Self Study Report (SSR)

Submitted to

National Assessment and Accreditation Council, Bangalore

Sinhgad Technical Education Society's
Smt. Kashibai Navale College of Engineering, Pune

S.No. 44/1, Vadgaon (Budruk),
Off Sinhgad Road, Pune– 411 041
Work Phone: 020 – 24354938, Fax: 020-24354938
Website: www.sinhgad.edu
E-mail:principal.skncoe@sinhgad.edu
Mobile: +91 9881000780

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CONTENTS

Abbreviations

AICTE	All India Council for Technical Education
AIEE	All India Engineering Entrance Test
AMC	Academic Monitoring Committee
AMCAT	Aspiring Minds Computer Adaptive Test
ARAI	Automotive Research Association of India
ARC	Application – Form Receipt Center
ATMA	AIMS Test for Management Admissions
BCUD	Board of College and University Development
BOS	Board Of Studies
CAP	Centralized Admission Process
CAT	Common Admission Test
CDAC	Center for Development of Advanced Computing
CEO	College Examination Officer
CET	Common Entrance Test
CIA	Continuous Internal Assessment
CPE	College with Potential for Excellence
CPGCON	Post Graduate Conference for Computer Engineering
CSI	Computer Society of India
CSI-ACE	Computer Society of India -Association of Computer Engineers
CT	Class Teacher
DEP	Distance Education Programme/s
Dept.	Department
DTE	Directorate of Technical Education
E & TC	Electronics & Tele-Communication
EBC	Economically Backward Class
E-Cell	Entrepreneurship Cell
ELESA	Electronics and Telecommunication Engineering Students Association
EPI	Easy Pass India
ERP	Enterprise Resource Planning
ET	Employability Test
FDP	Faculty Development Programme
FE	First year Engineering
GATE	Graduate Aptitude Test in Engineering
GB	Governing Body
GD	Group Discussion
GEMS	Governing Educational Management System
GMAT	Graduate Management Admission Test
GoM	Government of Maharashtra
GRE	Graduate record Examination
HBR	Harvard Business Review
HoD	Head of Department
HPC	HP cluster
ICT	Information and Communication Technology
IDP	Institutional Development Proposal
IET	Institute of Engineering and Technology
IETE	Institution of Electronics and Telecommunication Engineers
IIIC	Industry-Institute Interaction cell
IIM	Indian Institute of Management
IIT	Indian Institute of Technology
IPGCON	Post Graduate Conference for Information Technology
IQAC	Internal Quality Assurance Cell

ISF	Information Systems Frontiers
JEE	Joint Entrance Examination
LMC	Local Management Committee
MAT	Management Aptitude Test
MBA	Masters of Business Administration
ME	Masters of Engineering
MHCET	Maharashtra Common Entrance Test
MHRD	Ministry of Human Resource Development
MIS	Management Information System
MIT	Maharashtra Institute of Technology
MoUs	Memorandum of Understandings
NAAC	National Assessment and Accreditation Board
NBA	National Board of Accreditation
NPTEL	National Programme on Technology Enhanced Learning
NSS	National Service Scheme
OBC	Other backward Classes
OMS	Other than Maharashtra State
PEOs	Programme Educational Objectives
PG	Post Graduate
PI	Personal Interview
Pos	Programme Outcomes
QALR	Quantitative Aptitude and Logical Reasoning
QIP	Quality Improvement Program
R&D	Research and Development
RDC	Research and Development Cell
SAE	Society of Automotive Engineers
SC/ST	Scheduled Cast/ Scheduled Tribe
SCOE	Sinhgad College of Engineering
SKNCOE	Smt. Kashibai Navale College of Engineering
SNAP	Symboisis National Aptitude
SPPU	Savitribai Phule Pune University
SSC	Sinhgad Student Council
STES's	Sinhgad Technical Education Society's
STP	Student Training Programme
STTP	Short Term Training Program
SWOT	Strength, Weaknesses, Opportunities and Threats
TAP	Teachers Advancement Program
TEQIP	Technical Education Quality Improvement Programme
TG	Teacher's Guardian
TOFEL	Test of English as a Foreign Language
TTT	Train the Trainers
UG	Under Graduate
UGC	University Grant Commission
VAP	Value Addition Program
XAT	Xavier Aptitude Test

1. COVER LETTER FROM HEAD OF THE INSTITUTE

Sinhgad Technical Education Society's®

SMT. KASHIBAI NAVALE COLLEGE OF ENGINEERING®

Approved by AICTE Vide. F. No. 740-89-004 (NDEGAPR/ET/2000) &
Affiliated to University of Pune ID No. PU/PN/ENGG/155/2001

[Accredited by NBA]

S. No. 44/1, Vadgaon (Budruk), Off Sinhgad Road, Pune - 411 041.

Tel.: +9120-24354938, 24100295 / 293 ● Fax : 020-24354938 ● E-mail : principal.skncoe@sinhgad.edu ● Website : www.sinhgad.edu

Sinhgad Institutes

PROF. M. N. NAVALE	DR. (MRS.) SUNANDA M. NAVALE	DR. A. V. DESHPANDE
M.E. (Elect.) M.I.E., M.B.A.	B.A., M.P.M., Ph.D.	B.E., M.E. (Computer Engg.), Ph.D.
FOUNDER PRESIDENT	FOUNDER SECRETARY	PRINCIPAL

Ref.: SKNCOE/NAAC/2015-16/930   Date: 23/03/2016

To,
The Advisor,
National Assessment & Accreditation Council,
P.O.Box.No.1075.Opp NLSIU,
Nagabhavi, Bangalore-5600 072.

Subject: Submission of Self Study Report (SSR)

Respected Sir,

We are submitting herewith the self-Study Report (SSR) of STES's, Smt. Kashibai Navale College of Engineering, Vadgaon, Pune-411041. We would like to inform you that the copy of SSR is also uploaded on our Institute website on 23/03/2016 for your kind perusal.
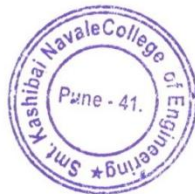
www.sinhgad.edu

http://cms.sinhgad.edu/SKNCOE/NAAC_SSR_STES_SKNCOE.pdf

You are kindly requested to accept our SSR for further processing.

This is for your kind information & consideration please.

Thanking you,

Yours faithfully,

(Dr. A.V.Deshpande)
Principal
Smt. Kashibai Navale
College of Engineering
Vadgoan (Bk.), Pune - 41

NAAC STEERING COMMITTEE

Sr. No.	Name of Faculty Member	Designation	Designation for Steering Committee
1.	Dr. Arvind V. Deshpande	Principal	Chairman
2.	Dr. Kishor R. Borole	Vice Principal	Vice Chairman
3.	Dr. Parikshit N. Mahalle	Professor & HoD, Computer Engineering	Coordinator
4.	Dr. Amar P. Pandhare	Associate Professor & HoD, Mechanical Engineering	Member
5.	Prof. Ravindra H. Borhade	Assistant Professor & HoD, Information Technology	Member
6.	Dr. Sonal K. Jagtap	Associate Professor & HoD, Electronics & Telecommunication Engineering	Member
7.	Prof. Mahesh S. Alandkar	Assistant Professor & HoD, Engineering Sciences	Member
8.	Dr. Mohsin R. Shaikh	Professor & HoD, MBA	Member
9.	Mrs. Kavita S. Borgave	Registrar	Member

2. PREFACE

Sinhgad Technical Education Society (STES) was established in the year 1993 with an objective of providing quality education in the field of Engineering, Management, Pharmacy, Architecture and basic schooling. All the institutions under STES are recognized by the concerned statutory authorities and fulfill the norms and standards laid down by them.

Smt. Kashibai Navale College of Engineering (SKNCOE) started functioning in the academic year 2001. It is approved by All India Council for Technical Education (AICTE), New Delhi, affiliated to the Savitribai Phule Pune University (SPPU), Pune. All eligible programs offered by the institute were accredited by National Board of Accreditation (NBA), New Delhi. The institute has grown in stature since its establishment.

The institute has very good team of dedicated, experienced, full time faculty members & supporting staff. Many of the faculties are PhD holders. The management encourages the faculty members to pursue doctoral degree at institutes of national importance like IITs, NITs as well as internationally reputed universities like Alborg University, Denmark.

The infrastructure of the institution is excellent with state-of-the-art laboratories, digital library, Wi-Fi campus, well furnished hostels for boys and girls, to mention a few which are as per the norms of AICTE & the syllabi of existing UG/PG programmes of SPPU. Regular feedback is taken from the stake holders to improve the academic and infrastructural standards of the institute.

The quality of teaching-learning is ensured by Academic Monitoring Committee (AMC). The institute has produced 93 rank holders of SPPU merit list till date. It follows the process of continuous evaluation for internal assessment and regularly conducts Value Addition Programmes (VAP) for students to bridge the gap between the academia & industry. The training and placement cell arranges training programs like campus-connect, personality development to enhance the technical, logical and communication skills of students.

Technical education sector is growing at a rapid pace. The growth in quantity has to be matched with the developments on quality front. We are aware of National Assessment and Accreditation Council (NAAC) objectives to facilitate the improvement of quality through accreditation, bring more transparency in the accreditation process, to introduce 360 degree feedback mechanism, to enhance credibility and to evolve a system of accreditation at par with the international standards.

Today we are counted as one of the Best and preferred Engineering Colleges in the region. By imbibing and adhering to the objectives of NAAC which are very much in sync with the cherished values of STES, we would like to be counted as one of the best institutions in the nation.

PRINCIPAL

3. EXECUTIVE SUMMARY

Criterion I: Curricular Aspects

SKNCOE is self-financing engineering institute affiliated to SPPU and follows curriculum prescribed by university. Boards of studies in various branches of engineering are involved and responsible for revising and finalizing curriculum. Faculties of the institute actively participate in syllabus revision workshop where members of board of studies and subject experts from all affiliated engineering colleges and industry experts also participate.

Feedback from industries and alumni with respect to curricular aspects are helping the departments, while designing the syllabus and enrichment courses to be given to the students. Certificate courses, seminars and collaborations through MoUs with leading industries help to bridge the gap between academia and industry and to achieve academic flexibility. The institute encourages developing entrepreneurship skills amongst students through entrepreneurship cell and conducting entrepreneurship development programs sponsored by IITs. As we follows SPPU syllabus, limited flexibility is available in curricula design with few elective subjects which can be offered as per the choice of the final year students.

Every department prepares academic calendar in line with the institute level academic calendar before the commencement of semester which helps students and teachers to orient in right direction. Skilled, qualified and experienced faculty helps students to get best possible inputs and excel in university examinations. Visits of AMC, regular student feedbacks and continuous student assessment help to monitor quality delivery of the curriculum and significant improvements. Career oriented programmes such as Student Training Program (STP), VAP, Aspiring Minds Computer Adaptive Test (AMCAT), Quantitative Aptitude and Logical Reasoning (QALR), etc are organized by departments. Sinhgad Student Council (SSC) also conducts various institute level programs to improve the employability of students.

Criterion II: Teaching-Learning and Evaluation

The admission process of the institute is governed by the rules laid by Directorate of Technical Education (DTE), Government of Maharashtra (GoM) through Centralized Admission Process (CAP). As per the rules of GoM, 80% students of the sanctioned intake are filled by CAP and 20% are admitted at institute level on merit basis. Students admitted are mix blend of background, culture, religion and language.

The transparent selection process of faculty as per the guidelines given by SPPU is adapted by the institute which helps to get quality faculty and enable excellence in teaching and learning. AMC ensures quality in teaching learning process by taking feedbacks from the student regarding faculty. The continuous evaluation of teaching-learning process is carried through the visits and audits. The teaching practice includes theory, tutorial, practical and STP component. The teaching-learning process involves black board teaching along with innovative teaching methods which include usage of PPTs, on line learning tools and project/game/activity-based learning. All the departments of the institution systematically

develop action plans for effective implementation of the curriculum considering the SPPU academic calendar, SKNCOE policies and administrative decisions.

Proven escalation model is being run at institute where students freely interact with their subject teachers, Teacher Guardians (TG), HoDs and then principal. This model helps students and faculties to maintain healthy and competitive environment in the department and in turn at institute. Grievance redressal cell is functioning at institute level in order to assist students and faculty. Institute also provides financial assistance to attend workshops, seminars and conferences which help them to upgrade their knowledge and qualification. The salary is paid as per the pay scale defined by the GoM. In the sequel, the faculty retention rate of SKNCOE is very good.

Student performance is monitored continuously through regular unit test, mid-term practical and oral examination, prelim examination and mock and practice practical turns. Remedial classes and laboratory session are conducted for slow learners in all the subjects. Question papers of the previous university examination are also made available in library for ready reference. SPPU and institute have defined Programme Educational Objectives (PEOs) and Programme Outcomes (POs) for each program. The significant improvement in the academic performance and employment ratio indicates achievements of teaching-learning process.

Criterion III: Research, Consultancy and Extension

The institute promotes research culture amongst the faculty as well as students by facilitating and motivating them to participate in research and related activities. The Research and Development Cell (RDC) of the institute is taking initiatives to develop research environment in every department. While doing so, faculty and students are encouraged to publish their research work in reputed journals and conferences. Students are also actively involved in innovative projects and participating in various competitions. State-of-art research facility and journals are available at the institute to promote the research.

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. The RDC has a plan to conduct multidisciplinary projects and cultivate research approach. Interactions with research organizations and industries also give platform to take live problems of the society while doing innovative projects and research activities. Industry support to develop laboratories and exchange of resources also helps to promote research culture. Collaborations with foreign universities also encourage students and faculty to take up higher studies as well as internship program.

Criterion IV: Infrastructure and Learning Resources

Institute has adequate physical infrastructure spread across two multi-storied buildings with around 90 class/tutorial rooms, laboratories and separate library. The physical infrastructure available is as per the norms of AICTE which helps to excel teaching-learning and research activities. All the class rooms are equipped with LCD projector and LAN cable/WI-FI for the Internet access. Separate Boys common room, Girls Common room, Sports and Gym

facilities and adequate hostel facilities are available in the campus. Institute has 1:1, 64 Mbps lease line.

The institute library is equipped with rich collection of reference books supported by e-journals and digital study material. Recommendations and suggestions are given by the library committee to the library based on the requirement of faculty and students. Institute has separate annual budget for the library. EASYLIB software is deployed at the library for effective utilization of library resources. Faculty and student have access 24 X 7 to the library. Book bank scheme is also available to issue books to the needy students. Funds are allocated for troubleshooting, maintenance and up gradation of computing facility. Reference books and proceedings are also available for different topics in engineering, management and science. A separate section in workshop has been provided to the students to experiment their innovative projects while participating at national and international competitions. Cultural activities of the students are also encouraged in the institute by providing them financial and infrastructural support. Dedicated student activity center is available to the students to develop projects and practice for cultural programs and competitions. Free medical facilities to faculty, staff and students are provided at SKN general medical hospital of STES.

Special facility available in the campus includes recreational facilities like cultural center, student activity center, sports facility like cricket ground, swimming pool, football court, gymkhana, table tennis and carom board, 500 KVA D.G. set for electric power generation, campus clinic, solar water heating system, water treatment plant, sewage disposal and post / banking facility includes ATM - Central Bank of India Branch, ATM- Bank of Baroda, ATM-ICICI Bank, ATM- Bank of Maharashtra and Bank of India .

Criterion V: Student Support and Progression

In order to cater the needs of the students, an effective TG scheme is implemented at institute level where every faculty is assigned around 20 students as a ward and they are monitoring the academic/personal progress of the students. The progress reports are sent to the parents periodically. This scheme also provide platform for the students to share their personal problems and for the teacher it is indeed a good platform for talent hunting. Further, a good support for sports, extra-curricular activities and co-curricular activities is given to the students through SSC.

Institute has dedicated student section in administrative office which assists the students to avail the benefit of scholarship from social welfare department and various NGOs. Earn and learn scheme financially supported by SPPU and institute is also implemented to extend support to financially weaker students. Accidental insurance policy is also provided to every student. Institute is actively involved in organizing extra-curricular and co-curricular activities which helps students to build their personality, social and moral ethics as well as holistic view. Anti-ragging committee, women's grievance redressed cell and disciplinary committee are in place to take care of students. The registered alumni association of institute is functioning actively. Institute organizes alumni meet and their interaction throughout the year by inviting them in their respective departments to guide the current students. The training and placement cell of the institute is well supported by all the departments while giving campus placement and career guidance.

The institute arranges various practice sessions of aptitude tests and group discussion for the students. As a part of this training, the institute has designed STP. The institute is also organizing workshops for identification of career opportunities, a work shop on developing soft skills. Special efforts like GATE coaching, career guidance workshops are conducted to help the students to take up higher studies and build their career. As a result of these efforts a good number of students are pursuing their higher studies.

Criterion VI- Governance, Leadership and Management

A progressive, visionary and supportive Governing Body (GB) of SKNCOE always gives freedom to the Principal to carry out academic activities of the institution. The management is always keen in providing state-of-art infrastructure facilities and excellent teaching and learning culture. The Principal and HoDs act as leaders to support and guide various academic activities in the department. Faculty strives hard with missionary zeal for shaping the personality and holistic development of the students.

HoDs have proactive support from Principal and are provided with autonomy to decide the strategies of individual department. HoDs are engaged in regular review regarding academics, research, placement and routine activities of the department. Transparent faculty and staff performance appraisal system with key performance parameters is in effect. This scheme helps faculties and staff to improve on the quality through counseling by AMC. Feedbacks are also available from the various stakeholders to the management for the purpose of policy reinforcement. Staff welfare scheme and staff grievance cell is available at SKNCOE for the benefit of faculty and supporting staff which resulted into sense of ownership and their retention. Budget required for all departmental expenditure is generated and put forth for approval by the Principal. Departmental expenditure towards apparatus, equipment, instruments, consumables and semi-consumables items is prepared. Record for expenditure towards advance required for miscellaneous items inclusive of details of purchase is maintained. The institute has a perspective development plan to become center of excellence in the field of technical education and research. The plan also consists of activities for making association with industry and do research in collaboration with them. The internal existing AMC has significant role in achieving academic excellence.

Criterion VII- Innovations and Best Practices:

The institute executes many environment-friendly policies which includes plantation, waste management, water harvesting and renewable energy sources. The Institute has many innovative practices which have helped in improving the functioning of the Institute which include strong academic monitoring, transparent administrative policies, mature performance monitoring of students and faculties and innovative practices in research and development.

Institute has innovative practices for the benefit of students and faculties which include STP for holistic development of a student as an employable engineer, live projects, inculcation of research culture among faculty and students, TG scheme, self - feedback of each faculty and practical exposure to students. The next best practice followed in the institute is paperless governance through Management Information System (MIS) software system – Governing Educational Management System (GEMS). With the help of this system, majority of the academic processes of institute are automated through GEMS.

4. THE SWOC ANALYSIS OF THE INSTITUTE

Following are the details of the SWOC analysis which will help in achieving the stated objectives in due course of time.

Strengths

- Very good infrastructure, clean and environment friendly campus with amenities which include hostel accommodation for boys and girls, sports facilities for indoor and outdoor games, telephone services, bank and ATMs, shopping complex, campus clinic, good quality mess, cafeteria, open air theatre & 500KVA Genset for power backup.
- Accreditation of programs by NBA: All eligible UG programs were accredited by NBA. The status of accreditation reflects that the institution provides quality.
- Institute has PhD research center in computer engineering and PG programmes in computer engineering, information technology and electronics and telecommunication engineering & MBA affiliated to SPPU.
- Spacious, well equipped laboratories with modern equipment as per norms of AICTE & SPPU.
- Excellent computing facilities fully networked through HPC cluster (HP C-DAC server) with various engineering application tools as well as four I-7 HP Computing nodes.
- Excellent connectivity through leased line of 64 Mbps (1:1).
- Wi-Fi connectivity in the institute premises.
- Library facilities with good quality titles with large number of volumes and national, international journals in print form. In addition online journals access through digital library, availability of reading room facility for 24 hours a day.
- Industry institute interaction through MOU's with Zensar Technologies, ATS InfoTech, Infosys, Atlas Copco, BMS Solutions etc.
- Good number of ongoing Research Projects under taken by faculty through various schemes of SPPU & AICTE.
- Policy for promotion of faculty for higher education. Five faculty members have been fully sponsored for PhD. at Aalborg University, Denmark.
- Quality assurance program for continuous improvement of teaching learning practices through AMC.
- Good team of faculty members and supporting staff with high retention ratio. The average experience of the faculty is 15 years.
- Consistently excellent results in university examinations with ranking TOP 3 amongst 121 plus engineering colleges.
- Good placements for registered candidates in reputed multinational, national companies through Training and Placement Cell. In the current year, 58.23 % of registered candidates have been placed in 51 companies till date and still the placement is ongoing.
- Implementation of VAP for students to bridge the gap between academia and industry in collaboration with MASS Technologies, Microsoft, Asian Academy etc.

Strategic plan to maintain strengths:

- Getting all the UG and PG programs accredited from time to time to ensure the quality education.
- Encourage faculty to take up Doctoral and Post-doctoral Studies.
- Periodic appraisal and accordingly promotion, appreciation and recognitions of deserving faculty through incentives for their retention.
- Extra efforts, facilities and scholarships for meritorious students.
- Quality assurance program for continuous improvement of teaching learning practices through AMC.

Weaknesses

- Less number of faculties with PhD qualification.
- Very few consultancy & industrial projects undertaken by faculty as well as institute.
- Less number of publications in reputed journals with good impact factor.
- Few patents filed till date.
- Feeble networking with reputed institutes like IITs, NITs.
- Inadequate advanced laboratories to carry out research work in focused areas: Although the institute is 15 years old and PG programmes have started 5 year back, the facilities are sufficient to meet the academic requirements. However, new state-of-art equipment needs to be made available to develop advanced laboratories which may be used in future research work to keep pace with advanced technologies.

Strategic plan to overcome weaknesses:

- Motivation and incentives to faculty in all disciplines that will lead to increase in registration for PhD programmes. Five faculty members have been deputed for PhD at Alborg University, Denmark with full financial support from the institute, which includes course fees, food & accommodation expenses. Being young institute, the research laboratories are to be developed for establishment of research centre. However, the improvement in faculty qualification will be achieved through following means.
    a) Our institute and sister concern has a research centre in the campus itself & currently 13 faculty members are pursuing PhD in SKNCOE research centre.
    b) Deputing faculty for QIP at IITs, NITs.
    c) Deputing faculty for PhD at reputed Universities, abroad.
- More industry collaborative programmes will be organized for exposure of faculty to the industry requirements in product development/ system development.
- The Institute will strengthen library by adding more research publications to assist the research work of faculty. Motivation and incentives to faculty in all disciplines to publish their work in national as well as international Journals.
- Creation of own incubation centre would encourage the faculty for filing patents.
- Faculty will be motivated to attend workshops and conferences at reputed peer institutes like IITs, for better interaction and networking with scientific world.
- The laboratories shall be modernized by adding new equipment, furniture and fixtures in the existing laboratories and setting up new advanced laboratories.

