seminar, FDP, STTP, TAP, TTT etc.
- Institute sponsors the faculty for attending revised syllabus orientation workshops held by SPPU, Pune.
- The Institute encourages the non-teaching staff to upgrade their skills regarding lab equipment and maintenance.
- Creating a sense of belongingness amongst faculty members by involving them in various committees.

6.3.3 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.

The various parameters of performance appraisal system of faculty to evaluate and ensure that information on multiple activities are properly captured and considered for better appraisal are listed in the below table. AMC/IQAC gives comments and suggestions to faculty and staff which are useful for their performance improvement.

Table 6.3.3.a: Appraisal System of the Faculty

PART A – Filled by Individual Faculty	PART B – Filled by HOD
1. Student Centric Activities (SCA) **1.1Teaching- Learning and Evaluation related activities** 1.1.1 Lectures taken as percentage of lectures allocated as per academic calendar (100% compliance = 8 points) 1.1.2 Seminars, tutorials, practical, contact hours undertaken as percentage of those actual allocated as per academic calendar (100% compliance = 8 points) 1.1.3 Extra Lectures, Remedial Lectures/ Practical or other teaching duties more than AICTE/SPPU norms per week for entire semester or proportional otherwise (2 hour access per week = 2.5 points for each semester) 1.1.4 University examination duties (Question paper setting, evaluation of answer scripts, etc.) as per duties allotted (100% compliance = 3 points) 1.1.5. University Online/In semester/Internal test Examination work such as coordination, invigilation, flying squad duties etc. (100% compliance = 3 points) 1.1.6 College/Internal Examination/Evaluation duties for internal/ continuous assessment work as allotted (100% compliance = 3 points) 1.1.7 Use of Innovative teaching – learning methodologies; a. Use of Information and communications technology (ICT); like k- point or any animation software, b. Updated subject content and course improvement c. Subject material sharing with the students. (1 point for each activity for all assigned subjects in both the semesters) 1.1.8. Design and Development of Value Addition Program (VAP) for more	Punctuality Integrity and Character Reliability Relation with the stakeholders (Internal/External) Peer review assessment Proficiency to shoulder department level Responsibility Command

than 10 Hrs. (3 points per VAP)	over English
1.2 Co-Curricular, Extra Curricular & Extension Activities 1.2.1 Coordination of student centric activities As Coordinator (Institute level-5/Dept. level-2) Alternatively, as Member (Institute level-2/Dept. level-1) Creation of industry exposure opportunities for students Through:(5/2/1 points per activity) 1. Internship 2. Sandwich training 3. Industrial Visit for live projects and interactions 4. Memorandum of Understanding (MOU) 5. Sponsored projects 6. Placement Support 7. Any other … (Personal liaison that benefits to the department to establish long term relationship with industry is important) 1.2.2 Coordination of activities mentioned in Sr.no.1 to 21) (5/2/1 points per activity) 1. Students Training Program (STP) 2. Techtonic / Technical Festivals 3. National level competition 4. Sports activity 5. Cultural activity 6. Co-curricular activity 7. CSR activities like PRAYAS /NSS/ other Governmental and non-Governmental channels etc. 8. Entrepreneurship Cell 9. Alumni 10. Sinhgad Students Council (SSC) 11. Spoken tutorials/ Online course (MOOC) 12. Educational Tour/Site visit 13. Value Addition Program (VAP) 14. Counselling/ Admission work 15. Magazine Committee 16. Library Committee 17. Result analysis Committee 18. Timetable Committee 19. Training and Placement support 20. Teacher Guardian /Class Coordinator 21. Any other need-based activity assigned by Principal/HOD. (Pl. Specify) ----------)	Contribution at Institute and department level responsibilities Integrity of work
1.3 Student Attendance, Feedback and Results 1.3.1 Attendance of Students SEMESTER-I 1. Theory 1 2. Theory 2 3.Practical 1/Tutorial 1 4. Practical 2/ Tutorial 2 SEMESTER-II 1. Theory 1 2. Theory 2	

3.Practical 1/Tutorial 1
4. Practical 2/ Tutorial 2

1.3.2 Student feedback (TH/PR)

SEMESTER-I
1. Theory 1
2. Theory 2
3. Practical 1
4. Practical 2

SEMESTER-II
1. Theory 1
2. Theory 2
3. Practical 1
4. Practical 2

1.3.3 Results of students(TH/PR)

SEMESTER-I
1. Theory 1
2. Theory 2
3. Practical 1
4. Practical 2

SEMESTER-II
1. Theory 1
2. Theory 2
3. Practical 1
4. Practical 2

2. Professional Development & Academic Contribution (PDAC)

2.1 Professional Development (PD)

2.1.1 Qualification improvement (Ph. D – 10/Post Doctorate – 10) (Ph. D registered - 4) – for every progress report submission – 2 points

2.1.2 Acquiring status of Certified trainer for skill development courses from reputed organisation.

2.1.3 Certification of International/National repute from reputed organisation. (e.g. *EdX* offers free online courses and classes. Find the latest Massive open online course (MOOC) from the world's best universities including MIT, Harvard, Berkeley, UT, etc.)

2.1.4 Awards/ Recognition/ Any other achievement through professional bodies of national/international repute (e.g. Best Teacher, Young Scientist Award given by ISTE).

2.2 Academic Contribution (AC)

2.2.1 Contribution in conducting the activities of professional bodies (like IEEE, CSI, IETE, etc.) for either to the students or faculty- (5 points for every activity like FDP, SDP, Seminar, Workshop etc. conducted with individual as the main resource person)

2.2.2 Interaction with outside world

2.2.3 Organization of Training program (FDP/SDP/STTP/Workshop/ Seminar etc.)

Organization of short term training courses

Two week duration (10)points/ One week (5 points) /for less than one week

(proportional)

Coordinator: Co-Coordinator: Member = (5:3:1)

2.2.4 Participation in Training Program

Participation in short-term training courses

Two-week duration (10) points/ One week (5points) / for less than one week (proportional)

2.2.5 Internal Revenue Generation (IRG)

(other than the research grant) through the Organization Of FDP/SDP/STTP/ Workshop/ Seminar

3 points for each Rs.15000 or proportionate Coordinator: Co-Coordinator: Member = (3:2:1)

2.2.6 Brand Building Activity (BBA)

Individual accounts on LinkedIn, Facebook, Twitter, Google+ and Building an audience and developing the brand name of the department and institute

2.2.7 Institutional/Department level Governance responsibilities assigned

(Institutional : Departmental: Member – 3: 2 : 1)
NBA/NAAC/NIRF Coordinator/Member - 3/2/1
AMC/IQAC Coordinator/Member - 3/2/1
SWO - 3/2
College Examination Officer – 3/2
Any other departmental responsibility – 3/2
Member of BoS/Faculty/Academic Council / Senate : 2 each
Member of other college/university level committees: 2 each
Contribution in activities of statutory bodies: 2 each
Any other STES level/Institute level responsibility allotted: 4
(Pl specify): ----------)

3) Research Contribution (RC)

3.1 Research Publication (journals)

Number of articles in refereed International Journals (For every publication with

Scopus indexed -5 points, Web of Science indexed – 3 points, and Google Scholar

indexed – 2 points)

3.2 Number of articles National/International level research papers in on–referred / journals, but having ISSN numbers and the list of journals prepared by the University and hosted on its website (2 points each)

3.3 Number of full papers in Conference Proceedings, etc.

(For every publication in International Conference Proceedings- 3 points, and National Conference Proceedings – 2 points)

3.4 Number of Subject Books by other local publishers With ISBN/ISSN numbers or Number of chapters in edited books

3.5 Organization of conference (International/ National)

3.6 Sponsored/ Funded Projects/Consultancy carried out/ ongoing

3.7 Number of Patents/Technology Transfer / Commercialization/ Product /copy right National/ International

3.8 Research Guidance

1. M. E. – 2 points for every awarded Degree / B.E – 1 point for every awarded group

Degree awarded Nos.: --------

2. Ph. D (Awarded/In progress) (8/1)

Degree awarded Nos.: --------

Number of research scholars under guidance: ----------

3.9 Involvement in Student Research activities

1 point for each of the following activity:

i. Encourage the students to pursue Masters and Ph.D.

ii. Encourage students to participate in research related activities.

iii. Inculcate research culture in the institute by arranging motivational lectures

to emphasise towards awareness of research, patent, copyrights, research tools, etc. iv. Motivate faculty for the BCUD research proposals. v. Encourage students for participation in project competition. vi. Undertake projects with specialized themes and social needs. vii. Strengthen association with research organisations such as DRDO, ARAI, WPRS, etc. viii. Consultancy, sponsored projects, and industry interaction. ix. Promote interdisciplinary projects	

Recently the appraisal system was upgraded and made online for more transparency.

The various parameters of performance appraisal system of non-teaching to evaluate and ensure that information on multiple activities are appropriately captured and considered for better appraisal are listed in the below table. AMC/IQAC gives comments and suggestions to faculty and staff which are useful for their performance improvement.

Table 6.3.3.b: Appraisal System of the Non-teaching Faculty

PART A –Filled by Individual Faculty	PART B – Filled by HOD
1. Service Record 1.1 % Attendance during actual teaching days in Academic Year (Present days/total teaching days) x 100 > 90% = 10, 85 to 90% =8, 80 to 84% = 6,75 to 79= 4 < 75% = 0 1.2 No. of late comings in Academic Year 1.3 No. of times the CL/C. off availed in conjunction with holidays in Academic Year ≥ 3 times = 2 , 2 times = 3, 1 time = 4 , 0 time =5 ≤ 24 = 4, > 24 = 0 1.4 No. of times the ELs availed in Academic Year > 3 times = 1, > 2 times =2 ,2 times = 4 1.5 No. of times the Medical leaves availed in Academic Year ≤ 2 times = 3, > 2 times = 0 1.6 No of days as LWP in Academic Year 0 days = 3, ≤ 5 days = 1, > 5 days = 0 1.7 Whether available on days when important events / work happened in Dept / College Always available=5, Not available once=3, Not available more than once = 0 1.8 No. of times the leaves were not pre-sanctioned 0 times = 4, ≤ 2 times = 3, > 2 times = 2, > 3 times = 0 1.9 No. of CL balance after 1 year >2 balance = 5, 2 balance = 4, 1 balance = 3, 0 balance = 0 1.10 Outcome of Feedback obtained from colleagues, staff & faculty. **2 Interpersonal Relations** 2.1 Whether following protocols/hierarchy in office matters 2.2 Frequently of complaints to higher authorities about colleagues 2.3 Sensitive to work assistance asked by co-worker 2.4 Whether displays positive outlook in pleasant manner with co-workers,	Quality of Job/Accuracy General Intelligence Initiative to do work Capacity to get work done Relation with Colleagues and others Response to work/Promptness Integrity and Character Reliability / Dependability /honesty Punctuality

faculty, staff, students, parents and public in general **3 Initiative & Co-operation** 3.1 Ability to do work with minimum instructions 3.2 Ability to identify requirements of the work assigned 3.3 Maintaining daily cycle of duties 3.4 Working cordially with colleagues 3.5 Involvement in work/duties at Institute level **4 Quality of Work** 4.1 Promptness (Timely completion of work) 4.2 Accuracy 4.3 Any outstanding work done during year 4.4 Integrity & honesty towards work and organization 4.5 Any efforts being made for academic qualification improvement/skill enhancement 4.6 Punishment warnings / memos received if any (in written form) Received None = 4, Received once = 2, More than once = 0 4.7 Appreciation received if any (in written form) Received None = 0, Received once = 2, More than once = 4 4.8 Consumption of banded substances on college premises or while on duty elsewhere	Whether willful worker work was done during the period Punishment/reward Leave Without Pay Availed during period of Assessment Overall Assessment Recommendations, if any

Recently the appraisal system was upgraded and made online for more transparency.

6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?

- The comments and feedbacks are given by HOD, AMC, principal and are available to faculty for their improvements.
- The counselling is done for non-satisfactory appraisal by the head of the institution.
- Non-satisfactory appraisal faculties are monitored for improvement of performance.
- Annual increments and promotions are given to staff for satisfactory appraisal.
- Appreciation letters based on the performance are given to staff.
- Official memos can be issued from the principal for the unsatisfactory performance.

6.3.5 What are the welfare schemes available for teaching and non-teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?

- Group insurance scheme.

- Group Insurance Scheme (GIS)
- Employee Mutual Biennial Fund (EMBF)
- Provident Fund
- Gratuity
- Accidental Insurance
- Free Medical Facilities for Faculty & Family
- Maternity leave, extended maternity leave and early leaves
- Staff quarters and Special hill-station allowance.
- Need based training programmes.
- In-campus type accommodation in quarters with all basic amenities
- In-campus availability of provision stores, chemist and necessary supplies
- On priority admission for wards in institute

The following welfare schemes are availed for teaching and non-teaching staff:

Table: 6.3.5 Welfare Schemes available in the institute

Sr. No.	Scheme	Percentage
1	Hill Station Allowance.	100
2	Group insurance scheme.	100
3	Staff quarters for teaching and non-teaching in a nominal cost.	56
4	Bus facility.	32
5	Free medical facility.	100
6	EMBF.	100
7	Gratuity.	100
8	Accidental Insurance.	0.9
9	Maternity leave extended maternity leave and permission to leave early or extended lunch.	24.39
10	Uniform for security guards.	100

6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

- Promotion for higher study with full pay and study leave is given to the staff members.
- Timely promotions for the eligible and deserving candidates.
- The pay scale, DA, HRA are given to all teaching and non-teaching staff as per GR of GOM.

- Transport facility for faculty.
- Staff quarters are available for teaching and non-teaching staff.
- Hill station allowance is provided.
- Financial assistance is provided to attend FDPs, workshops, seminars.

6.4 Financial Management And Resource Mobilisation

6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?

The effective uses of available financial resources of Institute are explained as below:

- Principal sends a mail/ notice to all HODs to prepare the departmental budget.
- The HOD circulates the notice regarding the requirement of laboratory equipment, consumables, repair and maintenance, stationery, furniture, books, etc. The discussion is carried out with faculties and laboratory in charges to give their positive inputs to obtain non-recurring and recurring expenditure of each year.
- The budget of the individual department is prepared and then it will be analysed by HOD.
- Individual departmental budget is then submitted to the Principal.
- Finally, Principal consolidates the budget in the CDC meeting for recommendation and approval.
- The final budget is then scrutinised and sanctioned in the GB meetings. Also, if any emergency expenditure is required HODs and Principals can discuss and request to the President, Secretary and vice president for instant approval.

6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.

Institute implements two level audit mechanisms as follows
1) Internal audit
2) Statutory (External) audit

The last audit was done for the year 2015-16. There are no major audit objections in the audit report. Some minor objections in 2015-16 audits and their compliance are shown in table 6.4.2

Table 6.4.2: Objections of external audit and compliance

Sr. No	Particulars of Objections in brief	Compliance by the institute
1	Cashbook	1) The irregularities get noticed and appropriate measures are taken to non-occurrence of delay in deposit of cash. 2) The above mentioned cash difference occurs due to Zoom software problem.
2	Stock verification of library	The library books were issued to the teaching faculties who have left from the services of the STES and amount was recovered.
3	Purchase of answer sheets	All these purchased answer sheets for exam department and stock accounts of answer sheets maintained up to date.
4	Stock entry of plywood flanks received from Vadgaon campus not taken to dead stock register	Stock entry of plywood flanks received from Vadgaon campus has been taken to dead stock register page no. 34, Serial No. 97 and the same entry will be seen by our Internal Auditor.
5	Non-maintenance of stock accounts of finished goods.	We have started to maintain stock of accounts and finished goods.

6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.

The major source of institutional receipts is from the fees of students. The deficit, if any is managed by taking advance from the central office of STES society. Audited income and expenditure statement are available with an office in file and summary of is given in the following table 6.4.3.

Table 6.4.3 Audited income and expenditure statement

Details	2016-17	2015-16	2014-15	2013-14
Income (Rs.)	12,75,62,693	15,64,21,546	12,97,69,448	9,65,81,548
Academic	12,49,77,970	11,09,64,971	12,68,66,370	9,29,09,827

Expenses (Rs.)				
Administrative Expenses (Rs)	74,97,678	28,03,705	41,68,243	39,42,832

6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).

The additional fund is received from the SPPU / AICTE/ BCUD /PhD online examination etc. for conducting different seminars, workshops, conferences, research activity and funds for Quality Improvement Program (QIP).

Table 6.4.4 Grants Received by the Institute

Sr. No	Name of Entity	Funding Agency	A. Y.	Amount (Rs.)	Purpose
1	SKNSITS	BCUD, SPPU, Pune	2016-17	5,00,000	Construction of Rooftop Solar System 2016-17
2	SKNSITS	BCUD, SPPU, Pune	2014-15	1,00,000	Heavy duty printer (60-90-130 CPM)
3	SKNSITS	BCUD, SPPU, Pune	2014-15	93,150	Gymkhana equipment
4	Mr. V. D. Thombre (Asst. Prof)	BCUD, SPPU, Pune	2014-15	32,242	BCUD research program on student sentiment analysis
5	Mr. S. S. Gholap (Asst. Prof)	BCUD, SPPU, Pune	2014-15	30,000	Optimum Design & Development Of bio composite material for automotive application
6	COMP, SKNSITS	BCUD, SPPU, Pune	2014-15	1,52,091	National conference on Advance Computer Networking (NCACN'15)
7	MECH, SKNSITS	BCUD, SPPU, Pune	2014-15	53,573	FDP on Efficient Design for Manufacturing and Assembly
8	SKNSITS	BCUD, SPPU,	2014-15	10,000	ARC Honorarium for Avishkar

		Pune			
9	SKNSITS	BCUD, SPPU, Pune	2013-14	1,00,000	Sony LCD projector (Quantity-2)
10	MECH, SKNSITS	BCUD, SPPU, Pune	2012-13	75,000	Pool boiling apparatus for Mechanical Engg. Department
11	ES, SKNSITS	BCUD, SPPU, Pune	2012-13	86,250	Gymkhana equipment (Dr. Tushar Jagdale)

6.5 Internal Quality Assurance System (IQAS)

6.5.1 Internal Quality Assurance Cell (IQAC)

a. Has the institution established an Internal Quality Assurance Cell (IQAC)? If 'yes', what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?

Yes, IQAC has recently been constituted from 10th August 2016, in accordance with AMC. Previously the T-L-P was monitored and governed by the AMC, which is now the part of IQAC. The primary aim of the IQAC is to develop a system for conscious, consistent, and catalytic action to improve the academic and administrative performance of the institution. IQAC comprises of peer members, as mentioned in the Table 6.5.1.

Table 6.5.1: Members of IQAC

Sr. No.	Name	Designation and affiliation
Chairperson		
1.	Dr. M. S. Rohokale	Principal
Members of the Management		
2.	Dr. M. S. Gaikwad	Member – Campus Director
3.	Prof. M. G. Bhat	Member – Director (Engg.)
4.	Prof. S. B. Pharkute	Member – Director (Academics)
Teachers		
5.	Mr. N. K. Gavade	Head – Mechanical Engg.
6.	Ms. R. M. Thadi	Head – Electronics & Telecommunication
7.	Mr. V. D. Thombre	Head – Computer Engg.
8.	Mr. G. M. Kadam	Head – Information Technology
9.	Mr. S. D. Datey	Head – Electrical Engg

10.	Mr. G. V. Khandekar	Head – Engineering Sciences
11.	Mr. G. A. Kadam	Asst. Professor – Mechanical Engg.
Administrative Officers		
12.	Mr. G. S. Sharma	Coordinator – Training and Placement
13.	Mr. S. S. Navale	Registrar
14.	Mr. S. S. Chavan	NSS Officer
Student Alumni and Parent		
15.	Mr. Rohit Dongare	Alumni
16	Mr. Palash Mane	Student Council
17.	Mr. M. G. Shinde	Parent
External Members		
18.	Mr. Sandeep Gujran	Asst Manager, Jacobs Engineering India Ltd.
19.	Mr. Ashok Divekar	Sr. Software Engineer, Allscripts.
Coordinator IQAC		
15.	Mr. S. L. Shinde	Asst. Professor – Mechanical Engg.

The cell implements and monitors Quality Assurance as per the policy given by principal and the institution includes following assessment parameters:

- Teaching-Learning process.
- Course delivery and Teaching plan verification.
- In semester evaluation plan.
- The performance of engaging lecture.
- Student's attendance and Feedback.
- Result analysis.
- Motivation for research.

b. How many decisions of the IQAC have been approved by the management / authorities for implementation and how many of them were actually implemented?

The IQAC is constituted, but AMC of the institute was working on the same line. All decisions taken by the AMC were generally accepted by the institutional management. Following are some of the important decisions taken by AMC in the past.

- The introduction of TG scheme.
- Infrastructure development - New building for Department of Computer, IT and Electrical Engineering as an expansion of the main building to accommodate increased intake.
- The addition of SLS and extra inputs scheme for weak students.
- Modernization of the classrooms with LCD and internet.
- Introduce online feedback system.

- Implementation of Wi-Fi facility in the campus.
- The introduction of ERP, GEMS, K-Point.

Following are some of the important decisions taken by IQAC recently.

- Preparation for NAAC.
- Undertaking interdisciplinary projects in final year.
- Conduction of one academic event per department per semester.
- Preparation of budget for NAAC.

c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.

Yes.
Mr. Ashok Divekar appreciated the STP. He also suggested that the students must go for interdisciplinary projects, especially between Computer & Mechanical engineering in near future. He added that he will be ready to assist for the same.
Mr. Gujran came up with notion for improving the mechanical placements in core industries, while he appreciated the situation of placement overall considering the crunch situation and the slag in recent years.

d. How do students and alumni contribute to the effective functioning of the IQAC?

Student council member and alumni, as and when needed are invited during the discussion of the points pertaining to student welfare or programs. They suggest their ideas and perspective of the same, for effective functioning.

e. How does the IQAC communicate and engage staff from different constituents of the institution?

All the HODs are the part of academic administration of institute. This ensures that all the faculty members of the institute are involved directly/indirectly in the effective functioning of AMC/IQAC. Faculty and staff of the institute are communicated through the heads of respective departments. AMC/IQAC members also interact with all staff members during the academic year.

6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If 'yes', give details on its operationalisation.

Yes. The institution has an integrated framework for academic and administrative activities. Meetings are conducted regularly for review of the same. The institution provides training to the staff for effective implementation of quality assurance procedures. The newly appointed staff is put on training both at the departmental and STES level.

6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If 'yes', give details enumerating its impact.

Yes, and the details are mentioned in the table below.

Table 6.5.3 Training Programs conducted by the Institute

Sr. No.	Training Programme	Training Agency	Objectives of training
1	Teacher Advancement Programme (TAP – I)	Wren & Pecker Pvt. Ltd., Pune	Effective teaching methods & skills Improving Communication Skills Impressive presentation skills
2	Teacher Advancement Programme (TAP – II)	Wren & Pecker Pvt. Ltd., Pune	To develop Skills to motivate & influence others, be courteous, increased tolerance & openness. Overall development of faculty. To improve Adaptability and Flexibility
3	Train The Trainer (TTT)	STES	To bring uniformity in teaching processes and methodologies in the colleges under STES To train the teachers by experienced faculty for the depth of the content delivery

6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If 'yes', how are the outcomes used to improve the institutional activities?

Yes. IQAC committee along with principal and HOD of departments continuously takes the reviews in the following manner:

- A general staff is meeting twice in a month by the principal.
- Weekly meeting of Principal with HOD.
- Weekly departmental meeting by HODs with the faculty members.

- Preparation and submission of activity report is made mandatory to all departments of the Institute.
- It's mandatory to submit self-appraisal reports of staff.
- Semester wise activity reports of every department is submitted to Principal

6.5.5 How is the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

- The quality of teaching is monitored by IQAC and HODs. Based on those observations necessary corrective actions are taken.
- The institute follows the rules and regulation laid by AICTE, DTE, SPPU and STES.
- Suggestions given in the compliance report by LIC committee from the SPPU are taken in positive spirit for enhancing internal quality assurance mechanisms.
- The library committee and IQAC initiate the library books and journal purchases according to the AICTE norms.

6.5.6 What institutional mechanisms are in place to continuously review the teaching-learning process? Give details of its structure, methodologies of operations and outcome?

The implementation of T-L-P starts with curriculum given by the SPPU.

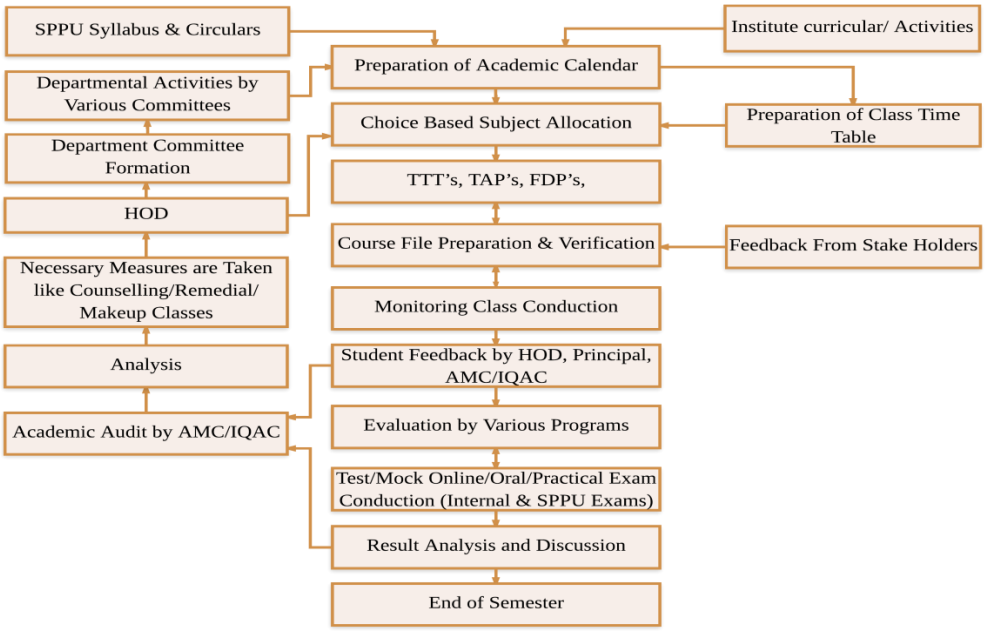


Figure: 6.5.6 Structure of Teaching Learning Process

6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?