*O*pportunities

- India being a developing country, there is always a need for qualified technical man power.
- Pune being hub of IT and core industries, there are excellent placement opportunities.
- Establishment of research laboratories, center of excellence in collaboration with industries.
- Opportunities for conduction of training programs for upgrading skills of employees from industry.
- Opportunities to offer the testing facilities and consultancy to industries.
- Need for implementation of various literacy programs for school children in rural areas to encourage them to take up technical education.

Strategic plan to exploit opportunities:

- Need for qualified technical man power will be addressed by increasing intake in the existing courses in demand. New courses in emerging technologies will be added to cater the need of the industries. In this way, efforts will be made to increase qualified technical man power.
- VAP will be designed considering expectations of corporate world. The students will be encouraged to take up these certification programmes to bridge the gap between academia and Industry. This will eventually lead to increase in placements in IT and core industries.
- Institute will identify focused areas from ICT and mechanical engineering for establishing research laboratories, center of excellence in collaboration with industries.
- Training programs for upgrading skills of employees from industry will be framed & conducted as per the needs of the industries.
- The availability of quality equipment shall facilitate testing services and consultancy to the industries.
- Computer awareness programmes for school children in rural areas will be continued and expanded to encourage them to take up technical education. Also new awareness programmes in the core areas of engineering will be designed and implemented.

*C*hallenges

- Foreign autonomous universities entering in field of technical education & fierce competition from increasing number of IITs, NITs in India.
- Ever increasing gap between industry requirements and current curriculum.
- Establishment of universities by corporate.

Strategic plan to convert challenges into opportunities:

- Extending transportation and other facilities for students living at distant locations, maintaining quality and excellence with respect to teaching-learning as well as infrastructure and providing scholarships to the deserving students will ensure admission of meritorious students.

- Also institute will continue to implement Earn and Learn Scheme for economically weak students.
- The faculty with expertise in advanced areas will be retained by providing special incentives and infrastructure for research.
- Efforts will be made to dynamically update the contents of final year subjects and offer more elective subjects in consultation with industries.
- Corporate universities generally focus on restricted area of their interest. Institute will offer more options and flexibility to attract more students.
- The institute has carried out elaborate SWOC analysis involving all stakeholders namely students, parents, faculty and industry.

5. PROFILE OF THE INSTITUTION

1. Profile of the Affiliated/Constituent College

1. Name and Address of the College:

Name:	Sinhgad Technical Education Society's, Smt. Kashibai Navale College of Engineering
Address:	S.No.44/1, Vadgaon (Bk), Off Sinhgad Road, Vadgaon(Bk), Pune
City: Pune	Pin:411041	State: Maharashtra
Website:	cms.sinhgad.edu/sinhgad_engineering_institutes/skncoe_vadgaon/institute_details.aspx (www.sinhgad.edu)

2. For Communication:

Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	Dr. A.V.Deshpande	O:020-24354938 R:020-25440206	9881000780	020-24354938	principal.skncoe @sinhgad.edu
Vice Principal	Dr. K.R.Borole	O: 020-32518689	9860906353	020-24354938	krborole@sinhgad.edu
Steering Committee Co-ordinator	Dr. P.N.Mahalle	O: 020-24100154 R:020-26900008	9822416316	020-24354938	pnmahalle@sinhgad.edu

3. Status of the Institution:
Affiliated College ✓
Constituent College ☐
Any other (specify) ☐

4. Type of Institution:
a. By Gender
    i.   For Men ☐
    ii.   For Women ☐
    iii.   Co-education ✓
b. By Shift
    i.   Regular ✓
    ii.   Day ☐
    iii.   Evening ☐

5. It is a recognized minority institution?

Yes ☐
No ✓

If yes specify the minority status (Religious/linguistic/any other) and provide documentary evidence.

> **NA**

6. Sources of funding:
   Government
   Grant-in-aid Self-
   financing
   Any other

✓

7. a. Date of establishment of the college: **18/06/2001**

   b. University to which the college is affiliated / or which governs the college (If it is constituent college)

   > Savitribai Phule Pune University, Pune

   c. Details of UGC recognition: **NA**

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

(Enclose the Certificate of recognition u/s 2 (f) and 12 (B) of the UGC Act))

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

Under Section/ clause	Recognition/Approval details Institution/Department Programme	Day, Month and Year (dd-mm-yyyy)	Validity
i.	F.No. Western/1-2453843876/2015/EOA	07/04/2015	1 Year (06/04/2016)

F.No. Western/1-2453843876/2015/EOA

Date: 07-Apr-2015

To,
The Secretary,
Tech. & Higher Education Deptt.
Govt. of Maharashta, Mantralaya,
Annexe Building, Mumbai-400032

Sub: Extension of approval for the academic year 2015-16

Ref: Application of the Institution for Extension of approval for the academic year 2015-16

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	1-2453843876
		Permanent Id	1-4266964
Name of the Institute	SMT. KASHIBAI NAVALE COLLEGE OF ENGINEERING	Institute Address	S.NO. 44/1, VADGAON BK., OFF SINHGAD RD., PUNE, PUNE, PUNE, Maharashtra, 411041
Name of the Society/Trust	SINHGAD TECHNICAL EDUCATION SOCIETY	Society/Trust Address	SINHGAD TECHNICAL EDUCATION SOCIETY, 19/15, ERANDWANE, SMT. KHILARE MARG, OFF. KARVE ROAD, PUNE-411004,PUNE,PUNE,Maharashtra,411004
Institute Type	Unaided - Private		

Opted for change from Women to Co-ed	No	Opted for change of name	No	Opted for change of site	No
Change from Women to Co-ed approved	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 2015-16

Application Number: 1-2453843876*

Page 1 of 4

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Letter Printed On:11 April 2015

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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

Application Id: 1-2453843876

Program	Shift	Level	Course	Full/Part Time	Affiliating Body	Intake 2014-15	Intake Approved for 15-16	NRI Approval status	PIO Approval status	Foreign Collaboration Approval status
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	COMPUTER ENGINEERING	FULL TIME	University of Pune, Pune	24	24	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	COMPUTER NETWORKS	FULL TIME	University of Pune, Pune	24	24	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	INFORMATION TECHNOLOGY	FULL TIME	University of Pune, Pune	18	18	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	SIGNAL PROCESSING	FULL TIME	University of Pune, Pune	18	18	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	VLSI AND EMBEDDED SYSTEMS	FULL TIME	University of Pune, Pune	18	18	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	COMPUTER ENGINEERING	FULL TIME	University of Pune, Pune	240	240	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRONICS & TELE-COMMUNICATION ENGINEERING	FULL TIME	University of Pune, Pune	240	240	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	INFORMATION TECHNOLOGY	FULL TIME	University of Pune, Pune	120	120	NA	NA	NA

Application Number: 1-2453843876*

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Application Id: 1-2453843876

Program	Shift	Level	Course	Full/Part Time	Affiliating Body	Intake 2014-15	Intake Approved for 15-16	NRI Approval status	PIO Approval status	Foreign Collaboration Approval status
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	MECHANICAL ENGINEERING	FULL TIME	University of Pune, Pune	240	240	NA	NA	NA
ENGINEERING AND TECHNOLOGY	2nd Shift	POST GRADUATE	COMPUTER ENGINEERING	FULL TIME	University of Pune, Pune	24	24	NA	NA	NA
ENGINEERING AND TECHNOLOGY	2nd Shift	POST GRADUATE	VLSI AND EMBEDDED SYSTEMS DESIGN	FULL TIME	University of Pune, Pune	24	24	NA	NA	NA
ENGINEERING AND TECHNOLOGY	2nd Shift	UNDER GRADUATE	COMPUTER ENGINEERING	FULL TIME	University of Pune, Pune	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	2nd Shift	UNDER GRADUATE	ELECTRONICS AND TELECOMMUNICATIONS ENGINEERING	FULL TIME	University of Pune, Pune	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	2nd Shift	UNDER GRADUATE	MECHANICAL ENGINEERING	FULL TIME	University of Pune, Pune	120	120	NA	NA	NA
MANAGEMENT	1st Shift	POST GRADUATE	MASTERS IN BUSINESS ADMINISTRATION	FULL TIME	University of Pune, Pune	60	60	NA	NA	NA

Note: Validity of the course details may be verified at www.aicte-india.org>departments>approvals

The above mentioned approval is subject to the condition that SMT. KASHIBAI NAVALE COLLEGE OF ENGINEERING 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.

Application Number: 1-2453843876*

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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 perpetrators or incidents of Ragging, it will be liable to take any action as defined under clause 9(4) of the said Regulation.

Dr. Avinash S Pant
Actg 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,**
   SMT. KASHIBAI NAVALE COLLEGE OF ENGINEERING
   S.NO. 44/1, VADGAON BK., OFF SINHGAD RD., PUNE,
   PUNE,PUNE,
   Maharashtra,411041

5. **The Secretary / Chairman,**
   SINHGAD TECHNICAL EDUCATION SOCIETY
   SINHGAD TECHNICAL EDUCATION SOCIETY,
   19/15, ERANDWANE, SMT. KHILARE MARG, OFF. KARVE ROAD, PUNE-411004,
   PUNE,PUNE,
   Maharashtra,411004

6. **Guard File(AICTE)**

Application Number: 1-2453843876*

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

Yes ☐   No ☑

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

Yes ☐   No ☑

9. Is the college recognized?

a. by UGC as a College with Potential for Excellence (CPE)?

Yes ☐   No ☑

If yes, date of recognition: …………N.A………… (dd/mm/yyyy)

b. for its performance by any other governmental agency?

Yes ☐   No ☑

If yes, Name of the agency……………………and

Date of recognition :……………………(dd/mm/yyyy)

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

Location*	Urban
Campus area in sq.mts.	35.66
Built up area in sq.mts.	26,932.2

(*Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)

11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.
- Auditorium/seminar complex with infrastructural facilities ☑
- Sports facilities
  * Playground ☑
  * Swimming pool ☑
  * Gymnasium ☑

- Hostel
  *Boy's hostel

  i. Number of hostels   `10`
  ii. Number of inmates   `03`
  iii. Facilities (Mention available facilities):
  Mess, 24 hour Security, CCTV, Attendance, Water Purifier, Hot Water, Water Coolers, UPS System, Firefighting system, Television, Dispensary, House Keeping, Internet, Reading Room, News Papers, Table, Chair, Fax machine, Induction cooker, Cooker service, Saloon, Post office etc.

  *Girl's hostel

i. Number of hostels $\boxed{11}$
ii. Number of inmates $\boxed{03}$
iii. Facilities (Mention available facilities):
Mess, 24 hour Security, CCTV, Attendance, Water Purifier, Hot Water, Water Coolers, UPS System, Firefighting system, Television, Dispensary, House Keeping, Internet, Reading Room, News Papers, Table, Chair, Fax machine, Induction cooker, Cooker service, Beauty parlour , Post office etc.

- Residential facilities for teaching and non-teaching staff (give numbers available—cadre wise)

| Teaching- 17 | Non-Teaching-35 |

- Cafeteria— ✓

- Health center– ✓

First aid, Inpatient, Outpatient, Emergency care facility, Ambulance…….

Health center staff–

Qualified doctor	✓	Fulltime	✓	Part-time	
Qualified Nurse	✓	Fulltime	✓	Part-time	

- Facilities like banking, post-office, book shops ✓

- Transport facilities to cater to the needs of students and staff ✓

- Animal house ✓

- Biological waste disposal ✓

- Generator or other facility for management / regulation of electricity and voltage ✓

- Solid waste management facility ✓

- Waste water management ✓

- Water harvesting ✓

12. Details of programmes offered by the college (Give data for current academic year)

Sr. No.	Programme Level	Name of the Programme/ Course	Duration	Entry Qualification	Medium of instruction	Sanctioned/ approved Student Strength	No. of students admitted
1	Under-Graduate	Electronics & Telecommuni cation Engineering	4 Years	12th Passed with Min 50% in PCM	English	300	313
2		Computer Engineering	4 Years	12th Passed with Min 50% in PCM	English	300	313
3		Information Technology	4 Years	12th Passed with Min 50% in PCM	English	120	127
4		Mechanical Engineering	4 Years	12th Passed with Min 50% in PCM	English	360	373
1	Post-Graduate	E &T/C-VLSI & Embedded System	2Years	B.E Passed with 50%	English	42	42
2		E&T/C-Signal Processing	2Years	B.E Passed with 50%	English	18	14
3		Computer Engineering	2Years	B.E Passed with 50%	English	48	47
4		Computer Network	2Years	B.E Passed with 50%	English	24	14
5		Information Technology	2Years	B.E Passed with 50%	English	18	14
1	Management Studies	MBA	2 Years	Any Graduate with 50%	English	60	58
2	Integrated Programmes PG	NA	NA	NA	NA	NA	NA
3	Ph.D.	Computer Engineering	NA	PG (Comp/IT)	English	NA	14
4	M.Phil.	NA	NA	NA	NA	NA	NA
5	Ph.D	NA	NA	NA	NA	NA	NA

6	Certificate courses	NA	NA	NA	NA	NA	NA
7	UGDiploma	NA	NA	NA	NA	NA	NA
8	PGDiploma	NA	NA	NA	NA	NA	NA
9	Any Other (specify and provide details)	NA	NA	NA	NA	NA	NA

13. Does the college offer self-financed Programmes?

Yes [ ]   No [✓]

If yes, how many?   [ ]

14. New Programmes introduced in the college during the last five years if any?

Yes	√	No		Number	01

15. List the departments: (respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding Programmes. Similarly, do not list the departments offering common compulsory subjects for all the Programmes like English, regional languages etc.)

Faculty	Departments (Eg. Physics, Botany, History etc.)	UG	PG	Research
Science	NA	NA	NA	NA
Arts	NA	NA	NA	NA
Commerce	NA	NA	NA	NA
Any Other Engineering	Computer Engineering, Information Technology, Mechanical Engineering, Electronics & Telecommunication Engineering & MBA	YES	YES	YES (Computer Engineering)

16. Number of Programmes offered under (Programme means a degree course like BA, BSc, MA, M.Com…)

a.   annual system   [ ]

b.   semester system   [10]

---

c.   trimester system ☐

17.   Number of Programmes with

a.   Choice Based Credit System ☐

b.   Inter/Multidisciplinary Approach ☐

c.   Any other(specify and provide details) ☐

18.   Does the college offer UG and/or PG Programmes in Teacher Education?

Yes ☐   No ☑

If yes,

| NA |

a. Year of Introduction of the Programme (s) NA
and number of batches that completed the Programme

b.   NCTE recognition details (if applicable)
NotificationNo.:…………………………………
Date: ……………………………(dd/mm/yyyy)
Validity:………………………

c. Is the institution opting for assessment and accreditation of Teacher Education Programme separately?

Yes ☐   No ☑

19.   Does the college offer UG or PG Programme in Physical Education?

Yes ☐   No ☑

If yes,

a.   Year of Introduction of the programme(s)……………….(dd/mm/yyyy)
and number of batches that completed the Programme. ☐

b.   NCTE recognition details (if applicable)
NotificationNo.:…………………………………
Date: ……………………………(dd/mm/yyyy)
Validity:…………………

c.   Is the institution opting for assessment and accreditation of Physical Education Programme separately?

Yes ☐

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					
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F
Sanctioned by the UGC/University / State Government *Recruited*	06	01	04	02	91	77	NA	NA	NA	NA
Yet to recruit	19	09	44	19	27	10	NA	NA	NA	NA
Sanctioned by the Management/ society or other authorized bodies	00	00	00	00	27	48	94	33	19	13
Yet to recruit	19	09	44	19	00	--	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							
D.Sc./D.Litt.	00	00	00	00	00	00	00
Ph.D.	06	01	04	02	00	01	14
M.Phil.	00	00	00	00	00	01	01
PG	00	00	00	00	104	99	203
PG Pursuing	00	00	00	00	13	25	38
Temporary teachers							
Ph.D.	00	00	00	00	00	00	00
M.Phil.	00	00	00	00	00	00	00
PG	00	00	00	00	00	00	00
Part-time teachers							
Ph.D.	00	00	00	00	00	00	00
M.Phil.	00	00	00	00	00	00	00
PG	00	00	00	00	00	00	00

22. Number of Visiting Faculty /Guest Faculty engaged with the College. 42

23. Furnish the number of the students admitted to the college during the last four academic years.

Categories	Year1		Year2		Year3		Year4	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	76	18	147	71	157	75	153	62
ST	12	1	20	8	21	14	20	4
OBC	181	61	116	80	141	64	110	68
General	495	166	630	233	650	329	494	201

Others	95	23	11	5	4	3	7	5

24. Details on students enrollment in the college during the current academic year:

Type of students	UG	PG	M.Phil.	Ph.D.	Total
Students from the same State where the college is located	991	133	0	5	1,129
Students from other states of India	137	59	0	5	201
NRI students	0	0	0	0	0
Foreign students	0	0	0	0	0
Total	1128	192	0	10	1330

25. Drop out rate in UG and PG (average of the last two batches)

UG | 3.5% | PG | 1.4 % |

26. Unit Cost of Education

(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)

(a)Including the salary component   **Rs.62,405**

(b)Excluding the salary component   **Rs.19,472**

27. Does the college offer any Programme/s in distance education mode (DEP)?

Yes | | No | ✓ |

If yes,

a) Is it a registered centre for offering distance education Programmes of another University

Yes | | No | |

b) Name of the University which has granted such registration.

| |

c) Number of Programmes offered | |

d) Programmes carry the recognition of the Distance Education Council.

Yes | | No | |

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

For UG:17.18:1   For PG: 12:1

29.   Is the college applying for Accreditation?

Cycle1 [✓] Cycle2 [--]   Cycle3 [--]   Cycle4 [--]

Re-Assessment: [　]

(Cycle 1 refers to first accreditation and Cycle 2, Cycle 3 and Cycle 4 refers to re-accreditation)

30.   Date of accreditation* (applicable for Cycle2, Cycle3, Cycle4 and reassessment only)

Cycle1:**19/07/2008**AccreditationOutcome/Result **Accredited for 3 Years**
Cycle2 :……(dd/mm/yyyy) Accreditation Outcome/Result.............
Cycle3 :……(dd/mm/yyyy) Accreditation Outcome/Result……......

Kindly enclose copy of accreditation certificate(s) and peer team report(s) as an annexure.

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

[240]

32.   Number of teaching days during the last academic year
(Teaching days means days on which lectures were engaged excluding the examination days)

[180]

33.Date of establishment of Internal Quality Assurance Cell (IQAC) IQAC:
…………………….(dd/mm/yyyy)Date of
Currently AMC is looking after the quality performance of the academics.
IQAC is proposed from the academic year 2016-17.

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

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

6. CRITERIA-WISE INPUTS

CRITERION I: CURRICULAR ASPECTS

1.1 CURRICULUM PLANNING AND 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

उत्तमपुरूषान् उत्तमाभियंतृन् निर्मातुं कटिबद्धाः वयम् ।
We are committed to produce not only good engineers but good human beings, also.

Mission

- OUR MISSION is to do WHAT it takes to foster, sustain and upgrade the quality of Education by way of harnessing Talent, Potential and optimizing meaningful Learning Facilities.
  OUR ENDEAVOUR is to provide the best learning conducive environment & equip the students with effective Learning Strategies.

Objectives of the institution:

- All-round development of students relevant to the needs of industries and making them competent to face the challenges due to globalization.
- Development of faculty and staff by deputation for higher studies and skill up-gradation.
- To strengthen industry liaison by way of faculty training, students projects, testing, Memorandum of Understandings (MoUs) etc.
- To promote R & D activities in the departments.
- To establish research center for doctoral programs and to undertake research in focused areas from Electronics & Telecommunication Engineering, Information Technology and Mechanical Engineering.
- To develop strong Industry-Institute Interaction to offer expertise for projects, training and consultancy.
- To seek academic freedom to lead in the University.
- To serve as engineering knowledge center for society, in general.

Publication and dissemination of vision, mission and objectives of the institution:
The vision, mission and objectives of the institution are displayed at different places like Institute website, administrative cabins, department floors, office rooms, laboratories and department notice boards.

Apart from this, they are disseminated to all the stakeholders of the programmes through induction programmes conducted for new academic batch of FE and SE and Awareness workshops for students and faculties periodically.

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).

The institution puts rigorous efforts for effective implementation of the curriculum and follows the process described below:

- Curriculum and academic calendars are prepared in-line with SPPU.
- Next semester subject allocation is done before end of current semester by circulating the subject choice sheet to all the faculty members. This choice sheet includes the preferences of subjects of all years, number of time subject taught and experience.
- Based on above information, HoD makes subject allocation in advance for preparation of the subject.
- Resource planning is done at the start of semester which focuses on stock verification of laboratories, identifying required software/hardware and consumables, need of repair and maintenance of equipment. Budget is prepared according to need and sanctioned by higher management authorities.
- Counseling of students for elective subject is carried out well in advance and accordingly elective choice sheet is circulated among the students for the confirmation.
- Time table is prepared considering subject allocation and academic calendar.
- Every faculty prepares course file, teaching plan, laboratory assignment plan and relevant up gradation of lab manuals.
- For every year (SE/TE/BE) one faculty coordinator is assigned and all the academic activities are delegated for smooth conduction and effective implementation.
- Guidance and knowledge sharing along with the teaching methodology is decided under the guidance of subject experts' especially senior faculty, under "Train The Trainer (TTT)" programme before the commencement of every semester.
- Institute conducts two days "Induction Programme" especially for newly admitted First year Engineering (FE) students. The eminent guests and alumni are invited from the reputed industry as speakers. The Principal, HoD's and FE coordinators address students and parents. After the programme a short campus tour is planned for students and parents to make aware about the facilities available in the campus.
- Institute has adapted TG Scheme to bridge the gap between student and teacher. A batch of around 20 students is allotted to a TG who conducts regular meetings with the batch to understand their academic and other problems. The problems raised by the students in the TG meeting are solved counseling and discussion.
- The attendance and the performance of the students in the Exam / Test are monitored and counseling is done for improvement. Monthly progress report is sent to the parents. A separate register is maintained by the TG. This scheme improves bonding between the faculty and the students; it further improves the attendance and performance of the students, and ultimately university results and placement.