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Institute communicates its quality assurance policies, mechanisms and outcomes to the stakeholders through institute Vision and Mission statements, which are displayed at prominent places in the Institute and also on Institute website .The objectives of technical education and institute's methodologies to achieve it are conveyed to the students, parents through an induction programme, various events, etc.

CRITERION VII : INNOVATIONS AND BEST PRACTICES

7.1 Environment Consciousness

7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

Yes, since inception, the institute has maintained greenest environment on its naturally eco-friendly campus. Every care is taken to ensure that carbon emissions are kept to the lowest level. Plantations, lawns, gardens have been specially developed and are maintained most green. The systems and processes are also checked for their greenness on a regular basis. Hygiene and general cleanliness are indeed the most impressive features of the campus.

Green Audit: In the backdrop of the heightened sensitivity of the issue climate change, the institute has formed a Green Audit Team and has been carrying out the audit. Although this campus is fortunately located in a highly natural environment away from city pollution, the green audit serves two purposes, one to know the actual status of the campus and second to sensitise the people on the campus about the environment issues.

Energy Audit: The electrical engineering department has been carrying out an electric power audit of the institute. Results and the conclusions have been drawn and submitted to management for consideration. An appropriate set of instruments such as an energy analyser, Clamp-on meters, and Lux meters is used for the exercise.

Maximised usage of daylight: The rooms are constructed in such a manner that maximum daylight should be received in classrooms and laboratories. Assessment of daylight availability and its optimum utilisation is done regularly

7.1.2 What are the initiatives taken by the institute to make the campus eco-friendly?

Awareness campaigns for energy conservation
Electrical and Mechanical engineering departments jointly carry out this campaign on a regular basis. The campaign includes a display of posters, poster competitions, conducting awareness meetings with students and staff. Through awareness drives towards keeping the campus free of polyethene, garbage and smoke, the institute has indeed accomplished the status of pride. Student bodies across departments have shown special

alertness for maintaining the eco-friendly campus. They regularly arrange awareness campaigns and programs.

Energy conservation:
Apart from an economy point of view, energy conservation is imperative from the nation's perspective. The best care has been taken while designing several buildings on the campus so that they are highly ventilated and well lighted by the daylight. Most of the academic and administrative premises hardly require artificial lighting and ventilation during day time because of the eco-friendly design. In a due response to major energy sufficiency initiatives taken by the central and state governments, the Institute is contemplating major green initiatives in the form of replacement of conventional tube lights by LED lighting and tapping the abundant resource of solar energy. Students of the institute have surveyed and evaluated the energy conservation potential in the campus. Modern energy saving technologies are promptly adopted by the institute such as replacement of CRT monitors by their LCD versions, replacing energy-intensive resistance type fan regulators by low consumption solid state regulators, etc.

Use of renewable energy: Hybrid solar heating systems has been extensively deployed on the campus for hot water supply in hostels. Considering the cost effective solar PV technologies being available in the market and with the recent announcement of renewable energy policies by central and state government, the Institute has designed a solar PV generation project for the campus.

Rain water harvesting: Given the above-normal rainfall in Lonavala, the institute has plans to adopt the rainwater harvesting to tap this natural resource to recharge the tube wells on the campus. These tube wells supply a major chunk of the water to the campus habitation after being treated in the plant.

Efforts for carbon neutrality: Carbon neutrality efforts are based on the theme of repair, reuse and recycle. Paper waste is sold for recycling and reuse. Institute promotes the use of furniture made of particle board. Air conditioners, refrigerators, and water coolers are of high quality and having eco-friendly refrigerant. The power backup sets of diesel generators are equipped with a catalytic converter for exhaust gas. In campus, lawns, plantations, big trees and forest are spread over 50% portion. Paperless governance is carried out through GEMS online, the ERP platform. All types of leaves by faculty and staff are submitted through GEMS only, and use of paper is partially eliminated for that purpose. Institute promotes paperless communication by mail and SMS. We promote reuse of printouts for internal communications. Facilities like a canteen, laundry, cafeteria, photocopy centre and ATMs by Central

Bank of India, State Bank of India and ICICI Bank are provided on campus for students and staff nearby hostels and staff quarters.

Plantations: The plantation is an ongoing activity on the campus. Maintenance of existing trees and planting new saplings is religiously done every year during an appropriate season. The natural forest like environment is intentionally preserved wherever possible.

Waste management: Housekeeping personnel collects daily garbage and handed over to Municipal garbage vehicle. All waste water lines from toilets; bathrooms etc. are connected to the drainage mains. The sewage treatment plant is present in the campus, and the treated water is used for gardening. Waste material like plastic, papers, etc. are collected and sold out to scrap vendor from time to time.

E-waste management: The e-wastes are disposed of periodically through a professional e-scrap vendor.

7.2 Innovations

7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the institute.

In its quest for excellence, the Institute continually experiments with innovations in every dimension of institute management. Some examples are as follows,

Administration:

- Institute is reducing the use of paper; for leave application, staff profile management, communication between staff, etc. For this purpose, institute has paperless e-governance and uses several Google tools for e-communication including file transfer, pooled data filling.
- Some of the features of GEMS are as follows
  - Notices for students
  - Service book
  - Leave Application
  - Staff Profiles
  - On duty worksheets
  - Annual Appraisal of Staff members

Academics:

- For effective learning, innovative laboratory modules and training programmes are being practised for both teachers and students.

- R&D committee is taking special efforts for the active involvement of faculty and students in research and development. Two faculty members have registered at the TUS, Bulgaria and twenty-five faculty members have registered for their Ph. D. at various universities in India
- PBL methodology has been adopted under which the students take up small projects and work systematically on them from scratch. They accomplish final objective through a meticulous process of analysis, design, and development.
- Lab. is equipped with K point software and NPTEL videos for imbibing more education through live sessions and demos. NPTEL videos and other technical video lectures are downloaded and made available to the students in Computer lab.
- In our institute, the classrooms are developed with LCD projectors for presentations and Personal audio system if needed. Internet facility is also available in classrooms to utilise the web resources for teaching learning to be in sync with recent trends.

Student Welfare:

- The STP which aims at the all-round development of students is conducted over and beyond the regular curriculum. In weekly time table, a two hours slot is added for STP. The program is conducted throughout five semesters from second to final year. Skill training includes soft skills, technical aptitude, GD/PI skills and advanced technologies.
- The student projects and competitions, like SAE INDIA BAJA, Techtonic and SKNINNOTECH are being sponsored by the Institute.

Staff welfare:

FDP: In every semester to develop the teaching and learning process for the faculties, initiatives are taken under FDP to arrange invited talks by experts on several issues like Stress Management, Student –Teacher Relationship, Teaching Methodologies, etc. TTT is organised by our Institute for subjects of First Year, Second Year and Third Year before the start of the semester for the qualitative teaching. TAP is organised for the overall personality development of the faculty.

7.3 Best Practices

7.3.1 Institutional Objectives and contributed to the Quality improvement of the core activities of the college.

Best Practice I: Project Based Learning Environment.

Goal: For achieving effective learning by students.

The Context: Learning happens only when one performs tasks on his own.

The Practice:

- Students are encouraged to pick up a project in small groups in the representative list of areas prepared by the department or by him. They are required to go through a structured process of analysing the problem, solution development and implementation.
- Student projects are then evaluated by merit.
- Necessary feedback is given to students.
- Institute has developed various schemes such as Lab innovations, VAP, and IIIC, which promote learning through projects.

Evidence of success: PBL shows improvement in understanding and confidence about core concepts among students. It also helps in achieving skills required for the professional practice.

A problem encountered and resources required: PBL
It was realised that it is a time consuming process as grouping and problem identification according to the students' mind-set is a tedious task. The traditional assumptions and stereotype problem solving methods forms a big barrier. Path away must be provided for out of the box thinking. With heavily packed syllabus and schedule, the PBL becomes an information overload. Evaluation of students gets difficult and new assessment methods must be evolved.

Best Practices II: Paperless governance with GEMS

Goal: The Institute implemented paperless governance through MIS software system – GEMS. With the help of this system, all the academic processes of Institute are automated.

The Context: Every faculty and staff are allotted an individual login ID through GEMS. The processes like AC, faculty leave management, faculty appraisal, student feedback and placement activities are operational and followed by every faculty and the staff members of Institute.

The Practice:

- Academics: For every semester faculty members upload their academic calendar, timetable, teaching plan of the subject, notes, schedules of examinations, attendance, etc.
- Leave Management: Faculty can apply for all the types of leaves with necessary alternative arrangements. These leaves are approved by Admin, HOD, Principal and management.
- Faculty appraisal and student feedbacks: Every semester faculty feedback is taken from students. Academic performance of faculty is evaluated through the GEMS annually.
- Placement activities: All the students are registered on GEMS and they fill their academic data online. The placement officer makes the announcements of placement activities and furnishes the required student's data to the company's online.

Evidence of success: The lesson plan of the respective subject is available based on which the lectures are planned. Accordingly, the attendance has been monitored. The reports of placement activity are generated as per the requirements of the company.

A problem encountered and resources required: GEMS systems run on a variety of computer hardware and network configurations, typically using a database as an information repository. Installation of the system with necessary application and data integration is difficult on various configurations of PCs. Conversion of the previous manual system into equivalent software system is not only difficult but also exhibits strong oppose from various cadres of employees. Therefore, extensive training is necessary for employees with strong convincing ability.

The institutional resources required for implementation of GEMS are as follows:

- Budgetary requirement for training of employees
- GEMS upgradation software
- PCs with the latest configuration.

Best Practices III: STP to enhance employability skill

Goal: Worldwide, the advancement in technology has not only revolutionised the scope of engineering education but also redefined the expectations from engineering graduates. At SKNSITS, a need was identified to start an innovative practice "Student Training Program" that would help the students to build a personality equipped with excellent technical and soft skills. With this in mind, a state- of-the-art STP is being implemented from the year 2013-14. The aim of the program is to enhance

the quality of the students by empowering them with skills those are globally at par.

The Objectives of the STP are to:

- Enhance the employability opportunity.
- Prepare students for entrepreneurship.
- Prepare students for higher education in India and abroad.

The Context:

- Integration into the Curriculum: Training incorporated into the curriculum to help students for preparation and self - evaluation in technical and soft skills.
- Lecture recordings: Subject wise lectures are recorded by expert faculty on K-point server. This is a LAN based resource to help the students to learn and revisit the concepts discussed in class earlier.
- Expert faculty: A good blend of the classroom and hands-on training provided by expert faculty.
- AMCAT assessment: Training need and outcome assessed using AMCAT, a test preferred by many well-known industries globally.

The Practice: The duration of STP is 120 hours that spread over five semesters as STP I-V. It is to be undertaken by the student from the start of the second year of engineering. The details of the program are explained in Section 1.2.3, Criterion I.

Evidence of success: Implementation of STP has shown a remarkable effect on placement activity. Also, students can crack professional examinations conducted by industries, government agencies, civil services, etc. This unique activity is appreciated by industries and alumni.

Problems Encountered and Resources Required: The VAP is required to be conducted in parallel with regular academics. Therefore, extra sessions from industry experts are normally arranged on weekends. Industry experts and corporate trainers charge heavily to the students for professional training. Extra-budgetary provisions to conduct such training become essential otherwise students pay on their own.
However, it is necessary to give VAP inputs to the students to cope up with industrial requirements and make them ready for placement.
The institutional resources used to conduct STP and VAP are as follows:

- Budgetary requirement for VAP
- Classroom with LCD and multimedia facility
- Software for ET and QA/LR
- Internet facility to conduct AMCAT
- IT infrastructure for hands-on training
- Library with necessary e-resources, journals and books.

Contact Details

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MECHANICAL ENGINEERING

1. Name of the department : Mechanical Engineering

2. Year of Establishment : 2011

3. Names of Programs / Courses offered : UG/ PG

Courses Offered	Name of the course	Specialization	Year of Establishment
U. G.	B. E. (1st Shift)	Mechanical Engineering	2011-2012
U. G.	B. E. (2nd Shift)	Mechanical Engineering	2012-2013
P. G.	M. E.	Mechanical Design Engineering	2012-2013

4. Names of interdisciplinary courses and the departments/units involved :

Sr. No.	Name of Interdisciplinary course	Department
1	Engineering Mathematics - III	ES
2	Electronics and Electrical Engineering	E&TC
3	Mechatronics	E&TC

5. Annual/ semester/choice based credit system (Programme wise):

Sr. No	Course Offered	Programme	Duration	System	Evaluation
1	U.G.	Mechanical Engineering	4 Years	8 Semesters	Marks/Credit
2	P.G.	Mechanical Design Engineering	2 Years	4 Semesters	Credit

6. Participation of the department in the courses offered by other departments :

Sr. No.	Courses	Offered to Department
1	Engineering Graphics-I	ES
2	Basic Mechanical Engineering	ES
3	Engineering Graphics- II	ES
4	Engineering Mechanics	ES

7. Courses in collaboration with other universities, industries, foreign institutions :

Sr. No.	A.Y.	Name of the Course	Name of Collaboration
1	2017-18	Robotics & Automation	Indiafirst Robotics Pune
2	2017-18	Refrigeration & Air-Conditioning	Kohinoor Technical Institute Pvt Ltd
3	2017-18	CATIA	Apollo Institute
4	2016-17	Automobile Vehicle and Dynamics	ELITE Techno Groups, Jaipur
5	2016-17	Development of Refrigeration System	Azhar Pathan Bros. Refrigeration & Air Conditioning Services, Lonavala, Pune.
6	2016-17	ANSYS	ELATION Element Simulation Academy, Akurdi, PUNE.
7	2016-17	Geometric Dimensioning & Tolerance	MECHATOL Engineering Solution, Pune
8	2016-17	Piping Design	V Kumar Solutions India Pvt. Ltd., Kothrud, Pune
9	2016-17	Entrepreneurship Development on Fibre Reinforced Plastics	Global Enterprises, Pune
10	2016-17	Group Discussion & Personal Interview Training	Mr Ramnayny, Pune (Free-Lancer)
11	2015-16	Geometric Dimensioning & Tolerance	MECHATOL Engineering Solution, Pune
11	2015-16	Piping Design & Engineering	Asian Academy of Professional Training, Pune
12	2015-16	Process Planning & Tolerance Analysis	Mechworks Engineering & Consultant, Pune.
13	2015-16	Two Wheeler Maintenance	Mr. Nikhil Fakatkar, Pune

14	2014-15	CATIA	Mr. S. S. Gholap, Pune.
15	2014-15	GRE	N & N Chopra's Consultants Pvt. Ltd.
16	2014-15	CATIA	Mr. S. S. Gholap, Pune.
17	2014-15	Robotics Course	K Imagination, Pune
18	2013-14	ANSYS	IFS Academy, Pune.
19	2013-14	Robotics Course	K Imagination, Pune
20	2012-13	CATIA	Matrix Design Training Institute, Pune.
21	2012-13	CATIA	Mr. S. S. Gholap, Pune.
22	2012-13	German Language	Bhavana Parlecha, Lonavala, Pune

8. Details of courses/programs discontinued (if any) with reasons : Nil

9. Number of Teaching posts

Designations	Number of Teaching Posts			
	For Undergraduate Programme		For Postgraduate Programme	
	Sanctioned	Filled	Sanctioned	Filled
Professors	3	2	1	0
Associate Professors	6	0	1	0
Assistant Professors	27	34	2	3
Adjunct Faculty	-	5	-	1
Total	36	41	4	4

10. Faculty profile with name, qualifications, designation, specialization, (DSc/ D.Litt/ Ph.D/ MPhil etc.) : Nil

11. List of senior visiting faculty : Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty - Nil

13. Student -Teacher Ratio (programme wise)

A. Y.	Student's Intake	Teacher(s)	Student Teacher Ratio (STR)
2017-18	540	36	14.59

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Type of Staff	Sanctioned	Filled
Technical Assistant	05	05
Workshop Staff	06	06
Peon	02	02
Total	**13**	**13**

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG

Sr. No.	Qualification	No. of Teaching Faculty
1	Ph.D	02
2	PG	34

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received.

A) Sponsored Projects from Industries and SPPU

A.Y.	Faculty	Title of the Project	Sponsoring Agency	Sponsorship amount	Status of Proposal
	Mr. Saudagar R. T.	Determination of Refrigerating Effect using LPG as A Refrigerant	MB Engineering works	Technical Sponsorship	In process
	Mr. A. K. Najan	Improve Productivity of side tank cover for K10 by using KANBAN	Varroc Polymer Pvt.Ltd	Technical Sponsorship	In process
	Mr Khope G. G.	Magnetic Mechanism for	Shiv shakti brakes	Technical Sponsorship	In process

		Lifting Box In Toast Plant			
2016-17	Mr. A. K. Najan	Productivity Improvement of Air Conditioning Plant by Kaizen	MAHLE BEHR India Pvt. Ltd., Pune	Technical Sponsorship	Completed
	Mr. G. A. Kadam	Manufacturing of Die	Mahindra CIE Automotive Ltd. Pune	Technical Sponsorship	Completed
	Mr. P. R. Ingole	Design & Development of Beading Machine	Sharda Engineering, Pune	Technical Sponsorship	Completed
	Mr. P. R. Ingole	Automated Guided Vehicle For Material Handling Trolley	Sanjyot Dies & Moulds, Pune	Technical Sponsorship	Completed
	Mr. N. K. Gavade	Pneumatic Seal Testing Machine	EagleBurgmann India Pvt Ltd, Pune	Technical Sponsorship	Completed
	Mr. A. K. Najan	Press Tool Design & Manufacturing.	Kalika Engineering Works, Pune	Technical Sponsorship	Completed
	Mr. G. A. Kadam	Process Modification & Automation For Polypropylene Sheets	Ranjit Enterprises, Pune	Technical Sponsorship	Completed
2015-16	Mr. P. R. Ingole	Analysis And Manufacturing Of Voltage Regulator Casing Used In Military Tanks	Indesys Equipment Pvt. Ltd. Lonavala Pune	Technical Sponsorship	Completed
	Mr. N. S. Jadhav	Design, Manufacturing,& Testing of Electromagnetic AC Shoe Brake	Pethe Engineering Pvt. Ltd. Lonavala Pune	Technical Sponsorship	Completed
	Mr. G. S. Datar	Electro-Magnetic Clutch Testing Machine	Magna Core Clutches & Brakes Pvt Ltd. Lonavala Pune	Technical Sponsorship	Completed
	Mr. T. V. Patil	Quality Improvement	Sigma Electric Manufacturing	Technical Sponsorship	Completed

		KAIZEN For Housing G-4	Corporation Pvt. Ltd. Chakan Pune		
	Mr. P. R. Ingole	Production Line Modification using Improved design of Rolling Ball Table	Mahindra CIE Automotive Ltd. Kanhe, Tal-Maval,Pune	Technical Sponsorship	Completed
	Mr. G. S. Datar	Design of Injection Mould for gear elements using CAD	Aim Plast, Nigdi Pune	Technical Sponsorship	Completed
2014-15	Mr. N. N. More	Design and development of torque limiter	SPARK TECHNOCRATS, Pune	Technical Sponsorship	Completed
	Mr. A. K. Najan	Design Of Pneumatic Insertion Mechanism For Moving Contact of Mnx 265-650and	L&T Electrical &Automation Products, Ahmednagar	Technical Sponsorship	Completed
	Mr. S. S. Gholap	Optimum Design Of Bio-composite Material For Automotive Application	BCUD, SPPU	Rs.60,000/	In Process
	Mr. T. V. Patil	Design &Testing Of Treated Water Storage Tank	QA & QC Consolidated Chemrquip (mfr) Corp Pune	Technical Sponsorship	Completed
	Mr. S. L. Shinde	Experimental Study And Modification of Strike Anchor Fastener	Sumo Fasteners, Kothrud, Pune	Technical Sponsorship	Completed

B) STES's funding

A.Y.	Faculty	Title of the Project	Sponsoring Agency	Sponsorship amount (Rs).	Status of Proposal
2014-15	Mr. S L Shinde	Measurement and Analysis of Foam Material by Air-	STES, Lonavala, Pune	10,000/-	In process

		Flow Resistivity Equipment			
	Mr. A K Najan Mr. P D Tambe	Design and fabrication of ATV	STES, Lonavala, Pune	1,10,000/-	Completed

18. Research Centre /facility recognized by the University- Nil

19. Publications

A) Paper Publications:

Sr. No.	Faculty Name	No. of paper published in per review journals faculty/students	No. of publication listed in International/ National conference	Monographs	Chapters in books	Books edited	Books with ISBN in International DB	Citation Index	SNIP	SJR	Impact factor	h- Index Average
1	Mr. N. K. Gavade	2	1	-	-	-	-	-	-	-	3.465	-
2	Mr. S. H. More	2	1	-	-	-	-	-	-	-	2.991	-
3	Mr. G. A. Kadam	6	4	-	-	-	-	6	-	-	1.87	2
4	Mr. D. V. Dandekar	2	3	-	-	-	-	-	-	-	3.38	-
5	Mr. S. L. Shinde	6	1	-	-	-	-	-	-	-	2.5	3.2
6	Mr. T. V. Patil	2	2	-	-	-	-	-	-	-	3.3	-
7	Mr. G. S. Sharma	1	2	-	-	-	-	-	-	-	-	-
8	Mr. N. S. Jadhav	1	-	-	-	-	-	-	-	-	2.991	-

9	Mr. N. N. More	6	-	-	-	-	-	2	-	-	2.3	-
10	Mr. R V Mahajan	3	2	-	-	-	-	-	-	-	4.072	
11	Mr. R T Saudagar	1	-	-	-	-	-	-	-	-	5.153	-
12	Mr. A. K. Najan	3	2	-	-	-	-	-	-	-	2.991	-
13	Mr. Ranjan Rajeev	-	2	-	-	-	-	-	-	-	2.9	-
14	Mr. N. S. Gandhi	1	2	-	-	-	-	-	-	-	3.465	-
15	Mr. A. S. Gadhave	-	3	-	-	-	-	-	-	-	4.35	-
16	Mr. P. A. Kharat	1	-	-	-	-	-	-	-	-	2.991	-
17	Mr. B. D. Kusure	1	3	-	-	-	-	-	-	-	4.064	-
18	Mr. A. D. Pathak	-	2	-	-	-	2	-	-	-	3.1	-
19	Mr. P. R. Ingole	5	5	-	-	-	-	-	-	-	2.991	-
20	Mr. P. D. Tambe	2	2	-	-	-	-	-	-	-	2.991	-

A) Books Published

Sr. No.	A.Y.	Name of Author	Title of Book	ISBN No.	Details of Publisher
1.	2015-16	Mr. J. P. Suple	Strength of materials	ISBN 978-93-5158-271-7	Success publication
2.	2015-16	Mr. A. D. Pathak	CNC Machines and automation	ISBN978-93-5224-389-1	Tech Max Publications
3.	2016-17	Mr. A. D. Pathak	Inspection & Quality Control	ISBN978-93-5224-465-2	Tech Max Publications

20. Areas of consultancy and income generated

Type of Consultancy	Details of Consultancy (Technical/Academic/	Name of Faculty	Revenue Generated

	Testing)		Rs.
Academic	Dr. A. G. Kamble, SIT Lonavala	Mr. D. V. Dandekar	5000
Academic	SIT Lonavala	Mr. V. D. Rathod	Nil

21. Faculty as members in

Sr. No.	Name of Committee	Number of Members
1	National Committee	13
2	International Committee	00
3	Editorial Boards	03

22. Student projects

Percentage of students who have done in-house projects including inter departmental/programme

Sr. No.	Description	2017-18	2016-17	2015-16	2014-15
A	Percentage of students who have done in-house projects including interdepartmental/ programme	91.26%	84.44%	86.28%	75%
B	Percentage of students placed for projects in organizations outside the institution	8.74%	15.56 %	13.72%	25%

23. Awards/ Recognitions received by faculty and students.

A. Awards/ Recognitions received by Faculties:

Sr. No.	Name of Faculty	Details of Awards / Recognitions	Organization
1	Mr. G S Datar	Best Paper Award	IRD India
2	Mr. D V Dandekar	Best Paper Award	IRD India
3	Mr. D V Dandekar	Best PBL Model Award	ViMEET
4	Mr. G S Datar	Best PBL model Award	ViMEET

B. Awards/ Recognitions received by Students:

A.Y.	Name of Student	Details of Awards / Recognitions	Organization
2016-17	Aditya Lote	Gold Medal in 3000 m Running	Zest 2017, COE, Pune

	Aditya Lote	Gold Medal in 5000 m Running	Zest 2017, COE, Pune
	Aditya Lote	Gold Medal in 10000 m Running	Zest 2017, COE, Pune
	Kabaddi Team	Runner Up	Sinhgad Karandak 2017, STES, Pune
	Shubham Pandita, Sanjay Prajapat	Runner-up	Smart Technocrat
	Sohail Shaikh	Winner	Lathe Wars
	Abhishek Amrutkar	Best Nose Drive for Slope Box Car	Sinhgad Karandak 2017, STES, Pune
2015-16	Mr. Vansh Datta	Best Outgoing Student	SKNSITS
	Sachin Gulab Shirsat	Six Sigma Green Belt	QC Services, Pune
	Sumit Shivaji Kale	Six Sigma Certification	QC Services, Pune
2014-15	Miss. Priyanka Shintre	Best Outgoing Student	SKNSITS
	Atul Krishna Patil	Winner in National Level Paper Presentation	
	Mr. Ravi Tomar	Winner Boxing- National Level	3rd Hapkido boxing national championship
	Miss. Komal Jadhav	Winner Boxing- national Level	3rd Hapkido Boxing National Championship
2013-14	Mr. Amol Walekar	Campus Ambassador of Election commission of India for 16th Lok Sabha Election	Bharatiya Chhatra Sansad, MIT, Pune
	Mr. Pramit Samanta	APPLE Certified support Professional	APPLE
	Mr. Prathamesh Phulambarkar	State Level Swimming	MSAAA, Maharashtra
	Mr. Prathamesh Phulambarkar	District Level Roller skating	D K District Roller Skating Assn
	Mr. Prathamesh Phulambarkar	State Level Badminton	Maharashtra Badminton Assn.
	Atul Patil	1st Prize in National Level Paper Presentation	VVP Polytecnic Solapur
	Mahesh Mane	2nd Prize in National Level	VVP Polytecnic