- Attendance monitoring is done on daily, weekly and monthly basis. Defaulter list is prepared and displayed on notice board. Parents of defaulter students are personally called and informed accordingly.
- Feedback is taken as self-feedback by teacher, TG, HoD's interaction with students and Principal's interaction with students for self-improvements and corrective measures.
- Student's performance is evaluated by conducting unit tests, prelim and mock practical and oral examinations.
- Mid-semester submission is done as a part of continuous evaluation.
- Class teacher prepares list of non-reported students and communicates with the concerned parents through telephonically/ letter.
- Research profiles of the faculties are displayed in the faculty cabin/office. The students according to their research interests approach the respective faculty member and discuss and finalize their problem statement of the in-house/industry sponsored projects. The progress of the individual project is periodically monitored through the review panel.

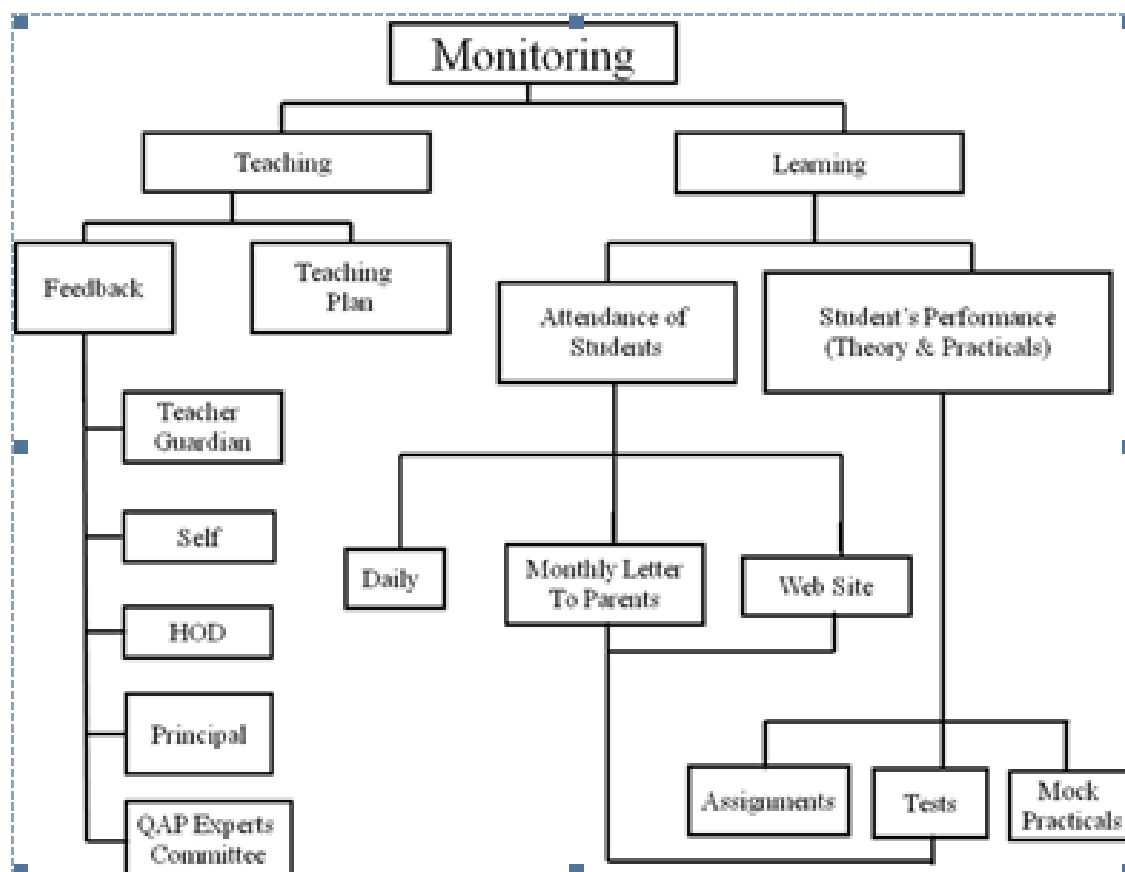Academic monitoring process is depicted in the Figure 1.1.2.

Figure 1.1.2: Academic Monitoring Process

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?

- After every five years university revise the syllabus for keeping pace with industrial developments. Once the syllabus is modified, university conducts syllabus detailing and orientation programs for the faculties of all affiliated colleges. Such workshops help the faculties to understand the syllabus effectively with all minute details. Reference and text books for various subjects are prescribed by the University for Syllabus. Accordingly concern faculties' gives requirements of books to central library for making it available to students in time.

- Institute promotes the faculties to attend the Short Term Training Program (STTP) and Faculty Development Programme (FDP) to update their subject knowledge which helps them to cater the technological developments to students. Institute encourages the faculty to attend various industrial training programs as a part of industry-institute-interaction.

- Institute also provides various educational aids like OHP, LCD projectors, high speed internet facilities for effective conduction of curriculum. Wi-Fi facility is available throughout the campus which helps faculties and students to refer the journal articles, animations, reference e-books and learning websites like National Programme on Technology Enhanced Learning (NPTEL) and Google scholar.

- The RDC in the institute conducts various orientation programme and workshops for research and teaching aptitude in faculty. Faculties are encouraged for higher qualification such as PG courses, Doctoral Programme and various certification courses in India and abroad. The institutions have collaboration with Aalborg University, Denmark for Doctoral and Post Doctoral Programmes.

- Every department in the institute has student's chapter of professional societies like CSI, IEEE, ISTE, SAE and IETE and it helps to faculties and students to bridge the gap between academia and industry. It also helps faculties in understanding emerging trends and recent advancements in the field of engineering.

- The SPPU grants research fund for faculty research projects to carry out domain specific research. Participation of students in these research projects helps to inculcate research culture.

- Industrial visits are part of academic calendar which allows students to understand the corporate culture and operations in the industries.

- The institute has central library in which there is a rich collection of books on Computer, Electronics and Telecommunication, Information Technology and Mechanical Engineering. The library also held the collection of books for Chemistry, Physics, Electrical, Mechanics, Graphics, and Management. It also has rich collection of various international journals in various disciplines. The Digital library gives access to IEEE, ASME, Springer, Elsevier journal papers, syllabus, and previous question papers of the university, project reports and video lectures from NPTEL. It helps faculty as well as students to carry out literature survey in their research work.

- Institute also conducts TTT program for enhancing teaching skills and Teachers Advancement Program (TAP) for enhancing soft skills of junior faculty members.

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

The institute has taken various initiatives in developing the system for effective curriculum delivery and translation of knowledge as per the curriculum of affiliating university. Further, additional innovative inputs are given to the students to build the overall performance of the students.

- Faculty prepares curriculum plan at the beginning of every semester consisting of course files, teaching plan, lab manuals, question bank etc. for effective transaction of knowledge as per the curriculum of SPPU.
- Junior faculty members are trained by TTT Program. Objective of TTT program is to transfer the knowledge and teaching methodology.
- As per new syllabus and training needs, faculties are deputed for FDPs/STTPs or resource persons are called from industry for discussion and deliberations.
- TAP is conducted for improving soft skills of faculty members.
- Online feedback of faculty from students is taken and then AMC visits every department and faculty counseling is done for improvement.
- Each department conducts unit tests in each month and based on results, weak students are identified and remedial classes are conducted for them.
- Each department has qualified and experienced faculty who makes students technically sound. To improve communication skills of student, institute has adopted STP which helps students to build their personality equipped with exquisite technical and professional skills.STP program itself divided into STP1-STP5. Overall goal is to improve soft skills, aptitude and technical knowledge of students.
- Progress of lab assignments and theory is continuously evaluated through continuous evaluation sheets.
- The central library is open 24x7. The library and reading hall is open to the students for all 365 days along with internet facility. The central library is equipped with NPTEL digital contents and journals.
- In addition to central library, every department has a separate departmental library which has sufficient number of books, old seminar and project reports for ready reference.
- Wired and Wireless lease line with Speed of 64 Mbps, 1:1 BW to facilitate high speed Internet speed. Internet facility is available for all 24 X 7 hours. Wi-Fi is also available to Boys as well as Girls hostel students.
- Laboratories are kept open for students after college hours which help students to work for different international and national competitions.
- To utilize student's potential, E-cell (Entrepreneurship Cell) is established. E-cell provides platform for intelligent students to come together and share knowledge and implement in-house and sponsored projects.
- Modern teaching aids like PPT presentation, video conferencing, NPTEL videos can run in classrooms as well as labs using internet connectivity. Institutes have developed Enterprise Recourse Planning (ERP) system which manages students, faculties all data centrally.

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

Involvement of industry, research bodies and the university in various activities like curriculum design and development is done at various levels.

Industry-Institute Interaction cell (IIIC):
- IIIC is active at every department which is actively involved in identification of resource persons from industry and eminent personalities from corporate.
- IIIC is also involved in identifying strong areas of the department along with competent faculties for initiating inter/intra-department research.
- IIIC also collaborate with industries for forming and establishing Center of Excellence, consultancy, research and development.
- To enhance/ upgrade the knowledge of students expertise industry person are called for various activities to bridge the gap between institute and industry.
- The guest lectures/workshops/seminars are conducted by eminent industry person from reputed industry. Alumni are also invited to interact with current students to share their views in recent happening in industry and efforts to be taken to bridge the gap.
- Various MoU's are signed with industries for the value addition programme/ student training programmed especially for Final Year students so that they can excel/ perform well in campus placement.
- The students are prepared for the placements through training them with respect to industry needs such aptitude test, group discussion and personal interviews while appearing during the campus placements.

RDC:
- Institute has well equipped Research Lab which constitutes a motivational culture for the research among young researchers. RDC & E-Cell links with various entrepreneur organization that cultivate professional skills in the students.
- Interaction research organizations like CDAC, ARAI, Persistent systems, Texas instruments etc. gives exposure to faculty and students while undertaking various research projects.

International Academic Collaboration:
- Easy pass India (EPI) is a professional programme offered by SKNCOE for international students. SKNCOE is a premier teaching institute which is endeavor to harness inherent potential by meeting to growing needs of national and international market.
- The main aim of this programme is to give an opportunity to French student to work in intercultural environment and to prepare them for Asian market working environment. This is accomplished by skilled faculty, resource and infrastructure, thereby building a society i.e. vibrant and going through knowledge sharing. Various experts faculty of institute are deputed for international exposure which share knowledge with Rwanda (East Africa) engineering students for each semester

1.1.6 What are 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.

- Senior faculty members of the college are actively involved in syllabus revision process of the university. Two faculty members are working as board of studies members as well as one faculty member is serving as member- Technical committee of SPPU.
- Senior faculty members are involved in syllabus revision, and appointed as chairman, paper setter and paper checking of SPPU.
- Senior faculty members are also called as an external examiner for various practical and oral examinations of other affiliating institutes and other universities.
- Institute has also arranged many syllabus revision workshops with SPPU with active involvement from industry representatives.
- Based on syllabus revision, we conduct FDP which gives platform for discussion on new syllabus and its effective implementation.
- Our institute served as a Central Assessment Programme center for Second Year and Third Year Engineering.

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.

- Institute is also involved in designing open electives for final year students in association with industry.
- Institute offers various add-on courses to students for bridging the gap between curriculum and industry requirement.
- Various VAP are conducted by the institute to give contents beyond syllabus wherein experts from the industries are invited to aware the students for new technologies in the respective domains.

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

- Institute has following major objectives:
    1. To improve academic performance
    2. To improve employability of the students
- The content beyond syllabus is designed from the feedback of the industry, alumni and parents.
- Content beyond syllabus is covered through different activities like guest lectures, industrial visits, VAP etc. Table 1.1.8 gives details of academic performance.

Table 1.1.8: Academic Performance

Sr. No	Objective	Indicator	Methodology	Class	Year 13-14		Year 14-15	
					I Class	Dist	I Class	Dist
1.	To improve count of students securing Distinction	Number	Based on test results remedial classes are conducted for weak students and question banks are provided. Mock	SE	88	39	96	64
				TE	76	20	101	59
				BE	56	33	56	62

	and First class		practical and theory sessions are also conducted.				
2.	To improve placement count of BE students	Number	Focusing of communication skills of students through STP program. STP program focuses on technical skills as well as soft skills	**BE**	58	109

- Every department analyses the results of online, internal, in-semester and mock practical/oral examinations immediately after the conduction and gets an idea of performance of the students. This helps the department in understanding weaker areas and necessary remedial actions to undertake to achieve the better performance

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.

- The provision of academic autonomy is provided to the final year students in terms of elective subjects. In every semester of final year, more than four subjects are available as elective subjects and students can opt one of them based on their choice.
- Advanced and customized industry related courses on emerging subjects in association with the industry are provided to the students in the form of open electives.
- Apart from the academic curriculum of university, departments/institute also offers certification courses which helps in development of employability skill of the student. Departments have collaboration with companies like Intel, Mozilla, IIT Mumbai and MoUs with many companies.

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

No, the institute does not provide any dual degree since there is no provision for offering twinning/dual degree from SPPU.

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.

Following are the institutional provisions with reference to academic flexibility to help the students in improving skills development, academic mobility, progression to higher studies and enhancing employability.
1. STP

Criterion I: Curricular Aspects

Aim: To build a personality equipped with exquisite technical and non-technical skills, which are globally at par offered in each department.

Objectives:
- To enhance the employability opportunity.
- To prepare students for entrepreneurship.
- To prepare students for higher education in India as well as Abroad.

Unique features:
- Training incorporated into the curriculum to prepare and evaluate the students in technical and non-technical skills.
- Training provided is based on the need of the student.
- Training need and outcome assessed using AMCAT, a job test preferred by many industries.
- Students will be provided a three year access on AMCAT portal to seek placement.

Program Details:
- Program is spread over 5 semesters.
- Total duration of program is 120 plus hours.
- Program provides training and practice on:
  - Soft Skills,
  - Technical Fundamentals,
  - Value Added component,
  - Quantitative Aptitude and Logical Reasoning and
  - Group Discussion and Interview preparation.

Following Table 1.2.3 (a) gives details of the training program.

Table 1.2.3(a): STP Details

Sr.No	Programme Name	Contents	Benefits
1	**STP I**	**10 modules** • Goal setting • SWOT • Behavior skill • Presentation skill • Listening skill • Public Speaking • Letter Listening skill • Resume writing • Report writing • GD	Awareness of soft skill areas
2	**STP II**	**4 pillars of communication** • Listening skill • Writing skill • Reading • Speaking	Need based training for Enhancement of soft skills
3	**STP III**	• Training and refreshing of Technical Fundamentals.	Enhancement of basics in core domain areas.
4	**STP IV**	• Training on GD and PI	Getting students ready for campus placement drives.

5	**STP V**	• Training from outside expert to add value to CV • Practice of Group Discussion and Personal Interview. • Quantitative Aptitude and Logical Reasoning Tests.	Making students aware of latest industrial trends.

In response to STP, AMCAT examinations are conducted to assess the need for training in Soft Skills and Technical Skills.

2. Progression to higher studies

- Sinhgad overseas cell provides help and guidance to the students for pursuing higher education in India and abroad.
- Final year students have flexibility to choose Elective subjects. The choice of option tentatively depends on curriculum, latest technology and industry oriented requirement. The university also offers open elective subject, which is designed by the department in consultation with industry experts based on current need and then approved by university board of studies and offered to the students.
- To enhance students skill set, each department arranges students workshops, guest lecturers etc.
- Each department arranges industrial visit for every class based on relevant subject of term. The visit helps student to get the feel of real time environment and significance of subject concepts applied in industry. The industrial visits are mapped to the curriculum subjects.
- To utilize student's potential, E-cell is established in Computer department. E-cell provides platform for intelligent students to come together and share knowledge and implement in-house and sponsored projects.
- Computer department provides online certification courses like C, C++, Java conducted by IIT and NPTEL.
- Department of Mechanical Engineering organizes hands on training on "SCILAB" for third year students which is completed with assessment test conducted by IIT Mumbai. This year 325 students appeared for test and 117 students are passed.
- Institute organize spoken tutorial based software training on course "C Programming" for second year engineering students, 288 student attended course and 263 student pass assessment test conducted by IIT Mumbai.

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

No, institute does not offer any self-financed programme as the institute is affiliated to SPPU.

1.2.5 Does the college provide additional skill oriented programmes, relevant to regional and global employment markets? If 'yes' provide details of such programme and the beneficiaries.

Yes, the institute provides STP and VAP to develop soft skills among student and expose them to the new technologies. Mechanical department has a Robotics club for students which help them to understand the science of robotics and automation and encourage them to participate in various national and international robotics competitions like ROBOCON.

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, institute does not 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 as the institute is affiliated to SPPU.

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 programmes and Institution's goals and objectives are integrated?

- To make aware and prepare the students to compete the global market, each department organizes guest lecture where experts from industries or academics are invited to share their knowledge about current trends.
- To improve student's academic results and their self-confidence, each department conducts remedial classes for weak students.
- To supplement university's curriculum, institute also deputes students for internship programs and also conducts tutorials and assignments regularly which helps students to prepare for their examinations.
- The institute has student council body which organizes various activities under SSC like guest lectures, workshops, seminars, different training under VAP are conducted like Linux, Java Cyber security, Creo, Hypermesh etc. Institute also organized GD, PI and how to face interview for UG & PG students.
- Various departments organizes internship programme for final year students with organizations like BSNL in collaboration with AICTE. Every year ten students are deputed for two months training. After successful completion of training students are honored by Silver, gold and platinum certificates without any charges.
- Institute organizes social programmes like PRAYAS, Computer literacy & DHYAS, Blood donation camp, Tree plantation, Arranging Relief funds for natural disasters (i.e. Earthquake held at Nepal, Malin Village, and Pune).
- Mini projects and soft skill programme are also included in the curriculum to enrich the application of knowledge and develop team building skills.
- Tutorials and assignments are made mandatory parts of the regular academic process in order to enhance their learning skills.
- Students are also encouraged to participate in various interdisciplinary international competitions such as ROBOCON, BAJA, SUPRA, FSAE etc.

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?

- Industrial visits, implant training, co-curricular activity and extra-curricular activities are conducted in every department to achieve institutional objectives and goals.
- Institute has started one innovative programme named as STP and VAP which focus on improving employability skills among the students.
- Every department has professional student association to supplement the university curriculum by implanting leadership and managerial skill in the students.
- Soft skills and communication classes are conducted by expert visiting faculty.
- Placement cell interacts with various companies and collects information about the current needs of dynamic employment market and required skill sets for the students. These requirements are communicated to all the departments to include VAP and workshops to enhance the experiences of the students to cope up with industrial requirements.

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

Following are the efforts by the institution to integrate the cross cutting issues as Gender, Climatic change, Environmental Education, Human Rights, ICT etc., into the curriculum:

Gender
Institute has a lot of programmes to improve technical skills of students but to increase the awareness among the students about different social issues like literacy, hygienic awareness, computer awareness and also Prime Minister's 'Beti Bachav' scheme.
Climate Change and Environmental Education
As a part of social awareness, responsibility and environmental issues, institute has formed Prayas Group which works under National Service Scheme of Savitribai Phule Pune University. Under this programme, students of the institute visited several of villages like Takali Haji, Parner, Bhambora, Vadgaon Rasai, Bori and Mandavgan Pharata and organized various programs for villagers. Students mainly focus on Computer literacy of rural peoples, arranging blood donation camps, free dental checkups of the villagers. Prayas group also helps intelligent but financially weak students by offering scholarship. Institute also received funds from State Bank of India, Capgemini IT Company and Savitribai Phule Pune University for activities under Prayas Group.

Human Rights
- To address various problems faced by students at various places like library, mess, canteen, hostel, playground, classes etc within the campus, institute has formed Grievances Redressal cell.
- Student involvement for the awareness about human rights is attracted through various activities like street plays and various karandak competitions like PURUSHOTTAM, FIRODIA, and SYMBIOSYS etc.
- It addresses grievances at the staff and student level. The Grievance committee consists of Principal, Vice Principal and one staff coordinator and student

coordinator from each department. Anti Ragging Committee which monitors and resolves students ragging related problems. In response to increase in crimes against women institute has a separate Women Grievance Cell.

- Our institute has students from various geographical locations and they also belong to different cast and community. They face various academic and non-academic problems. To solve their problems and to increase the interaction between students and faculty institute has introduced teacher guardian scheme.

- Teacher Guardian is assigned as a mentor for group of students from each class. The Guardian provides information of education objectives, mission and vision of the department and college to students. They also helps students to solve their personal as well as academic problems, provides information to parents about their wards through SMS, telephonic talk and post. Guardian also retains the personal file of the student and keeps record of all discussion with the parents and teacher guardian meets.

- Institute has students who are willing for higher studies but have financially weak background for such students Institute also runs Earn and Learn scheme introduced by SPPU. Students with weak financial background take advantage of this scheme by working after college hours for central and departmental library. As a part of social responsibility, institute shoulder the responsibility of education depending on merit and need of the student. Institute offer scholarship to needy students.

ICT

- Various awareness programmes towards the use of ICT in education are conducted by cyber cell department as well as various NGOs working for the betterment of the society.

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

- Moral and ethical values
  To enhance the moral and ethical values in students various street plays and social activities are organized by the students.
- Employable and life skills
  Various STP programmes and guest lectures are arranged to boost the employable and life skill.
- Better career options
  Various carrier guidance and counseling session to final year students have been organized for better career option and community orientation and act accordingly.
- Community orientation
  To support community orientation the institute has NSS, Prayas, Dhyas, Anvita club which takes social initiatives includes visits to rural areas, to make people aware about various social and moral ethical issues.
.

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

- Institute takes feedback from its stakeholders like students, alumni, parents, industries and considers it in enriching the curriculum. The best example of this is as

per industry and alumni feedback institute have started STP course in all departments for students to meet the industry needs and bridge the gap between curriculum and industry.

- Involvement of experts from industries is promoted during every curriculum revision to receive feedbacks and requirements to bridge the gap between industry and academia. Same comments are incorporated in the curriculum revision.
- Feedback is also received from industries regarding the performance of alumni's placed in various reputed companies and the gaps where they need to improve is discussed and communicated with all the subject teachers.

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

Following are the initiatives of the institute to monitor and evaluate the quality of its enrichment programmes:

Monitoring initiatives:
- Continuous assessment in the form of regular unit tests (2 unit tests/semester) and prelim exam is conducted in every academic semester.
- Mid-term submission and mid-term practical/oral examination is also carried out to monitor continuous progress for laboratory assessment. In addition to this, the practice turns and mock examination is also conducted at the end of every academic semester.

Enrichment initiatives:
- Students are working on modular assignment which are designed and evaluated in the VAPs which are conducted during the semester.
- Various certificate examinations are conducted and results displayed and discussed. Student receives certification at the end of course.
- Mock MCQ online examination for all subjects in the curriculum is conducted twice in the semester for FE/SE students.
- Employability Test (ET), QALR module is also included in the academic time table of all six and seven semester students.