		Paper Presentation	Solapur
	Firmsteps Group	Winner- Group Dance competition (Cultural Fest)	SKNSITS
2012-13	Mr. Pramit Samanta	NASA's Senior Mission Planner from India	NASA, USA
	Miss. Priyanka Shintre	6th Rank in SPPU	SPPU, Pune

24. List of eminent academicians and scientists/ visitors to the Department

A.Y.	Name	Designation	Organization	Purpose of Visit
2017-18	Dr.K.N.Vijay Kumar	Prof and HOD Mech	D.J.Sanghavi COE, Mumbai	Invited Talk on Latest trends in Mechanical Engineering
	Dr.Vivek Yenkkundi	Principal	LT COE, Mumbai	Introduction to HYPERMESH
2016-17	Mr. Smriti Dagur	President	IETE, Delhi	IETE Chapter Formation
	Mr. Khushal Singh Bithu.	Senior Research Associate.	Elite Techno Group	3 day workshop on "Automobile and Vehicle dynamics"
	Dr. P. K. Desai	President ISTE	ISTE, Delhi	Student Chapter
	Mahesh More	Manager	Infosys, Pune	Project Exhibition
2015-2016	Dr. K. N. Vijaykumar	HOD Mechanical Engg	Fr. CRCE, Bandra, Mumbai	Session Chair Person for RTME, 2016
	Dr. A. T. Pise	Dy. Director	DTE, Mumbai	Chief Guest for RTME, 2016
	Dr. Tansen Chaudhari	Chief Operating Officer	Fluid controls Pvt. Ltd, Pune	Guest for RTME, 2016
	Dr. R. S. Khavekar	TPO	D.J. Sanghavi COE, Mumbai	Session chair person for RTME, 2016
	Mr. Devesh Agarwal	Manager, Transmission Design	Tata Motors	Invited Talk on Transmission System & Gear Design
	Mr. Ashutosh Khaire	Consultant	Eleation Academy	Introduction to Ansys
	Mr. Mayank	Resource	(Elite Techno	Automobile

	Arora	person	Group)	Dynamics
	Mr. Aditya Abhyankar	Professor	Faculty Coordinator, SPPU	Research Methodology Workshop
2014-15	Dr. D G Thakur	Scientist	DIAT, DRDO, Pune	Session Chairperson for STTP on "DFMA"
	Dr. Y. D. Venkatesh	Principal	St. Xaviers Institute of Technology Navi mumbai	Session Chairperson for STTP on "DFMA"
	Dr. D. S. Bilgi	Principal	Bharati Vidyapeeth	Chief guest: for STTP on "DFMA"
	Brig. B. S. Gill	Brigadier, Ex. President SSB	Indian Army, SSB Allahabad Cadre	Invited Talk on "Career in armed forces"
2013-14	Mr. Devesh Agarwal	Manager, Transmission Design	Tata Motors	Invited Talk on Gear Box Design
	Mr. Yogesh Chavan	Air India Personnel	Air India, Mumbai	Invited Talk on "Recent Trends in Aeroplane system And Opportunities for Engineers in Aviation."
	Mr. Nilesh Uplap	Manager	India Soft Tech Pvt Ltd.	Simulation & Automation of Machines
2012-13	Dr. K P Issac	Member Secretary	AICTE Delhi	International Conference
	Dr. A K Shukla	Regional Officer	AICTE Mumbai	International Conference
	Dr. Gunthi Gunarathne	Director	LabVIEW Academy, UK	International Conference
	Dr. D. J. Regulwar	Dean R & D,	Govt. COE, Aurangabad	State Level Conference
	Dr. N. B. Dhokey	Professor	Metallurgy Dept, COE, Pune	Session chair
	Dr. V.K. Tripathi	Asso. Professor	Mechanical Dept, COE, Pune	Session co- chair
	Dr. S.N.Deshmukh	Asso. Professor	Computer Dept, COE, Pune	Session co- chair
	Dr. Vijay Rathod	Lecturer	Mechanical Dept, GP, Thane	Session co- chair

25. Seminars/ Conferences/Workshops organized & the source of funding

A.Y.	Category	Title	Funding Agency
2016-17	Workshop	Automobile and Vehicle Dynamics	Self-Sponsored
	Seminar	Introduction to ANSYS	Self-Sponsored
	Seminar	Industrial Engineering & Automation	Self-Sponsored
	Workshop	Development of Refrigeration System.	Self-Sponsored
2015-16	National Conference	Recent Trends in Mechanical Engineering	Self-Sponsored
	Workshop	Two wheeler Maintenance	Self-Sponsored
	Seminar	Geometric Dimensioning & Tolerances	Self-Sponsored
2014-15	STTP	Efficient Design for Manufacturing and Assembly	SPPU
	STTP	MATLAB	Self-Sponsored
	Workshop	Robotics	Self-Sponsored
2013-14	Workshop	Robotics	Self-Sponsored
	Workshop	Mechanics Modeling	Self-Sponsored
2012-13	International Conference	Advances in Engineering and Technology	SPJ Center of Multidisciplinary Research (SCMR) and SCMR's Association of Research (SAR).
	State Level Conference	Advanced Computational Techniques	SPPU

26. Student profile Programme/Course wise:

A) UG Details

A.Y.	Name of Course	Applications received	Selected	Enrolled		Passing %
				M	F	
2017-18	MECH	Admissions process in the state is only through CAP and governed by DTE,	55	55	-	-
2016-17	MECH		67	66	1	-

2015-16	MECH	Maharashtra State Government. The institute follows the rules, regulations and guidelines set by SPPU, State Government body.	167	167	0	-
2014-15	MECH		166	165	1	87.86
2013-14	MECH		178	177	1	79.58
2012-13	MECH		185	179	6	94.64

B) PG Details

A.Y.	Name of Course	Applications received	Selected	Enrolled		Passing %
				M	F	
2016-17	MECH	Admissions process in the state is only through CAP and governed by DTE, Maharashtra State Government. The institute follows the rules, regulations and guidelines set by SPPU, State Government body.	2	2	0	-
2015-16	MECH		15	13	2	-
2014-15	MECH		18	17	1	44.44
2013-14	MECH		7	4	3	71.42
2012-13	MECH		24	23	1	79.16

27. Diversity of Students :

A. Y.	% of students from the same state	% of students from the other state	% of students from abroad
2017-18	98.53	1.47	0
2016-17	94.09	5.91	0
2015-16	88.69	11.31	0
2014-15	88.46	11.54	0
2013-14	92.04	7.96	0
2012-13	89.19	10.81	0

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc?

Academic Year	Number of Students cleared National & State Competitive Examinations			
	GATE	GRE	TOEFL	CAT
2016-17	4	2	-	-
2015-16	3	-	-	-

2014-15	1	-	1	-

29. Student progression

Student progression	Against % enrolled		
	2016-17	2015-16	2014-15
UG to PG	1.67	1.01	7.14
PG to M.Phil.	-	-	-
PG to Ph.D.	-	-	-
Ph.D. to Post-Doctoral	-	-	-
Employed	-	-	-
Campus selection	9.40	17.07	12.5
Other than campus recruitment	2.7	34.76	33.92
Entrepreneurship / Self-employment	1	-	3

30. Details of Infrastructural facilities

a) Library
b) Internet facilities for Staff & Students
c) Classrooms with ICT facility
d) Laboratories

a. Library – YES
Departmental library contains books, journals, magazines, video lectures, E-journals, seminar reports and project reports of last four year for reference.

Sr. No.	Title	Details
1	No. of Titles	524
2	No. of Volumes	395
3	Project Report	112

b. Internet Facilities for Staff & Students –Yes.

Wi- Fi Facility is given. Wi-Fi facility is upgraded to 32 Mbps for staff and students, the residential staff of all institutes, in the campus.

Classrooms
Number of Classrooms with ICT facilities = 05
Number of Seminar Rooms = 01
Number of tutorial rooms = 02

c. Classrooms with ICT facility

Details of Classrooms

Room Descriptions	Capacity	Facilities
B104	80 Students	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains
B105	80 Students	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains
B106	80 Students	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains
B107	80 Students	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains
B108	80 Students	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains

Details of Seminar Hall:

Room Descriptions	Capacity	Facilities
B 305	120 Students	White board, Ethernet cable, LCD Projector, PA System, fan , fluorescent Tube and curtains

Details of PG Labs:

Room Descriptions	Capacity	Facilities
Laboratory – 01	25	White board, Ethernet cable, LCD Projector, PA System, fan, fluorescent Tube, Curtains , FFT Analyser
Research Laboratory – 02	25	White board, Ethernet cable, LCD Projector, PA System, fan, fluorescent Tube, Curtains and Software packages like ANSYS, CATIA, MASTERCAM, etc

Details of Tutorial Rooms:

Room Descriptions	Capacity	Facilities
B109	25	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains
B301	25	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains

d. Details of Laboratories

Sr. No.	Name of the lab	Name of faculty In	Room No

		charge	
1	Theory of Machines	Mr. M Badadare	B-103
2	Dynamics of Machinery	Mr. M. M. Nagargoje	B-005
3	CAD 1	Mr. S. S. Bhopale	B-110
4	CAD 2	Mrs. T K Bhoskar	B-102
5	Metrology and Quality Control	Mr. A. D. Pathak	B-007
6	Fluid Mechanics	Mr. A. S. Gadhave	B-003
7	Heat Transfer	Mr. S S Babar	B-003
8	Strength of Material	Mr. P. P. Kapalay	B-005
9	Mechatronics	Mr. P. S. Maske	B-007
10	Hydraulics and Pneumatics	Mr. B. D. Kusure	B-002
11	Refrigeration and Air Conditioning	Mr. P. R. Ingole	B-302
12	Metallurgy	Mr. V. D. Rathod	B-302
13	Turbo Machines	Mr. A K Najan	B-002
14	Applied Thermodynamics	Mr. N. S. Gandhi	B-001
15	Workshop	Mr. N. S. Jadhav	GR-01

31. Number of students receiving financial assistance from college, university, government or other agencies

The following data indicates no. of students receiving financial assistance

A.Y.	EBC	SC	OBC	SBC	VJNT	ST
2016-17	159	16	98	11	11	2
2015-16	151	62	184	11	52	1
2014-15	120	50	126	9	48	2
2013-14	84	35	89	5	35	1
2012-13	38	20	51	3	19	0

32. Details of student enrichment programmes (special lectures / workshops / seminar) with external experts

2017-18

Sr. No.	Student Enrichment Programmes Details	No. of Participants
1. Value Addition Programs		
3	CATIA	28

2. Invited Talks		
1	GATE Exam Preparations	150
2	Invited Talk on Latest trends in Mechanical Engineering	165
3	Introduction to HYPERMESH	120
3. Workshop / Conferences organized		
1.	Robotics & Automation	60
2	Refrigeration & Air-Conditioning	68
4. Industrial Visits		
1	Refrigeration and Air Conditioning- Katraj Dairy	129

2016-17

Sr. No.	Student Enrichment Programmes Details	No. of Participants
1. Value Addition Programs		
1.	ANSYS 17.0	105
2	Geometric Dimensioning & Tolerances	55
3	Piping Design	66
4	Fiber Reinforced Plastics	34
5	Development of Refrigeration System	105
2. Invited Talks		
1	Introduction to ANSYS software	130
2	Vehicle Dynamics	260
3	Automotive device	250
4	FEA	140
5	CAD – CAM	127
3. Workshop / Conferences organized		
1	Automobile and Vehicle Dynamics	130
4. Industrial Visits		
1	Refrigeration and Air Conditioning- Katraj Dairy	150
2	Thermodynamics- Sant. Tukaram Sugar Factory	210
3	Hydraulics and pneumatics: Adlabs Imagica	120
4	MQC - Pethe Industries	150
5	Turbo Machines - Manikdoh Hydroelectric Power Plant	146

6	Applied Thermodynamics – Apollo Service Centre, Lonavala	207

2015-16

Sr. No.	Student Enrichment Programmes Details	No. of Participants
1. Value Addition Programs		
1	Geometric Dimensioning & Tolerances	93
2	Piping Design	83
2. Invited Talks		
1	Transmission System and Gear Design	112
2	CAD CAM and CAE	97
3	Piping Design & Engineering	107
4	GRE Preparation	126
5	Automotive Industry	372
6	GATE Coaching and Preparation	252
3. Workshop / Conferences organized/Seminar		
1	Two Wheeler Maintenance	130
2	Recent Trends in Mechanical Engineering 2016	217
3	Geometric Dimensioning and Tolerances	98
4. Industrial Visits		
1	Turbo Machines - Manikdoh Hydroelectric Power Plant	180
2	Refrigeration and Air Conditioning- Katraj Dairy	138
3	Thermodynamics- Katraj Dairy	186
4	Hydraulics and Pneumatics: Adlabs Imagica	188
5	MQC - Pethe Industries	205
6	Applied Thermodynamics – Apollo Service Centre	185

2014-15

Sr. No.	Student Enrichment Programmes Details	No. of Participants
1. Value Addition Programs		
1	CATIA	61
2	GRE	61
2. Invited Talks		
1	Advances in Material Science	170

2	Opportunities in Indian Army	385
3	Energy Audit And Management	35
4	Ansys	37
5	Heat Transfer	152
6	CFD Applications For Research	45
3. Workshop / Conferences organized/Seminar		
1	Mechanics Modeling	36
2	Robotics	129
3	Design for Manufacturing and Assembly	49
4. Industrial Visits		
1	Turbo Machines -Manikdoh Hydroelectric Power Plant	95
2	Turbo Machines -Dimbhe Hydroelectric Power Plant	97
3	Refrigeration and Air Conditioning - Katraj Dairy	45
4	Thermodynamics -Sant. Tukaram Sugar Factory	180
5	Hydraulics and Pneumatics - Adlabs Imagica	176
6	MQC - Accurate Engineering	182
7	Applied Thermodynamics - Dapodi ST Depot	189
8	CAD CAM Automation – Ramani Precision Machines Pvt Ltd., Chandigarh	24

2013-14

Sr. No.	Student Enrichment Programmes Details	No. of Participants
1. Value Addition Programs		
1	ANSYS	31
2	CATIA	49
2. Invited Talks		
1	Robotics & Its Current Application in Industry	107
2	CAD CAM	42
3	GATE	47
4	Simulation & Automation of Machines	41
5	Transmission System & Gear Design	45
3. Workshop / Conferences organized/Seminar		
1	Robotics	112

4. Industrial Visits		
1	Thermodynamics- Sant. Tukaram Sugar Factory	190
2	Turbo Machines - Pavana Hydroelectric Power Plant	40
3	Refrigeration and Air Conditioning- Katraj Dairy	45
4	Design of Machine Elements - Raj Gears, Pune	44
5	Applied Thermodynamics- Dapodi ST Depot	183

33. Teaching methods adopted to improve student learning

- Before beginning of each semester, every faculty prepares course file containing all notes and prerequisite material required for effective conduction of course.
- Use of PowerPoint presentations and interactive videos for comprehensive understanding of students.
- Online study material is available for use of students.
- Continuous assessment of students.
- Teacher guardian is allotted to every student to monitor and support the improvement of students.
- Monthly attendance report and progress of the student in examination is sent to parents.
- Remedial classes are conducted for weak academically weak students.
- Self-learning sessions are arranged for challenging subjects.
- PBL modules
- Invited Talk
- K Point

34. Participation in Institutional Social Responsibility Activity & Extension Activities

AY	Name of Activity	Place	Date	No. of students participated
2017-18	Yoga Day	SKNSITS	21/06/2017	33
	Rain Marathon	SKNSITS	25/07/2017	40
	Tree Plantation	SKNSITS	17/07/2017	40
2016-17	Blood donation camp	SKNSITS	27/02/2017	32
	Lohagad drive	Lohagad fort, Lonavala	28/01/2017	40
	Swami Vivekanand	SKNSITS	12/01/2017	45

	Jayanti & Rajmata Jijau Jayanti			
	Orphanage cloth donation	Snehsadan Orphange, Khandala	22/12/20016	28
	Wall of humanity	Railway station Lonavala	19/12/2016	33
	Dandiya coordination	SKNSITS	07/09/2016	14
	International Yoga Day	SKNSITS	21/08/2016	15
	Youth motivation	SKNSITS	19/08/2016	18
	Orphanage Visit	Sneh Sadan, Khandala	15/08/2016	18
	Essay writing Compitition	Z. P. School Kusgaon	12/08/2016	06
	Railway Station Cleaning Camp	Lonavala Railway Station	11/08/2016	38
	Varsha Daud - Rain Marathon	SKNSITS	29/07/2016	30
	Green Maharashtra - Tree Plantation Activity	SKNSITS	1/07/2016	20
2015-16	Blood Donation Camp	SKNSITS	26/10/2015	16
	NSS Special Camp & Camp Resort	Karunj, PawanaNagar, Maval	28/12/2015 to 31/12/2015	13
	Plastic Kachra Mukta Abhiyan	SKNSITS, and Canteen Area	13/02/2016	25
	Blood Donation Camp	SKNSITS	18/02/2016	25
	Tree Plantation	SKNSITS	1/07/2016	11
	Gurupurnima Celebration	SKNSITS	19/07/2015	5
2014-15	Look up campaign: Social media addiction awareness	STES Campus, Lonavala	13/03/2015	29
	Street Play (Dosti Offline Social media addiction awareness)	SKNSITS	18/03/2015	8
	Painting Relations- Social media addiction awareness	STES Campus, Lonavala	19/03/2015	39
	Dosti Offline- Social	STES	25/03/2015	16

	media addiction awareness	Campus, Lonavala		
2013-14	Heartfulness meditation	SKNSITS	21/05/2014	19

35. SWOC Analysis & Future Plan

Strengths:

The Mechanical Engineering Department is committed to deliver excellence in technological education and research with the following prime attributes:

- Implementation of project based learning.
- Utilisation of interactive teaching methodologies.
- Entrepreneurship and leadership development.
- Well focused co-curricular activities.
- Emphasis to develop technical and corporate skill in students.
- Well-equipped labs with adequate facilities.
- Activities for overall personality growth of the students.
- Student Training programme focused on improving employability of students.
- Personal monitoring and support of each student of the department through counseling.
- Availability of e-resources.

Weaknesses:

- Lack of R & D and consultancy work
- Less number of faculties with PhD qualification

Opportunities:

- Encourage students and faculties for entrepreneurship availing the government initiatives such as Startup India.
- Expand and effectively utilise Industry Institute Interaction cell.
- Increase research and application in the field of Renewable Energy sources and Environment protection.
- Ascertain adequate involvement students and faculties in Live Industrial projects.
- Encourage and support faculties for consultancy work.

Challenges:

- To overcome adversities posed by rural geographical location of the institute.
- To improve soft skills and personality development of socially diversified group of students.
- To ensure that students with accomplished academic background are admitted in the institute.
- To maintain the faculty retention ratio.

Future Plans:

- To establish a research center in the institute.
- To have more MOUs with internationally recognised

ELECTRICAL ENGINEERING

1. Name of the Department: Electrical Engineering

2. Year of Establishment: 2011

3. Names of Programmes / Courses offered

Course offered	Name of the programme	Specialization	Year of Establishment
U.G.	BE	Electrical Engineering	2011-12

4. Name of Interdisciplinary courses and the departments/units involved:

Following Interdisciplinary courses are involved in curriculum of programs:

Sr. No.	Name of Interdisciplinary course	Department
1	Engineering Mathematics III	ES
2	Numerical Methods and computer Programming	COMP
3	Analog and Digital Electronics	E&TC
4	Fundamental of Microcontroller and its Applications	E&TC
5	Advanced Microcontroller and its Application	E&TC
6	Power Generation Technologies	MECH

5. Annual/ semester/choice based credit system (Programme wise):

Sr. No.	Course offered	Programme	Duration	System	Evaluation
1	U.G.	ELECT	4 Years	8 Semester	Marks / Credit

6. Participation of the department in the courses offered by other departments:

Sr. No.	Courses offered	Department
1	Basic Electrical Engineering	ES
2	Electrical & Electronics Engineering	MECH

7. Courses in collaboration with other universities, industries, foreign Institutions, etc.

Sr. No.	Academic Year	Name of Course	Name of Collaboration
1	2017-18	Automation	Adroit AutoTech , Pune
2	2016-17	Circuit Design	EIE Projects India, Pune
3	2016-17	Technologies in Sensing & Measurement	Educate to Automate, Pune
4	2016-17	Transformer Hands on Training	N-Kenin Transformer, Latur
5	2016-17	GD & PI Training	Go Figito, Pune
6	2015-16	Smart Home	Ablab Solution, Bhubaneswar
7	2015-16	Control System Design	Aedifico Tech Pvt. Ltd, Delhi
8	2015-16	PLC & SCADA	EIE Projects India, Pune
9	2015-16	IIT Spoken Tutorials	IIT Bombay
10	2014-15	Solar Power	Roboversity
11	2014-15	GRE / Gate Classes	N & N Chopra, Delhi
12	2013-14	PLC SCADA	Prolific System, Pune
13	2013-14	Teacher Advancement Program	Wren & Pecker Pvt. Ltd.
14	2012-13	German Language	Ms. Bhavana Palrecha, Lonavala
15	2012-13	Communication Skill	Ms. Bhavana Palrecha, Lonavala

8. Details of courses/programmes discontinued (if any) with reasons: Nil

9. Number of teaching posts

For Undergraduate Programme

Name of Teaching Post	Sanctioned	Filled
Professors	1	01
Associate Professors	2	01
Assistant Professors	9	12
Adjunct Faculty	--	02

10. Faculty profile with name, qualification, designation, specialization. (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,): Nil

11. List of Senior Visiting Faculty: - Nil

12. Percentage of Lectures delivered, and practical classes handled [Program wise] by temporary Faculty: Nil

13. Student Teacher ratios: -

Student's Intake	Teacher(s)	Student Teacher Student Ratio
180	14	12.85 : 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Type of Staff	Sanctioned	Filled
Technical Assistant	4	4
Peon	2	2
Total	**6**	**6**

15. Qualification of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Sr. No.	Qualification	No of Teaching faculty
1	Ph. D.	02
2	P.G.	12

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

A Y	Faculty	Title of the Project	Sponsoring Agency	Sponsorship amount in Rs.	Status of Project
2016-17	Mr. Satya Prakash	Automatic Winding Machine	STES, Lonavala, Pune	10000/-	In process

18. Research Centre /facility recognized by the University: Nil

19. a) Publications per faculty:

Sr. No	Name o Faculty	Number of Paper Published in peer reviewed Journals (National /International) by Faculty & Students	Number of Publications listed in International /National Conference	Monographs	Chapters in Book	Books Edited	Boos with ISBN/ISSN numbers with details of publishers	Citations	SNIP	SJR	i10 Index	h-Index
1	Mr. S. D. Datey	3	3	--	--	--	--	--	--	--	--	--
2	Mr. Satya Prakash	2	1	--	1	--	--	--	--	--	--	--
3	Ms. Pallavi Srivastava	5	1	--	--	--	--	--	--	--	--	--
4	Mr. Vivek Saxena	2	--	--	1	--	--	--	--	--	--	--
5	Mr. A. K. Chourasia	2	--	--	--	--	--	--	--	--	--	--
6	Mr. A. T. Ingle	2	--	--	--	--	--	--	--	--	--	--
7	Mr. S. S. Sananse	2	--	--	--	--	--	--	--	--	--	--
8	Mr. P. D. Rahate	2	--	--	--	--	--	--	--	--	--	--
9	Ms. V. Vanamane	1	--	--	--	--	--	--	--	--	--	--
10	Mr. P. R. Chaugule	1	--	--	--	--	--	--	--	--	--	--

20. Areas of consultancy and income generated

Providing Laboratory Services:

Sr. No.	Name of Faculty coordinator	Academic Year	Name of Lab	Name of consultancy	Amount (Rs.)
1	Mr. J P Dabhade	2015-16	HVE Lab	Dattakala Instt. of Engg & Technology, Bhigwan	25,000/-
2	Mr. A T Ingle	2015-16	SGP Lab	Dattakala Instt. of Engg & Technology,	

				Bhigwan	

21. Faculty as members in National committees b) International Committees c) Editorial Boards

Sr. No.	Name of Committee	Number of members
1	National committees	10
2	International Committees	01
3	Editorial Boards	Nil

22. Student's projects

Sr. No.	Description	2016-17	2015-16	2014-15
1	Percentage of students who have done in-house projects including interdepartmental/ Programme	66/69 (95.66 %)	45/52 (86.53 %)	71/74 (95.94 %)
2	Percentage of students placed for projects in organizations outside the institution	3/69 (4.34 %)	7/52 (13.46 %)	3/74 (4.05 %)

23. a) Awards/ Recognitions received by faculty and students

AY	Name	Details of Awards / Recognitions	Organization
1. Faculty			
2015-16	Mr. S. D. Datey	As Session chair	Vivruti-15 Dilkap College of Engineering, Neral
2015-16	Mr. Satya Prakash Mr. Vivek Saxena	Book Chapter Published	IGI Global
2011-12	Mr. P R Chaugule	Second Prize in National Conference	Jointly organized by PVG's COET Pune, MNEPA Nashik and MEDA Pune
2. Students			
A. University Rankers			
2015-16	Abhishek Bhopate	Secured 3th rank in University (BE Electrical)	SPPU, Pune
2014-15	Sumit Thigale	Secured 6th rank in University	SPPU, Pune

		(BE Electrical)	
B. Other Achievements			
2016-17	Anand Jain, Vinit Koli, Shruti Jagtap.	Winner: SKN Innotech 2017	SKNSITS, Lonavala
2016-17	Shivanand Dhandgal Sachin Phadtare Prasad Waraghade	Runner up: SKN Innotech 2017	SKNSITS, Lonavala
2016-17	Santosh Dalpuse Nitin Magar Chitesh Nagarikar Shweta Rahulwar Shaikh Irfan	Second Prize in Business Plan Competition	SKNSITS, Lonavala
2016-17	Jitendra Chaudhari Swanand Manchalwar Shubham More Sainath Misal Indrasen Gupta	Third Prize in Business Plan Competition	SKNSITS, Lonavala
2015-16	Yogesh Chaudhari Abhishek Patil Bhushan Patil Atul Deshmukh	First Prize in Business Plan Competition	SKNSITS , Lonavala
2015-16	Jitendra Chaudhari Shubham More Amruta Gaikwad Vrushali Palande	Third Prize in Business Plan Competition	SKNSITS , Lonavala
2015-16	Harshwardhan Walke Abhishek Kaul	Winner in Techtonic Karandak-V.I.E.W	SKNSITS , Lonavala
2015-16	Sandeep Pawar Shubham Kalwane	Runner Up in Techtonic Karandak-V.I.E.W	SKNSITS , Lonavala
2015-16	Jagraj Singh Jaywant Shinde	Runner Up in Techtonic Karandak-Robo Soccer	SKNSITS , Lonavala
2015-16	Abhishek Bhopate	Best Academic Student Award	SKNSITS , Lonavala
2015-16	Yogesh Diwakar	Student of the batch	SKNSITS , Lonavala
2015-16	Arbaj Shaikh	Best Contributing Student	SKNSITS , Lonavala
2015-16	Mayur Thakare	Winner in geoSK@N	SKNSITS , Lonavala
2015-16	Abhishek Bopate Sachin Pawar	First Prize in SKN INNOTECH’	SKNSITS , Lonavala

	Sanket Fasale Ganesh Palasdevkar	16 (Project Competition)	
2015-16	Gitanjali Salgaonkar Vasharani Kolse Sarika Patil	Runner up in SKN INNOTECH' 16 (Project Competition)	SKNSITS , Lonavala
2014-15	Prabhanjan Borkar Darshan Sancheti	Winner in Business Plan Competition	SKNSITS , Lonavala
2014-15	Ravi Prakash	Runner up in Paper Presentation	DEXTERITY-Marathwada Mitra Mandal's COE
2014-15	Prabhanjan Borkar	Runner Up in Spandan-Face Painting	SKNSITS , Lonavala

24. List of eminent academicians and scientists/ visitors to the department

AY	Name	Designation	Organization	Purpose of Visit
2017-18	Mr. Sangram Deshmukh	Director	ETA, Pune	Invited Talk on "PLC & HMI"
2017-18	Mr. Ashish Kalambe	Director	Skywings Technologies Pvt Ltd.	Invited Talk on "Microcontroller & Application"
2017-18	Mr. Bapu Saheb Dhage	Consultant	BIT, Navi Mumbai	Invited Talk "Industrial Automation"
2017-18	Mr. Omprakash Barure	Owner	Bhageshree Instrumentation, Kharghar	Value Addition Programs on "Foundation Automation Training on PLC programming"
2016-17	Prof. P. K. Desai	President	ISTE	Convey information regarding student's chapter
2016-17	Mr. Tulshiram Ingle	Retired Executive Engineer.	MSEDCL	To visit the Labs & addressed the students
2016-17	Dr. R. G. Ratnawat	Director	ITM-SIA Business School, Mumbai	Lecture on "Personality Development"
2016-17	Mr. Sharad Tandle	CEO	Indiana Technology	Chief Guest for "Entrepreneurship Awareness Workshop"

2015-16	Mr. Anand Warkari	Sr. Lead Engineer	Geometric Technology	Guest of FE Induction Program
2015-16	Dr. Vishram Bapat	Professor	SIT , LONAVALA	Lecture on "Earthing"
2015-16	Mr. Amol Patil	Project Manager	EIE Project India Ltd.	Lecture on "Programmable logic Controller"
2015-16	Mr. Sudhir G. Bhatia	Managing Director	S. B. Electro Engineers, Lonavala	Lecture on "Variable frequency Drives"
2015-16	Mr. Padmakar Landage	Retired Executive Engineer	RSEB, Rajastan	Judge in Project Competition
2014-15	Mr. Nachiket Kulkarni	Manager	KENIN Transformer, Latur	Lecture on "Transformer Design"
2014-15	Mr. Nitin Lokhande	Director	Educate To Automate (ETA), Pune	Lecture on "Industrial Automation"
2013-14	Mr. Mohan Kulkarni	Manager	Kirloskar Pneumatic Company limited	Lecture on "Machine Design"
2013-14	Mr. Vivek Sardar	Manager	PROLIFIC SYSTEM, PUNE	Value Addition Programs on PLC and SCADA
2013-14	Mr. Mohan Kulkarni	Manager	Kirloskar Pneumatic Company limited	Lecture on "BLDC Electrical Machine"

25. Seminars/ Conferences/Workshops organized and the source of funding

(a) National

AY	Category	Title	Funding Agency
2016-17	Workshop	Circuit Design	Self-Sponsored
2016-17	Workshop	"C" Language (IIT Mumbai)	Self-Sponsored
2016-17	Seminar	Electrical Usage of Agriculture Pumping System	Self-Sponsored
2016-17	Workshop	Entrepreneurship Awareness	Self-Sponsored
2016-17	STTP	Java Programming (IIT Mumbai)	Self-Sponsored
2015-16	Workshop	LATEX	Self-Sponsored
2015-16	Workshop	Smart Home	Self-Sponsored

2015-16	Workshop	Antenna Design and Simulation using CEM Simulation Tool	Self-Sponsored
2014-15	Workshop	Solar Power	Self-Sponsored
2014-15	Workshop	SE Train the trainer (4/12/14 to 6/12/14)	Self-Sponsored
2014-15	Workshop	TE Train the trainer (9/12/14 to 11/12/14)	Self-Sponsored
2013-14	Seminar	Electronics Components and Design	Self-Sponsored
2013-14	Workshop	Teacher Advancement Programme (01/04/14 to 7/05/14	STES Sponsored
2012-13	Workshop	PCB Designing	Self-Sponsored

(b) International

AY	Category	Title	Funding Agency
2012-13	Conference	International Conference on Advances in Engineering and Technology (ICAET 2013)	SPJ Center for Multi-disciplinary research (SCMR) and SCMR's association of researchers (SAR)

26. Student profile programme/course wise:

AY	Name of Course / Programmes	Applications received	Selected	Enrolled		Pass percentage
				M	F	
2017-18	UG (ELECT)	Admission process in the state is only through CAP and governed by Director of Technical Education (DTE), Government of Maharashtra. The Institute follows the rules, regulation & guidelines set by Savitribai Phule Pune University, State Government body.	66	47	19	--
2016-17			70	54	16	--
2015-16			53	40	13	--
2014-15			63	54	9	80.95
2013-14			61	51	10	78.69
2012-13			72	67	5	72.22

27. Diversity of Students

AY	Name of the	% of	% of	% of

	Course	students from same state	students from other States	students from abroad
2017-18	UG (ELECT)	**100**	**Nil**	**Nil**
2016-17		100	Nil	Nil
2015-16		94.34	5.66	Nil
2014-15		96.83	3.17	Nil
2013-14		81.97	18.03	Nil
2012-13		97.22	2.78	Nil

28. How many students have cleared national and state competitive examinations such as NET, SET, GATE, Civil services, Defense services, etc.?

Academic Year	Number of Students cleared in Competitive Examinations			
	GATE	GRE	TOEFL	BANK Exams
2016-17	1	--	--	--

29. Student progression

Student Progression	Percentage against enrolled		
	2016-17	2015-16	2014-15
UG to PG	--	2.7%	1.9%
PG to M. Phil.	NA	NA	NA
PG to Ph. D.	NA	NA	NA
Campus selection	5.88	19.23	13.33
Other than campus recruitment	5.88	13.46	11.11
Entrepreneurs / Self employment	--	1	--

30. Details of Infrastructural facilities

a) Library
b) Internet facilities for Staff & Students
c) Classrooms with ICT facility
d) Laboratories

a. Library – YES

Departmental library contains books, journals, magazines, video lectures, E-journals, seminar reports and project reports of last four year for reference.

Sr. No.	Title	Details
1	No. of Titles	200
2	No. of Volumes	292
3	TE Seminars	72
4	BE Project	30

b. Internet Facilities for Staff & Students –Yes.

Wi- Fi Facility is given. Wi-Fi facility is upgraded to 32 Mbps for staff and students, the residential staff of all institutes, in the campus.

c. Classrooms

Classrooms with ICT facilities

Number of classrooms = 02

Number of Seminar Rooms = 01

Number of tutorial rooms = 01

Details of Classrooms

Room Descriptions	Capacity	Rooms equipped with
B-201	80 Students	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains
B-202	80 Students	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains

Details of Seminar Hall:

Room Descriptions	Capacity	Rooms equipped with
B-305	120 Students	White board, Ethernet cable, LCD Projector, PA System, fan , fluorescent Tube and curtains

Details of Tutorial Rooms:

Room Descriptions	Capacity	Rooms equipped with

C-302	40	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains

d. Details of Laboratories

Sr. No	Name of the LAB	Name of faculty In charge	Room Description
1	Analog & Digital Electronics	Ms. A. S. Ramteke	B-206
2	Network Analysis	Mr. S. D. Datey	B-206
3	Electrical Measurements & Instrumentation	Mr. Vivek Saxena	B-205
4	Electrical Machines	Mr. A. K. Chourasia	B-204
5	Material Science	Mr. J. P. Dabhade	B-210
6	Power Systems	Mr. Satya Prakash	B-207
7	Microcontroller	Mr. Bhushan Kadu	B-207
8	Control System	Mr. J. P. Dabhade	B-208
9	Programmable Logic Control	Mr. Bhushan Kadu	B-203
10	High Voltage Engineering	Mr. P. R. Chaugule	B-210
11	Power Electronics	Mr. Satya Prakash	B-206
12	Switch Gear And Protection	Dr. Amol Kalge	B-203
13	Industrial Drives & Control	Mr. Vivek Saxena	B-205
14	Computer	Mr. P. R. Chaugule	B-208

31. Number of students receiving financial assistance from College, university, government or other agencies

The following data indicates no. of students receiving financial assistance:

AY	EBC	SC	OBC	SBC	VJNT	ST
2016-17	59	5	27	7	5	1
2015-16	63	25	39	7	31	3
2014-15	54	19	43	4	23	2
2013-14	43	12	36	4	18	1

32. Details on student enrichment programmes with external experts

Sr. No.	Student Enrichment Programmes Details	No. of Participants
Academic year 2017-18		
1. Value Addition Programs		

1	Foundation Automation Training on PLC programming	40
2	House Wiring	21
	2. Invited Talk	
1	"PLC & HMI" by Mr. Sangram Deshmukh	62
2	"Microcontroller & Application" by Mr. Ashish Kalambe	49
3	"Industrial Automation" by Mr. Bapu Saheb Dhage	57
	3. Industrial Visit	
1	MSLDC, Kalwa	37
	Academic year 2016-17	
	1. Workshop / Seminar / Conference	
1	"C" Language (IIT Mumbai)	34
2	Two days National Level Workshop cum Competition on Circuit Designing"	62
3	One day Seminar on "Electrical Usage of agriculture Pumping system"	54
4	One day workshop on "Entrepreneurship Awareness"	37
	2. Value Addition Programs	
1	PCB Design	42
2	MATLAB and Simulink	35
3	Transformer Hands on Training	10
4	Electrical Wiring	21
5	Technologies in Sensing & Measurement	65
	3. Invited Talk	
1	"Pic Microcontroller'' by Shantanu Kulkarni	56
2	"Industrial Automation" by Vinit Kulkarni	62
3	"SCADA Security" By Yatin Bagul	38
4	"Energy Audit" by Aniket Dhamangaonkar	73
5	"Basics of MATLAB'' by Vinit Kulkarni	40
6	"Personality Development" by Dr. R. G. Ratnawat	76
7	"Tranformer Designning" by Mr. Nachiket Kulkarni	68
	4. Industrial Visit	
1	MSETCL 440 kV Substation, Chakan	46
2	Loco Trip shade, Lonavala Railway Station	32
3	25kV Railway Substation, Lonavala Railway Station	32
4	Brahaspati InfoTech Pvt. Ltd., Chandigarh	15
5	Power House	65

6	APLAB Ltd, Thane	58
7	MSETCL Substation, Vasai	102
8	Madhav Capacitors Pvt. Ltd, Bhosari, Pune	66
Academic year 2015-16		
1. Workshop / Seminar / Conference		
1	Two Days National Level workshop on "Latex"	34
2	Two Days workshop on "Smart Home"	84
3	Two Days State Level workshop on "Antenna Design and Simulation using CEM Simulation Tool"	12
2. Value Addition Programs		
1	PLC & SCADA	73
2	Control System Design	72
3. Invited Talks		
1	"Earthing and Grounding" by Dr. Vishram Bapat	87
2	"Programmable logic Controller" by Mr. Amol Patil	58
3	"Electrical CAD" by Mr. Akshay Shah	60
4	"Electrical Circuit Design using MATLAB" by Mr. Abhay Pal Singh	68
5	"Variable frequency Drives" by Mr. Sudhir G. Bhatia	65
4. Industrial Visit		
1	TATA Power, Khopoli	60
2	CROMPTON GREAVES, Nashik,	78
3	APLAB Ltd, Thane	51
4	MSETCL Substation, Vasai	52
5	Madhav Capacitors Pvt. Ltd, Bhosari, Pune	45
6	MSETCL Substation, Lonikand	39
Academic year 2014-15		
1. Workshop / Seminar / Conference / FDP		
1	Two Days workshop on "Solar Power"	60
2	National Conference on Advance Computer Networking (NCACN 15)	5
3	SE Train the trainer program	15
4	TE Train the trainer program	15
2. Value Addition Programs		
1	GRE / GATE	10
2	Transformer Design construction & Testing	20

3	PLC SCADA	9
3. Invited Talks		
1	"PLC and SCADA" by Mr. Vivek Sardal	34
2	"Industrial Automation" by Mr. Nitin Lokhande	66
3	"Electrical Equipment maintenance and testing" by Mr. A. T. Telharkar	54
4. Industrial Visit		
1	Tata Power, Khopoli	54
2	Crompton Greaves, Nashik	109
3	Shimla and Manali	17
4	APLAB Ltd, Thane	45
5	Madhav Capacitors Pvt. Ltd, Bhosari, Pune	39
6	MSETCL Substation, Vasai	50
7	MSETCL Substation, Lonikand	60
Academic year 2013-14		
1. Workshop / Seminar / Conference		
1	Teacher Advancement Programme	34
2	Seminar on "Electronics Components and Design"	28
2. Value Addition Programs		
1	PLC SCADA	29
3. Invited Talks		
1	"Machine Design" by Mr. Mohan Kulkarni	57
2	"Embedded Systems & RFID" (In association with E&TC)	53
4. Industrial Visit		
1	APLAB Ltd, Thane	48
2	Madhav Capacitors Pvt. Ltd, Bhosari, Pune	35
3	TATA Power, Khopoli	46
4	CROMPTON GREAVES, Nashik	50
Academic year 2012-13		
1. Workshop / Seminar / Conference		
1	PCB Designing (In association with E&TC)	20
2	International Conference on Advances in Engineering and Technology (ICAET 2013)	8
2. Value Addition Programs		
1	German Language	2
2	Communication Skill	2

3. Invited Talks		
1	"BLDC Electrical Machine" by Mr. Mohan Kulkarni, Pune	51
4. Industrial Visit		
1	Benn Electricals	45
2	Madhav Capacitors Pvt. Ltd, Bhosari, Pune	48

33. Teaching methods adopted to improve student learning

To improve classroom learning, department has applied following practices:

- Teachers are allotted subject as per their choice and specialization which they have already dealt with.
- Models, videos, and animations are used by faculty members to elaborate concepts as per the complexity of the topic.
- Teachers are asked to prepare semester teaching plan and course file before the start of the semester.
- Each teacher is asked to prepare soft copies of their notes and powerpoint presentations for the course content and the same is shared with the students by using ERP software as well as in the classrooms.
- Lectures with self-learning session are added to the timetable.
- Assignments for practice and assessment are given to students.
- NPTEL videos are available on FTP for students to refer.

Active Learning

- Project exhibition and technical event provides an opportunity for active learning.
- Invited Talk, industrial visit and VAP are arranged to bridge the knowledge gap of the students.
- Students are motivated to work on sponsored projects.
- Lab Innovation is an activity in which students are motivated to work on their ideas. This activity results in improved learning and creation of useful lab models.

Assessment Method

- Various tests (Unit test and Prelim, Online, etc.) are used for assessment.
- Indirect assessment is done through mock campus interviews and GD session.
- Feedbacks from alumni are taken into account, during the revision of the PEO's at the institute.
- Mock tests are conducted to evaluate the students' understanding.

34. Participation in Institutional Social Responsibility (ISR)and Extension activities

Academic Year	Name of Activity	Place	Date	No. of students participated
2017-18	Varsha Daud	SKNSITS, Lonavala	03/07/2017	18
2017-18	Pledge (Sankalp Se Siddhi)	SKNSITS, Lonavala	09/08/2017	45
2017-18	Meditation “Sahaja Yoga”	SKNSITS, Lonavala	11/08/2017	35
2017-18	Swashata Abhiyan	SKNSITS, Lonavala	14/09/2017	13
2016-17	Blood Donation Camp	SKNSITS, Lonavala	27/02/2017	30
2016-17	Swami Vivekanand Jayanti & Rajmata Jijaoo Jayanti	SKNSITS, Lonavala	12/01/2017	12
2016-17	Orphanage cloth donation	Snehsadan Orphange, Khandala	22/12/2016	05
2016-17	Wall of humanity	Railway station Lonavala	19/12/2016	06
2016-17	International Yoga Day	SKNSITS, Lonavala	21/06/2016	38
2016-17	Tree Plantation Activity	SKNSITS, Lonavala	1/7/2016	47
2016-17	Varsha-Daud	SKNSITS, Lonavala	29/07/ 2016	27
2016-17	Cleaning Camp	Lonavala Railway Station	11/8/2016	26
2016-17	Essay writing Compitition	Z. P. School Kusgaon	12/8/2016	6
2016-17	Orphanage Visit	Sneh Sadan, Khandala	15/08/2016	4
2016-17	Rakshabandhan	SKNSITS, Lonavala	15/08/2016	19
2016-17	Heartfulness Meditation	SKNSITS, Lonavala	21/09/2016 to 23/09/2016	20
2016-17	Yes+ activity	SKNSITS, Lonavala	27/09/2016 to 30/09/2016	6

2016-17	Dandiya coordination	SKNSITS, Lonavala	7/10/2016	14
2015-16	Blood Donation Camp	SKNSITS, Lonavala	26/10/2015	16
2015-16	NSS Special Camp	Karunj, Village near Lonavala	28/12/2015 to 31/12/2015	13
2015-16	Plastic Kachra Mukta Abhiyan	SKNSITS, Lonavala College and Canteen Area	13/02/2016	8
2015-16	Blood Donation Camp	SKNSITS, Lonavala	18/02/2016	31
2015-16	Tree Plantation	SKNSITS, Lonavala	1/7/2016	11
2015-16	Gurupurnima Celebration	SKNSITS, Lonavala	19/07/2015	5
2014-15	Street Play (Social media addiction awareness)	SKNSITS, Lonavala	18/03/2015	8
2013-14	Tree Plantation	SKNSITS, Lonavala	21/05/2014	19

35. SWOC analysis of the Department and future plans

SWOC Analysis

This analysis is used to identify the acquired and inherent strengths along with weaknesses of the department. Furthermore, it is also carried out to identify the opportunities to excel, improve and negotiate the challenges faced by the department from the internal and external environment.

Strengths

- Well qualified and experienced teaching and non-teaching staff.
- Rankers in the list of SPPU.
- Ample student activities to ensure the development of leadership qualities among students.
- State-of-the-art laboratory facilities.
- MOU with industries like ETA, N-Kenin Transformer, Prolific System, etc.
- Entrepreneurship Development Cell.
- e-Exam Portal for SE.
- Teacher Guardian Scheme for the betterment of students.
- VAP and STP are conducted for students' overall personality development.
- K-Point support to students for self-study.
- Conducting Industrial visits in esteemed companies for practical exposure to students.
- Conducting Invited Talk for upgradation of students' knowledge by experienced person from renowned companies and institutes.

- GD/PI, QA/LR, ET, etc. are conducted throughout the curriculum.

Weaknesses

- Consultancy work to be enhanced.
- Less number of sponsored research projects and patents.
- Faculty with Ph.D. qualification.

Opportunities

- Faculty can be motivated and encouraged to take up R & D and consultancy assignments from industry and PSUs and Government agencies.
- Encouragement for publications at International / National levels.
- Enrich Project Based Learning model to enhance skills among students.
- Involving students in R&D projects by faculty.

Challenges

- Admission challenge due to geographic location.
- Training the students for the ever changing industry scenario.
- Faculty adoption with respect to new technologies.
- Greater challenge in placing our students in the appropriate company, due to recession.
- To increase the number of R&D Projects/Consultancy work.
- To teach students from rural and urban backgrounds on the same platform effectively.
- To enrich teaching-learning process through PBL model.

Future Plans:

- Emphasize skill building among students.
- All faculties getting involved in research and development of recent technologies and publish their research in reputed journals.
- To establish a research center
- Obtain fund for the projects from various organizations.
- Register patents.
- Involving faculties in consultancy work.
- Increase student placement.

COMPUTER ENGINEERING

1. Name of the department: Computer Engineering

2. Year of Establishment: 2011

3. Names of Programmes / Courses offered

Course offered	Name of the Programmes	Specialization	Year of Establishment
U.G.	BE	COMP	2011-12
P.G.	ME	COMP	2012-13

4. Names of Interdisciplinary courses and the departments/units involved:

Following Interdisciplinary courses are involved in curriculum of programs:

Sr. No.	Name of the course	Department involved
1	Discrete Structures	ES
2	Digital Electronics and Logic Design	E&TC
3	Microprocessor Architecture	E&TC
4	Engineering Mathematics-III	ES
5	Microprocessors and Interfacing Techniques	E&TC
6	Data Communication and wireless sensor network	E&TC
7	Digital Signal processing applications	E&TC
8	Computer Organization and Architecture	E&TC

5. Annual/ semester/choice based credit system (programme wise):

Sr. No.	Course offered	Programme	Duration	System	Evaluation
1	U.G.	Computer Engineering	4 Years	8 Semesters	Marks/Credit
2	P.G.	Computer Engineering	2 Years	4 Semesters	Credit

6. Participation of the department in the courses offered by other departments:

Sr. No.	Courses Offered	Department
1	Numerical Methods and Computer Programming	ELECT
2	Data Structures and Files	E&TC
3	Object Oriented Programming	E&TC
4	Fundamentals of Programming Language I	ES
5	Fundamentals of Programming Language II	ES

7. Courses in collaboration with other universities, industries, foreign Institutions, etc.

Sr No	Year	Name of the course	Participating institution /industry
1	2016-17	Java Beginners Program	Profound Edutech Ltd.,Pune
2	2016-17	Advanced Java	Mass Technology Pune
3	2016-17	Android Development	Mass Technology Pune
4	2016-17	FDP on JAVA	IIT Spoken tutorial
5	2015-16	PHP & Web development	Mass Technology Pune
6	2015-16	GD & PI Training	Go Figito Pune
7	2014-15	Microsoft.NET	Microsoft/ATS solutions, Pune
8	2013-14	C & C++ with data structure	Object Technology , Pune

8. Details of courses/programmes discontinued (if any) with reasons: Nil

9. Number of teaching posts

For Undergraduate Programme

Name of Post	Sanctioned	Filled
Professors	2	1
Associate Professors	4	0
Asst. Professors	18	20
Adjunct faculty	-	3

For Postgraduate Programme

Name of Post	Sanctioned	Filled
Professors	1	--
Associate Professors	1	--

Asst. Professors	2	3
Adjunct faculty	-	1

10. Faculty profile with name, qualification, designation, specialization. (D.Sc./ D.Litt./Ph.D. / M. Phil. etc.,):- Nil

11. List of Senior Visiting Faculty:-Nil

12. Percentage of Lectures delivered, and practical classes handled [Program wise] by temporary Faculty: Nil

13. Student Teacher ratios:-

Students' Intake	Teacher(s)	STR
360	24	15:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Type of Staff	Number of staff
Technical Assistant	05
Peon	02
Total	07

15. Qualification of teaching faculty with D.Sc/D.Litt/Ph.D/M.Phil/PG

Sr. No	Qualification	No of Teaching faculty
1	Ph.D.	01
2	Ph.D. pursuing	08
3	P.G.	15

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

A.Y.	Faculty	Title of the Project	Sponsoring Agency	Sponsorship amount	Status of Proposal
2015-16	Mr. V. D. Thombre	Student Sentiment Analysis	BCUD Pune	32242	Submitted

18. Research Centre /facility recognized by the University: Nil

19. Publications

a) Publications per faculty:

a) Publication per faculty

Sr. No.	Faculty Name	No. of paper published in per review journals faculty/students	No. of publication listed in International/ National conference	Monographs	Chapters in books	Books edited	Books with ISBN in International DB	Citation Index	SNIP	SJR	Impact factor	h- Index Average
1	Mr. V. D Thombre	5	1									
2	Ms. S. B. Sarkar	7	2									
3	Mr. Jacob John	4	2					10				2
4	Mrs. J. S. Mahajan	5	1									
5	Ms. K. G. Kadam	7	3									
6	Ms. B. M. Bahikar	2	2									
7	Mr. P. D. Abhonkar	3	-									
8	Mr. A. C. Manepatil	7	1									
9	Mrs. P. S. Yevale	5	-									
10	Mr. Venkatesan N.	4	1									
11	Ms. B. R. Patle	5	3									
12	Ms. Swati Jaiswal	6	1		1							
13	Mr. M. R. Gosavi	3	2									
14	Ms. M. G. Mali	3	1									
15	Ms. R. S. Patil	1	2									
16	Ms. N N Jamdar	2	2									
17	Mr. R. V. Chavan	1	2									
18	Mr. P. G. Karkalle	2	1									
19	Mr. A. Y. Satpute	1	-									

20	Mr. Pravin Keskar	1	-									

20. Areas of consultancy and income generated

Sr. No.	AY	Name of Area	Name of Staff	Agency
1	2016-17	Web Technology	Mr. V. D. Thombre	Bhargav Enterprises

21. Faculty as members in

Sr. No.	Committees	No. of Faculties
1	National committees	10
2	International Committees	2
3	Editorial Boards	02

22 Student's projects

Sr. No.	Description	2016-17	2015-16	2014-15
1	Percentage of students who have done in-house projects including interdepartmental/ programme	91.66%	93.0%	100%
2	Percentage of students placed for projects in organizations outside the institution	8.33%	7.0%	--

23 a) Awards/ Recognitions received by faculty and students Faculty

Name of Faculty	Details of Awards / Recognitions	Organization
Ms. Swati Jaiswal	As Reviewer	Asia University, Taiwan
Ms. K. G. Kadam	Best Paper Award	ICAET-2013
Ms. J. S. Mahajan	Best Paper Award	ACT-2013
Mr. Jacob John	As Reviewer	CAST-2016 COEP ,Pune
Mr. V. D. Thombre	As Session chair	PGCON PCCOE, Pune
Mr. V. D. Thombre	As Session chair	Vivruti-15 Dilkap College of Engineering, Neral
Mr. V. D. Thombre	Appointed as editorial board member & Reviewer	A.R. Research publication & Conference world

b) Awards / Recognitions received by students:

Only Internal & external awards & recognition need to be considered.