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?

- Faculty members regularly attend various workshop and seminars for the development of the curriculum. Some of the faculty members are working as board of studies members of respective streams. Various faculty members are actively involved in designing syllabus as well as revision of syllabus. The question banks for university in-semester, end-semester as well as online examination are designed by senior faculty members.
- The valuable suggestions of faculty regarding curriculum are forwarded to university through the member of board of studies.

- Whenever the university organizes workshop, seminar and conference for knowledge enhancement of the faculty, institute deputes the faculty to attend the same. Faculty members take the active participation and involvement to gain the knowledge of respective technology.

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

Institute has formal mechanism to obtain feedback from students and stakeholders on curriculum. Institute communicates the syllabus and activity of department to employer and alumni for their valuable suggestion and feedback which can incorporate in the effective implementation of the curriculum.

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

New Programmes introduced:

- Ph. D programme in computer engineering is started from 2013.
- Masters programmes are introduced in E&TC, COMP, IT departments from 2011. E&TC programmes offers two specialization in VLSI& Embedded systems and Signal Processing. Computer engineering programmes offers two specializations in Computer Engineering and Computer Network.
- Institute has started second shift for E&TC, Computer and Mechanical engineering.
- Every year as per the need of industries each department offers various choice of electives for final year students which help them to gain latest emerging technology.

Rationale for introducing new course:

- Increasing demand from students and industries
- Better and lucrative job opportunities in the market
- Cultivate research culture among the faculty and students

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?

Publicity and transparency in admission process is ensured as follows:

Publicity
- Admission notification is published by DTE, Maharashtra state in all leading national and regional daily newspapers.
- The Institute publishes advertisements for admission to different courses in all leading newspapers which includes information about courses, eligibility, process of admission and academic as well as support facilities.

Transparency
- The admission process is strictly controlled by DTE, Maharashtra through CAP.
- The application forms are available on DTE portal. Students interested in seeking admission have to fill on line application form through DTE admission portal between the dates mentioned in admission notification.
- Application-Form Receipt Center (ARC) verifies all the necessary documents and gives confirmation of receipt of application form to the candidate.
- The provisional merit list is displayed on DTE website and after the cognizance of the entire grievances, final state level merit list is prepared. The same is kept in the college office as public information.
- The choices for branch and college are filled by students through online registration. The required information about the college is available on DTE admission information brochure.
- All admissions are carried out strictly through state level merit in all criteria**.** The college strictly follows the rules and regulations regarding admissions prescribed by the state government and the SPPU by giving proper affidavit to DTE.
- As per the directives of DTE and Government of Maharashtra, 20 % of the total seats are filled by Institutes. Hence, Institute publishes advertisement in all leading newspapers for Institute level seats.
- Institute has formed counseling cell for students and parents to cater the information regarding admission while they visit to college.
- Institute also takes part in education fairs at various cities for institute level admissions.
- Admission to PG and MBA are also carried out transparently in similar manner.
- The entire direct second year admissions are strictly monitored and carried out by DTE, Government of Maharashtra.

Figure 2.1.1 shows admission process for centralized and institute level admission

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┌────────────────────────────────────────────────┐
│  1. JEE/AIEE/CET Examination Notification        │
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│  2. Filling of online Application form for        │
│     "Centralized  Admission"                      │
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│  3. Document Verification and confirmation of     │
│     application by ARC                            │
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│  4. Display of Provisional Merit List             │
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│  5. Submission of Grievances if any to ARC        │
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│  6. Display of Final Merit List                   │
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│  7. Filling & Confirmation of College option      │
│     form by the Candidate                         │
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│  8. Display of Allotment of College on DTE        │
│     Website                                       │
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│  9. Repeat step 7 and 8 for Round 2 and 3         │
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│  10. Go for Round 4: Counselling Round            │
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"Institutional Admission"

Display of Merit Branch wise List

"Students Admitted in specific branch"

Figure 2.1.1: Admission Process for Centralized and Institute Level Admission

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

Criteria and process adapted for admission is as follows:
(i) Merit
- As per the directives of DTE, Government of Maharashtra State and AICTE
- For MBA admissions valid score of MHCET/CAT/MAT/XAT and ATMA exams.
(ii) Common admission test conducted by state agencies and national agencies
- At entry level Common Entrance Test (CET) and Joint Entrance Examination (JEE) examination valid score is considered as per directives of DTE

(iii) Combination of merit and entrance test or merit, entrance test and interview
- NA

(iv) Any other to various programs of the Institution
- NA

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

Table 2.1.3 (a) gives details of FE Admission minimum and maximum percentile of SKNCOE.

Table 2.1.3 (a): FE Admission Minimum and Maximum Percentile of SKNCOE

Sr. No.	Programme	Year of admission	Min. CET Marks of Admitted Student	Max. CET Marks of Admitted Student	Min. mark of Students Affiliated College/ University	Max. mark of Students Affiliated College/ University
1	E &TC	2015-16	65.75	83.31	Remarks:	
		2014-15	65.76	86.90		
		2013-14	95.00	129	• Significant improvement in the admission cut-off is witnessed since last 3 academic years.	
		2012-13	100	136		
2	Computer	2015-16	85.89	90.57		
		2014-15	84.05	92.26		
		2013-14	106	129		
		2012-13	107	146		
3	I.T	2015-16	76.64	86.74	• Preferences of the students for various programmes at the institutes are considerably increased.	
		2014-15	72.78	84.06		
		2013-14	76	124		
		2012-13	97	113		
4	Mech.	2015-16	75.88	93.23		
		2014-15	73.72	93.32		
		2013-14	103	144		
		2012-13	107	151		

Following Figure 2.1.3 (a) depicts FE Admission minimum and maximum percentile of SKNCOE.
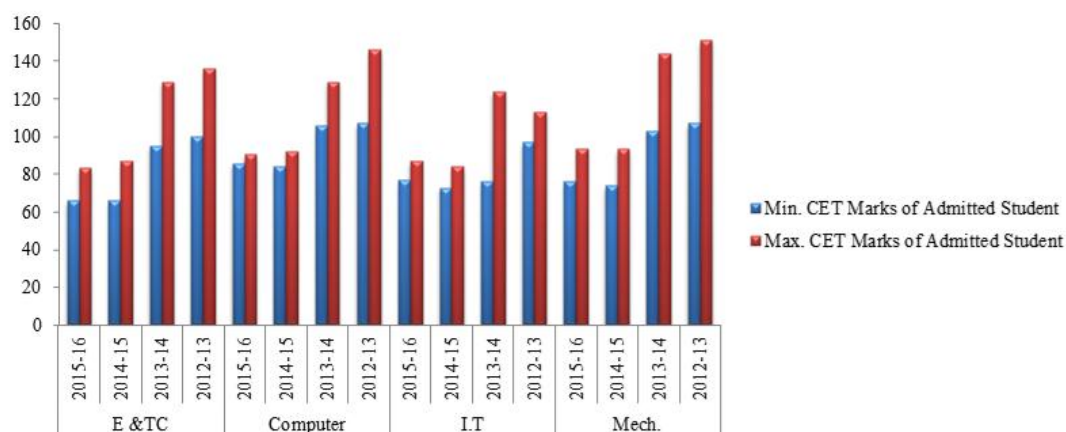
Figure 2.1.3 (a):FE Admission Minimum and Maximum Percentile of SKNCOE

Academic Year 2014-15

Table 2.1.3 (b) gives details of FE Admission minimum and maximum percentile 2014-15 with respect to nearby colleges (Modern College, NESS Wadia) under SPPU

Table 2.1.3 (b): FE Admission Minimum and Maximum Percentile 2014-15 with Respect to Nearby Colleges under SPPU

Department	SKNCOE		Modern College		NESS Wadia	
	Min	**Max**	**Min**	**Max**	**Min**	**Max**
Computer Engineering	84.05	92.26	45	86	33.73	84.89
Information Technology	72.78	84.06	74	83	NA	NA
Electronics & Tele-communication Engineering	65.76	86.9	46	83	39.49	64.04
Mechanical Engineering	73.72	93.32	88	91	60.62	90.59
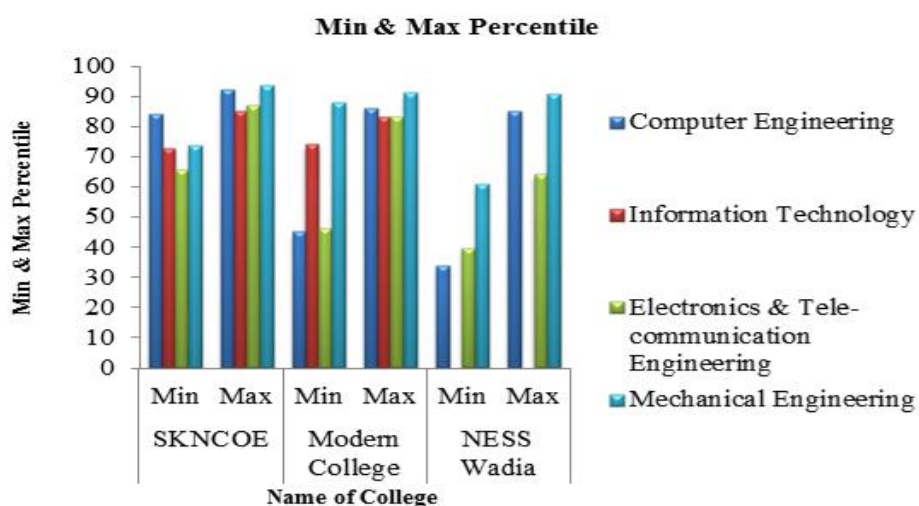
Figure 2.1.3 (b):FE Admission Minimum and Maximum Percentile of SKNCOE, Modern, Wadia for Academic Year 2014-15

Figure 2.1.3 (b) shows that our institute has higher cut off than well-established nearby institutes (Modern College, NESS Wadia).

Academic Year 2015-16

Table 2.1.3 (c) gives comparison details of FE Admission minimum and maximum percentile 2015-16 with respect to nearby well known colleges (MIT, SCOE) under SPPU.

Table 2.1.3(c): FE Admission Minimum and Maximum Percentile 2015-16 with Respect to Nearby Colleges under SPPU

Department	MIT		SCOE		SKNCOE	
	Min	Max	Min	Max	Min	Max
Computer Engineering	90.71	96.6	87.27	95.08	85.89	90.57
Information Technology	89.43	93	77.41	91.6	76.64	86.74
Electronics & Tele-communication Engineering	78.72	95.03	70.28	91.52	65.75	83.31
Mechanical Engineering	80.49	97.33	83.34	96.14	75.88	93.23
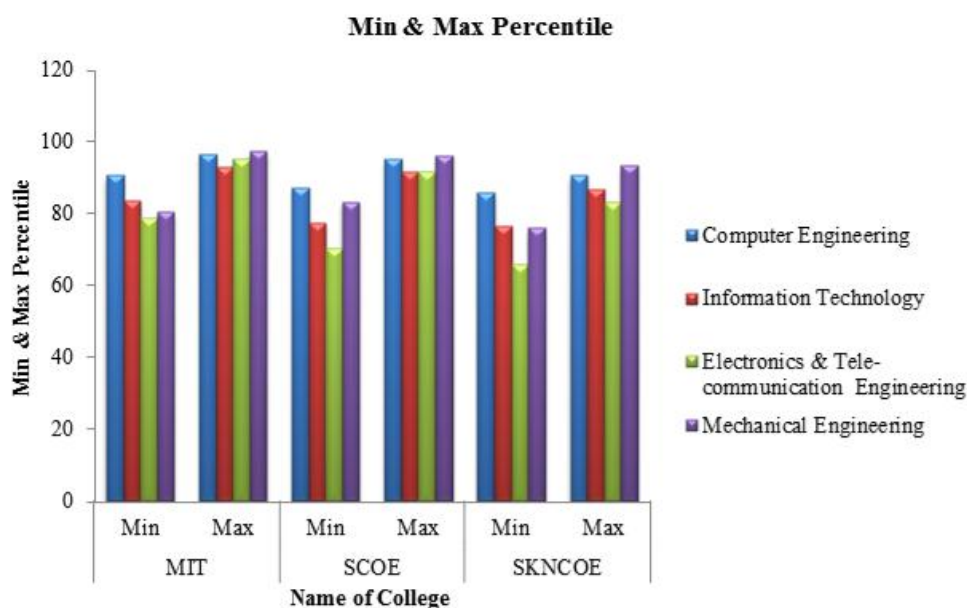
Figure 2.1.3 (c): FE Admission Minimum and Maximum Percentile of SCOE, MIT, SKNCOE for Academic Year 2015-16

Fig 2.1.3 (C) shows comparison with Maharashtra Institute of Technology (MIT), Sinhgad College of Engineering (SCOE). These are the well-established (more than 18 years) and well known colleges. The comparison shows that our institute has cut off percentile/CET marks for all the courses very much close to these Institutes.

Table 2.1.3 (d) gives comparison details of FE admission minimum and maximum percentile 2015-16 with respect to nearby colleges (Modern, JSPM) under SPPU.

Table 2.1.3 (d): FE Admission Minimum and Maximum Percentile 2015-16 with Respect to Nearby Colleges under SPPU

Department	SKNCOE		Modern College		JSPM	
	Min	Max	Min	Max	Min	Max
Computer Engineering	85.89	90.57	58	86	54.3	65.95
Information Technology	76.64	86.74	49	73	----	----
Electronics & Tele-communication Engineering	65.75	83.31	47	74	26.24	34.9
Mechanical Engineering	75.88	93.23	62	84	53.4	64.58
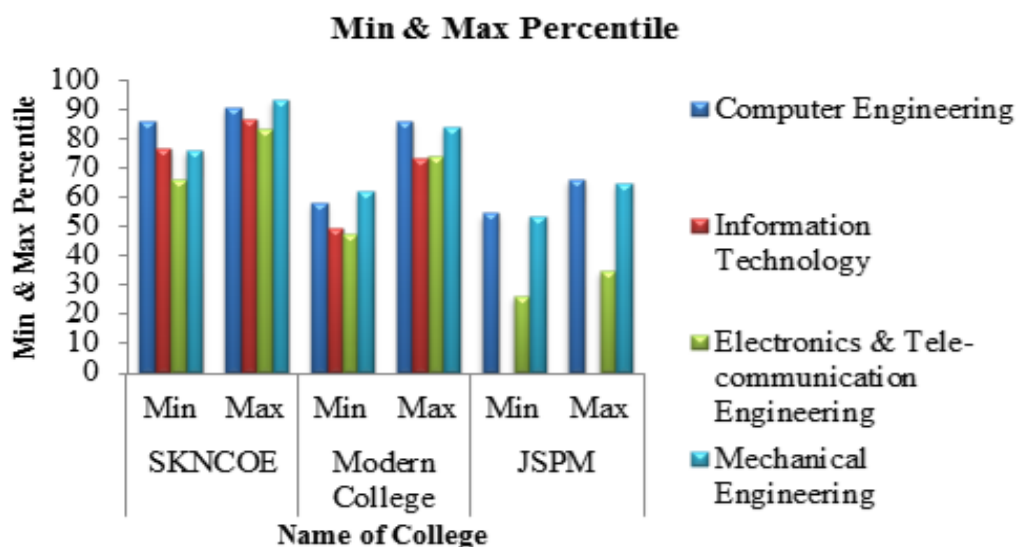
Figure 2.1.3 (d):FE Admission Minimum and Maximum Percentile of SKNCOE, Modern, JSPM.

Figure 2.1.3 (d) shows that our institute has higher cut off percentile/CET marks for all the courses as compare to other nearby well established institutes in Pune.
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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, to make admission process hassle free, separate admission cell has constituted at institute level.

- Advertisement regarding admission is published in all leading news papers and also available at institute website www.sinhgad.edu (cms.sinhgad.edu/sinhgad_engineering_institutes/skncoe_vadgaon/institute_details.aspx)
- All brochures related to admission process from DTE/AICTE are made available with counseling cell for clarification of all queries by parents.
- An orientation program for newly admitted students along with their parents is arranged at institute level before commencement of academic session.
- Feedbacks obtained from parents are taken into consideration for improvement in further admission process.
- Parent's meets are arranged at the beginning and end of academic semester to review student profile on following basis.
  a) Background of student (Rural / Urban)
  b) Medium of education (Regional / English)
  c) Educational background of family
- Considering the admission scenario in last 2-3 years, the institute has policy to make name and fame of the institute at national level by organizing admission drives in major cities of India.
- In the sequel, a significant improvement in quantity as well as quality in admission

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has taken place as shown in Figure 2.1.3 (a) to Figure 2.1.3 (d).

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.

Following information is provided to the diversified students to make awareness of various facilities provided by the government and institute:

SC/ST/OBC
- The seats allotted for SC/ST students are filled only through single window counseling conducted by DTE, GoM and SPPU.
- Students belonging to SC/ST category are provided with scholarship by the GoM for tuition fees.

Women and Economically weaker students
- DTE and GoM has special quota for the women admission as well as for economically weaker sections. Fig 2.1.5 (a) shows current Boys and Girls percentage in the Institute. Fig 2.1.5 (b) shows current Boys and Girls percentage in category. The information is also given to the students regarding Economically Backward Class (EBC) scholarship during the admission process and it is also available on DTE website.
- The institute also runs Earn and Learn scheme of SPPU in order to financially support economically weaker students.

Differently abled
- Barrier free environment is provided to any differently abled student. Their classrooms are allotted in the ground floor till they complete their programme.

Outstanding achievers in sports and extra-curricular activities
- Quota for the achiever in sports is available in the single window counseling conducted by DTE, GoM and SPPU.
- These students are provided with necessary support for training and participating in the Sports/games competitions.
- Institute also provides term work benefits and certificate of appreciation to outstanding achievers in sports and extra-curricular activities.

J&K, Defence and OMS Quota
- There is a special quota for the candidates of Jammu and Kashmir and defence as per DTE norms.
- There is a provision of hostel and mess facility in the campus wherein the out state students can stay securely and comfortably.
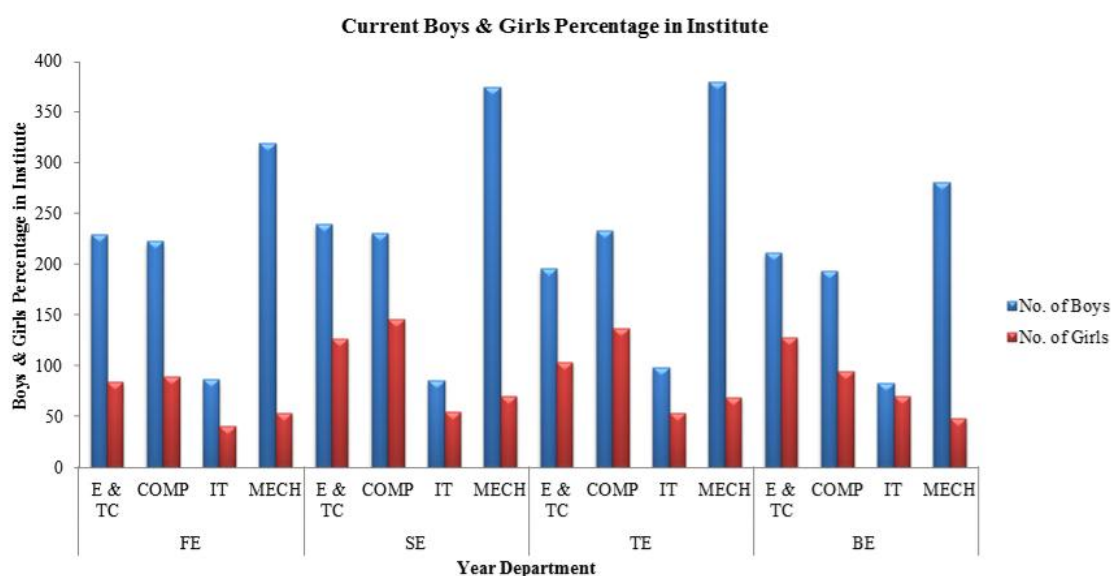
Figure 2.1.5 (a): Current Boys and Girls Percentage in the Institute

Figure 2.1.5 (a) shows details of current boys and girls percentage in the Institute
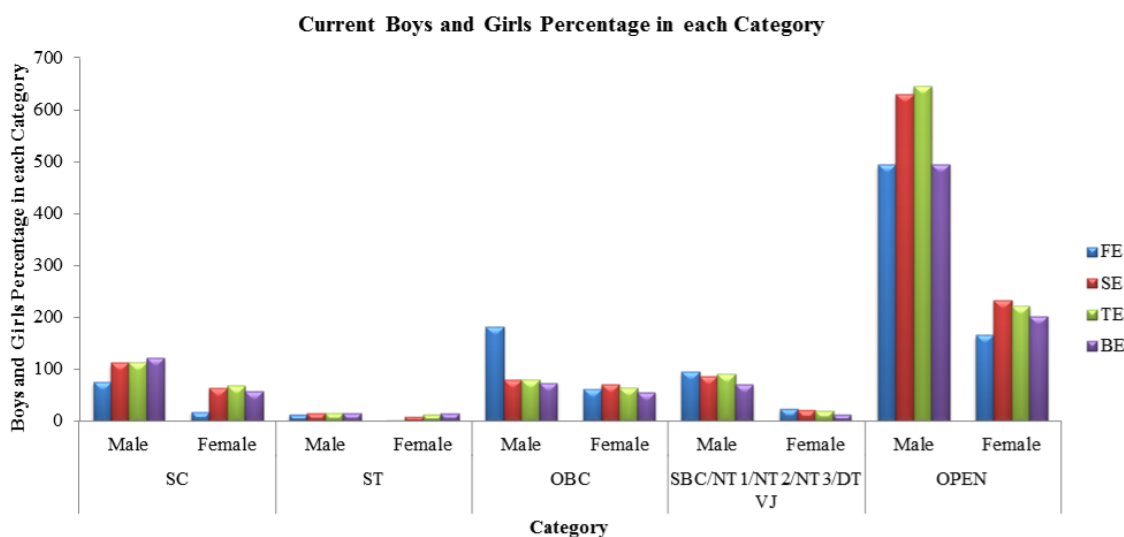
Figure 2.1.5 (b): Current Boys and Girls Percentage in each Category

Figure 2.1.5 (b) shows details of current boys and girls percentage in each category.

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.

- Institute has no role in admission process, as the complete admission process is prescribed and governed by Government authorities. Hence it is difficult to calculate the demand ratio. But demand based on the intake in each program can be used to calculate demand ratio.

- The statistics with demand ratio, from Academic year 2012-13 to 2015-16, for all programs in the Institute is given in the following tables,

Table 2.1.6 (a): UG Studies Demand Ratio for Admission

Sr. No.	Programme	Year of admission	No. of Student Application	No. of students Admitted	Demand Ratio
1	E &TC	2015-16	240	240	100
		2014-15	240	240	100
		2013-14	233	233	100
		2012-13	240	240	100
2	Computer	2015-16	240	240	100
		2014-15	180	180	100
		2013-14	180	180	100
		2012-13	180	180	100
3	I.T	2015-16	120	120	100
		2014-15	120	120	100
		2013-14	116	116	100
		2012-13	119	119	100
4	Mech.	2015-16	240	240	100
		2014-15	180	180	100
		2013-14	240	240	100
		2012-13	190	180	180

Table 2.1.6 (b): Demand Ratio for Admission of PG-Management Studies

Sr. No	Programme	Course	Year of admission	No. of Student Application	No. of students Admitted	Demand Ratio
1	Management Studies	MBA	2015-16	66	61	92.42
			2014-15	52	52	100
			2013-14	68	61	89.71
			2012-13	65	61	93.85

Table 2.1.6 (c): Demand Ratio for Admission of PG- Engineering Studies

Sr. No.	Programme	Year of admission	No. of Student Application	No. of students Admitted	Demand Ratio
1	E&T/C-VLSI &Embedded System	2015-16	18	18	100
		2014-15	18	18	100
		2013-14	20	18	90
		2012-13	19	18	94.74
	E&T/C-VLSI & Embedded System-II	2015-16	24	24	100
		2014-15	23	23	100
		2013-14	25	24	96
	E&T/C -Signal Processing	2015-16	14	14	100
		2014-15	16	16	100
		2013-14	21	18	85.71
		2012-13	20	18	90
2	Computer	2015-16	30	24	80

Sr. No.	Programme	Year of admission	No. of Student Application	No. of students Admitted	Demand Ratio
	Engineering	2014-15	24	24	100
		2013-14	28	24	85.71
		2012-13	30	24	80
	Computer Engineering-II	2015-16	23	23	100
		2014-15	20	20	100
		2013-14	27	24	88.89
	Computer Network	2015-16	14	14	100
		2014-15	10	10	100
		2013-14	25	24	96
		2012-13	28	24	85.71
3	Information Technology	2015-16	14	14	100
		2014-15	20	18	90
		2013-14	22	18	81.82
		2012-13	22	18	81.82

Tables 2.1.6 (a), 2.1.6 (b) and 2.1.6 (c) gives details of demand ratio for admission of UG studies, PG - Management studies and PG - Engineering studies respectively. The demand ratio is calculated as percentage students admitted with respect number of application received.

The reasons for increase/decrease in admission
- National and global employment scenario with increase in demand in various sectors viz. Electronics, Computer, Automobile, Mechanical etc.
- Promotional schemes for pursuing higher education by education ministry of Government of India.
- Awareness about the low interest loan available for education.
- Increasing in the intake in existing institute and establishing new institutes every year.
- Industrial recession in a specific sector may hamper admissions in respective programme.

Action initiated for improvement placement and as a result admissions
- Institute has started providing effective training and placement activities viz. STP II, STP-III, STP-IV.
- Institute conducts various VAP in consultation with industry.
- Before admission counseling helps in making students as well as parents aware about placement oriented activities of institute.

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?

In order to cater to the needs of differently-abled students, separate arrangement is made in hostel such as western toilets, intercom, etc. Extra time is also given to such students in all examination as per directives of SPPU.

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

- Institute organizes orientation programme for newly admitted students and their parents to help them in understanding the engineering curriculum and university examination process.
- Each department organizes an induction programme for second year students before start of academic session to make them familiar with their curriculum.
- At second year level, foundation training for critical subjects as well as laboratories is conducted to cope with the subjects and challenges.

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?

Understanding the knowledge and interest of the enrolled students, the institute has following strategies in order to bridge the gap**:**
- During practical hours the interest of the individuals is identified and practical training is provided.
- Students according to their interest are advised to attend internship/implant training programs in vacations.
- Special training is given to the students on the recent needs of the industries through STP 1 to STP 5.
- Special training to the students is provided by conducting VAP as STP 5 and add-on courses to minimize the knowledge gap of the students during the regular class itself.
- Workshops/Seminars/Guest lectures on latest trends in technology are arranged.
- Industrial visits are arranged to understand the applications of the various subjects in their curriculum.
- QALR tests and ETs are conducted on regular basis to give hands on practice of aptitude tests.

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

Following efforts are made by the institute to sensitize its staff and students on issues such as gender, inclusion, environment etc.:
Gender

- Institute does not have any gender bias while giving an opportunity in administrative, co–curricular and extra-curricular activities. Faculty members are nominated in committees without any discrimination (gender, caste, religion).
- An equal opportunity is given to boys and girls while participating in the various activities viz. Cultural, Technical events, sports etc. organized by institute. (The Institute has Girls Cricket and Kabaddi team).
- Institute has gender free promotional policies as well as benefits to all faculty and staff.
- There are 30.36% of girl students and 44.13% lady faculty in the institute, which shows that institute environment is absolutely non-discriminative based on gender.

Inclusion
- "Prayas" and "Dhyas Youth foundation" a group of social activity has formed, where the students work together for a social cause. The different social activities are arranged under the banner of Prayas for the welfare of society viz. such as Computer literacy program for the students in rural area, blood donation camps etc.
- "Anvita Art Circle" a forum for cultural activities is formed which refers social issues and awareness amongst the society.
- "Sinhgad Karandak" an annual cultural event is arranged to explore the unleashing potential in students and also to change the state of mind of students regarding gender difference.
- NSS has formed wherein the students work together for the social cause. The objectives of such camps are to create awareness among villagers about cleanliness and health care, rainwater harvesting and women education etc.

Environment
- To keep the environment free from gender or religious issues TG is appointed for a batch of around 20 students by every department and counsel them.
- The different activities and events organized by institute as mentioned earlier helps in maintaining the unity in the institute.
- Institute has formed Women Grievances Cell which works for the benefit of the women employees and girl students.
- The salary paid by the institute is as per the guidelines of pay commission helps in maintaining the environment healthy.

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

The institute has following process to identify and responds to special educational/learning needs of advanced learners:

Identification
- The different parameters are used to identify the advanced learner viz. score in preceding examination, classroom performance, regularity in submission of class term works and assignments, attendance and personal interactions.
- Discussions are made with faculties and their recommendations are considered for the identification of advanced learners.
- External agencies are hired by the institute to identify and develop the intellect of advanced learners.
- Also TG are identifying advance learner through interaction during TG meet.

Respond

The college offers opportunities for bright students to augment their talent and meet their learning needs in following manner:

- Institute has good interaction with industries and also signed MoU's with various reputed Industries/ Research institute to provide platform for the advanced learners to explore their talents.
- Students are deputed for summer and winter internship programs in industries and also encouraged to identify and take the problem from industry for their projects.
- Institute library is provided with latest versions of reference books, e-journals, e-books, NPTEL lecture series etc. for advanced learners.
- VAPs are organized by college teachers and by external faculty to develop students on these fronts through special coaching for competitive examination viz GATE, GRE, TOFEL, etc.
- Institute has established a technical forum to guide student to participate in BAHA, SUPRA, FSAE, ROBOCON, CSI, ISF, IET, ACE, etc.
- Extra contact hours by teachers are also provided for advanced learners.
- Institute organizes TECHTONIC, technical event every year where the students are encouraged to participate in various innovative technical competitions. These events are totally organized by the students for the students. Students are also motivated to participate in different project competitions like AVISHKAR, SAE- BAJA, IETE Project Competition, CONVENE-SKNCOE etc.
- Different enrichment courses are conducted to fulfill the knowledge thirst of advanced learners.
- Students are guided to attend different workshops, seminars by industrial experts, training programs and also motivate to participate in various technical competitions organized by industries.

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 sort of support is not provided)?

The institute collects, analyze and use the data and information on the academic performance of the students at risk of drop out is as follows:

Collection of data

The following ways are adopted to collect the data and information on the academic performance of the students at risk of drop out.

- University exam result analysis is available with each department which helps in getting the academic performance of students in preceding examination.
- The record of results of internal examinations viz. unit test, mock online test, preliminary examination, mock oral and practical are maintained by the department..
- The TG regularly interacts with the students, from which institute gets information about slow learners, physically challenged and economically weak students.
- Class Teachers (CT) are also appointed to keep a record of students of their respective class like leave record, result analysis record, record of extra and co-curricular activities etc.
- The details about the students in various categories like SC/ST, OBC, minority, EBC, physically challenged etc. can be available from admission information.

- The class teacher and teacher guardian scheme is executed as per Figure 2.2.6.

CLASS TEACHER	TEACHER GUARDIAN
Maintain roll call list, address, and contact numbers of students of their class.	Conduct regular meetings with students. Discuss points like attendance, academic progress & Problems if any
Keeps leave record, result analysis record & record of extracurricular & co-curricular activities	Contact parents in case of continuous absentee to give feedback to them about the attendance & progress of the students.
Co-ordinate with all teachers of class & TG's for maintaining smooth conduction of timetable.	Maintain complete academic student record of their batch in History book.

Figure 2.2.6: Responsibilities of CT and TG

Analysis of information
- The academic performance sheet is prepared by each department with the help of various sources mentioned above wherein the record of each student in terms of attendance, test result and university result are available.
- The analysis of the academic performance sheet helps in identifying the students at risk of drop out and slows learners.

Institute uses the data and analysis information as follows

Support for physically challenged
- Regular counseling sessions are conducted to motivate physically challenged students by CT and TG.
- Awareness regarding benefits reserved for physically challenged students such as scholarships from government and nongovernmental organizations, special employment opportunities and reservations in higher studies in various sectors is continually provided by social welfare/ scholarship / Training and placement section.
- To meet academic and examination requirements in physically challenged cases, all arrangements are made at institute level.

Support for Slow learner
- Regular TG meetings are arranged to find out and discuss the problems of weak students.
- Accordingly separate tasks are assigned to individual cases to improve academic

performance.
- Extra sessions are conducted in zero hours for slow learners and specially prepared subject wise course material is made available.
- Problem solving sessions are arranged on individual basis before examinations in preparation leave to boost their confidence.

Support for Economically Weaker Section
- Under Earn and Learn scheme derived by SPPU, institute identifies economically weak students. The identified students are allocated to Library and office sections for assistance in zero hours and remuneration is paid to them.
- Information about different scholarship schemes from various government and non-government organization is provided by institute.
- Awareness about different education loan scheme is made available to them.
- Students under economically weaker section are allowed to pay fees in installment, which are not eligible for any scholarship.

Disadvantaged sections of society
- The students of SC/ST/EBC/OBC/minority categories are given benefits in admission and scholarship. The social welfare department guides them about the scholarship/social welfare scheme available to the student as per Government norms.
- The students are guided at student section in institute office about the Social Welfare Schemes which helps the students to apply for these schemes in proper format and procedure.

2.3 TEACHING-LEARNING PROCESS

2.3.1 How does the college plan and organize the teaching, learning and evaluation schedules? (Academic calendar, teaching plan, evaluation blueprint, etc.)

The institute has the following process to plan and organize the teaching and learning as well as evaluation schedules:

Teaching and learning process
- Before the commencement of semester, the faculties if required are being recruited. Also the requirement of instruments/software/equipment for laboratory is fulfilled.
- SPPU provides an academic calendar before the commencement of semester wherein the number of days for teaching and evaluation are available which gives a guideline to frame an institute level academic calendar.
- Institute level academic calendar is prepared and provided to all departments before the commencement of semester.
- Principal conducts meeting with all HoD's and gives necessary guidelines on the basis of previous feedback.
- Choice based preferences are asked for next semester before the staff members proceed for vacation and load distributions is done by HoD taking into consideration these choices.
- HoD also assigns the responsibilities to the faculties for the activities to be conducted throughout the semester.
- The teaching plan is prepared by every subject teacher prior to the starting of the semester which includes lecture number, topics planned, date, topics covered, date etc.. This is approved and monitored periodically by the HoDs.
- The subject teachers are ask to prepare/update course file which contains academic

calendar, syllabus, teaching plan, subject notes, PPT's, question bank on each unit, university question papers with model solution etc.

- Weekly meeting of faculties is conducted by HoD to discuss the problems if any and to take updates of the conduction of academics.

Evaluation

- The continuous evaluation of students is done by university examinations as well as internal examinations and continuous assessments carried out at institute level. The evaluation of teaching learning process is carried out as shown in the F**igure 2.3.1**.
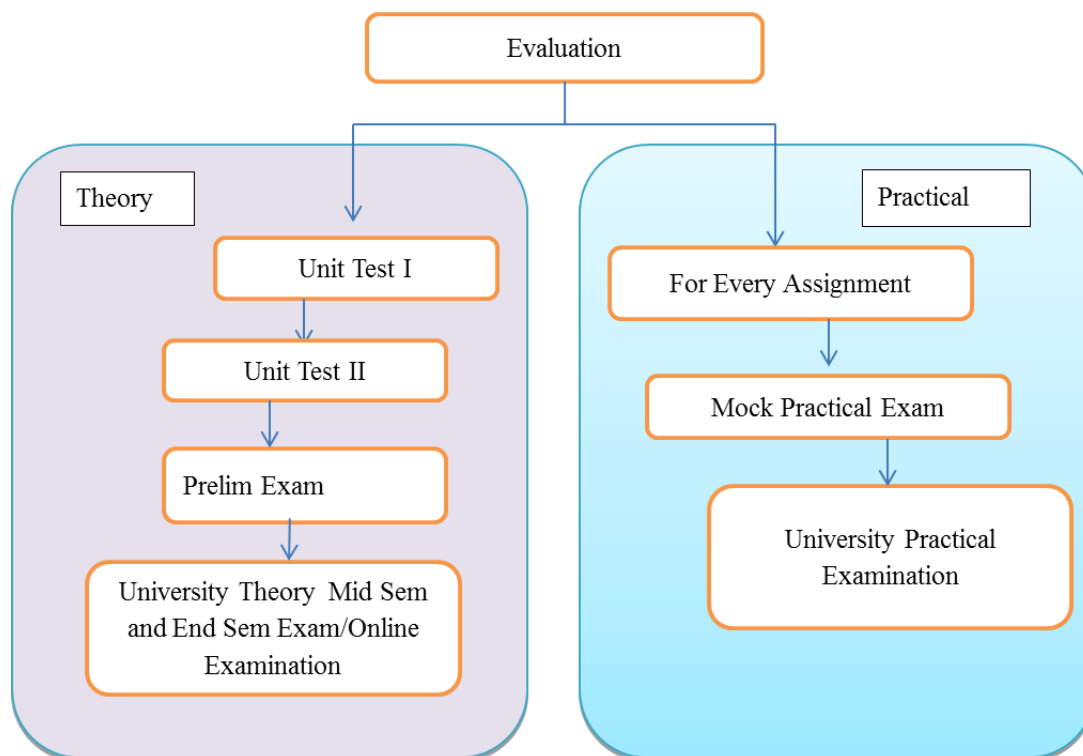
Figure 2.3.1: Evaluation Procedure

- Institute conducts unit test per month based on one third syllabus and prelim exam on entire syllabus at the end of semester.
- Test performance of all the students is conveyed to their parents by TG through telephonic calls/ SMS.
- University theory examination is conducted at the Mid Semester and End Semester as well as online examinations for SE and FE students is conducted in the following manner. Table 2.3.1(a) shows exam pattern of SPPU.

Table 2.3.1(a): Exam Pattern of SPPU

Year	Phase-I (Marks 25)	Phase-II (Marks 25)	Insem ((Marks 30)	End Sem (Marks 50/70)
FE	✓	✓		✓
SE	✓	✓		✓
TE			✓	✓

BE			✓	✓

- As a part of continuous evaluation process the term work marks given to every student is based on overall attendance, punctuality, understanding and presentation. A sheet containing progressive practical internal assessment record is maintained by the faculties for proper evaluation of term work.
- Continuous assessment of Practical's is carried out based on the following criterion.
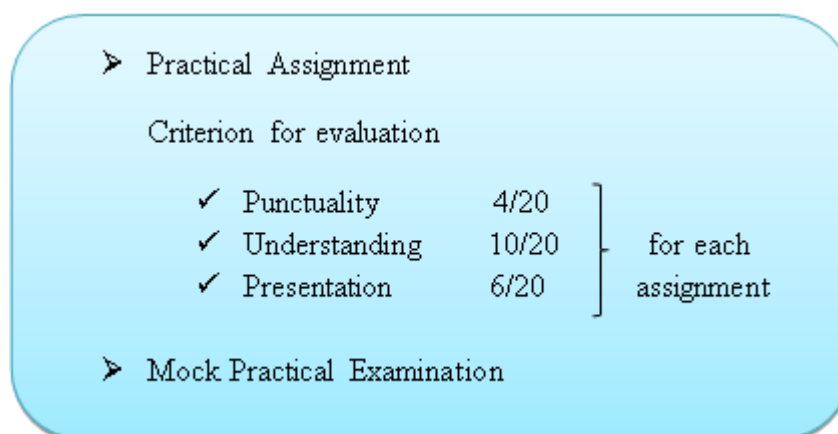
- The distribution of this criterion is communicated to all the students well at the beginning of the semester and invariably all the departments are strictly following the same.
- TG's conducts meeting of their batches every week in the slots provided in timetable to guide the students about the importance of attendance, regular assessment and also to resolve their problems if any.

2.3.2 How does IQAC contribute to improve the teaching –learning process? (Minor change in the wording)

Presently the Teaching-learning process is monitored and governed by the AMC. Internal Quality Assurance Cell (IQAC) is proposed from next academic year. The primary aim of the proposed IQAC is to develop a system for conscious, consistent and catalytic action to improve the academic and administrative performance of the institution.

Function
- Development of quality parameters and benchmarks for the academic and administrative activities of the institution.
- Acquire feedback from stakeholders with respect to 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/ STES.
- Document verification of quality parameters / activities leading to quality improvement.
- Acting as a nodal agency of the institution for quality-related activities.

Mechanism
IQAC aims to maximize 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 and Parents

While doing so, the IQAC will work in close loop system with faculty, staff, students and management for developing a unique work culture in the institute. **Figure 2.3.2** gives overall idea of this closed loop system.
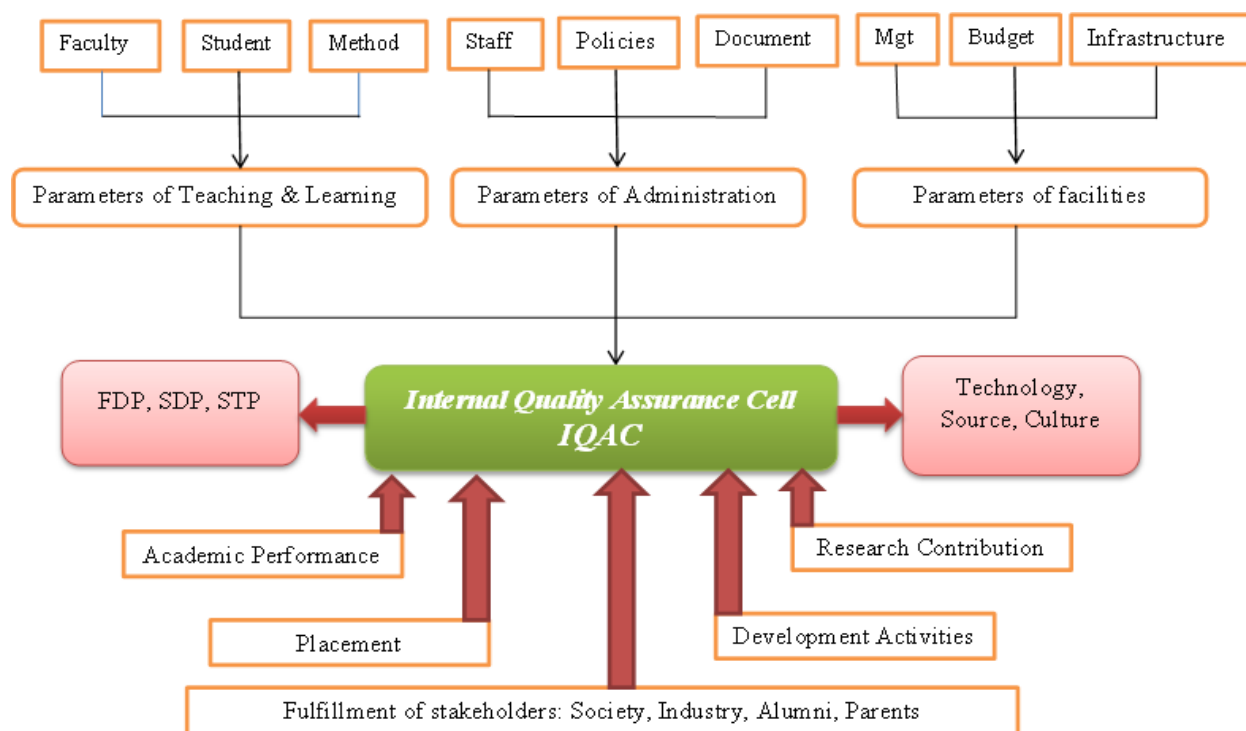
Figure 2.3.2: IQAC Closed Loop System

The IQAC analyzes the performance of institute with parameters in terms of:
- Teaching and learning: faculty, students, teaching methodologies used,
- Administrative systems: staff, policies and
- Documentation process Facilities: management strategies, budget allocation and availability of infrastructure

The IQAC analyzes these parameters consistently and suggests remedial actions for ensuring timely, efficient and progressive performances in academics, administration and development of facilities in the institute.

Benefits
The analysis and suggestions by IQAC will benefit the institutional progress in quality education and research. It will also make sure about keeping the transparency in faculty, staff and management with respect to objectives towards attainment of mission and vision of the institute. IQAC create a mechanism to integrate various academic activities, enhance supportive administrative tasks and effectively communicate to achieve quick actions and get impact on quality objectives of the institute.

AMC is chaired by head of the institute and consist of two STES directors as advisors along with all the heads of the departments as members. AMC use to monitor all the academics, student feedback and overall teaching learning process to achieve maximum academic performance of the students. Guidance of advisors in terms of teaching load distribution, new faculty recruitments and procurement of new equipment & library books is always helping the individual department to improve their performance. Faculty and staff appraisals are also looked after by AMC where it not only monitors the performance of individual faculty but also guide them to achieve their own objectives. AMC also keeps eye on critical subjects from FE to BE and always advise heads to perform in best possible way.