AY	Name of Student	Details of Awards /	Organization

		Recognitions	
2016-17	Bhaktishwar Rajiwade	Best Paper Award at IESS`17	SKNSITS, Lonavala
2016-17	Shradhha Kolte	Winner in Poster Making Competition	SKNSITS, Lonavala
2016-17	Maulik Desai	Runner Up in Poster Making Competition	SKNSITS, Lonavala
2016-17	Satish Gaikwad	Winner in Three Days Workshop on Java	SKNSITS, Lonavala
2016-17	Jatin Tonpe	Runner Up in Three Days Workshop on Java	SKNSITS, Lonavala
2016-17	Sakshi Amrutkar	Winner in Python Workshop	Python Express and SKNSITS, Lonavala
2016-17	Deepam Patel	Runner Up in Python Workshop	Python Express and SKNSITS, Lonavala
2016-17	Tushar Gujarathi Gaurav Dabhade Shubham Parekh	Selected in Smart India Hackathon 2017	MHRD, AICTE, Persistant Systems,i4C,NIC, MyGov
2016-17	Gajendra Singh Rathore Prajakta Awaghade Sakshi Amrutkar Anjali Bhatt Avinash Singh Amit Birthalia Rajdeep Singh	Selected in Smart India Hackathon 2017	MHRD,AICTE, Persistant Systems,i4C,NIC, MyGov
2016-17	Pruthvi Lokhande Satayam Palrecha	Business Plan Competition	SKNSITS, Lonavala
2016-17	Shruti Joshi	Winner-Solo Singing	Sinhgad Karandak
2015-16	Gaurav Dabhade	C-venture(Winner)	SKNSITS, Lonavala
2015-16	Darshan Agarwal	OOSE Seminar(Winner)	SKNSITS, Lonavala
2015-16	Gaurav Dabhade	OOSE Seminar(Runner)	SKNSITS, Lonavala
2015-16	Mistry Jay	State level 1ST PRIZE Taekwondo championship	Taekwondo championship Board of India
2015-16	Shital Thakar	Best poster (Winner)	SKNSITS, Lonavala
2015-16	Payal Pokharkar	Business club (Winner)	SKNSITS,

			Lonavala
2015-16	Mandar Bhosale	Best Contribution Award (Winner)	SKNSITS, Lonavala
2015-16	Anup Managave	Best Academic Award (Winner)	SKNSITS, Lonavala
2015-16	Anuradha Gaikwad	Best poster (Winner)	SKNSITS, Lonavala
2015-16	Shubham Bhongale	(Winner) Zonal round of NRC	NRC India
2014-15	Sandesh Balgude	(Winner) Seed Idol competition	Seed Infotech
2013-14	Shirapure Chanchal	A Grade in ADB Course	Center for computer & Mobile Technology

24 List of eminent academicians and scientists/ visitors to the department:

The following eminent persons have visited the Department:

A.Y.	Name	Designation	Organization	Purpose of Visit
2017-18	Dr. S.K.Shinde	Vice Principal & BOS(CE-MU)	LTCOE Navi Mumbai	Invited talk on Data Mining
2016-17	Dr. Parag Kulkarni	Scientist and CEO	Iknowlation	Key Note Speaker for IESS`17
2016-17	Dr. Padmaja Joshi	Joint Director	CDAC, Mumbai	Key Note Speaker for IESS`17
2016-17	Dr. Amol Admuthe	Associate Professor and HOD IT	RIT, Isalampur	Session Chair for IESS`17
2016-17	Mr. Prince Arora	CEO	Technogreeks , Pune	Key Note Speaker for IESS`17
2016-17	Dr. P.K. Desai	ISTE, President	ISTE	Visited as Visitor
2016-17	Dr. Jayesh Minase	Member	Sinhgad Over Seas Cell	Invited Talk Study Abroad
2016-17	Dr. Prashit Mahalle	HOD	SKNCOE PUNE	Invited Talk on higher study

				opportunities abroad
2016-17	Mr. Prashant Dhotre	Asst. Professor	SITS Narhe	Conducted Invited Talk on higher study opportunities abroad
2016-17	Mr.Sharad Tandale	CEO	INDIANA Technologies & Solutions,	Conducted Invited Talk on EDC
2015-16	Mr. Christian Hujer	CEO	Nelkinda software craft	Chief Guest &Speaker For seminar on OOSE
2015-16	Mr. Tushar Samnerkar	Financial Head	Infosys Pune	Conducted Invited Talk On Working Culture in IT Industry
2015-16	Prof. Sunil Dhore	HOD(COMPUTER)	AIT Pune	Speaker For seminar on OOSE
2015-16	Dr. Aditya Abhyankar	HOD	DOT SPPU	Speaker For RM Workshop
2014-15	Dr. P.K.Sinha	Director	C-DAC Pune	Key Note Speaker for NCACN-15
2014-15	Dr. Vahida Attar	Professor	COEP Pune	Speaker for NCACN-15
2014-15	Dr. B.R. Patil	Principal	Viswaniketan Mumbai	Guest for NCACN-15
2014-15	Dr. S.K. Shinde	BOS (Comp) Mumbai University	Mumbai University	Conducted Invited Talk On Web Mining
2013-14	Dr. A.W. Kiwlekar	HOD (Computer)	Dr. BATU Lonere	Conducted Invited Talk On software Architecture
2013-14	Prof Gopal Upadhya	Asst. Professor	RHCOE Pune	Conducted Invited Talk On Computer organization
2013-14	Mr.DigambarYedge	Software Developer	Cognizant Technology	Guest for Induction

				program
2013-14	Prof. Yatin Bagul	Asst. Professor	Dilkap college of Engineering Nerul	Conducted Invited Talk On role of java in software development

25 Seminars/ Conferences/Workshops organized and the source of funding

AY	Category	Title	Funding Agency
2017-18	Workshop	Workshop on advance java and Android application	Self-Financed
	Workshop	workshop on C++ Programing	CTA
2016-17	International Conference	1st International Engineering Science Summit 2K17	Self-Financed
2016-17	Workshop	Workshop On Java	CTA
2016-17	Competition	Poster Making Competition	CTA
2016-17	Competition and Exhibition	SKNINNOTECH	Self-Financed
2016-17	Workshop	Python Express India Workshop	CTA
2016-17	Workshop	On Object Oriented Programming(C++) 10-14 Sept 16	CTA
2016-17	Workshop	Android CS Workshop on 30 Sept 16	CTA
2016-17	Workshop	EDC Workshop on 30 July 16	Self-financed
2016-17	Seminar/Webinar	Webinar On Big Data Hadoop on 30 Aug 16	Self-financed
2016-17	FDP	One week FDP on JAVA on 20-25 Aug 16	Self-financed
2015-16	Workshop	National level Workshop on Mathematical Modeling 5-6 Sept. 2015	Self-financed
2015-16	Seminar/Webinar	Two Days seminar on OOSE on 2-3 March 2016	Self-financed

2015-16	Project Exhibition	Project Exhibition on 25 March 2016	Self-financed
2015-16	Workshop	Workshop on Latex 22 March 2015	Self-financed
2015-16	Conference	NCACN-15 on 17 & 18 Feb 2015	BCUD SPPU
2015-16	Workshop	Summer Training Program 18-24 may 2015	Self-financed
2013-14	Workshop	National Network Security championship	Self-financed
2013-14	Seminar/Webinar	Seminar on Wireless Sensor Networks	Self-financed

26 Student profile programme/course wise:

UG Details

A.Y.	Name of Course	Applications received	Selected	Enrolled		Passing %
				M	F	
2016-17	COMP	Admission Process in State is only through CAP and Governed by DTE, Maharashtra State Government. The institute follows rules, regulation and guideline set by SPPU, State government body	126	98	28	NA
2015-16	COMP		112	78	34	NA
2014-15	COMP		157	108	49	72.61
2013-14	COMP		149	105	48	66.44

PG Details

A.Y.	Name of Course	Applications received	Selected	Enrolled		Passing %
				M	F	
2016-17	COMP	Admission Process in State is only through CAP and Governed by DTE, Maharashtra State Government. The institute follows rules, regulation and guideline set by SPPU, State government body	2	1	1	NA
2015-16	COMP		5	3	2	NA
2014-15	COMP		10	4	6	30
2013-14	COMP		24	8	16	83.33

*M=Male F=Female

27 Diversity of Students

A Y.	% of students from the same state	% of students from other States	% of students from abroad
2015-16	67.30	32.7	NIL

2014-15	73.97	26.03	NIL
2013-14	82.89	17.10	NIL

28 How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc?

A. Y.	Number of Students cleared in National, State Competitive Examinations		
	GATE	GRE	DRDO
2016-17	00	3	NA
2015-16	4	5	1
2014-15	1	1	NA
2013-14	NA	NA	NA

29 Student progression

Student Progression	Against% Enrolled		
	2016-17	2015-16	2014-15
UG to PG	0	4.68	3.63
PG to M.Phil.	NA-		
PG to Ph.D.	NA		
Ph.D. to Post-Doctoral	NA		
Employed •Campus selection •Other than campus recruitment	47.95 38.35 9.59	65.22 44.34 29.56	65.45 43.63 27.27
Entrepreneurship/Self-employment	1	00	1

30. Details of Infrastructural facilities

a) Library – YES

Sr. No.	Title	Details
1	No. Of Titles	96
2	No. Of Volumes	165
3	Project Reports	78

b) Internet Facilities for Staff & Students –Yes.Wi- Fi Facility is given. Wi-Fi facility is upgraded from 6 Mbps to 14 Mbps for students, the residential staff of all institutes, in the campus.

c) Labs with ICT Facility
Number of classrooms = 04

Number of classrooms PG = 01
Number of Seminar Rooms = 01
Number of tutorial rooms = 01
Classrooms with ICT facilities

Details of Classrooms

Room Descriptions	Capacity	Rooms equipped with
A-201	80 students	Glass Board, LCD, Fans, tubes, internet, curtains
A-203	80 students	Glass Board, LCD, Fans, tubes, internet, curtains
A-206	80 students	Glass Board, LCD, Fans, tubes, internet, curtains
A-212	80 students	Glass Board, LCD, Fans, tubes, internet, curtains
A-313	80 students	Glass Board, LCD, Fans, tubes, internet, curtains

Details of Seminar Hall:

Room Descriptions	Capacity	Rooms equipped with
A-303	120 students	LCD, Fans, tubes, curtains, PA System, Podium, internet

Details of Tutorial Rooms:

Room Descriptions	Capacity	Rooms equipped with
C-114	20 students	Glass Board, Fans, tubes, curtains

d) Details of Laboratories

Sr. No.	Name of the lab	Faculty In charge	Room No
1	Linux Lab	Ms. B.R Patle	A-202
2	DELD Lab(H/W lab)	Mrs. P.G.Karkalle	A-204
3	PG Lab	Mr. M. R. Gosavi	A-205
4	Software Development Lab	Ms. Swati Jaiswal	A-207
5	Computer Lab	Ms. Pallavi Yevale	A-208
6	Computer Lab	Ms. Bhavana Bhaikar	A-209
7	Computer Lab	Ms. Jaishree Mahajan	A-210
8	Computer Lab	Ms. Madhuri Mali	A-211

31. Number of students receiving financial assistance from College, university, government or other agencies

The following data indicates no. of students receiving financial assistance

AY	EBC	SC	OBC	SBC	VJNT	ST
2016-17	101	9	62	12	5	0
2015-16	94	32	105	16	35	1
2014-15	80	22	96	13	33	--
2013-14	33	13	55	5	19	--

32. Details on student enrichment programmes (special lectures / workshops / seminars) with external experts

Academic year 2017-18		
Value Addition Programs		
1	Java Programming	32
2	HTML5 & PHP	41
Invited talk		
1	Invited talk on Computer Network-Current scenario by Sham Pakhale from Tata communication	70
2	Invited talk on How to prepare for placement by Santosh Padwal	35
3	Invited talk on data mining by Dr. S.K. Shinde	66
Workshop / Conferences organized		
1	Workshop on advance java and Android application	27
2	workshop on C++ Programing	31
Academic year 2016-17		
Value Addition Programs		
1	Java Programming	35
2	Android Development	60
3	Advance Java	60
Invited talk		
1.	Advance PHP Programming By Mr. Santosh Deshmukh	35
2	Programming Development Skills By Mr. Nilesh Chavan	80
3	Softs Skill and How To crack Aptitude By Mr. Tejas Parate	60
4	Invited Talk Study Abroad by Dr. Jayesh Minase	112
5	Invited Talk On role of java in software development by Mr. Yatin Bagul	80
6	Invited Talk on OOP by Mr. Sandesh Balgude	50
7	Invited Talk on higher study opportunities abroad by Mr. Prashant Dhotare	120

Workshop / Conferences organized		
1	Workshop On Java	56
2	Workshop On Python	27
3	IESS`17	178
4	FDP on Java	45
5	Workshop on C++	50
Academic year 2015-16		
Value Addition Programs		
1	Core and advance Java	60
2	Web development with PHP	60
Invited talk		
1	Invited Talk On Working Culture in IT Industry by Tushar Samnerkar	
2	Invited Talk On Web Mining by Dr. S.K. Shinde	80
Workshop / Conferences organized		
1	National level Workshop on Mathematical Modeling 5-6 Sept. 2015.	60
2	Project Exhibition on 25 March 2016.	60
Academic year 2014-15		
Value Addition Programs		
1	Data structure with C++	
Invited Talks		
1	Invited Talk On software Architecture By Dr. A. W. Kivlekar	60
2	Invited Talk On Advanced Computer Network By Dr. G. V. Patnaik	60
Workshop / Conferences organized		
1	NCACN-15	88
2	Workshop on Latex 22 March 2015	45
3	Summer Training Program 18-24 may 2015	30
Industrial Visits		
1	Industrial visit to Jaipur	50
Academic year 2013-14		
Value Addition Programs		
1	Java	35
2	Communication skill	30

Invited talk		
1	Invited Talk On Computer organization by Gopal Upadhye	100
2	Invited Talk On role of java in software development by Mr. Yatin Bagul	41
Workshop / Conferences organized		
1	National Network Security championship Workshop	50
2	Seminar on Wireless Sensor Networks	55
Academic year 2012-13		
	Value Addition Programs	
1	C&C++	45
Invited Talks		
1	Invited Talk On Role of Communication skill in IT industry by Ms. Sheetal Pawar	45
Workshop / Conferences organized		
1	Workshop on latex	45

33. Teaching methods adopted to improve student learning

The teaching methodologies vary according to the heterogeneous group of students. For the benefits of the students we adopt following teaching and learning practices:

- Lectures
- Lab experiments
- Assignments/Tutorials
- Industrial visits
- Viva and Tests
- Extra input sessions or remedial classes or practice sessions or SLS
- LCD Presentations
- Expert Lectures or invited talk
- Lab innovation
- Value addition program
- Project Based Learning
- NPTEL
- IIT Spoken Tutorials
- K-point software

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Academic Year 2017-18

Sr. No	Date	Program	Details	Participation

1	07/07/2017	Tree plantation	STES Ground	16
2	13/06/2017	Haritkaranti	lonavala	8
3	25/07/2017	Rain marathon	STES campus	14
4	12/09/2017	Cleaning Camp	Loanavala railway Station	5

Academic Year 2016-17

Sr. No	Date	Program	Details	Participation
1	27/02/2017	Blood donation camp	SKNSITS, Lonavala	15
2	28/01/2017	Lohgad drive	Lohgad fort, Lonavala	8
3	12/01/2017	Swami Vivekanand and Rajmata Jijau Jayanti	SKNSITS, Lonavala	6
4	22/12/2016	Orphanage cloth donation	Snehasadan Orphanage, Khandala	8
5	21/6/2016	International Yoga Day	This program is hosted by SKNSITS, Lonavala	35
6	1/7/2016	Tree Plantation Activity	This program is hosted by SKNSITS	22
7	29/7/2016	Varsha-Daud	This program is hosted by SKNSITS Lonavala	45
8	11/8/2016	Cleaning Camp	Lonavala Railway Station cleaning	25
9	14/9/2016	Street Play	Street play for social awareness	5

Academic Year 15-16

Sr. No.	Date	Program	Details	Participation
1	26/10/2015	Blood Donation Camp	SKNSITS, Lonavala	15
2	28/12/2015 to 31/12/2015	NSS Special Camp	Karunj, Village near Lonavala	7
3	13/02/2016	Plastic Kachra Mukta Abhiyan	SKNSITS, Lonavala College and Canteen Area	20
4	18/02/2016	Blood Donation Camp	SKNSITS, Lonavala	12

Academic Year 14-15

Sr. No.	Date	Program	Details	Participation
1	21/11/2014	Blanket Distribution by CTA	This program is hosted by CTA at Lonavala stations	5
2	14/01/2015	Street Play	Street play for social awareness	5

35. SWOC analysis of the Computer Engineering Department and future plans

SWOC Analysis

This analysis is used for identifying and analysis of the acquired and inherent strengths along with weaknesses of the department. It is also useful to identify the opportunities to excel and improve, to negotiate the challenges faced by the department from the internal and external environment.

Strengths:

- Dedicated Faculty
- Well-equipped Laboratories
- Students are exposed to Eminent Guest speakers from academia, industry and service sectors.
- Fully WiFi enabled department
- Students are promoted for internship to do projects.
- Close monitoring of student performance and system of communicating regularly with parents through TG Scheme.
- Classrooms are equipped with internet facility and projector
- Computer Technology Association (CTA)
- Good support from alumina and parents for Development of department.

Weaknesses:

- Consultancy work need to be improved
- No Ph.D. faculty members.
- Lack of Industry sponsored projects
- R&D needs to be strengthened.

Opportunities:

- To achieve university rank
- Interdisciplinary approach in research & industrial training
- Good opportunity for community& Industry projects
- The existence of Microsoft Campus club, Business club, EDC cell, Google Group for promoting the technology and entrepreneurship

Challenges:

- Rapid changes in technology

- Improving Soft skills

Future Plans:

- To encourage the faculty to register for the Ph.D. programmer and increase the Ph.D.'s in the department
- To offer consultancy services.
- To secure University ranks.

INFORMATION TECHNOLOGY

1. Name of the department: Information Technology

2. Year of Establishment: 2011

3. Names of Programmes / Courses offered

Course offered	Name of the Course	Specialization	Year of Establishment
U.G.	B.E.	IT	2011-12

4. Names of Interdisciplinary courses and the departments/units involved:

Sr. No	Name of Interdisciplinary course	Department
1	Digital Electronics & Logic Design	E&TC
2	Processor Architecture & Interfacing	E&TC
3	Engineering Mathematics-III	ES
4	Discrete Structures	ES

5. Annual/ semester/choice based credit system (programme wise):

Sr. No.	Course offered	Programme	Duration	Evaluation
1	U.G.	IT	4 Years	Marks / Credit

6. Participation of the department in the courses offered by other departments:

Sr. No.	Courses offered	Department
1	Fundamentals of Programming Languages-I	ES
2	Fundamentals of Programming Languages-II	ES

7. Courses in collaboration with other universities, industries, foreign Institutions, etc.

Sr. No	Name of the course	AY	Participating institution /industry
1	Android Application Development	2016-17	EcoRise Software Solutions, Pune

2	JAVA Programming Spoken Tutorial	2016-17	IIT Bombay
3	IT Security Cyber Crime	2015-16	Quest Institute of Knowledge, Pune
4	GD PI Training	2015-16	GoFigito, Pune
5	Microsoft Dot Net	2014-15	ATS Info Tech
6	C++ & Data Structures	2014-15	Object Technologies, Pune
7	GRE	2014-15	N & N Chopra Consultants Pvt. Ltd.
8	Microsoft Dot Net	2013-14	ATS Info Tech
9	C & C++ with Data Structure	2012-13	Object Technologies, Pune
10	German Language	2012-13	Mrs. Bhavana Palrecha, Lonavala
11	Communication Skill	2012-13	Mrs. Bhavana Palrecha, Lonavala

8. Details of courses/programmes discontinued (if any) with reasons: Nil

9. Number of teaching posts For Undergraduate Programme

Name of Teaching Post	Sanctioned	Filled
Professors	01	01
Associate Professors	02	00
Asst. Professors	09	11
Adjunct Faculty	03	03

10. Faculty profile with name, qualification, designation, specialization. (D.Sc./ D.Litt./Ph.D. / M. Phil. etc.,) :

Name	Qualification	Designation	Specialization
Dr.T. J. Parvat	Ph.D.	Professor	Network Intrusion security detection

11. List of Senior Visiting Faculty: Nil

12. Percentage of Lectures delivered, and practical classes handled [Program wise] by temporary Faculty: Nil

13. Student -Teacher ratios:

Sr. No	Program	Student -Teacher ratios
01	UG	15:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Staff Details	Number of Staff
Technical Assistant	03
Peon	02
Total	05

15. Qualification of teaching faculty with Dsc, D.Litt/PhD/MPhill/PG.

Sr. No	Qualification	No of Teaching faculty
1	Ph.D.	01
2	P.G.	11

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil

18. Research Centre /facility recognized by the University: Nil

19. Publications

Sr. No.	Faculty Name	No. of paper published in per review journals faculty/students	No. of publication listed in International/ National conference	Monographs	Chapters in books	Books edited	Books with ISBN in International DB	Citation Index	SNIP	SJR	Impact factor	h- Index Average
1	Dr. T. J. Parvat											
2	Mr. G. M. Kadam	1	2	-	-	-	-	-	-	-	1.7	-
3	Ms. S. S. Khartad	1	2	-	--	-	-	-	-	-	1.8	-
4	Mrs. K. G. Walke	2	2	-	-	-	-	-	-	-	2.735	-

5	Mr. A. K. Bone	2	4	-	-	-	-	-	-	-		-
6	Mr. S. S. Andhalkar	2	3	-	-	-	-	-	-	-	2.75	-
7	Ms. S.N. Kanade	2	2	-	-	-	-	-	-	-	2.5	-
8	Mr. R.S. Badodekar											
9	Ms. C.S. Wasvand	2	1	-	-	-	-	--	-	-		-
10	Mr. S.B. Kothari	-	-	-	-	-	-	-	-	-		-
11	Mrs. V.D. Paatil											
12	Mr. C.S. Pagar											

20. Areas of consultancy and income generated

Sr. No.	A.Y.	Title of Project	Name of Company
1	2016-17	Cross Platform Development and API Support for Kalpataru Application	EcoRise Software Solution, Pune
2	2015-16	Database Development and Payment gateway interface development for NDIonline.in	EcoRise Software Solution, Pune

21. Faculty as members in

Sr. No.	Committees	No. of Faculties
a	National committees	3
b	International Committees	Nil
c	Editorial Boards	04

A.Y.	Name of the Faculty	Work carried out / Activity	External Agency / Consultancy
2016-17	Mr. G. M. Kadam	Member for Syllabus Preparation (Audit Course-II)	SPPU
2015-16	Ms. S. S. Khartad	Syllabus Preparation (DELD)	SPPU
2014-15	Mrs. K. G. Walke	Syllabus Preparation (MOC)	SPPU
2014-15	Mr. P. R. Barapatre	Syllabus Preparation (GIS)	SPPU

22. Student's projects

Sr. No.	Description	2017-18	2016-17	2015-16	2014-15
1	Percentage of students who have done in-house projects including interdepartmental/ programme	72	75	94	88
2	Percentage of students placed for projects in organizations outside the Institution	28	25	6	12

23. a) Awards/ Recognitions received by faculty and students

A) Faculty

Sr. No.	Name of Faculty	Details of Awards / Recognitions	Organization
1	Mr. G.M. Kadam	Session Chair	GIT, Lavel
2	Mr. P. R. Barapatre	Session Chair	GIT, Lavel

B) Awards / Recognitions received by students:
Only Internal & external awards & recognition need to be considered.