Table 2.3.2 (a): Members of Academic Monitoring Committee (AMC)

Sr.	Name of Staff Member	Designation	Designation
1	Dr. A. V. Deshpande	Principal	Chairman
2	Prof. M. G. Bhatt	Director, STES	Advisor
3	Prof. S. B. Pharkute	Director, STES	Advisor
4	Dr. K.R. Borole	Vice Principal	Advisor
5	Dr. P.N. Mahalle	HoD Computer	Member
6	Dr. A. P. Pandhare	HoD Mechanical	Member
8	Dr. Mrs. S.K.Jagtap	HoD E&TC	Member
9	Prof. R.H. Borade	HoD IT	Member
10	Dr. M.R. Shekh	HoO MBA	Member
11	Prof. M.S.Alandkar	HoD FE	Member

Table 2.3.2 (a) shows members of AMC. The institute will establish IQAC from the academic year 2016-17. IQAC will be headed by principal and consist of two STES directors as advisors along with all the heads of the departments and registrar of the institute as members. In order to get the feedback from stakeholders IQAC is also added with stakeholders as members- industry person, parent, alumni, professionals and person from academic background outside the institute. The proposed members of IQAC are shown in Table 2.3.2 (b).

Table 2.3.2 (b): Members of Institute Quality Assurance Cell (IQAC)

Sr No	Name of the Member	Designation	Designation for IQAC
1	Dr. A.V.Deshpande	Principal	Chairman
2	Dr. K.R. Borole	Vice Principal	Vice Chairman
2	Prof. M. G. Bhatt	Director, STES	Advisor
3	Prof. S. B. Pharkute	Director, STES	Advisor
4	Mr. Tushar Samnerkar	Industry Person	Member
5	Dr. P.N.Mahalle	Head, Computer Engineering	Member
6	Dr. A.P.Pandhare	Head, Mechanical Engineering	Member

7	Dr. Mrs. S.K.Jagtap	Head, Electronics & Telecommunication	Member
8	Prof. R.H.Borhade	Head, Information Technology	Member
8	Prof. A.J.Patil	Student's Activity In-charge	Member
9	Prof. S.N.Uke	Sports & Cultural In-charge	Member
10	Prof.S.M.Ingawale	Women Redressal In-charge	Member
11	Mr. Vijay Joshi	Parent, Professional Activity	Member
12	Dr. S.G. Bhirud	Parent, Computer Education	Member
13	Mrs. K.S.Borgawe	Registrar	Member
14	Ms. Surabhi Somani	Alumni	Member
15	Mr. A. S. Mhasatkar	Training and Placement Officer	Member

2.3.3 How is learning 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?

Considering student as an important stakeholder of the institute, various activities are conducted by the institute during the semester

- Institute conducts Aptitude Test (AMCAT) for all students to check their intelligent quotient.
- Separate lectures are arranged for soft skills and technical skill development.
- Institute has separate Language lab
- Entire campus is made available with free Wi-Fi facility to make available all e-learning material.
- NPTEL lecture series for each subject is available in all departments.

Figure 2.3.3 shows various students centric teaching learning methodologies adopted in all the departments.
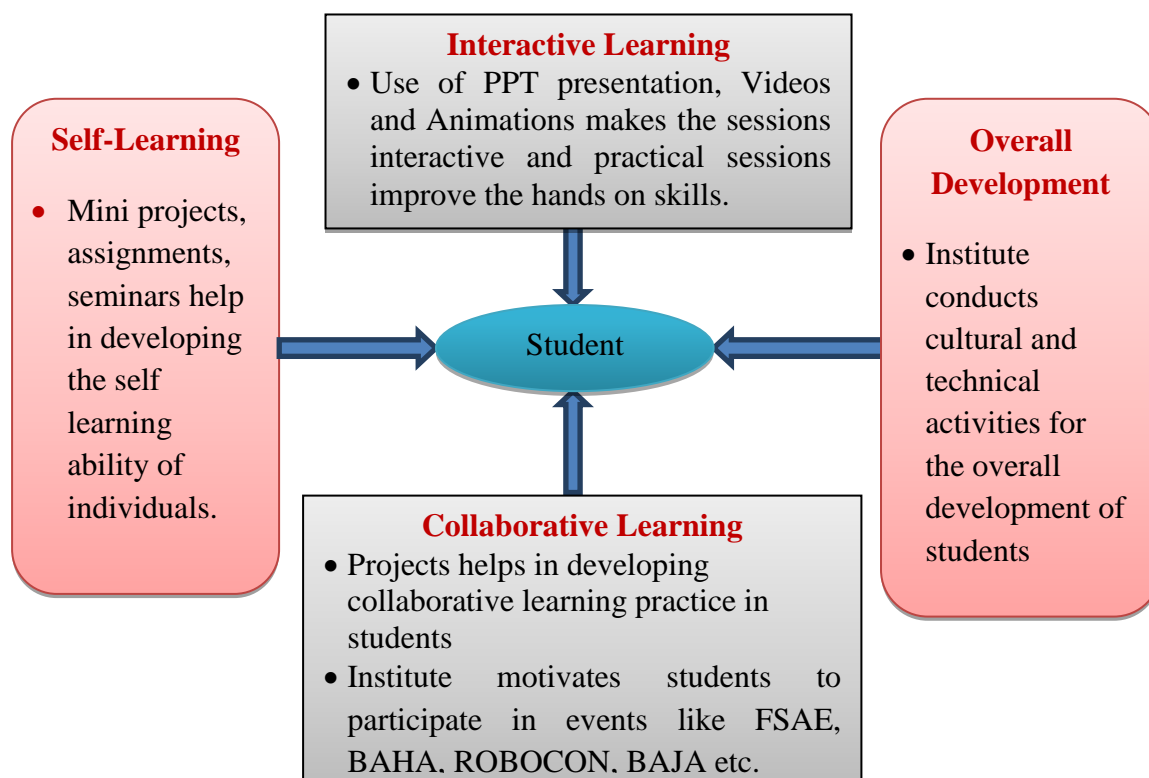
Figure 2.3.3: Students Centric Teaching Learning Methodologies

- Videos and animations for different technical concepts are made available to make more interactive lectures.
- Internship programmes in association with Expert hub are organized in every semester.
- By conducting tutorials the students will have better understanding of the course.
- Assignments on advanced topics in every course are given which make the students to acquire the self-learning capability.
- Occasionally online quiz, group discussions and seminars are conducted for advanced topics in various courses.
- Easy access is made available for students to some of key books providing them in departmental library.
- Institute motivates students to participate in events like FSAE, BAHA, ROBOCON, BAJA etc.
- In addition for overall development of students, institute also conducts cultural and technical activities.

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?

- Institute encourage students to participate in events viz. BAHA / SUPRA/ FSAE/ ROBOCON where innovative modeling and ideas are promoted.
- Institute organizes a national level technical event which encourages students to develop CAR models for racing, robot models for different tasks, software development, circuit development etc.
- Institute also encourages and guides students to participate in conferences like IPGCON, CPGCON and EPGCON.
- Institute invites eminent personalities from industries to share their success stories with students.
- Students are involved in industry sponsored projects and research projects which help to make them lifelong learners and innovators.
- Departmental visits of alumni and industry people during industry institute interaction also helps the students in deciding their domain area and possible carrier opportunities at early stage of their student life. This also helps the students in preparing themselves for the new corporate era.
- Students are encouraged to participate in paper presentation competitions which help in developing the independent learning ability.
- Students are motivated to participate in competition like ROBOCON to make the students comfortable on interdisciplinary platform.

2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? Eg: 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.

- Faculty members uses visual library, MATLAB, SCILAB, PRO-E, CREO, NS2, NS3, Latex, Eclipse, Visual studio, MPLAB, Proteus, DIP trace, Grammarly and other platforms to make the subject easy to understand.

- Institute provides e –book, e-tutorial and application notes by industry such as Intel, HP and Microsoft etc. to the students. K-point technology used in the institute helps the students and faculties to take the lesson online.
- Institute made available free e-Journals of AICTE and online journals to faculty members.
- Institute insists the faculties to take membership of professional societies.
- E-journals, Science Direct (website operated by the Anglo-Dutch publisher Elsevier), facility is available in digital library.
- NPTEL lectures are made available.
- Class rooms of each department are equipped with LCD and OHP.
- Each department is provided with sufficient number of computers and laptops.
- Every department is equipped with necessary advanced software to cope up with new technologies.
- Institute has seminar hall with LCD, Plasma TV and multimedia facility to conduct Guest lectures, Workshops and Seminars.
- The entire campus is Wi-Fi enabled.
- The Google group for every division is formed and faculty uploads assignments, materials related to different topics.

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

Students and faculties are exposed to advanced level of knowledge and skills by various means as shown in **Figure 2.3.6.** Workshops and Seminars on advanced topics, Alumni interaction, Industry Interactions, Technical paper and poster presentations at conferences, research interactions and project design & implementations etc. are the sources of development of advanced level of knowledge and skills for the students.
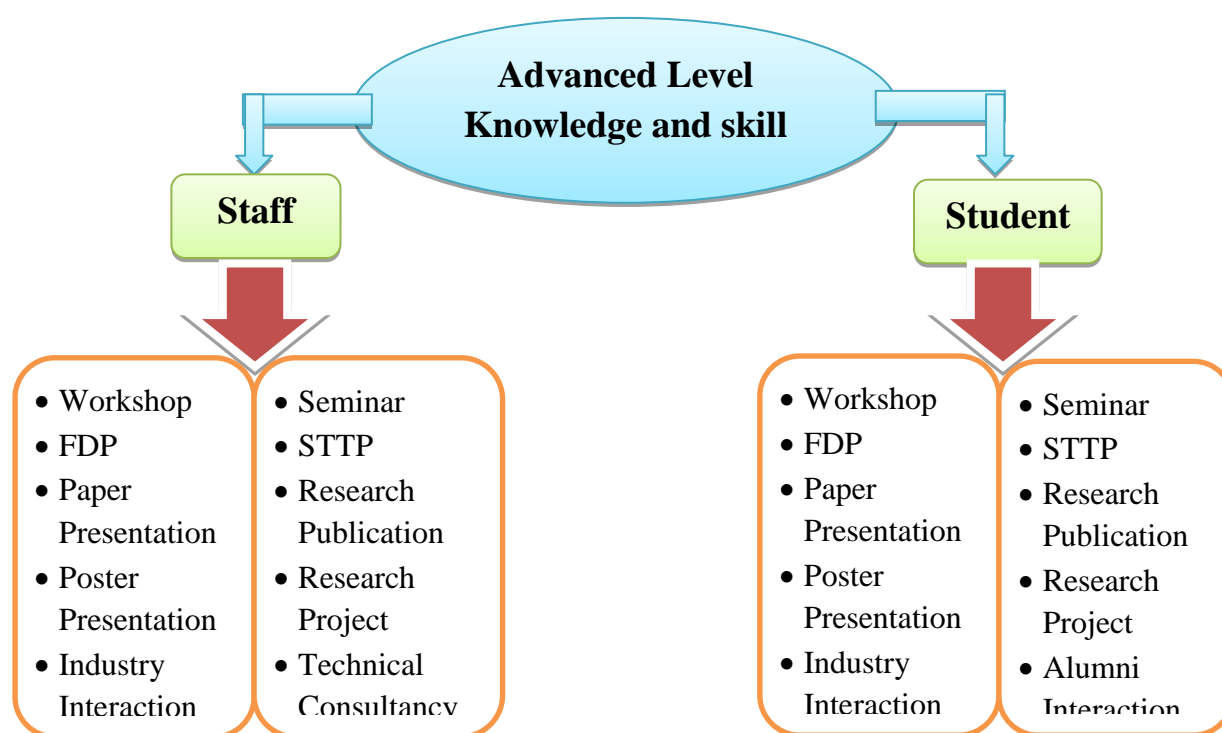
Figure 2.3.6: Advanced Level of Knowledge and Skills by Faculty and Students

Students
- Institute has signed MOU with various industries and organizations to give exposure to student for updating developments in the technologies.
- Students are encouraged to join Industry internship in vacation.
- Institute invites eminent persons from industries to deliver lectures on the latest technology.

Faculties
- Faculty members are encouraged to attend FDP, QIP, TEQIP Seminars, Workshops and Conferences organized by AICTE, ISTE, MHRD, Industry and Universities.
- Institute has student Chapters of professional bodies like SAE, IET and CSI
- The institute has conducted different workshops to get exposure to faculty.

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 advise) provided to students?

- TGs are appointed for academic and personal guidance of the students. The record of the same is maintained by the teacher guardian throughout the semester.
- HoDs also interact with the students and counsel them time to time.
- The Training and Placement department do professional counseling of students.
- The Institute has developed student training programme for imparting soft skills and placement skills to the students.
- NSS activity also gives social awareness amongst students. It also gives training for psychosocial support.
- Prayas a social forum is formed by the institute to give the socio ethical awareness among the student.
- TG, HOD and Principal are taking care of students who are seeking psychologically on case to case basis. In extreme cases, the parents are informed to take further action.
- Residential wardens are continuously monitor behavior of students staying in the hostel and report to the principal about abnormal case if any immediately.

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 faulty to adopt new and innovative approaches and the impact of such innovative practices on student learning? Faculty use models, graphs, PPT presentation, Videos, animations and transparencies to present the content in the syllabus.

- Institute has made available every class room with LCD, OHP, Wi-Fi and LAN connection.
- The Institute encourages the faculty to use proactive teaching methodologies such as quiz, brain storming sessions, group discussion and NPTEL lecture videos for making the session effective.
- Audio recordings of subject experts of our Institute are made available through K-Point.
- Faculty prepares question bank for the students.

- Institute deputes the faculty for teaching learning programmes like TTT, WIPRO Mission 10x, Infosys Academic leadership, faculty enablement programme etc.
- Faculty members conduct different discussions regarding case studies from Harvard Business Review (HBR) and Indian Institute of Management (IIM) as well as simulations.
- Teachers assigned for STP are also trained by experts from industries to deliver best practices and contents to the students.
- Faculty members are deputed for participating in the FDP, Work-shops and Industrial trainings to update their skills on recent technologies.
- Institute provides subscriptions for various National and International Journals.

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

- Textbooks, reference books as per syllabus and other good references are available in library which helps the students and faculties to get more insight in subject learning.
- E-learning facility is made available with separate digital library section.
- All major National and International transactions are available in library which can be referred by UG, PG students and faculty members.
- All previous exam question papers and various tutorials, notes and presentations are available to students and staff.
- To update themselves with the current news and latest technological developments, students and staff avail the facilities of newspapers and magazines in the library.
- Question paper sets of all subjects of previous university examinations are available in the central library.
- Old project reports of students are maintained in departmental library which are referred regularly by students of the department.
- Reading rooms are provided with proper seating arrangement, fans, tubes and ventilation, water facilities.

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 few challenges in completing the curriculum within the planned time frame and calendar. These are as follows:

Challenges before Institution
- Teaching plan prepared by individual faculty with common perception may not confirm with actual students intellect ability or subject prerequisites.
- University presume uniform time slot for all subjects which may not confirm with subject difficulty level from student point of view. This may vary time for same subject.
- State government admission process of the different engineering programmes.
- Delay in result declaration by apex body i.e University.
- 14 weeks term sanctioned by university do not account to holidays such as Sunday and other Festival days which put extra burden for syllabus completion.
- University online exam pattern of SPPU put burden to teachers to complete two

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units in one month.
- Delay in the admission process of direct second year diploma students causes fast completion of the syllabus.

Efforts to overcome above mentioned challenges
- Faculty members are given adequate flexibility to adopt required changes with permission of authorities which will be based on students review.
- Extra sessions are arranged for subjects which are difficult from student point of view to make them better understand with an additional working days (Some of Saturdays and Sundays)
- To compensate delay in admission process, some additional working days are planned during semester and even after end of the semester.
- Faculty uses the previous result analysis to analyze student's capacity for teaching current subject.
- Special effort and time table are planned for direct second year diploma students.

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

Monitor
- Two level monitoring, evaluation and feedback is carried out to maintain the quality of teaching and performance of the students. HoD shall give feedback on the progress of the classes/laboratory by faculty to the Head of the Institution every week. All the faculty members are monitored fortnightly by the HoD to ensure the course progress.
- Batch wise discussions are made with students by TG and difficulties in the learning are understood. Accordingly, corrective steps are taken in teaching eg. slow teaching for difficult portion or more numerical for analytical portion.
- The Institute takes online feedback in each semester from students pertaining to each faculty.
- The 11 parameters of feedback given by the students are as shown in **Table 2.3.11**

Table 2.3.11: Parameters of Students' Feedback

S. N.	Criteria	Problem? (Yes/ No)
1.	Less Explanation	
2.	Doubt not cleared	
3.	Wrong Pronunciation	
4.	Lack of Interaction	
5.	Lack of Communication	
6.	Poor Preparation	
7.	Poor English	
8.	Fast speaking	
9.	Fast Syllabus Coverage	
10.	Improper Board Writing	
11.	Low Voice	

Evaluate

- Institute conducts month wise unit tests to evaluate teaching learning from student point of view.
- Remedial lectures are arranged to identify slow learners.
- Students observed with poor attendance are referred for counseling and informed about the same to their parents. Thus collective efforts are taken by faculty and parents to make students to attend classes on regular basis.
- Institute arranges interactive sessions of faculty and students with industry experts to bridge the gap of curriculum of current industry scenario.
- Principal and HOD's observe some of lectures and practical sessions and give necessary instructions if required.
- To evaluate all above efforts end semester feedback from students are taken and assessed with above points.

Following structure depicted in Figure 2.3.11 defined at institute level add new impetus to increase quality of teaching learning.
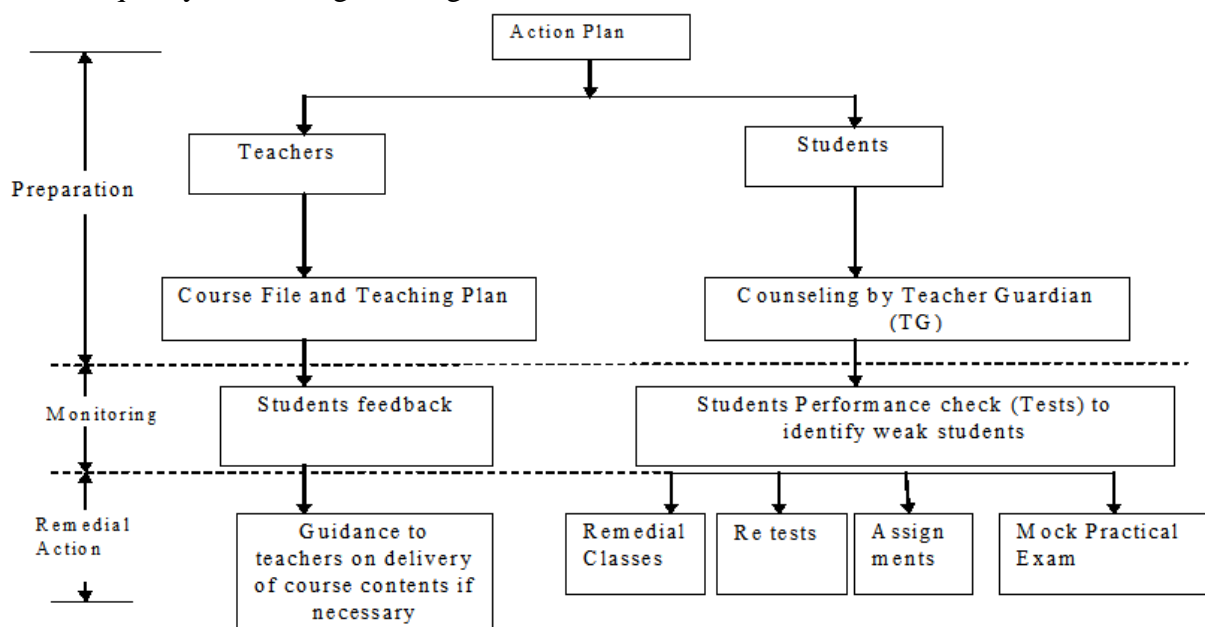
Figure 2.3.11: Action Plan

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

Recruitment strategies

- The roster is verified by the Assistant Commissioner, Reservation Cell, Pune and Mantralaya Maharashtra State.
- Institute follows AICTE and University norms for recruitment at all faculty position (e.g. Professor, Associate Professor, Assistant Professor etc.)

- Advertisement is published in national, state and local news paper as well as made available on institute website.
- Before final interview with selection committee, demo lectures are conducted for all positions.
- In case of emergency, faculty recruitment is made through Local Selection Committee.

Retention strategies
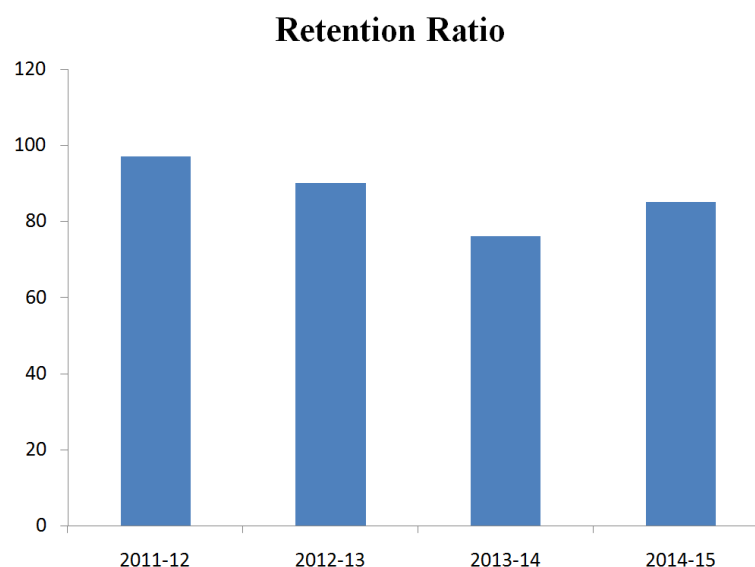
Retention Ratio

Figure 2.4.1(a): Retention Ratio

Figure 2.4.1(a) gives details of retention ratio of staff for last four years.
- Payment / Salary are paid as per AICTE norms.
- Institute deputes faculty members with sponsorship for higher studies in India and abroad.
- Institute encourages faculty members to attend QIP, Conferences/ Workshop /Seminar /FDP at national and international level.
- 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.

Details of faculties pursuing and completed higher education is depicted in Figure 2.4.1(b).

Faculties Pursuing and completed higher education
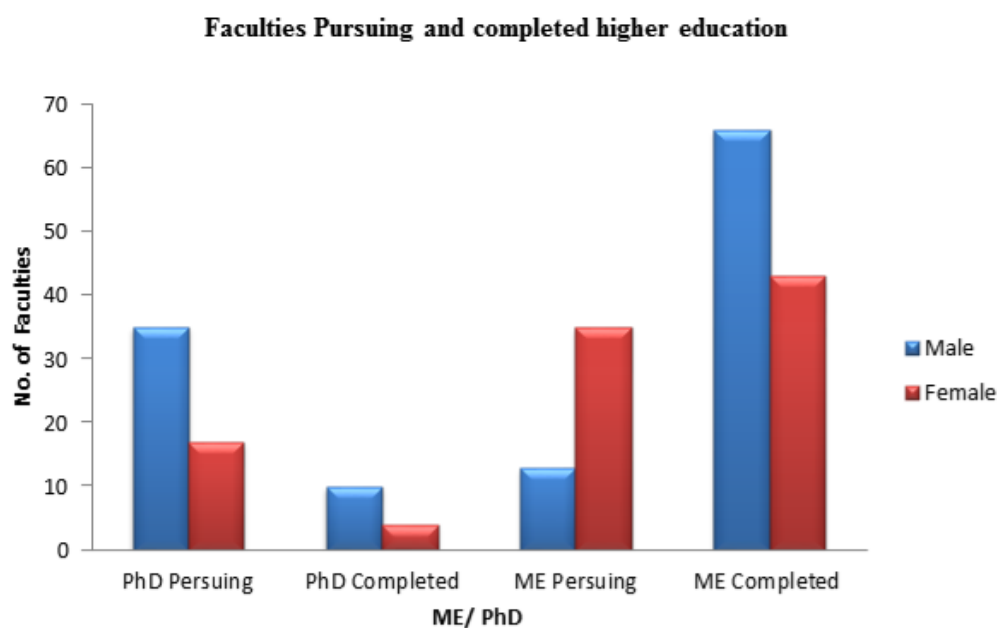
Figure 2.4.1(b): Faculties Pursuing and Completed Higher Education

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 to cope up with growing demand in specialized area, senior / expert faculties are recruited through proper recruitment process.

- The Institute has appointed highly qualified faculty to handle new and emerging subjects as proposed in the curriculum of SPPU.
- Encourage faculty to do research in new emerging areas and percolate the same among the students.
- For best performing faculties, additional promotions are given by institute.
- To attract senior faculties, handsome salary packages are provided by institutes.
- Free medical and dental facilities are made available by institute for all faculties.
- Freedom and transparency in system encourages staff.
- Staff quarters are available for the staff members in the campus.
- Institute has a policy towards inviting senior professors / industry experts as visiting faculty to teach new programmes and modern subjects whenever required.
- Overall number of faculty and their qualification has been improved in last three years.
- As a result of the efforts made by the institute, the results are improved drastically.
- The placement of AY 2014-15 has been improved by various efforts taken by department, Central Placement cell and institute compared to last two years.

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 to staff development programmes

Table 2.4.3 provides the details of staff nominations to various staff development program.

Table 2.4.3: Details of Staff Development Programmes

Academic Staff Development Programmes	Number of faculty nominated
Refresher courses	114
HRD programmes	68
Orientation programmes	89
Staff Training Conducted by college	67
Staff training conducted by the university	69
Staff training conducted by other institutions	74
Summer/ winter schools, workshops, etc.	248

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

1. Teaching learning methods/approaches
2. Handling new curriculum
3. Content/knowledge management
4. Selection, development and use of enrichment materials
5. Assessment
6. Cross cutting issues
7. Audio Visual Aids/multimedia
8. Open Education Resources (OER's)
9. Teaching learning material development, selection and use
10. TTT

Teaching learning methods / approaches
- Orientation programmes for FE/SE students are arranged at the beginning of semester.
- TTT is devised by organization especially for new / fresher faculty
- Faculties are trained for e – learning tools/ techniques.

Handling new curriculum
- Faculties are deputed to attend syllabus implementation workshop conducted by university.
- E-learning material viz. NPTEL lecture series, books animation, video, journal proceeding etc are referred.

Content / knowledge management
- Contents are delivered effectively through demonstration and experimentation.
- For sharing knowledge and content, modern aid such as LCD projector are utilized.

Selection development and use of enrichment material
- MOU's are signed with institutions like IIT , industries and abroad universities
- Institute invites experts from other organization to impart knowledge about new developments.

Assessment
- Practical hands on session are conducted for students and feedback is taken at the end of session.

- Institute gets benefited through self appraisal for staff development and students get improvement in learning feedback systems.

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 teaching-learning process.
- Audio visual Aids/ multimedia
- Faculties are trained for different e- learning tools through audio-visual aids and multimedia in class room.

Teaching learning material development, selection and use

- Faculties are updated with new teaching aids which made them possible to collect information from various resources.

Details regarding various workshops organized by the institute is given in Figure 2.4.3 (a).

Workshops Organized

Figure 2.4.3 (a): Workshops Orgnised by Institute

c) Percentage of faculty invited as resource persons in Workshops/ Seminars/ Conferences organized by external professional agencies.

Invited as Resource person
Figure 2.4.3 (b) gives graph of Invited as resource person by all departments.
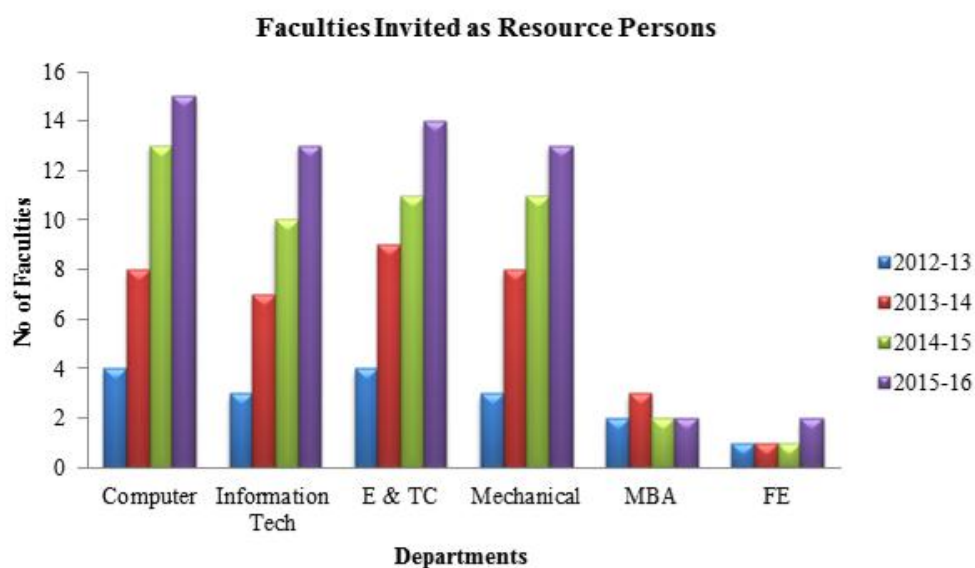
Figure 2.4.3 (b): Invited Resource Person by All Departments

Faculty participation in External Events

Figure 2.4.3 (c) gives graph of Faculty participation in external events.
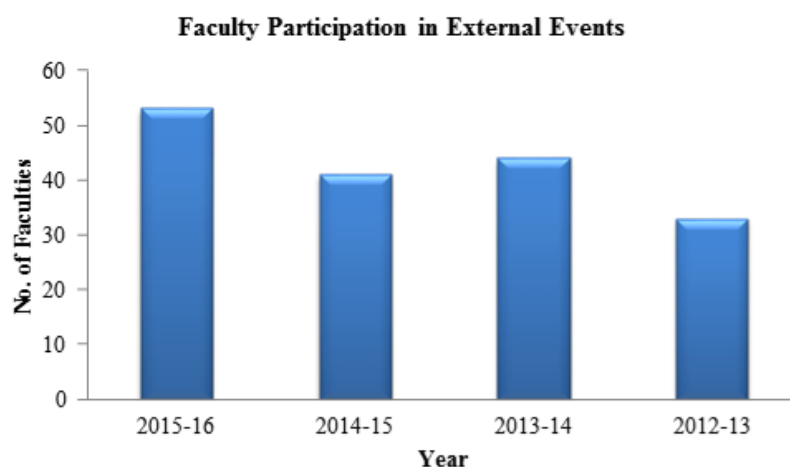
Figure 2.4.3 (c): Faculty Participation in External Events

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 specialized programmes industrial engagement etc.)

Provision of research grants
- Institute encourages faculty members to avail research grants from university / organization / departments.
- Institute supports the research activity by providing various facilities like equipment, software, e-resources for research publications, library books etc.

Study leave and research support
- Institute deputes faculty members for FDP / Workshop / QIP / Conferences / Seminar with on-duty leave.
- The institute has policy to give study leave to faculty and send them on deputation for PhD course work.
- Sinhgad Institutes has tie-up with Alborg University, Denmark, where selected faculty members gets an opportunity to complete their PhD with full sponsorship.
- The institute always put efforts to inculcate the research attitude in department by faculty as well as students. In this direction, STP-IV has been specially designed for research methodology inputs to students, wherein every student is supposed to write a research survey paper and submit it at the end of semester VI.

Academic Publications
- The financial support for attending national/international conferences, conducted at various places is provided by the institute.
- The interactive sessions on research methodology, technical report writing, and various research areas are arranged wherein the faculty members can take inputs from renowned personalities from research organizations such as IIT, DRDO, ARAI etc.

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.

The institute always supports for the development faculty and creates a research culture amongst the faculty. The efforts taken by faculty always recognizes by the Institute management. Institute provides supports in term of duty leaves for attending conferences, workshops, seminars etc. The following staff members have received awards in last four years.
- Dr. A.P. Pandhare has received a Guru Dronacharya Award for guiding the Winner team of BAHA competition of our Institute.
- Dr. P. N. Mahalle has received a best teacher award.
- Prof. G. A. Jagdale has received a best research paper presentation award in International Conference on Inter-science Research Network India.
- Dr S. K. Shah has received "Nawab Jain Yarjung Bahaddur Memorial Prize" of Institute of Engineers Pune

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 institution introduced evaluation of teachers by the students and external Peers. This is monitored by AMC and required guidelines are given to the HoD and improving the teaching learning process.
- Students are provided individually online access for giving feedback of faculty members / institute.
- AMC review the entire feedback every semester and gives necessary suggestion for improvement.

- The teaching load (Theory & Practical) should be assigned to faculty members for the next semester at the end of current semester so that they will get sufficient time for the preparation of the subject.
- The theory subject and its practical both should be assigned to same faculty member so that there will be correlation between theory and practical.
- The theory subject should be assigned to the faculty members based on previous student's feedback, subject choice given by faculty.
- The senior faculty members whose student's feedback is good should be assigned to first and second year engineering classes.
- Subject should not be changed for at least three years if feedback is good.
- The self-appraisal forms are also filled by respective faculty in the month of June and are verified by the HoD with their remarks on various performance parameters. The AMC also gives specific remarks to individual faculty for the improvement of teaching learning process.

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?

- At the commencement of the term students are notified about the criteria for evaluation of SPPU, Credit system, Grades, Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA).
- Induction programmes are conducted for First Year students as well as parents and for second year students where they are made aware about university and institute evaluation procedure.
- Institute also declares criteria for distribution and evaluation of term work marks which includes attendance, timely submission and performance in unit test and prelim exams.
- Unit Test /Continuous Internal Assessment (CIA) dates and End Semester examination (ESE) starting dates are provided in the calendar of academic activities.
- The students are informed of the same through TG /Faculty advisor Meetings, Class Committee Meetings and distributing the circular in the class rooms and displaying the same in the Notice Boards.
- The complete evaluation procedure in the form of regulations of various programmes are printed in the academic calendar and distributed to all the students.
- The ESE results once declared are also displayed.
- Any Change/amendments made in the regulations are conveyed to the students by the Class Teacher/Class Advisors and Tutors in the Class.
- The evaluation processes are also explained to the parents during the First year Orientation.
- The information regarding evaluation process is also informed to different industries through placement cell.

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?

University Level

The institute follows all the evaluation reforms prescribed by the SPPU. Following are the major evaluation reforms introduced by the University-

- **Appointment of single point of contact**- The Institute has appointed a senior and experienced faculty member as Chief Examination Officer (CEO) as per the directives of university. The Examination Committee is a structured with the Principal as the Chairman assisted by CEO who is the member Secretary.
- **SPPU Examination Pattern** – The examination structure of SPPU is given in table 2.5.2. In SPPU evaluation pattern contains in-semester examination and end semester examination per semester.

Table 2.5.2: SPPU Evaluation Pattern

Year	Exam by SPPU		Marks	Exam by SPPU	Marks
FE	Phase I [25M]	Phase II [25M]	50	End semester	50
SE	Phase I [25M]	Phase II [25M]	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
MBA	On-line [20M]	Internal [30M]	50	End semester	50

- **Computerization**- Online examination for evaluation of first and second year engineering students. The Institute conducts online examinations during every semester.
- **Appointment of Internal Examiners**- Institute appoints internal examiners for the practical/oral examinations as per the guidelines of the SPPU online examination.
- **Credit system**- As per the SPPU guidelines credit system has been introduced for the UG and PG Programmes.

Institute Level

- Institute also organizes supporting competition for students to develop their intellect.
- Faculty members are advised to set the Continuous Internal Assesment (CIA) Test
- Supplementary examinations are conducted immediately after the announcement of results.
- CEO has been appointed on behalf of university to conduct all examinations smoothly.
- Institute conducts mock online examinations, tutorials, mid-semester examination and mock practical/oral examinations. Institute also conducts project competitions, AMCAT, ET, QALR, quizzes and soft skill development competitions for the students.

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

- The Institute has exam coordinators from each department for smooth conduction of the examination.
- The examination committee meets periodically to discuss all the examination related matters.
- At Institute level, effective implementation of tutorial and mid-semester test takes place and results are declared within three to four days. The students can see their evaluated answer sheets and discuss the same with concerned faculty.

- Continuous assessment of lab work, project and seminars are done by the faculty.
- Final year term work is jointly evaluated by internal and external examiners.
- For smooth conduction of University theory examination, an internal squad comprising of senior faculty members is appointed.
- CCTV cameras are used for monitoring the online examinations.

Institute
- CEO is appointed at institute level to conduct all examination according to university instructions.
- Examination coordinators are appointed for each department of institute for proper conduction of internal and external examination. The results of all internal examination are displayed within two days of examination.
- All measures taken at university and institute level as suggested in section 2.5.2 are also contributing to ensure effective implementation of evaluation.
- CEO, HoD and examination coordinator of departments make sure the completion of term work, conduction of mock practical and theory examinations, Submission of term work marks based on continuous evaluation scheme, Assessment of in semester examination answer sheets, conduction of online and theory examinations.
- Student can verify their performance and faculty also make use of this analysis for student's evaluation.

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

Formative evaluation process
Following parameters are used for formative evaluation:
- Attendance to theory and practical sessions throughout the semester
- Class room interaction
- Unit test performance
- Assignments
- Mock on-line and practical/oral examinations
- Co-curricular activities viz. workshops / seminars /mini and major projects etc.
- Industrial visits
- VAP , STP
- Social Activities

Summative evaluation process
Following parameters are used for Summative evaluation:
- Theory / online examination
- Oral / practical examination
- Project examination
- AMCAT examination

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

Weightages for assessment are as shown in table for sample out of 50 marks.

- Assessed papers of internal examination at institute level are given to students for their own evaluation.
- Students are given an opportunity to clarify their doubts after evaluation with subject teacher.
- Evaluation criteria for the term work marks are based on continuous assessment, timely submission and attendance are discussed with students in induction programmes.

Transparency

- Institute has set the parameters for formative and summative evaluation process and it is notified to the students at the beginning of semester. The bifurcation of 50 marks in **Figure 2.5.5** is communicated to the students in the beginning of semester.
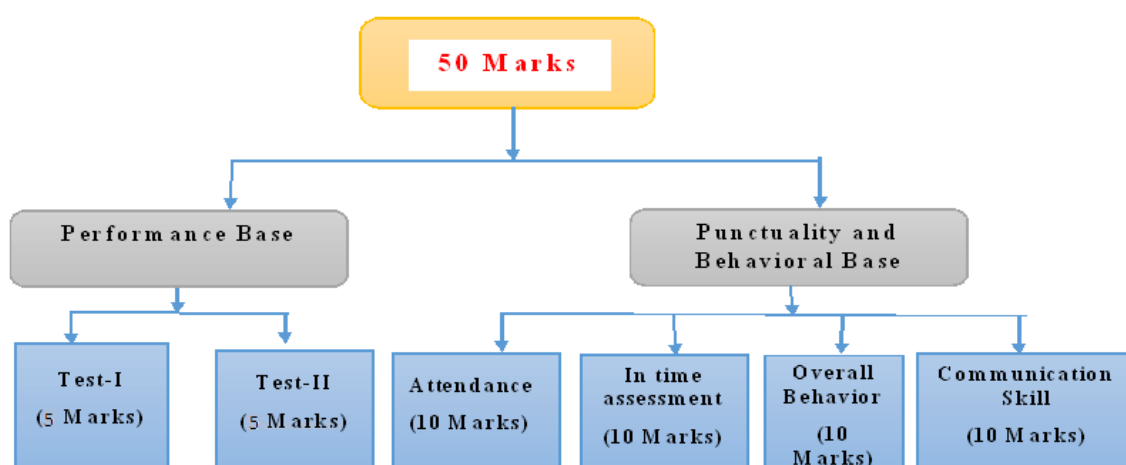
Figure 2.5.5 Weightage for Assessment

- Students are given an opportunity to clarify their doubts after evaluation with subject teacher.
- The attendance record of each student is maintained and due weightage is given for attendance in theory class and practical sessions, performance in tests/tutorials and timely submissions.
- In semester exam answer papers are masked before its evaluation by respective faculty.
- Online exams use random question generation method. Therefore every student gets different questions with equal difficulty level which avoids any malfunctioning.

Behavioral aspects

- The weightage is given for the overall behaviors of students as indicated in Figure 2.5.5 which is also responsible for term work marks of students.
- The efforts are taken on different level viz. TG, Class teacher, HoD and Principal for improving the behavior of students which is responsible for their overall development.
- The overall development of students gets reflected not only in academic performance and mark sheets, but also reflects in developed 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 scheme of curriculum.
- TG also keeps the eye on independent involvement of the students who can recommend suitable marks and transparently give to HoD for further consideration.

Communication skills
- SPPU has also marked suitable weightage of marks in the curricula implementation by the student in the semester. Students are evaluated during seminar and presentation of their projects as well as practical/oral exams, while explain concepts of respective subjects.

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

The university has specified following graduates 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 analyze a problem, to conduct experiment, interpret and analyze the results with logical reasoning.
  Design / Development of Solutions: to design and conduct experiments, model and analyze physical system, components or process to meet desired needs.
  Conduct 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 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 project.
  Life-long Learning: to recognize the need for and an ability to engage in life-long learning

- After graduations their employability in private and government sector.

Measures taken at institute level to attain graduate attributes

- For academic excellence college ensures continuous monitoring of students progress. The slow learner and advance learner are identified and corrective / supportive steps are taken accordingly.
- Students are encouraged to share benefit to their technical expertise to society through various activities conducted by form viz prayas, Dhyas at institute level.
- Different career oriented programmes such as STP, VAP, AMCAT, QLAR, etc are organized by CPC and SSC at institute level to improve the employability in various private and government sectors.
- The mock GDPI 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

2.5.7 What are the mechanisms for readdressed of grievances with reference to evaluation both at the college and University level?

- **Level 1 - Departmental Level**: The continuous evaluation of students is carried out by faculty in terms of theory lectures, labs, assignments etc. The term work is allotted based on defined strategies and displayed on notice board. Query if any is discussed with faculty and HoD.
- **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 University. If students are facing any problems, they are solved by Senior Supervisor in coordination with CEO appointed by the University. 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. Figure 2.5.7 shows Grievances Handling with reference to Evaluation.

Level –I : Departmental Level
Grievances related with continuous evaluation of students carried out by faculty and department and term work marks given to the students transparently

Level –II : College Level
Grievances during the conduction of Online/Theory examinations are solved by Senior Supervisor in coordination with CEO and principal

Level –III : University Level
Grievances related with unfair means, results, mistakes in mark sheets etc. are handled by university examination section after forwarding such quires through the college examination section

Figure 2.5.7: Grievances Handling with Reference to Evaluation

- **Level 3 – University Level**: Examination online form filling, exam seats allotments, results, photocopy, revaluations etc. are coordinated by office superintendent to University. The result queries, printing mistakes of mark sheets, corrections if any are handled at University 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 with 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
- Institute has clearly defined learning outcomes on academic documents given to faculty, students and parents.
- Learning outcomes are notified and made available on website.

The PEOs of our programmes are as follows: to prepare graduates
- To prepare graduates who will be successful demonstrate technical competency by applying knowledge in industry, government, academia, research, entrepreneurial pursuit and consulting firms
- To prepare graduates who will contribute to society as broadly educated, expressive, ethical and responsible citizens with proven expertise
- To prepare graduates who will achieve peer-recognition; as an individual or in a team; through demonstration of good analytical, design and implementation skills
- To prepare graduates who will flourish to pursue life-long learning to fulfill their goals

Engineering programmes are to prepare graduates to attain the following POs
- An ability to apply knowledge of mathematics, science and engineering in practice
- An ability to identify, critically analyze, formulate and solve engineering problems
- An ability to select appropriate engineering tools and techniques and use them with skill
- An ability to design a system and process to meet desired needs within realistic constraints such as health, safety, security and manufacturability
- An ability to devise and conduct experiments, interpret data and provide well knowledgeable conclusions
- An ability to understand the impact of engineering solutions within purview of laws, in a contemporary, global, economical, environmental, and societal context for sustainable development
- An ability to function professionally with ethical response ability as an individual as well as in multidisciplinary teams with positive attitude
- An ability to communicate effectively

- An ability to appreciate the importance of goal setting and to recognize the need for life-long learning
- To produce well informed socially responsible global citizen with sharp critical thinking skills having sound awareness about engineering laws and human rights, ethics and values.
- The students and faculty are aware of PEOs, POs and COs as they are given along with their curriculum syllabus in every class.
- The outcomes are reviewed in the meetings of AMC at the beginning of every academic year.
- The faculty explains the outcomes expected from the students in the orientation classes / beginning lecture at every semester.
- The outcomes expected from the students for the programme are displayed at prominent places in the department.

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.

- Result analysis is made available at department level for parents and students.

Result Analysis of all branches

Table 2.6.2 (a), (b), and (c) gives details of SE, TE, and BE result analysis respectively and their respective branch wise result analysis graphs are shown in figures 2.6.2 (a), (b), and (c).