AY	Name of Student	Details of Awards / Recognitions	Organization
2016-17	Darshan Biyani, Balaji Lase, Lalit Sutar	Smart Technocrat 2k17	Techtonic 2K17
2016-17	Lalit Sutar	Project Exhibition	Techtonic 2K17
2016-17	Aishwarya YadavVishal Lekhwani Devesh Chinchole	Smart Hackathon 2k17	Ministry of HRD, GOI in association with AICTE.
2015-16	Lalit Sutar	SEED IT Idol -2016	SEED
2014-15	Aishwarya Yadav Shivam Patil Vishal Lekhwani Devesh hinchole	Participation projects(E-citizen)	Hackathon by Persistent pvt.ltd – Pune
2014-15	Heramb Pawar Sonal Goje MukeshWadile Sagar Gosavi	Participation projects(Garbage Management using RFID)	Hackathon by Persistent pvt.ltd – Pune
2014-15	Sham BiradarMayur GujratiChetan RaneMonal Sonarikar	Participation projects Electronic Energy Meter	Hackathon by Persistent pvt.ltd - Pune
2013-14	Sushil Rajiwade	second prize in blind	MIT, Pune

		coding	
2013-14	Sushil Rajiwade	first prize in C language quiz	SKNSITS, Lonavala
2013-14	Bhamini Vispute	Zonal winner in NNSC Competition	NNSC

24. List of eminent academicians and scientists/ visitors to the department:

The following eminent persons have visited the institute

Sr. No.	A.Y.	Name	Designation	Organization	Purpose of Visit
1	2016-17	Dr. Jayesh Minase	Member	Sinhgad Overseas Cell	Conducted Invited Talk Study Abroad
2	2016-17	Dr. Parikshit Mahalle	HOD	SKNCOE PUNE	Conducted Invited Talk on higher study opportunities abroad
3	2016-17	Mr. Prashant Dhotre	Asst. Professor	SITS Narhe	Conducted Invited Talk on higher study opportunities abroad
4	2016-17	Mr. Sharad Tandale	Owner	INDIANA Technologies & Solutions, Pune	Conducted Invited Talk on OOP
5	2015-16	Mr. Christian Hujer	CEO	Nelkinda software craft	Speaker For seminar on OOSE
6	2015-16	Mr. Tushar Samnerkar	Financial Head	Infosys Pune	Conducted Invited Talk On Working Culture in IT Industry
7	2015-16	Dr. Aditya Abhyankar	Dean, Faculty of Technology	SPPU, Pune	Workshop on Research methodology
8	2015-16	Dr. U. N. Gaytonde	Professor	IIT, Bombay	Workshop on Research methodology
9	2014-15	Dr. P. K. Sinha	Director	C-DAC Pune	Key Note Speaker of NCACN-15
10	2014-	Dr. Vahida	Professor	COEP Pune	Speaker for

	15	Attar			NCACN-15
11	2014-15	Dr. B. R. Patil	Principal	Viswaniketan Mumbai	Guest.for NCACN-15
12	2014-15	Dr. S. K. Shinde	BOS (Computer) Mumbai University	MGM, Mumbai	Invited Talk on Web Mining
13	2013-14	Dr. A.W. Kiwlekar	HOD (Computer)	Dr. BATU Lonere	Invited Talk on Software Architecture
14	2013-14	Dr. Gunti Gunarathne	Professor	Robert Gordon University Scotland (U.K.	Advances in Engineering & Technology
15	2013-14	Dr. Jaspreet Dhupia	Professor	N.T.U. Singapore	Advances in Engineering & Technology (ICAET)
16	2013-14	Dr. K. P. Karunakaran	Professor	IIT Mumbai	Advances in Engineering & Technology (ICAET)
17	2012-13	Prof Gopal Upadhya	Asst. Professor	RHCOE Pune	Conducted Invited Talk On Computer organization
18	2012-13	Mr. Digambar Yedge	Software Developer	Cognizant Technology	Guest for Induction Programme

25. Seminars/ Conferences/Workshops organized and the source of funding

a. National

Academic Year	Category	Title	Funding Agency
2016-17	STTP	Python	Self-Sponsored
	Workshop	CCNA	SkyBird Technology Pvt. Ltd.
	FDP	Java Programming	Self-Sponsored
2015-16	Workshop	Big Data	Self-Sponsored
		National Level Workshop on Mathematical Modeling	Self-Sponsored
		One day Entrepreneurship	Self-Sponsored

		Awareness Workshop	
	National Seminar	IT ACT 2000	Self-Sponsored
2014-15	National Conference	NCACN	BCUD SPPU, Pune
	National Workshop	Summer Training Program For Diploma Students	Self-Sponsored
2013-14	National Workshop	LATEX	Self-Sponsored
		National Level Workshop on Network Security	Self-Sponsored

b) **International:**

AY	Category	Title	Funding Agency
2012-13	International Conference	International Conference on Advances in Engineering and Technology (ICAET 2013	SPJ Centre of Multidisciplinary Research (SCMR) & SCMR Association of Research(SAR)

26. Student profile programme/course wise:

AY	Name of the course	Applications received	Selected	Enrolled		Pass %
				M*	F*	
2017-18	UG(IT)	Admission process in the state is only through CAP and governed by Director of Technical Education (DTE), Government of Maharashtra. The Institute follows the rules, regulation & guidelines set by Savitribai Phule Pune University, State Government body	18	15	3	
2016-17			20	15	5	
2015-16			28	24	4	
2014-15			11	7	4	
2013-14			24	19	5	97
2012-13			62	44	18	96

*M=Male *F=Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2017-18	95.00	05.00	NIL
2016-17	72.41	27.58	NIL

2015-16	60.71	39.29	NIL
2014-15	90.91	09.10	NIL
2013-14	83.33	16.67	NIL
2012-13	83.87	16.13	NIL

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc?

AY	Number of Students cleared in Competitive Examinations			
	GATE	GRE/IELTS	TOEFL	CAT
2016-17	---	0	0	1
2015-16	1	2	1	0
2014-15	0	2	0	0

29. Student progression.

Student progression	Against % enrolled		
	2016-17	2015-16	2014-15
UG to PG	4	6	8
PG to M.Phil.	NA		
PG to Ph.D.	NA		
Ph.D. to Post-Doctoral	NA		
Employed			
Campus selection	22.22	51.79	34.62
Other than campus recruitment	5.56	19.64	26.92
Entrepreneurship/Self-employment	1	--	--

30. Details of Infrastructural facilities

a. Library – YES

Sr. No.	Title	Details
1	No. Of Titles	99
2	No. Of Volumes	169
3	No. Of Project Reports	41
4	No. Of Journals(National)	00

5	No. Of International(E-Journals)	-----

b. Internet Facilities for Staff & Students –Yes.
Wi- Fi facility is available for students, faculties in the campus.

c. Class rooms with ICT facility

Number of classrooms:- 02

Room Descriptions	Capacity	Rooms equipped with
C-410	80 Students	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains
C-411	80 Students	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains

Tutorial Rooms:-01

Room Descriptions	Capacity	Rooms equipped with
C-414	25	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains

d. Details of Laboratories

Sr. No.	Name of the lab	Name of faculty In charge	Room No
1	Laboratory – 01	Ms. S.N. Kanade	C401
2	Laboratory – 02	Ms. K. G. Walke	C402
3	Laboratory – 03	Mr. A. K. Bone	C405
4	Laboratory – 04	Ms. S. S. Khartad	C415

31. Number of students receiving financial assistance from College, university, government or other agencies

The following data indicates no. of students receiving financial assistance

A.Y.	EBC	SC	OBC	SBC	VJNT	ST
2016-17	32	0	19	1	0	0
2015-16	48	5	30	2	5	--
2014-15	48	6	30	3	5	1
2013-14	33	3	14	3	8	1
2012-13	16	6	9	3	3	-

32. Details on student enrichment programmes (special lectures / workshops / seminars) with external experts

Academic year 2017-18		
Value Addition Programs		
1	C and C++ Programing	15
Invited talk		
1	Data mining By Mr. Mahesh Bodhgire	19
2	Operating System By Mrs. Pallavi Ahire	22
Academic year 2016-17		
Value Addition Programs		
1	Java Programming Spoken Tutorial	36
2	Android Application Development	65
Invited talk		
1	Web Technology & PHP	65
2	System Programming By Mrs. Vandana Tonde	22
3	Project base learning for Faculties	70
4	New Emerging Networking Possibilities by Mr. R.N. Rao	35
5	Parser in Compiler design by Prof. D.N. Londhe	18
Workshop / Conferences organized		
1	Apache APX Big Data Workshop	65
2	Android Application Development Workshop	67
3	Webinar on BIGDATA	45
4	FDP on JAVA Programming	25
5	CCNA Workshop	55
STTP Organized		
1	One Week National Level STTP on ‘Python’	34
Industrial Visits		
1	Brahspati Info tech. Pvt. Ltd Chandigarh	4
2	Persistant Pvt. Ltd.	20
Academic year 2015-16		
Value Addition Programs		
1	Cyber Security & Cyber Crime	50
2	Core Java	45
Invited talk		

1	Invited Talk On Role of Communication skill in IT industry by Ms. Sheetal Pawar	45
2	Invited Talk Recent Trends in IT by Mr. Munde	41
Workshop / Conferences organized		
1	National Level Workshop on Mathematical Modelling	61
2	National Level Workshop on BIG DATA & HADOOP	45
3	EDC Workshop	142
4	Seminar on IT act 2000	65
Industrial Visits		
	Persistant Pvt. Ltd.	25
Academic year 2014-15		
Value Addition Programs		
1	C ++ & Data Structure	27
2	GRE	10
Invited talk		
1	Web Technology	70
2	UML	70
3	PHP	70
4	JAVA	70
5	Project Based Learning	70
Workshop / Conferences organized		
1	National Conference of Advanced Computer Networking 2015	95
2	STTP on MATLAB	
Industrial Visits		
1	Paper Square Limited, Bangalore	40
Academic year 2013-14		
Value Addition Programs		
1	Microsoft Dot Net Certification	65
2	ASP .NET	15
Invited talk		
1	Invited Talk on Communication Skill	120
2	How to present your Presentation	100
3	Call Gate(PAI)	50
4	System Programming	64

5	Computer Organization	150
Workshop / Conferences organized		
1	Latex Workshop	60
2	National Level Workshop on Network Security	57
3	Teacher Advancement Program	10
Industrial Visits		
1	Industrial visit to Paper soft Ltd	50
Academic year 2012-13		
Value Addition Programs		
1	C ++ & Data Structure	38
2	German Language	1
3	Communication Skill	15
Invited Talks		
1	Invited Talk On Role of Communication skill in IT industry by Sheetal Pawar	45
Workshop / Conferences organized		
1	Workshop on latex	45

33. Teaching methods adopted to improve student learning

Department practice blend of Activity based and Project based learning in addition to traditional lecture-based learning.

To improve classroom learning, department has applied following practices

- Teachers are allotted subject as per their choice and specialization
- Teachers are asked to prepare semester-long teaching plan and course file before the start of the semester.
- Each teacher is asked to prepare their notes and Power point presentations for the course content. Same is shared with the students by using GEMS software and in the classrooms.
- To simplify Teaching Learning process teaching aids are provided for conducting lectures.
- Models, videos, and animations are used by faculty members to elaborate concepts as per the complexity of the topic.
- Lab experiments and homework in the form of assignments is given to students
- Lectures with self-learning sessions, Student Interaction, Teacher Guardian, Training and placement activity, Student Training program are added to the timetable.
- K Point audio kapsule prepared and distributed to students through K Point server.

Project Based and Active Learning

- Department has designed three courses based on the Project Based Learning (PBL) concept. In these courses, students are asked to work on the projects. Students will learn in PBL environment, which is better than traditional lectures.
- Lab Innovation is another activity in line with PBL principles, in which students are allowed to work on their ideas. This activity also results in improved learning and creation of useful lab models.
- Also, students are motivated to work on of ongoing research projects. Capstone projects are compulsory projects for the final year students.
- Project exhibition and various technical festivals provide an opportunity for active learning.
- Invited talks and Industry expert Seminars are arranged to bridge the knowledge gap of the students.

Assessment Method

- Direct assessment of the course was done by alumni, industry and experts from professional bodies.
- Various tests (Unit test and Prelim, Online, etc.) are used for assessment.
- Mock tests are conducted to evaluate the students'understanding.
- Industry experts are included during the revision of the course at university level.
- Feedback from alumni and final year student are taken into account during the revision of the PEO's at the institute.
- Indirect assessment is done through campus interviews and performance of students in competitive exams like GATE, GRE, and CAT, etc.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Academic Year	Name of Activity	Place	Date	No. of students participated
2017-18	Book Exhibition	SKNSITS, Lonavala	14/09/2017	10
2017-18	Swachtcha Abhiyan	SKNSITS, Lonavala	12/09/2017	10
2017-18	Tree Plantation	SKNSITS, Lonavala	07/07/2017	-
2017-18	Yoga Day	SKNSITS, Lonavala	21/06/2017	-
2016-17	Blood Donation Camp	SKNSITS, Lonavala	27/02/2017	20
2016-17	Swami Vivekanand Jayanti & Rajmata Jijaoo	SKNSITS, Lonavala	12/01/2017	20

	Jayanti			
2016-17	Orphanage cloth donation	Snehsadan Orphange, Khandala	22/12/2016	15
2016-17	Wall of humanity	Railway station Lonavala	19/12/2016	05
2016-17	International Yoga Day	SKNSITS, Lonavala	21/06/2016	35
2016-17	Tree Plantation Activity	SKNSITS, Lonavala	1/7/2016	10
2016-17	Varsha-Daud	SKNSITS, Lonavala	29/07/2016	25
2016-17	Cleaning Camp	Lonavala Railway Station	11/8/2016	05
2016-17	Essay writing Compitition	Z. P. School Kusgaon	12/8/2016	05
2016-17	Orphanage Visit	Sneh Sadan, Khandala	15/08/2016	25
2016-17	Rakshabandhan	SKNSITS, Lonavala	15/08/2016	12
2016-17	Heartfulness Meditation	SKNSITS, Lonavala	21/09/2016 to 23/09/2016	06
2016-17	Yes + activity	SKNSITS, Lonavala	27/09/2016 to 30/09/2016	15
2016-17	Dandiya coordination	SKNSITS, Lonavala	7/10/2016	25
2015-16	Blood Donation Camp	SKNSITS, Lonavala	26/10/2015	25
2015-16	NSS Special Camp	Karunj, Village near Lonavala	28/12/2015 to 31/12/2015	05
2015-16	Plastic Kachra Mukta Abhiyan	SKNSITS, Lonavala College and Canteen Area	13/02/2016	07
2015-16	Blood Donation Camp	SKNSITS, Lonavala	18/02/2016	15
2015-16	Tree Plantation	SKNSITS, Lonavala	1/7/2016	06
2015-16	Gurupurnima Celebration	SKNSITS, Lonavala	19/07/2015	13
2014-15	Street Play (Social media addiction awareness)	SKNSITS, Lonavala	18/03/2015	03

2013-14	Tree Plantation	SKNSITS, Lonavala	21/05/2014	03

35. SWOC analysis of the Information Technology Department and future plans.

Strengths:

- Learning environment is a blend of traditional teaching and Activity Based Learning.
- Well qualified and dedicated faculties.
- Healthy retention ratio.
- Well-equipped labs and classrooms to support curriculum.
- K-Point software for recording the video lectures & distributing to the students through software.
- MOU with the industries for research and development

Weaknesses:

- Lack of Professor.
- Inadequate consultancy activities.

Opportunities:

- To achieve university rank.
- Interdisciplinary approach in research & industrial training.
- Good opportunity for community projects.
- Opportunity to become renewable energy model department.

Challenges:

- Admission challenge due to geographic location
- Low ranks and diversity of incoming students.
- Attracting senior faculty.

Future Plans:

- Centre for Project Based Learning research

ELECTRONICS AND TELECOMMUNICATION

1. Name of the department: Electronics and Telecommunication Engineering

2. Year of Establishment : 2011

3. Names of Programs / Courses offered:

Course offered	Name of the Programme	Specialization	Year of Establishment
U.G.	B.E.	E&TC	2011-12

4. Names of Interdisciplinary courses and the departments/units involved:
Following Interdisciplinary courses are involved in curriculum of programs:

Sr.No.	Name of Interdisciplinary course	Department
1	Engineering Mathematics-III	ES
2	Data Structures and algorithm	COMP
3	Object Oriented Programming	COMP
4	System Programing and Operating system	COMP

5. Annual/ semester/choice based credit system (programme wise):

Sr.No.	Course Offered	Programme	Duration	System	Evaluation
1	U.G.	Electronics and Telecommunication Engineering	4 years	8 Semester	Marks/Credit

6. Participation of the department in the courses offered by other departments:

Sr.No.	Courses Offered	Department
1	Electronics and Electrical Engineering	MECH.
2	Mechatronics	MECH.
3	Basic Electronics Engineering	ES
4	Digital Signal Processing Applications	COMP
5	Digital Electronics and Logic Design	COMP, IT
6.	Microprocessor Architecture	COMP

7 Courses in collaboration with other universities, industries, foreign Institutions, etc.:

A.Y	Name of the course	Participating institution /industry
2017-18	Arduino based Projects	Robokart.com, Mumbai
	GD &PI Training	Go Figito, Pune
	GD &PI Training	Barclays Training, Mumbai
	Android application and development	Greeks labs Pvt. Ltd ,Pune
2016-17	GD &PI Training	Go Figito, Pune
	RASBERY PI, Linux, Arduino by	Sofocon India Pvt. Ltd.
	Introduction to Industrial Automation Training Program	ETA (Educate to Automate)
	Internet of Things (IoT)	Chelsio Communication
	PCB Desigining	Whirpool, India ltd
2015-16	Arm & Cortex	BICARD Pune
	JAVA Programming	MASS Technologies Pvt. Ltd.
2014-15	Embedded System & Robotics	P. S. Technology Pune
	GRE/ GATE Classess	N & N Chopra Delhi
2013-14	Teachers Advancement Program	Wren & Pecker Pvt. Ltd.
	PLC & SCADA	Prolific Private Limited
2012-13	PCB Designing	Subtronics Mumbai
	German Language	Bhavana Palrecha, Lonavala
	Communication Skill	Bhavana Palrecha, Lonavala
	Matlab Programming	Saitronics Mumbai

8 Details of courses/programmes discontinued (if any) with reasons: Nil

9. Number of teaching posts

A. For Undergraduate Programme

Post	Sanctioned	Filled
Professors	1	0
Associate Professors	2	0
Asst. Professors	9	13
Adjunct Faculty	-	03

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil., etc.,)

Sr. No	Name of faculty	Designation	Qualification	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
1	Dr. V. M.Rohokale	Asso. Prof. & Dean R &D	M.E.	Electronics	19	04
			Ph.D.	Wireless communication		

11 List of Senior Visiting Faculty: - Nil

12 Percentage of Lectures delivered, and practical classes handled [Program wise] by temporary Faculty: Nil

13 Student Teacher ratios:-

Students' Intake	Teacher(s)	STR for UG
180	13	13.84:1

14 Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Type of Staff	Number of Staff
Technical Assistant	2
Peon	1
Total	3

15 Qualification of teaching faculty with D.Sc./D. Litt./ Ph.D./MPhill/PG:

Sr. No	Qualification	No of Teaching faculty
1	Ph.D.	0
2	P.G.	13
Total		13

16 Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

Number of faculty with National ongoing projects	Amount received	Number of faculty with International ongoing projects	Amount received in Rs.
-	-	2	11,42,348/-

17. Departmental projects funded by DST, FIST; UGC, DBT, ICSSR, etc. and total grant received:

a. Sponsored Projects –

A.Y	Faculty	Title Of The Project	Sponsoring Agency	Sponsorship amount in Rs.	Status Of Proposal
2013-14	Dr. S. P. Narote	Under QIP (Lab equipments)	SPPU Pune	100000/-	Completed
2014-15	Mrs. P.P. Tayade	DTMF based spy robot	Nutan infotech Pvt.Ltd. Pimpri	5675/-	Completed
2015-16	Dr. V. M. Rohokale	Cloth tester using Image processing	Vistacore Pvt. ltd. Pune	3250/-	Completed
	Mr. M.D.Bhagwat	Wireless vehicle charging	Indeysyes Pvt. Ltd. Lonavvala	4085/-	Completed
	Mrs. R.M. Thadi	Smart Traffic control using PLC	Yantra harvestor Pvt. Ltd. Pune	4220/-	Completed
2016-17	Mr.R. S.Musale	Machine vision system	Jal automation Pvt. Ltd. Akurdi	4800/-	Inprocess

b. STES's funding

A.Y.	Name of	Title Of The Project	Amount Of	Status Of
2016-17	Mr. Shaikh J. R.	The Next Vision	10000/-	Ongoing
	Mr. Shaikh J. R.	Ph.D. at Sofia	285587/-	Ongoing
	Mr.Patil S. M.	Ph.D. at Sofia	285587/-	Ongoing
2015-16	Mr. Shaikh J. R.	Ph.D. at Sofia	285587/-	Ongoing
	Mr.Patil S. M.	Ph.D. at Sofia	285587/-	Ongoing

18 Research Center /Facility recognized by the university: Nil

19. Publications :

Sr. No	Name of Faculty	No. of papers published in peer-reviewed journals Faculty/students	Number of publications listed in International National conference	Monographs	Chapter in Books	Books Edited	Books with ISBN in international DB	Citation Index	SNIP	SJR	Impact Factor	h-index
1	Ms. R. M. Thadi	-	6	-	-	-	-	-	-	-	-	-
2	Dr. V. M. Rohokale	8	11	-	02	-	02	82	-	-	2	05
3	Dr. P. H. Patil	9	0	-	-	-	-	-	-	-	-	-
4	Mr. A. A. Chavan	-	5	-	-	-	-	-	-	-	-	-
5	Mr. S. S. Chavan	-	-	-	-	-	-	-	-	-	-	-
6	Mr. M. D. Bhagwat	1	-	-	-	-	-	-	-	-	-	-
7	Mr. S M Patil	0	1	-	-	-	-	-	-	-	-	-
8	Mr. J. R. Shaikh	1	-	-	-	-	-	-	-	-	-	-
9	Ms. S. B. Ambekar	2	2	-	-	-	-	-	-	-	-	-
10	Ms. P. P. Tayade	1	2	-	-	-	-	-	-	-	-	-
11	Ms. K. A. Yadav	1	1	-	-	-	-	-	-	-	-	-
12	Mr. A. S. Ukirde	-	-	-	-	-	-	-	-	-	-	-
13	Ms. P.D. Halle	1	1									
14	Mr. R. S. Musale	-	-	-	-	-	-	-	-	-	-	-

20. Areas of consultancy and income generated

AY	Title of Project	Industry Name	Amount inRs.
2016-17	Security with Darknets, VANET Security, Smart Grid Security WSN Routing Security	CDAC- Gujarat Technological University (GTU)	48,000/-

2015-16	IOT Forensics, SDN Plane security, Coasting Model for Cloud Computing	CDAC- Gujarat Technological University (GTU)	36,000/-
2015-16	Design and implementation of universal charger for wireless charging between low power	Opulent Infotech Pune	4515/-

21 Faculty as members in:

Sr.No.	Committees	No. of Faculties
1	National Committees	13
2	International Committees	01
3	Editorial Board	02

Name of Faculty	Committee	Conference and Journal
Dr. V. M. Rohakale	TPC Member and Reviewer	International Conference GWS-2014, Aalborg University Denmark
	TPC Member, Session Chair and Reviewer	International Conference GWS-2015, Hyderabad, India
	Reviewer	International Conference CASP-2016 Cummins COE Pune
		IEEE Global Conference on Wireless Computing and Networking (GCWCN-2014)
	Springer IEEE International Conference (Reviewer)	ICDECT 2016
	Member Editorial Board	ICLCSTM 2016
Ms.R.M.Thadi	Member Editorial Board	SE syllabus Structure Finalization(2015 course)
		TE syllabus Structure Finalization(2015 course)

22. Student projects:

Sr.No.	Description	2016-17	2015-16	2014-15

1	Percentage of students who have done in-house projects including interdepartmental/ programme	91.66%	82.60%	90%
2	Percentage of students placed for projects in organizations outside the institution	8.33%	17.39%	10%

23. Awards/ Recognitions received by students & faculty:

a) Awards/ Recognitions received by faculty:

A.Y.	Name of The Faculty	Details of Awards / Recognitions	Organization
2017-18	Mr. Javed Shaikh	Best Teacher award	SKNSITS Lonavala
2016-17	Dr. V. M. Rohokale	Best Teacher award	SKNSITS Lonavala
		Ph. D. Review research committee member	Vellore Institute of Technology , Chennai
		Judge in PG project exhibition cum Competition	BOS, SPPU at MAEER's MIT COE , Pune
		Given Invited Talk on "Cyber Security for CONASENSE", duringInternational Workshop on 5G CONASENSE during GISFI Meeting on 26th and 27th Sept 2016	ViMEET, Kumbhivali, Khalapur,Mumbai University
		Given a keynote speech on "Research in Next Generation Wireless Networks", in the FE Induction program	IT Dept, SIT LonavalaSPPU
	Dr. P. H. Patil	Elected as a Executive committee member of IETE Pune center and appointed as Vice-Chairman IETE Pune Center	IETE Pune Center
		Judge in PG project exhibition cum Competition	RSCOE, Pune

		Reviewer For IJESE Journal	IJESE Journal
		Invited as a Guest for IEEE Conference	PCCOE Pune
		Technical expert for syllabus framing for E& TC UG Course	MIT MAE Alandi, Pune
	Mrs.R.M.Thadi	Judge in Inter college IETE project Competition -2017	RMD Sinhgad COE,Pune
2015-16	Dr. V. M. Rohokale	Ph. D. Thesis Assessment and Viva-Voce Examination committee member	Jay Narayan Vyas University, Jodhpur, India
		Session Chair for session "Security, Trust, Privacy and authentication"	"WPMC, GWS 2015" , International conference at Hyderabad, India
		Conducted a session on "Cyber Physical System-Smart Grid", in the International Workshop on	IETE Delton Hall New Delhi ,Delhi University
	Dr. V. M. Rohokale	Conducted a session on "Characteristics of Research Problem and Problem Definition, Framing Research Questions and Objectives" during FDP on Research Methodologies on 10/08/2015	SIT Lonavala, SPPU
	Dr. P. H. Patil	Moraya Puraskar 2015	Chinchwad Devstan Trust , Pune
		Session chair for International Conference	GHRIET Pune
		Reviewer for ICESA-2016	DYPIET Pimpri
2014-15	Dr. V. M. Rohokale	Referee for examination of Ph. D. Thesis	Rashtasant Tukadoji Maharaj Nagpur University
		PhD Coursework design for E&TC Elective-I Advanced Developments in Wireless Communication and Coding Techniques P-III	Solapur University

		(New)	
		Session Chair and Keynote Speaker	ACCET - Second National Conference at Modern COE, Pune
		Recognised as a member of Global ICT Standardization Forum for India (GISFI)	GISFI and I4CT, India
2013-14	Dr. S. P. Narote	Best Teacher Award	SPPU Pune
2012-13	Mr. M. D. Bhagwat	Best paper award in international conference ICAET 2013	SKNSITS Lonavala & SCMR Delhi

b). Awards / Recognitions received by students:
Inter -institute Awards gain by students

A.Y.	Name of The Student	Details of Awards / Recognitions	Organization
University Ranker			
2013-14	Ajay Kumar yadav	6th rank in TE(pune university)	SPPU Pune
Other Achivements			
2016-17	Kajal Fasale, Pooja Chavan, Shubham Diwane, Pranav Patil	2nd prize in Group Dance (spandan-17)	SKNSITS Lonavala
	Kajal Fasale, Pooja Chavan	1st Prize in Rangoli competition (spandan-17)	SKNSITS Lonavala
	Kajal Fasale,	Miss SKNSITS (spandan-17)	SKNSITS Lonavala
	Tushar Sawant	1st Prize in SPPU Level Boxing	Maharashtra State
	Bhagyalakshmi Patil, Vineetkumar chauhan, Divyansh Varshney	Project of the year (SKN INNOTECH-17)	SKNSITS Lonavala
	Prathamesh Bhusari, Harshal Adhav, Ravindra Chavan, Shubham Kanti dey	1st Prize in project competition(SKN INNOTECH-17)	SKNSITS Lonavala
	Rahul Tagalpallewar, Jyoti Savakare,	2nd Prize in project competition(SKN	SKNSITS Lonavala

	Shubhangi Salunkhe	INNOTECH-17)	
	Maitrey Pachpute	Selected for 45 days internship program	Alborg University Denmark
2015-16	Akshay Harnaval Akshay Jambulkar Prathamesh Done	Avishkar- 2015	SPPU Pune (MES Wadia COE, Pune)
	Narayan Lipane Samir Mulani	Avishkar- 2015	SPPU Pune (MES Wadia COE, Pune)
	Darshay Vyas Nikhil Patil	SKN Innotech 16	SKNSITS Lonavala
	Ankit Kumar Tejas Bodhe	SKN Innotech 16	SKNSITS Lonavala
	Rahul Tagalpallewar	1st prize in project competition	BNCOE Pusad
	Shubham Vithalkar	1st prize in Technical Exhibition	DR. N P Hirani Institute, Pusad
	Devashish Bhatkar Manoranjay Biswal Priyanka Sharma Ingle Mayur Swapnil Navghane Bhagyashree Bhavsar	1st Prize in Group Dance (spandan-16)	SKNSITS Lonavala
	Akshay Puppal	Best Outgoing Student	SKNSITS Lonavala
	Pankaj Yadav Kajal Fasale Kiran More	Runner up In business plan competition by EDC Cell	SKNSITS Lonavala
	Kajal Fasale	1st Prize in “R U Different”?	SKNSITS Lonavala
2014-15	Ajay Kumar yadav	Best Outgoing Student	SKNSITS Lonavala
	Devashish Bhatkar Manoranjay Biswal Priyanka Sharma Swapnil Navghane Bhagyashree Bhavsar	1st Prize in Group Dance (spandan-15)	SKNSITS Lonavala
2013-14	Siddhi Ghare Mayuri Waghmare Aafrin Shaikh	1st Prize in Group Dance (spandan-14)	SKNSITS Lonavala

24 List of eminent academicians and scientists/ visitors to the department:
The following resource persons have visited the institute and conducted state level conference/seminar:

A.Y.	Name	Designation	Organization	Purpose of Visit
2017-18	Dr. M. M. Deshmukh	Prof. & Dean	Trinity COE &R, Pune	Research Convention 2017
	Ms. Lavina Utamani	Product Designer	Barclays, Mumbai	GD PI Training
	Ms. Karishma Arora	Trainer	Barclays, Mumbai	GD PI Training
2016-17	Dr. P. Vijaykumar	Associate Professor	VIT Chennai	NS2 & NS3 Trainer
	Dr. P. Vetrivelen	Associate Professor	VIT Chennai	NS2 & NS3 Trainer
	Dr.Smriti.Dagur	IETE President	IETE Delhi	Promotion of IETE &visit to Institute
	Dr.Rahul.More	CEO	Ocean Technology	FE Induction Program
	Dr. Vivek Deshpande	Professor	VIT, Pune	Research Convention-16
	Prof. Madhukar Deshmukh	Professor	TCOER, Pune	Research Convention-16
	Dr. P. K. Desai	President	ISTE	Institute Visit
2015-16	Dr. P. K. Sinha	Senior Director	C-DAC Pune	National Conference NCACN 2015
	Dr. Adhitya Abhyankar	Professor	SPPU Pune	Workshop On Research Methodology
	Dr. U. N. Gaitonde	Professor	IIT Mumbai	Workshop On Research Methodology
2012-13	Dr. Gunti Gunarathne	Professor	Robert Gorden University, Scotland	International Conference ICAET- 2013
	Dr. Jaspreet Dhupia	Professor	N. T. U. Singapore	International Conference ICAET- 2013
	Dr. K. P. Karunakaran	Professor	IIT Mumbai	International Conference ICAET- 2013

	Dr. K. P. Issac	Member secretary AICTE Delhi	AICTE Delhi	International Conference ICAET- 2013
	Dr. A. K. Shukla	Regional Officer	AICTE Mumbai	International Conference ICAET- 2013
	Dr. S. A. Sonawane	SCMR Nominee	SCMR Delhi	International Conference ICAET- 2013

25. Seminars/ Conferences/Workshops organized and the source of Funding National

A. Y.	Category	Title	Funding Agency
2017-18	Project Competition	PBL Project Competition in Association with IETE	Self-Sponsored
2016-17	Project Competition	SKN-INNOTECH-17	Self-Sponsored
	Seminar	Wireless Sensor Network	Self-Sponsored
	FDP	Java Programming (IIT Mumbai)	Self-Sponsored
	Workshop	Research Convention-16	Self-Sponsored
	FDP	Network Simulator [NS2 & NS-3]	Self-Sponsored
	Seminar	Aalborg University Internship	Self-Sponsored
2015-16	Workshop	Antenna Design and Simulation using CEM Simulation Tool	Self-Sponsored
	Project Competition	SKN-INNOTECH-16	Self-Sponsored
	Project Competition	Genesis-TechInnoFair16	Self-Sponsored
	Workshop	Two Days Workshop On Research Methodology	Self-Sponsored
	Workshop	One Day Workshop on “Backbones of Scientific Research	Self-Sponsored
	Workshop	National workshop on Latex	Self-Sponsored
2014-15	National Conference	National Conference in Advanced Computer Networking (NCACN) 15	Self-Sponsored
	Workshop	Solar power	Self-

			Sponsored
	Workshop	Summer Training Program For Diploma Students	Self-Sponsored
	Workshop	Workshop on "Scientific Report Writing" by Dr. Rohokale V. M.	Self-Sponsored
	STTP	MATLAB	Self-Sponsored
2013-14	Seminar	Electronics Components and Design	Self-Sponsored
2012-13	Workshop	PCB designing	Self-Sponsored

b) International

A. Y.	Category	Title	Funding Agency
2012-13	International Conference	International Conference on Advances in Engineering and Technology 2013	SPJ Centre of Multidisciplinery Research(SCMR) and SCMR's Association of Reasearch(SAR)

26. Student Profile Programme/Course Wise:

A. Y.	Name of the course/programme	Applications received	Selected	Enrolled *M/*F	Pass percentage
2017-18	UG E&TC	Admission process in the state is only through CAP and governed by Director of Technical Education (DTE), Government of Maharashtra. The Institute follows the rules, regulation & guidelines set by Savitribai Phule Pune University, State Government body.	11	8/3	-
2016-17			22	13/9	-
2015-16			38	27/11	-
2014-15			71	53/18	93.67
2013-14			63	42/21	96.82
2012-13			67	53/14	40.29

*M=Male F=Female

27. Diversity of Students:

AY	% of students from the same state	% of students from other States	% of students from abroad

2017-18	81.81	18.18	-
2016-17	72.75	27.27	-
2015-16	94.73	0.05	-
2014-15	85.91	14.08	-
2013-14	88.88	11.11	-
2012-13	91.044	0.089	-

28. How many students have cleared national and state competitive Examinations such as NET, SLET, GATE, Civil services, Defense Services, etc?

A Y	Number of Students participated in National & State Competitive Examinations			
	GATE	GRE	TOEFL	Seller Entry Scheme Exams
2016-17	-	01	-	
2015-16	-	-	-	01

29. Student Progression:

Student progression	Against % enrolled		
Year	2016-17	2015-16	2014-15
UG to PG	2/73 (3%)	3/75(4%)	1/27(3.70%)
PG to M.Phil.	NA	NA	NA
PG to Ph.D.	NA	NA	NA
Ph.D. to Post-Doctoral	NA	NA	NA
Employed Campus selection	24	42.03	14.81
Other than campus recruitment	8	26.09	48.15
Entrepreneurship/Self-employment	--	1	--

30. Details of Infrastructural facilities:
a) Library
b) Internet facilities for Staff & Students
c) Classrooms with ICT Facility
d) Laboratories

Library-Yes

Departments	No. of Titles	No. of Volume
E&TC	119	148

Internet facilities for Staff & Students –YES; WIFI facility is available
Wi-Fi facility is upgraded to 32 Mbps for staff and students, the residential staff of all institutes, in the campus.
Classrooms - YES,
No. of classrooms-2
No. of Seminar hall-1
No. of tutorial rooms- 01
Laboratories –YES, labs-10

Details of Classrooms:

Room Descriptions	Capacity	Rooms Equipped with
A-302	80 students	Glass Board, LCD, Fans, tubes internet, curtains
A-305	80 students	Glass Board, LCD, Fans, tubes, internet, curtains

Details of Seminar Hall:

Room Descriptions	Capacity	Rooms equipped with
A-303	120 students	LCD, Fans, tubes, curtains, PA System, Podium

Details of Tutorial Rooms:

Room Descriptions	Capacity	Rooms equipped with
A-313A	60 students	Glass Board, LCD, Fans, tubes, curtains

Details of Laboratories

Laboratory Name	Lab Incharge	Location
Signal Processing Lab	Mr. Chavan S. S.	A-309A
Embedded And VLSI Lab	Ms. Halle P. D.	A-308A
Project Lab	Mr. Musale R. S.	A-310
EDC Lab	Ms.Tayade P. P.	A-311A
Communication Lab	Mr.Bhagwat M. D.	A-306A
Digital Electronics	Mr.Shaikh J. R.	A-312A
Microwave Antanna Lab	Mr. Ukirde A. S.	A-312B
Network & Power Lab	Ms.Tayade P. P.	A-311B
Advance Communication Lab	Mr.Bhagwat M. D.	A-306B
Basic Electronics	Mr.Patil S. M.	A-102A

31. Number of students receiving financial assistance from College, university, government or other agencies:
The following data indicates no. of students receiving financial assistance

A.Y.	EBC	SC	OBC	SBC	VJNT	ST
2016-17	5	17	0	2	0	37
2015-16	13	42	5	7	0	53
2014-15	10	41	3	7	1	53
2013-14	10	22	4	7	1	31
2012-13	5	14	3	3	0	24

32. Details on student enrichment programmes (special lectures / workshops / seminars) with external experts:

Sr. No.	Student Enrichment Programmes Details	Target Audience
Academic year2017-18		
Value Addition Programs		
1	**Arduino Based projects**	**25**
2	**Android and Application Development**	**19**
Invited Talks		
1	**Recent trends in Telecommunication Engineering**	**40**
Workshop / Conferences organized		
1	Research Convention-17	**24**
2	Seminar on cutting edge innovations and technologies	**30**
Academic year2016-17		
Value Addition Programs		
1.	IOT	33
2.	RASBERY PI, Linux, Arduino by Sofocon India Pvt. Ltd.	50
3.	GD &PI Training by Go Figito, Pune	42
4.	PCB design by Ganesh Khadke	30
Invited Talks		
1.	Embedded Processor by Dipali Shende	30
2	Digital Electronics By Matri D. S.	19
3.	Electronics Devices & circuits by Prof. S. S. Bharadwaj	18
4.	RASPBERRY PI by K. Ramesh	41

5.	Career opportunities by Sharad Vikhe	35
6.	Career guidance by Priyanka Sharma	36
7.	Signal and System by Sachin Shinde	18
8.	ESED by Sarang Patil	22
9.	Introduction to PLC and SCADA industrial application by Vivek Sardal	30
10.	Electronic Design Tools by Ganesh Khadke	30
Workshop / Conferences organized		
1.	FDP On NS2 & NS3	37
2	FDP on Java Programming(IIT Mumbai)	20
3.	Research Convention-16	16
4.	Seminar on Aalborg University Internship	50
5.	Seminar on Wireless Sensor Network	35
Industrial Visits		
1.	The Brihaspati Infotech Pvt. Ltd. (11th to 17 th Jan 2017)	18
2.	BSNL office Chinchwad	50

Sr. No.	Student Enrichment Programmes Details	Target Audience
Academic year 2015-16		
Value Addition Programs		
1	PCB Design by Nehal kumbhar	27
2	ARM & Cortex by Hemant Choudhary	28
3	JAVA Programming(MASS Technologies PVT LTD)	45
Invited Talks		
1.	Labview software by Sachin Kudari	50
2.	Career Guidance by Kalpesh Hiwse	60
3.	EMOSFET by Sanika Bharatwaj	30
4.	Data Acquisition by Ganesh Lohar	32
5.	LINUX construction by Kakade M. S.	41
6.	RASPBERRY PI by Rajani Rakesh	25
7.	Network Analyser by Supriya Sarkar	32
Workshop / Conferences organized		

1.	Antenna Design and Simulation using CEM Simulation Tool	40
2.	Project Exhibition for TE student	38
3	SKN-INNOTECH-16	75
4	Genesis-TechInnoFair16	10
5	Workshop (National workshop on Latex)	10
6	Smart Home (Seminar)	12
7	Two Days Workshop On Research Methodoly	17
8	One Day Workshop on “Backbones of Scientific Research	17
Industrial Visits		
1.	BSNL office Chinchwad	50

Sr. No.	**Student Enrichment Programmes Details**	**Target Audience**
Academic year2014-15		
Value Addition Programs		
1.	Embedded System & robotics by Prashanta Choudhary	30
2	GRE(N & N CHOPRA , DELHI)	10
Invited Talks		
1.	Various Opportunities in Industrial Automation by Lokhande Nitin	50
2.	Embedded Processor by Dipali Shende	45
3.	Talk on Career Guidance by Nilesh Munphan	55
4.	Power Electronics by Prof. Sawant	52
5.	Project Guidance by Ranjit	45
6.	Embedded System and robotics by Prashanta Choudhury	65
Workshop / Conferences organized		
1.	Workshop on Scientific Writing Dr. Rohokale V. M.	14
2	Workshop on Solar power	42
3	Summer Training Program For Diploma Students	10
4	National Conference NCACN 15	10
5	Project Exhibition for TE student	60
6	Six Days STTP on MATLAB and Simulink	
Industrial Visits		
1.	Ramani Precision Machines, Chandigadh	40

2.	BSNL office Chinchwad	40

Sr. No.	Student Enrichment Programmes Details	Target Audience
Academic year2013-14		
Value Addition Programs		
1.	PLC SCADA	4
2	PCB Desigining	20
Invited Talks		
1.	Embedded System by Vikas Burhanpure and Dipak Joshi	38
2.	Concept of Electronics product design by D. D. Choudhary	42
3.	Recent trends in Aviation communication system by Yogesh Chavan	52
4.	RFID by Sahu Yadav	30
Workshop / Conferences organized		
1	Seminar(Electronics Componets and Design)	30
Industrial Visits		
1.	S. N. Transformer BANGLORE	50

Sr. No.	Student Enrichment Programmes Details	Target Audience
Academic year2012-13		
Value Addition Programs		
1.	MATLAB by Avinash , Saitronics Mumbai	40
Invited Talks		
	MOSFET by Sneha Bharatwaj	45
2.	Two Port Network by Shankar Navale	42
Workshop / Conferences organized		
1.	PCB design by Prof. Lalit Patil	30
2	International Conference ICAET 2013	5

33. Teaching methods adopted to improve student learning:

To improve classroom learning, department has applied following practices:

- Teachers are allotted subject as per their choice and specialization
- As far as a possible teacher who taught that particular course is allotted to teach that course.
- Teachers are asked to prepare semester teaching plan and course file before the start of the semester.
- Each teacher is asked to prepare soft copies of their notes and Powerpoint presentations for the course content. Same is shared with the students by using ERP software and in the classrooms.

- Models, videos, and animations are used by faculty members to elaborate concepts as per the complexity of the topic.
- Lab experiments and homework in the form of assignments is given to students
- Lectures with self-learning session are added to the timetable.

Active Learning

- Lab Innovations is another activity in which students are allowed to work on their ideas. This activity also results in improved learning and creation of useful lab models.
- Students are motivated to work on ongoing research projects.
- Project exhibition and various technical festivals provide an opportunity for active learning.
- Invited talk and Industry expert Seminars are arranged to bridge the knowledge gap of the students.

Project Based Learning

- Department has designed three courses based on the Project Based Learning (PBL) concept. In these courses, students are asked to work on the projects. Students informed that learning in PBL environment is better that traditional lectures. Also, it is useful for promoting professional and process skills.
- Lab Innovations is another activity in line with PBL principles, in which students are allowed to work on their ideas. This activity also results in improved learning and creation of useful lab models.
- Also, students are motivated to work on of ongoing research projects.
- Capstone projects are compulsory projects for the final year students.
- Project exhibition and various technical festivals provide an opportunity for active learning.
- Expert talks and Industry expert Seminars are arranged to bridge the knowledge gap of the students.

Assessment Method

- Various tests (Unit test and Prelim, Online,etc.) are used for assessment.
- Mock tests are conducted to evaluate the students' understanding.
- Feedback from alumni and final year student are taken into account during the revision of the PEO's at the institute.
- Indirect assessment is done through campus interviews and performance of Students

34 Participation in Institutional Social Responsibility (ISR) and Extension activities

Academic year 2017-18

Sr.No	Date	Program	Details	Participation
1	21/06/2017	International Yoga Day	International Yoga Day was organized on by NSS and Student Welfare Team, teaching and non-teaching staff members and students of different departments participated in the event	22
2	07/07/2017	Tree Plantation Activity	Tree Plantation Activity supporting "Green Maharashtra" was organized by NSS and Student Welfare Team	07
3	7/07/2017	Rain Marathon	Rain Marathon was organized by NSS	09
4	12/09/ 2017	Cleaning Camp Lonavala Railway Station	Cleaning Camp was organized to support Swatch Bharat Abyan	07
5	7/09/2017	Teachers Day & Engineer's Day	On The Auspicious Occasion of birthday of Dr. Sarvepalli Radhakrishnan we celebrated teacher's day.On The Auspicious Occasion of birthday of Dr. Vishveshwaraya was celebrated as Engineer's day.	32
6	7/09/17	Business Club Event	Smart Library system	25
7	09/09/2017	EDC Activity	Entrepreneurship Development Cell of SKN Sinhgad Institute of Technology and Science, Lonavala has organized an Entrepreneurship Awareness Workshop	08
8	2/08/2017 & 21/08/2017	FE Induction & DSE Induction Program	The department of Electronics& Telecommunication engineering has conducted the Induction program for first year & Direct Second year E&TC students	11
09	11/08/2017	Pledge Activity	Sankalp Se Siddhi (New India Movement 2017-2022)	11
10.	21/8/2017	Essay writing	NSS team had organized	06

		and painting competition	painting competition for school children in kusgaon	
11	04/08/2017	Orphanage Visit and Rakshabandan celebration	Social activity was conducted by NSS Team	05

Academic year 2016-17

Sr.No	Date	Program	Details	Participation
1	21/06/2016	International Yoga Day	International Yoga Day was organized on by NSS and Student Welfare Team, teaching and non-teaching staff members and students of different departments participated in the event	40
2	1/07/2016	Tree Plantation Activity	Tree Plantation Activity supporting "Green Maharashtra" was organized by NSS and Student Welfare Team	10
3	29/07/2016	Varsha-Daud	Varsha –Daud was oranised By NSS ans Student council	20
4	11/08/ 2016	Cleaning Camp Lonavala Railway Station	Claening Camp was organized to support Swatch Bharat Abyan	10
5	19/07/ 2016	Gurupournima Celebration	Gurupournima was celebrated to pay respects to teachers and express gratitude.	30
6	17/09/2016	Teachers Day & Engineer's Day	On The Auspicious Occasion of birthday of Dr. Sarvepalli Radhakrishnan we celebrated teacher's day.On The Auspicious Occasion of birthday of Dr. Vishveshwaraya was celebrated as Engineer's day.	40
7	25/07/16	Business Club Event	Financial literacy is ability to understand how money works in the world: how someone manages to earn or make it, how that person manages it, how he/she	20

			invest it (turn it into more) and how that person donates it to help others.	
8	21/09/16,22/ 09/16and 23/09/2016	Heartfulness Meditation	'Heartfulness meditation', is a simple and effective approach to meditationsuited to the present times.	25
9	30/09/2016	World Entrepreneur's Day Celebration on	Entrepreneurship Development Cell of SKN Sinhgad Institute of Technology and Science, Lonavala has organized an Entrepreneurship Awareness Workshop .	10
10	5/08/2016 & 7/09/2016	FE Induction & DSE Induction Program	The department of Electronics& Telecommunication engineering has conducted the Induction program for first year & Direct Second year E&TC students	10
11	23/08/ 2016	National Anthem Day	As we know India will be entering the 70th year of Independence on 15th August 2016, it has been decided that period from 9th August 2016 to 23rd August 2016 be declared as Azadi 70- Yaad Karo Kurbani.	10
12	8/10/2016	Dandiya celebrations	Dandiya is celebrated in navarathri festival as a tribute to Durga Ma.	20
16	27/02/2017	Blood Donation Camp	Blood Donation Camp Was Conducted by NSS to support Blood Banks	15
17	27/02/2017	International Women's Day	Motivational speech by PSI Deshmukh M. S. and Social worker Sujata Angadi	50
18.	24/12/2016 to 30/12/2016	NSS Camp	Special winter camp was conducted by NSS Team	50
19	19/12/2016	Wall of humanity	Social activity was conducted by NSS Team	50
20	12/01/2017	Swami Vivekanand	CSR activity was conducted by NSS Team	50

		Jayanti		
21	22/02/2017	Orphanage cloth donation	Social activity was conducted by NSS Team	50

Academic year 2015-16

Sr.No	Date	Program	Details	Participation
1	1/07/2015	Tree Plantation Activity	Tree Plantation Activity supporting "Green Maharashtra" was organized on 1st July 2016 by NSS and Student Welfare Team	10
2	26/10/2015	Blood Donation Camp	Blood Donation Camp Was Conducted by NSS To support Blood Banks	15
3	28/12/2015 to 31/12/2015	Four Different events per year 7 days NSS camp was organized in the village for sustainable development.	At institute level, 50 Students have participated in different NSS activities throughout the year. Minimum working hours per student per year is 120 hrs. 25 students from the institute have participated in NSS special camp of 7 days for sustainable development of one village in the area of the University of Pune.	10
4	13/02/2016	Plastic KachraMuktaAbhiyan	Plastic KachraMuktaAbhiyan was organized under NSS to make STES Lonavala Campus plastic free environment.	10
5	18/02/2015	Blood Donation Camp	Blood Donation Camp Was Conducted by NSS to support Blood Banks	15
6	19/07/2015	Gurupournima Celebration	Gurupournima was celebrated to pay respects to teachers and express gratitude.	30
7	5/09/2015and 7/09/2015	Teachers Day & Engineer's Day	On The Auspicious Occasion of birthday of Dr. Sarvepalli Radhakrishnan we celebrated teacher's day.On The Auspicious Occasion of birthday of Dr.	40

			Vishveshwaraya was celebrated as Engineer's day.	
8	29/07/2015	Business Club Event	Financial literacy is ability to understand how money works in the world: how someone manages to earn or make it, how that person manages it, how he/she invest it (turn it into more) and how that person donates it to help others.	42
9	30/07/2015	World Entrepreneur's Day Celebration on	Entrepreneurship Development Cell of SKN Sinhgad Institute of Technology and Science, Lonavala has organized an Entrepreneurship Awareness Workshop at SKN Sinhgad Institute of Technology and Science,	22
10	25/07/2015	FE Induction	The department of Electronics& Telecommunication engineering has conducted the Induction program for first year E&TC student	20
11	27/02/2015	Marathi Day Celebration	Marathi day was celebrated as per the circular from SPPU to support and promote regional language	11
12	5/09/2015	Orphanage Visit	Students from department spend time with primary school orphanage girl students from five to fifteen on Computer training.	5
13	10/10/2015	Dandiya celebrations	Dandiya is celebrated in navarathri festival as a tribute to Durga Ma.	20

Academic year 2014-15

Sr.No	Date	Program	Details	Participation

1	5/09/2014 & 7/09/2014	Teachers Day & Engineer's Day	On The Auspicious Occasion of birthday of Dr. Sarvepalli Radhakrishnan we celebrated teacher's day. On The Auspicious Occasion of birthday of Dr. Vishveshwaraya was celebrated as Engineer's day.	40
2	21/05/2014	Heartfulness Meditation	'Heartfulness meditation', is a simple and effective approach to meditationsuited to the present times.	35
3	20/09/2014	Business Club Event	Financial literacy is ability to understand how money works in the world: how someone manages to earn or make it, how that person manages it, how he/she invest it (turn it into more) and how that person donates it to help others.	42
4	30/07/2014	Entrepreneur's Development Cell Inaugration	EDC cell for students was Inaugrated to motivate students to become successful enterprenuership	25
5	25/07/ 2014	FE Induction	The department of Electronics& Telecommunication engineering has conducted the Induction program for first year E&TC student	20
6	10/10/2014	Dandiya celebrations	Dandiya is celebrated in navarathri festival as a tribute to Durga Ma.	

Academic year 2013-14

Sr.No	Date	Program	Details	Participation
1	5/09/2013 and 7/09/2013	Teachers Day & Engineer's Day	On The Auspicious Occasion of birthday of Dr. Sarvepalli Radhakrishnan we celebrated teacher's day.On The Auspicious Occasion of birthday of Dr. Vishveshwaraya was celebrated as Engineer's day.	40

2	Once in a year in second semester.	Cultural Events "SPANDAN"	The Cultural event comprises drama, dance, singing competition, etc.Also various other cultural activities like a cultural day, painting competition, etc. are organized by the students.	33
3	Throughout the year	Earn and Learn Scheme	About 20 students at Institute level have participated in earn and Learn Scheme of the University of Pune.	4
4	25/07/2014	FE Induction	The department of Electronics& Telecommunication engineering has conducted the Induction program for first year E&TC student	20

Academic year 2012-13

Sr.No	Date	Program	Details	Participation
1	5/09/2012 & 07/09/2012	Teachers Day & Engineer's Day	On The Auspicious Occasion of birthday of Dr. Sarvepalli Radhakrishnan we celebrated teacher's day.On The Auspicious Occasion of birthday of Dr. Vishveshwaraya was celebrated as Engineer's day.	40
2	Once in a year in second semester.	Cultural Events "SPANDAN"	The Cultural event comprises drama, dance, singing competition, etc. Also various other cultural activities like a cultural day, painting competition, etc. are organized by the students.	50
3	Throughout the year	Earn and Learn Scheme	About 20 students at Institute level have participated in earn and Learn Scheme of the University of Pune.	5

35. SWOC analysis of the department and Future plans Strengths:

Strengths

- Major statistical assessment platform to assess employability in the form of Aspiring Minds Computer Adaptive Test (AMCAT) is undertaken which is well accepted by Top MNC's.
- Participation in technical & Non-technical activities by students and staff.
- Multi-Disciplinary activities (TTT and TAP) and knowledge sharing are carried out across the sister concern colleges of our management.
- Various activities such as Group discussion (GD), Personal Interview (PI) sessions, QA/LR, ET, Research club presentations are conducted throughout the curriculum.
- Teacher Guardian Scheme is adopted for the students and weekly meetings are held to solve their academic and personal problems. Also this scheme helps in regular interaction with parents.
- Additional activities are conducted for students overall personality development like Student Training Program (STP) and Value Addition Program (VAP).
- Eminent speakers from academia, industry, and service sector are invited for Interaction and exposure to best practices for the students and faculty.
- Transparent and conducive environment

Weaknesses

- Faculty with Ph.D. qualification.
- Research, Publications, and consultancy.

Opportunities

- Scope for strengthening the industry institution interaction for better placements of students.
- To develop R&D activities by interacting with premier industries and reputed higher learning institutions.
- Enter into collaborative projects with industries and other institutions for better exposure.
- Interdisciplinary approach
- Developing good entrepreneurs

Challenges

- To get maximum employment.
- Getting patents

Future Plan

- Increase number of university Toppers
- To get all faculties as PhD completed
- To start PG course and research center in the department
- To achieve more than 90% Placements in Department.

ENGINEERING SCIENCES

1. **Name of the Department:** Engineering Sciences

2. **Year of Establishment**: 2011

3. **Names of Programmes / Courses offered**

Course offered	Name of the course	Year of Establishment
U.G.	UG (Engineering Sciences*)	2011-12

*Engineering Sciences (ES) is common for all programs.

Name of Interdisciplinary courses and the departments/units involved:
Following Interdisciplinary courses are involved in curriculum of programs:

Sr.No.	Name of Interdisciplinary course	Department
01	UG (Engineering Sciences)	MECH, COMP, IT, ELECT E&TC.

4. **Annual/ semester/choice based credit system (Programme wise):**

Sr. No	Name of the programme	**Pattern/System** (Annual/ semester/choice based credit system)
1	UG (Engineering Sciences)	Semester Pattern

From Academic Year 2015-16, Savitribai Phule Pune University has adopted Choice Based Credit System.

5. **Participation of the department in the courses offered by other departments:**

Sr. No.	Courses offered	Department
1	Engineering Mathematics-III	All Programs

6. **Courses in collaboration with other universities, industries, foreign Institutions, etc. :** Nil

7. **Details of courses/ programmes discontinued (if any) with reasons**: Nil

8. **Number of teaching posts**

Designation	Sanction	Filled
Professors	1	1
Associate Professors	2	0
Assistant Professors	10	11
Adjunct Faculty	--	-

9. Faculty profile with name, qualification, designation, specialization, D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,).

Sr.No	Name	Designation	Qualification	Specialization	No.of Years of Experience (Years)	No.of Ph.Ds. Guide for the last 4 years
1	Dr.Mrs. V. R. Ladde	Assistant Professor	Ph.D.	Chemistry	14	Nil

10. List of Senior Visiting Faculty: Nil

11. Percentage of Lectures delivered, and practical classes handled [Program wise] by temporary Faculty: Nil

12. Student Teacher ratios: NA

13. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Type of Staff	Sanctioned	Filled
Lab Assistant	2	3
Peon	1	1

14. Qualification of teaching faculty

Sr. No.	Qualification	No of Teaching faculty
1	Ph.D.	01
2	P.G.	11

15. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

16. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil

17. Research Centre /facility recognized by the University: Nil

18. a) Publications per faculty:

Sr.No	Name o Faculty	Number of Paper Published in peer reviewed Journals (National /International) by Faculty & Students	Number of Publications listed in International /National Conference	Monographs	Chapters in Book	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Citations	SNIP	SJR	i10 Index	h-Index
1	Dr.Mrs. V. R. Ladde	1	1									

19. b)Books and Monographs Published: Nil

20. Areas of consultancy and income generated : Nil

21. Faculty as members in National committees b) International Committees c) Editorial Boards

Sr. No.	Name of Faculty	Members
1.	Dr.Mrs. V. R. Ladde	Indian Women Scientist Association – Lifetime Member
2.	Mr. A. Y. Pathan	Indian Mathematical Society– Lifetime Member

22. Student's projects : NA

23. a) Awards/ Recognitions received by faculty and students

Academic Year	Name	Details of Awards / Recognitions	Organization
Faculty			

2015-16	Mr. G. V. Khandekar	Best Student Welfare Officer	SPPU, Pune

24. List of eminent academicians and scientists/ visitors to the department :

Sr. No.	Academic Year	Name	Designation	Organization	Purpose of Visit
01	2017-18	Mr.Ravi. Achaliya	Director	XL Comm. Solutions.	FE Induction Programme
02	2016-17	Dr. P. K. Desai	ISTE President .	ISTE	To convey the information regarding ISTE Student Chapter
03	2016-17	Mr.Tulshiram Ingle	Retired Executive Engineer.	MSEDCL	To visit the Labs addressed the students
04	2016-17	Mr.SharadTandle	CEO	Indiana Technology	Chief Guest for "Entrepreneurship Awareness Workshop"
05	2015-16	Dr.VishramBapat	Professor	SIT , LONAVALA	Lecture on "Earthing"
06	2014-15	Mr.NitinLokhande	Director	Educate To Automate (ETA), Pune	Lecture on "Industrial Automation"
07	2013-14	Mr. Mohan Kulkarni	Manager	Kirloskar Pneumatic Company limited	Lecture on "BLDC Electrical Machine"
08	2011-12	Dr.Satishchandra B. Ogale	Chief Scientist	CSIR-NCL, Pune	2 days workshop on "MET 2012"
09	2011-12	Dr.DebbrataRautary	Manager	TATA Chemicals Ltd, Pune	2 days workshop on "MET 2012"

25. Seminars/ Conferences/ Workshops organized and the source of funding

AY	Category	Title	Funding Agency
2011-12	National Level Workshop	Recent Advances in Material Engineering and Technologies 2012	Self-Sponsored

26. Student profile programme/course wise: Nil

27. Diversity of Students (2015-16) : Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? : NA

29. Student progression : NA

30. Details of Infrastructural facilities

a) Library
b) Internet facilities for Staff & Students
c) Classrooms with ICT facility
d) Laboratories

a. Library – YES

Departmental library contains books, journals, magazines, video lectures, E-journals, seminar reports and project reports of last four year for reference.

Sr. No.	Title	Details
1	Titles	20
2	Volumes	50
3	National Journals	-
4	International Journals	-
5	CDs	11
6	e-Books and e-Journals	00

b. Internet Facilities for Staff & Students –Yes.

Wi- Fi Facility is given. Wi-Fi facility is upgraded to 32 Mbps for staff and students, the residential staff of all institutes, in the campus.

C. Classrooms

Classrooms with ICT facilities

Number of classrooms = 06
Number of Seminar Rooms = 00
Number of tutorial rooms = 01

Details of Classrooms

Room Descriptions	Capacity	Rooms equipped with
A-103	70 Students	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains

A-104	70 Students	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains
A-107	70 Students	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains
A-108	70 Students	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains
A-111	70 Students	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains
A-112	70 Students	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains

Details of Seminar Hall: Nil

Details of Tutorial Rooms:

Room Descriptions	Capacity	Rooms equipped with
A-114	40	Green Glass board, Ethernet cable, LCD Projector, fan , fluorescent Tube and curtains

d. Details of Laboratories

Sr. No	Name of the LAB	Name of faculty In charge	Room Description
1	Engineering Physics	Mr. M. M. Kulkarni	A-110
2	Engineering Chemistry	Dr. Vaishali Ladde	A-113
3	Fundamentals of Programming Languages	Mr. Abhijit Manepatil	A-010
4	Basic Electronics Engineering	Mr. Sarang Patil	A-102
5	Basic Electrical Engineering	Mr. Vivek Saxena	A-002
6	Basic Mechanical Engineering	Mr. Abhishek Chavan	B-006
7	Engineering Mechanics & BCEE	Mr. Sanjay Mali	A-001
8	Engineering Graphics	Mr. Girish Khope	B-304

31. Number of students receiving financial assistance from College, university, government or other agencies : NA

32. Details on student enrichment programmes with external experts

Academic Year	Name of the Enrichment Programme	Name of external Expert	Organization
2016-17	Workshop on Sexual Harassment of women & student at workplace (Prevention, Prohibition &Redressal) Act 2013.	Miss. Madhuri S. Deshmukh – PSI, Lonavala Gramin Police; Miss. Sujata Angadi – Counselor, Sampark Balgram, Bhaje, Lonavala.	Maharashtra State Mahila Commission, Mumbai. & SKN Sinhgad Institute of Technology & Science, Kusgaon (bk.), Lonavala.

33. Teaching methods adopted to improve student learning

To improve classroom learning, department has applied following practices:

- Models, videos, and animations are used by faculty members to elaborate concepts as per the complexity of the topic.
- Teachers are asked to prepare semester teaching plan and course file before the start of the semester.
- Each teacher is asked to prepare soft copies of their notes and powerpoint presentations for the course content and the same is shared with the students by using ERP software as well as in the classrooms.
- Lectures with self-learning session are added to the timetable.
- Assignments for practice and assessment are given to students.

Assessment Method

- Various tests (Unit test and Prelim, Online,etc.) are used for assessment.

34. Participation in Institutional Social Responsibility (ISR)and Extension activities

AY	Name of Activity	Place	Date	No. of students participated
2017-18	Varsha Daud	SKNSITS, Lonavala	03/08/2017	11
2017-18	Pledge (Sankalp Se Siddhi)	SKNSITS, Lonavala	09/08/2017	210

	Swashata Abhiyan	SKNSITS, Lonavala	14/09/2017	13
2016-17	International Yoga Day	SKNSITS, Lonavala	21/06/2016	25
	Tree Plantation Activity	SKNSITS, Lonavala	1/7/2016	58
	Varsha-Daud	SKNSITS, Lonavala	29/07/2016	32
	Cleaning Camp	Lonavala Railway Station	11/8/2016	10
	Essay writing Competition	Z. P. School Kusgaon	12/8/2016	3
2015-16	Blood Donation Camp	SKNSITS, Lonavala	26/10/2015	8
	Gurupurnima Celebration	SKNSITS, Lonavala	19/07/2015	12
2014-15	Varsha-Daud	SKNSITS, Lonavala	20/08/2014	11
2013-14	Tree Plantation	SKNSITS, Lonavala	21/05/2014	13

35. SWOC analysis of the Department and future plans

SWOC Analysis

Strength Weakness Opportunity Challenges (SWOC) analysis used to identify the acquired and inherent strengths along with weaknesses of the department. Furthermore, it is also carried out to identify the opportunities to excel, improve and negotiate the challenges faced by the department from the internal and external environment.

Strengths

- Well qualified, experienced and hard-working teaching and non-teaching staff.
- E-Exam Portal.
- Teacher Guardian Scheme for the betterment of students.
- K-Point support to students for self-study.

Weaknesses

- Inadequate interaction with industry.

- Insufficient involvement in research activities.

Opportunities

- More involvement of faculty in curriculum development of affiliated university.
- Support to core departments for guiding projects of students.

Challenges

- To acquire research based learning skills by faculty.
- To bridge the gap between Fundamental Science and Engineering.

Future Plans:

- To prepare the students of first year engineering for comfortable transition to respective program of engineering through expert lectures and seminars.

ANNEXURE - I

All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-India.org

F.No. Western/1-2809754523/2016/EOA Date: 05-Apr-2016

To,

The Secretary,
Tech. & Higher Education Deptt.
Govt. of Maharashta, Mantralaya,
Annexe Building, Mumbai-400032

Sub: Extension of approval for the academic year 2016-17

Ref: Application of the Institution for Extension of approval for the academic year 2016-17

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2012 notified by the Council vide notification number F-No.37-3/Legal/2012 dated 27/09/2012 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Regional Office	Western	Application Id	1-2809754523
Name of the Institute	SKN SINHGAD INSTITUTE OF TECHNOLOGY & SCIENCE	Permanent Id	1-459215421
Name of the Society/Trust	SINHGAD TECHNICAL EDUCATION SOCIETY	Institute Address	GAT NO 309, KUSGAON (BK.), OFF MUMBAI - PUNE EXPRESSWAY, KUSGAON, LONAVALA, PUNE, Maharashtra, 410401
Institute Type	Unaided - Private	Society/Trust Address	44/1 VADGAON (BK), OFF SINHGAD ROAD, PUNE 411041,PUNE,PUNE,Maharashtra,411041

Opted for change from Women to Co-ed and Vice versa	No	Opted for change of name	No	Opted for change of site	No
Change from Women to Co-ed approved and Vice versa	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable

To conduct following courses with the intake indicated below for the academic year 2016-17

Application Id: 1-2809754523			Course	Full/Part Time	Affiliating Body	Intake 2015-16	Intake Approved for 2016-17	NRI Approval status	PIO / FN / Gulf quota Approval status	Foreign Collaboration/Twining Program Approval status
Program	Shift	Level								
ENGINEERING AND TECHNOLO	1st Shift	POST GRADUA	COMPUTER ENGINEERING	FULL TIME	University of Pune, Pune	24	24	NA	NA	NA

Application Number: 1-2809754523
Note: This is a Computer generated Report.No signature is required.

Page 1 of 3
Letter Printed On:20 April 2016

Printed By : AIC003360

All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-India.org

GY		TE								
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	MECHANICAL ENGINEERING DESIGN	FULL TIME	University of Pune, Pune	24	24	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	COMPUTER ENGINEERING	FULL TIME	University of Pune, Pune	120	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRICAL ENGINEERING	FULL TIME	University of Pune, Pune	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRONICS AND TELECOMMUNICATIONS ENGINEERING	FULL TIME	University of Pune, Pune	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	INFORMATION TECHNOLOGY	FULL TIME	University of Pune, Pune	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	MECHANICAL ENGINEERING	FULL TIME	University of Pune, Pune	120	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	2nd Shift	UNDER GRADUATE	MECHANICAL ENGINEERING	FULL TIME	University of Pune, Pune	60	60	NA	NA	NA

The above mentioned approval is subject to the condition that SKN SINHGAD INSTITUTE OF TECHNOLOGY & SCIENCE shall follow and adhere to the Regulations, guidelines and directions issued by AICTE from time to time and the undertaking / affidavit given by the institution along with the application submitted by the institution on portal.

In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.

Strict compliance of Anti-Ragging Regulation:- Approval is subject to strict compliance of provisions made in AICTE Regulation notified vide F. No. 37-3/Legal/AICTE/2009 dated July 1, 2009 for Prevention and Prohibition of Ragging in Technical Institutions. In case Institution fails to take adequate steps to Prevent Ragging or fails to act in accordance with AICTE Regulation or fails to punish

Application Number: 1-2809754523
Note: This is a Computer generated Report.No signature is required.

Page **2** of **3**
Letter Printed On:20 April 2016

Printed By : AIC003360

All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-India.org

perpetrators or incidents of Ragging, it will be liable to take any action as defined under clause 9(4) of the said Regulation.

Note: Validity of the course details may be verified at www.aicte-india.org

Dr. Avinash S Pant
Vice - Chairman, AICTE

Copy to:

1. **The Regional Officer,**
   All India Council for Technical Education
   Industrial Assurance Building
   2nd Floor, Nariman Road
   Mumbai - 400 020, Maharashtra
2. **The Director Of Technical Education,**
   Maharashtra
3. **The Registrar,**
   University of Pune, Pune
4. **The Principal / Director,**
   SKN SINHGAD INSTITUTE OF TECHNOLOGY & SCIENCE
   GAT NO 309, KUSGAON (BK.), OFF MUMBAI - PUNE EXPRESSWAY,
   KUSGAON, LONAVALA,PUNE,
   Maharashtra,410401
5. **The Secretary / Chairman,**
   SINHGAD TECHNICAL EDUCATION SOCIETY
   44/1 VADGAON (BK), OFF SINHGAD ROAD, PUNE 411041,
   PUNE,PUNE,
   Maharashtra,411041
6. **Guard File(AICTE)**

Application Number: 1-2809754523
Note: This is a Computer generated Report.No signature is required.

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Letter Printed On:20 April 2016

Printed By : AIC003360

ANNEXURE-II

दूरध्वनी क्रमांक :
०२०-२५६९१२३३
२५६०१२५७
२५६०१२५८
२५६०१२५९
15120071

सावित्रीबाई फुले पुणे विद्यापीठ
(पूर्वीचे पुणे विद्यापीठ)

शैक्षणिक विभाग
गणेशखिंड, पुणे-४११००७.
टेलिग्राफ : 'युनिपुणे'
फॅक्स : ०२०-२५६९१२३३
वेबसाइट : www.unipune.ac.in
इ-मेल : dyracademic@unipune.ac.in

संदर्भ क्र.: CA/1023 दि.: 23/05/2016

प्रति,
मा. प्राचार्य,
सिंहगड टेकिनकल एजुकेशन सोसायटी एस.के.एन -
सिंहगड इन्स्टिट्यूट ऑफ टेक्नालजी अँड साइन्स पत्ता:
गट न ३०९/३१० ऑफ मुंबई-पुणे एक्सप्रेस वे कूसगॉन
लोणावळा ता मावळ पुणे ४१०४०१ ता.: मावळ जि: पुणे

विषय:- अटींच्या पूर्ततेच्या पडताळणी अहवालबाबत...

महोदय,
वरील विषयासंदर्भात विद्यापीठ अधिकार मंडळाने घेतलेल्या निर्णयानुसार आपणास कळविण्यात येते की, आपल्या महाविद्यालयास शैक्षणिक वर्ष २०१६-२०१७, या वर्षाकरिता खालील रकान्यात नमूद केलेल्या अभ्यासक्रमांच्या सलग्नीकरणाच्या नुतानिकरणास / नैसर्गिकवाढीस अखिल भारतीय तंत्रशिक्षण परिषद, नवी दिल्ली व तंत्रशिक्षण संचालनालय, महाराष्ट्र शासन यांचे अभ्यासक्रम व प्रवेश क्षमता मान्यतेच्या अधीन राहून अटी पूर्ततेचा पडताळणी अहवाल स्वीकारण्यात आलेला आहे.
शैक्षणिक वर्ष २०१६-२०१७ करिता अटी पूर्तता अहवालाचे पत्र देत असताना स्थानिक चौकशी समितीच्या अहवालात नमूद केलेल्या ज्या शिक्षकांच्या तदर्थ नेमणुका करण्यात आलेल्या आहेत अशा सर्व शिक्षकांना शैक्षणिक वर्ष २०१६-२०१७ मध्ये कायम ठेवण्यात यावे.तसेच याबाबत विद्यापीठामार्फत वेळोवेळी तपासणी करण्यात येईल.

अनु. क्र.	अभ्यासक्रमाचा तपशील	विद्यार्थी संख्या	प्रथमपाळी/व्दितीय पाळी	संलग्नीकरणाचा प्रकार
1	एम.इ. (कॉम्प्यूटर)	24	2016-2017 : - वर्ष प्रथम व व्दितिय- Div No.1,,	नूतनीकरण
2	एम.इ. (मेकॅनिकल डिझाइन)	24	2016-2017 : - वर्ष प्रथम व व्दितिय- Div No.1,,	नूतनीकरण
3	बी.ई. (इन्फर्मेशन टेक्नॉलॉजी)	60	2016-2017 : - वर्ष पहिले ते चौथे- Div No.1,,	नूतनीकरण
4	बी.ई. (इलेक्ट्रिकल)	60	2016-2017 : - वर्ष पहिले ते चौथे- Div No.1,,	नूतनीकरण
5	बी.ई. (इलेक्ट्रॉनिक्स अँड टेलिकम्यूनिकेशन)	60	2016-2017 : - वर्ष पहिले ते चौथे- Div No.1,,	नूतनीकरण
6	बी.ई. (कॉम्प्यूटर)	120	2016-2017 : - वर्ष पहिले ते चौथे- Div No.1,- वर्ष पहिले ते चौथे- Div No.2,,	नूतनीकरण

1 Of 2 5/2/2016 10:48:36 AM

7	बी.ई. (मेकॅनिकल)	180	2016-2017 : - वर्ष पहिले ते चौथे- Div No.1,- वर्ष पहिले ते चौथे- Div No.2,- वर्ष पहिले ते चौथे- दुसरी पाळी Div No. 3,,	नूतनीकरण

कळावे,

आपला,

03/05/16
उपकुलसचिव
शैक्षणिक विभाग

ANNEXURE-III

Sinhgad Institutes

SINHGAD TECHNICAL EDUCATION SOCIETY'S ®
SKN SINHGAD INSTITUTE OF TECHNOLOGY & SCIENCE
(Affiliated to Savitribai Phule Pune University & Approved by AICTE)
Gut No 309, Kusgaon (Budruk), Off. Mumbai - Pune Expressway, Lonavala, Dist. Pune - 410401.

PROF. M. N. NAVALE	DR. (MRS.) SUNANDA M. NAVALE	DR. M.S. ROHOKALE
M.E. (Elect.) MIE, MBA	B.A., M.P.M., Ph.D.	M.Tech.,M.B.A.,Ph.D.
FOUNDER PRESIDENT	FOUNDER SECRETARY	PRINCIPAL

DECLARATION BY THE HEAD OF THE INSTITUTION

I certify that the data included in the Self Study Report are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the peer team will validate the information provided in the SSR during the peer team visit.

Date: 25th March 2017.

Place: Lonavala, Pune.

SINHGAD INSTITUTE OF TECHNOLOGY & SCIENCE LONAVALA

PRINCIPAL
SKN SINHGAD INSTITUTE OF
TECHNOLOGY & SCIENCE
Kusgaon (Bk.), Lonavala-410 401.

ANNEXURE-IV

Sinhgad Institutes

SINHGAD TECHNICAL EDUCATION SOCIETY'S ®

SKN SINHGAD INSTITUTE OF TECHNOLOGY & SCIENCE

(Affiliated to Savitribai Phule Pune University & Approved by AICTE)

Gut No 309, Kusgaon (Budruk), Off. Mumbai - Pune Expressway, Lonavala, Dist. Pune - 410401.

PROF. M. N. NAVALE	DR. (MRS.) SUNANDA M. NAVALE	DR. M.S. ROHOKALE
M.E. (Elect.) MIE, MBA	B.A., M.P.M., Ph.D.	M.Tech.,M.B.A.,Ph.D.
FOUNDER PRESIDENT	FOUNDER SECRETARY	PRINCIPAL

CERTIFICATE OF COMPLIANCE

This is to certify that Sinhgad Technical Education Society's SKN Sinhgad Institute of Technology & Science Kusgaon (Bk), Lonavala, Pune fulfill all norms.

1. Stipulated by the affiliating University and/or.
2. Regulator Council/Body (Such as UGC, NCTE,AICTE,MCI,DCI,BCI etc.) and
3. The affiliation and Recognition is valid as on date.

It is noted that NAAC accreditation if granted, shall stand cancelled automatically once the institution loses its University Affiliation or Recognition by the regulatory Council, as the case may be.

In case the Undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.

Date: 25th March 2017.
Place: Lonavala, Pune.

SINHGAD INSTITUTE OF TECHNOLOGY & SCIENCE LONAVALA

PRINCIPAL
SKN SINHGAD INSTITUTE OF
TECHNOLOGY & SCIENCE
Kusgaon (Bk.), Lonavala-410 401.

ANNEXURE-V

Savitribai Phule Pune University

(Formerly University of Pune)

Telephone Nos. :
020 – 25691233
25601258
25601259
25601257

ACADEMIC SECTION
Ganeshkhind, Pune – 411007, INDIA
Telegraph : 'UNIPUNE'
Fax : 020-25691233
Website : www.unipune.ac.in
E-mail : dyracademic@unipune.ac.in

Ref. No. : CA/ 3091

Date : 03/08/2016

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Sinhgad Technical Education Society's SKN Sinhgad Institute of Technology & Science, Gat No. 309, Off Pune-Mumbai Express way, Kusgaon (Bk.), Lonavala-410401 is affiliated to the Savitribai Phule Pune University, since 2011 (PU/PN/ENGG/429/2011) and the following courses are taught in the said college as per approval.

Courses Under Graduate	Duration of the Course	Affiliation (Permanent / Temporary)	Validity Period
Computer Engineering	04 Years	Temporary	From 2016-17
Electrical Engineering	04 Years	Temporary	From 2016-17
Electronics & Telecommunication Engineering	04 Years	Temporary	From 2016-17
Information Technology	04 Years	Temporary	From 2016-17
Mechanical Engineering	04 Years	Temporary	From 2016-17

Courses Post Graduate	Duration of the Course	Affiliation (Permanent / Temporary)	Validity Period
Master of Engineering (Computer Engineering)	02 Years	Temporary	From 2016-17
Master of Engineering (Mechanical Design)	02 Years	Temporary	From 2016-17

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SKN SINHGAD INSTITUTE OF TECHNOLOGY & SCIENCE * LONAVALA *
Inward No. : 2804
Date : 25/3/17

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The said certificate is issued as per the request application received from the Principal of the college Ref. No. SKNSITS/2016-17/2750, dated 19.07.2016 so as to submit it to the National Assessment and Accreditation Council (NAAC), Banglore.

Dr. V. B. Gaikwad
Director, B.C.U.D.