Table 2.6.2(a): SE Result Analysis

Departments	SE Passing Percentage			
	AY11-12	AY12-13	AY13-14	AY14-15
Mechanical	62.4	63.88	76.4	81.9
Computer	50	46.49	80.6	84.09
E&TC	53.69	65.67	82.2	74.18
IT	62.2	65.67	78.4	77.37
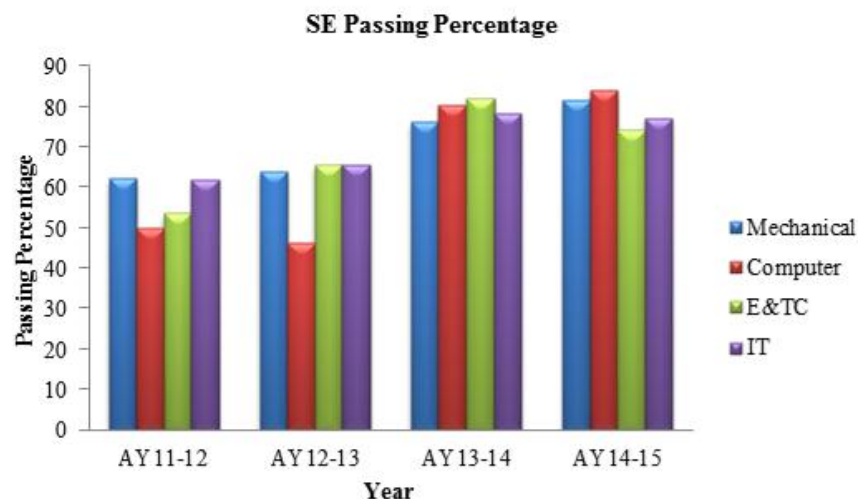
Figure 2.6.2 (a): SE Branch wise Passing All Clear Percentage
Table 2.6.2 (b): TE Result Analysis

Department	TE Passing Percentage			
	AY11-12	**AY12-13**	**AY13-14**	**AY14-15**
Mechanical	64.8	64.02	66.33	77.45
Comp	62.76	75.33	83.56	82.51
E&TC	62.31	77.47	71.8	80.42
IT	80.16	81.39	60.3	86
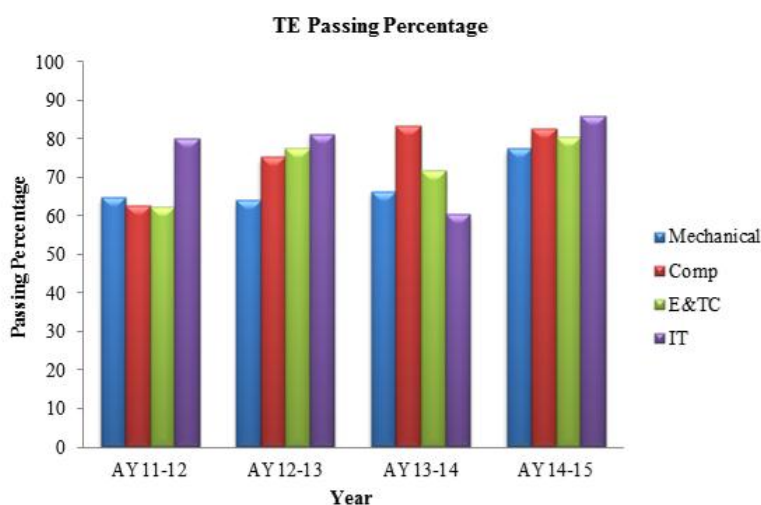
Figure 2.6.2 (b): TE Branch wise Passing All Clear Percentage

Table 2.6.2 (c): BE Result Analysis

BE Passing Percentage				
Department	AY11-12	AY12-13	AY13-14	AY14-15
Mechanical	80.88	82.95	93.43	98.05
Comp	94.28	97.81	95.58	98.18
E&TC	94.4	99.28	97.86	96.91
IT	99.2	99.21	99.2	100
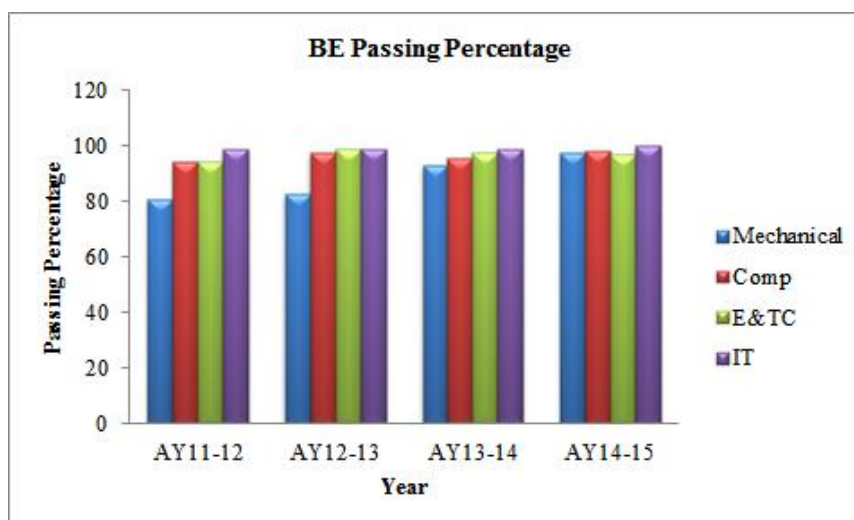
Figure 2.6.2 (c): BE Branch wise Passing All Clear Percentage

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
- Institute level academic calendar is prepared by institute head and provided to all departments.
- All faculty members prepares course file as per contents of curriculum and other study material. (viz PPT, Video, etc)
- New / junior faculty members are trained for subject under TTT (Train the Trainer) programmer at institute level.
- Faculty members are encouraged to attained QIP/ STTP programme to update technical knowhow.

Learning Strategies
- Faculty members are encouraged to use audio / video aids to make more insight in subject and easy learning for student.
- Students are provided with study material viz subject notes, question bank, PPT, etc.
- Industrial visits are arranged to develop practical approach of learning.
- Skill development sessions are arranged which gives hands on experience to practical problems.
- Remedial lectures are arranged for slow learners.

Assessment strategies
- In TG meet faculty member interact with student to take feedback about learning problems, if any.
- Students are made aware about all points considered in an individual assessment in semester.
- Unit wise / month wise tests are arranged to check understanding of subject and evaluation of student.
- Preliminary examination is conducted before final university examination.
- Month wise progress of all students is informed to their parents.
- Mock oral / practicals are conducted to assess them before final examination.

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?

Students Placement
- Training and Placement department of institute organizes guest lecture of HR persons from pioneer organizations to get awareness of present market scenario.
- E-cell institute organizes the programmes on entrepreneurship.
- Under STP AMCAT, GDPI etc. are arranged for students to improve their co-curricular skill.

Entrepreneurship
- Institute has formed entrepreneurship cell to develop the awareness about self-employment.
- Workshop/ Seminar/ Conferences are arranged to develop co-curricular skill.

Innovation
- Various technical competitions viz. paper presentation/ workshops/ seminar/ project competition/ Quiz are conducted.
- Institute motivates students to participate in different competition such as SUPRA, FSAE, BAHA, ROBOCON, CONVENE, Techtonic and other technical events.

Research Aptitude development
- STP IV is designed by the Institute especially on Research methodology to incline the students approach towards research activities.
- Students are encouraged to attend research project competition organized by SPPU like AVISHKAR.
- Institute as membership of different professional bodies such as SAE, CSI etc.

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

Collect
- Data of external examination and internal examination is compiled.
- TG meets are scheduled in time table to interact with students to find the problem they are facing in academics.
- Self-feedback is also initiated after commencement of two weeks of teaching for self-evaluation and improvement of the faculty.
- The feedback from the alumni is taken during the Alumina meet.
- QALR, ET and AMCAT results are also analyzed
- Mock GD and PI are taken to understand students' ability in Communication skill
- Students' leadership skills are observed while executing students' activities

Analyze
- The student's performance is analyzed through result analysis of external and internal examination.
- The data available with TG is analyzed to identify slow learners
- Remedial lectures are arranged for slow learners.
- Feedback taken from the students are given to faculty for their self-improvement
- Overall feedback given by outgoing students and alumni every year used to identify strong and weaker areas of the department
- AMC is also formed to interact with the students once in the semester for quality improvement.

- Concerns and feedbacks during AMC visit are also discussed with the concerned faculties.

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

- Student attendance is monitored on regular basis by TG and informed to respective parents through phone call /SMS /letters.
- TG meets are scheduled with students on regular basis to share feedback about subject teaching.
- Result data analyzed through internal examination and previous university examination is referred to ensure achievement of learning outcome.
- Based on previous history, difficult subject from student point of view are identified and expert lectures are arranged.
- Slow learners are identified separately and extra efforts are made through remedial classes and practice sessions.
- Feedback obtained by alumni as well as industry experts are taken care with suitable changes in learning methods.
- History-Card is provided to every student during 1st year which collects academic data of all semesters to analyze the learning outcomes

Monitor & Ensure Achievement of Learning Outcomes is depicted in Figure 2.6.6.
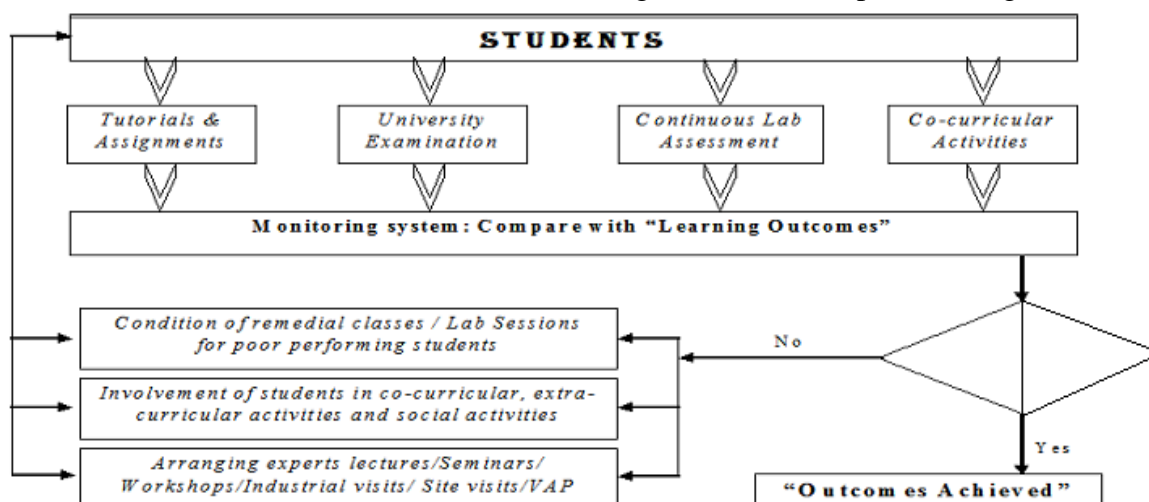
Figure 2.6.6: Monitor & Ensure Achievement of Learning Outcomes

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. Any other relevant information regarding Teaching-Learning and Evaluation which the college would like to include.

Yes, Institution and individual teachers use following guide lines for learning objectives and planning for evaluating student performance.

- Effective course file is prepared by adding content in line with learning objectives.
- Students are questioned personally in class to take verbal feedback.
- Mock test written/online helps in deciding further necessary course of action.
- Interview, feedback from T&P department is considered to modify learning objectives.
- Students participate in different academic activities viz. tutorial, mini-projects, solution of numerical problems, quiz, seminar, oral etc. These activities help to assess proficiency of students in application of mathematical and engineering concepts, effective communication skills. This process helps in achievement of learning outcomes. Teaching and learning process monitoring is depicted in Figure 2.6.7.
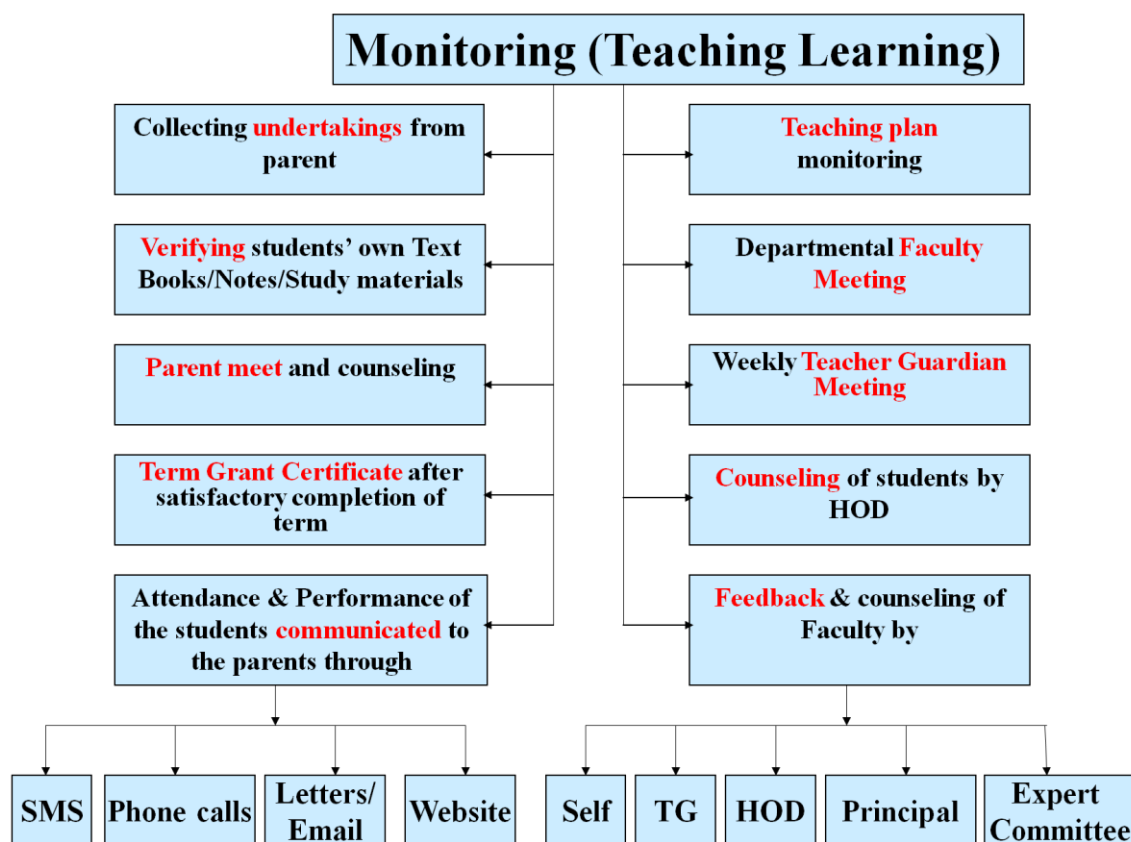
Figure 2.6.7: Teaching and Learning Process Monitoring

CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

3.1 PROMOTION OF RESEARCH

Institute has strong research promotion culture and policy for students and teachers and staff members. Policy promotes participation in all research activities, higher studies and internship program. Policy also comprises provision of resources and other facilities for the promotion of research. Institute also encourages and sponsors teachers for their postgraduate, doctoral and post-doctoral studies in India and abroad.

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

SKNCOE has recognized research center in Computer Engineering affiliated to SPPU since academic year 2012-13. Total 14 PhD scholars are pursuing their doctoral research and three of them are on the verge of completion.
Research center is equipped with state of the art facility in computing and provides essential research platform for carrying research in computer engineering. Refer Table 3.1.1 (a).

Table 3.1.1 (a): Research Center Information

Sr. No	Name of the department	Affiliating University	Year of Affiliation	Letter No. with date
1	Computer Department	SPPU	2012	CA/4126 Dated: 6/12/2012

Following are the recognized and affiliated guides; details are given in Table 3.1.1 (b):

Table 3.1.1 (b): Name of Guides

Sr. No	Name of the guide	Number of students registered
Department of computer Engineering		
1	Dr. A. V. Deshpande	4
2	Dr. S. A. Joshi	0
3	Dr. R. B. Ingle	1
4	Dr. S. J. Wagh	1
5	Dr. S. N. Mali	2
6	Dr. R. S. Prasad	6

Three PhD guides are available in the institution and three PhD guides from other affiliated institutes are also contributing to the research center of the institute.
Efforts for affiliating with other universities like Bharat University Chennai, Satyabhama University, and Chennai are in process, to start the research centre in various branches in 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.

Institute is having dedicated RDC. RDC has been established in 2012 to promote industrial liaison, consultancy assignments and research projects in association with industries. The composition of RDC includes Principal, Vice-Principal, all Heads of Department and senior researcher faculties.

Aims and Objectives of Research and Development Cell
- Mission of RDC is to offer comprehensive research environment where innovation is an integral part.
- Cross-disciplinary talent development and technical cooperation are high priorities.
- To build inspiring research environments at the Institute which includes complete methodological freedom in conducting research, the recognition of diversity as a value creator, and a focus on strengthening regional, national and international cooperation.
- To build cognition of knowledge, technology and innovation that address important societal problems; and effective dissemination of knowledge through cooperation with the community and wider society.
- To establish national and international collaborations with other universities, industries for research projects and consultancy services which can be undertaken by teachers and students of the institution.
- To ensure smooth conduction and effective implementation of research activities at the institute.

Role and Responsibilities of RDC committee
- Encourage, initiate and monitor research projects sponsored by various funding agencies like DST, DRDO, DAE, ISRO, CSIR, UGC, AICTE and SPPU.
- Writing proposals for workshops/conferences and seminars sponsored by QIP-SPPU, UGC and AICTE.
- Providing channels and opportunities for strengthening research activities for UG and PG students of the institute.
- To plan and organize training program for the students to educate on various aspects of research like why and how to do research, formulation of research problem, literature review and methodology.
- Inviting various industries, identifying scope for signing MOUs, setting up center of excellences.
- Promotion of industry institute interaction and establishing collaborative research association for undertaking various research projects in thrust areas.
- Implementation, follow-up and monitoring of all research activities and projects.

Recommendation and impacts
- Periodicals meetings of RDC are conducted and members of the RDC committee discuss about emerging research areas in various discipline.
- Potential and deserving staff members are identified and ask to initiate research proposals.
- RDC recommended forming research groups at every department and one mentor is assigned to each group.
- RDC also recommended updating the equipments and software required to build proof of concept to write the research proposals.

- Member of RDC evaluates the proposal written and as an outcome institute receives research funding from various funding agencies.
- In the sequel, there is conducive research environment being develop in the institute and it also helped in increasing the number of faculty undertaking research.

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

The measures taken by the institution to facilitate smooth progress and implementation of research schemes/ projects are as follows:

Autonomy to the principal investigator
- The principal investigator has complete autonomy to select research problem. He motivates the students in research projects.

Timely availability or release of resources
- The institute has made funds available for the research work and is released as per the demand of the faculty. Faculties have research collaborations with Aalborg University Denmark.

Adequate infrastructure and human resources
- Institute has well settled laboratories and facilities for carrying out research projects. Funds are provided under AICTE/BCUD research grants also.

Time-off, reduced teaching load, special leave etc. to teachers
- Department adjust the teaching load of faculty during research work and are also permitted to take study leaves. Even after college working hour's laboratory and library facilities are made available for faculty as well as students for research work.

Support in terms of technology and information needs
- Adequate internet band-width facility and Wi-Fi are provided. Various training programmes on research methodology are also arranged to motivate faculties and students.

Facilitate timely auditing and submission of utilization certificate to the funding authorities
- Institute research budget and grants are utilized by faculties and students for timely completion of projects. The timely auditing of research projects and submission of utilization certificate is carried with the help of account department of institute.

Any other
- Institute has MOU with Aalborg University Denmark where faculties are encouraged to complete their research work. Full sponsorship is provided to faculties to complete the research work.

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

- Institute runs a STP over 5 semesters of the undergraduate program. The aim of the STP is to help the students build a personality equipped with exquisite technical as well as non-technical skills that are globally at par.
- In the STP, research is one of the vital components.
- Institute also conduct workshop for the students which educate the students on the aspects of research like Why & How to Research, Formulation of Research Problem, Literature Review, Methods and Methodology & Technical Writing for Presentation of

Outcomes.
- These workshops act as an input to the students in their seminar and project work and bring a radical change in the students' mindset and help them to perform quality research at undergraduate level.
- Students also gain vast knowledge by hearing perspectives on "Why & How" of Research.
- Students are also encouraged to participate in various activities like BAHA, ROBOCON, SUPRA, FSAE through which the students are developing innovative projects.
- Encouraging and motivating students to participate in workshops, seminars, national and international conferences under the guidance of teacher.
- Faculty members are constantly encouraged and motivated to upgrade the knowledge and pursue higher education.
- The institute also provides internship to various European universities and 10 plus students have already completed their internship in Europe, DRDO, HP etc.

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.

Every department of the institute have specialized research areas and have state-of-art computing facilities available in the respective department. In addition to this, many faculties of the department are also guiding good number of research scholars. The proactive mechanism is also adapted by college to facilitate smooth implementation of research.
- Management and institute are very much positive and supportive to release the funds in advance for the sanctioned research projects.
- The seed money is also provided based on the request to initiate the research project.
- Flexibility and autonomy is provided to Principal Investigator and Co-principal Investigator for utilization of the research grants and overhead charges.
- Funds are jointly handled by PI and Co-PI with consultation with accountant of the college which reduces the delay in release of grants.
- Timely audit and file checking is carried out by central team of auditors and accountant of the college.
- Yearly audit is also conducted by funding agencies like SPPU for timely release of grants.

Department of computer engineering is running two PG programs in Computer Engineering and Computer Networks with the intake of 72. Department of Electronics and telecommunication is running two PG programs in signal processing and VLSI with the intake of 42 and IT Department is running one PG programme in Information Technology with the intake of 18. Fifty faculties are guiding PG projects and many of them are research projects which are witnessed from the publication track of the institute.

Different expertise in research for various departments is depicted in Table 3.1.5 (a).

Table 3.1.5 (a): Research Areas

Department	Research Area (Expertise)
Computer Engineering	Security in Internet of Things, Secure Network Storage, Information and Network Security, Neural Networks, Routing Protocol, Cloud Computing,

	Image Processing, Data Mining, Future Internet, Wireless sensor network.
Electronics and Telecommunication Engineering	Digital Image Processing, Communication, Signal Processing, VLSI Design, Embedded System, Microwave, Speech Processing, Video Processing.
Department of IT	Wireless Communication, Software Engineering and Project management, Software Quality Assurance , Cloud Computing, Image Processing, Network Security, Mobile Communication, Database Management and mining
Department of Mechanical Engineering	Suspension and vibration analysis, Alternative Fuels, Refrigeration and air conditioning, Design using composite materials, Thermo mechanical treatment of metals and alloys, Surface improvement techniques of materials, Advanced manufacturing techniques.
Department of Management studies	Channel Management , Consumer Behaviour, Digital Marketing ,Working Capital Management, Health and Safety, Credit Risk Analysis, Financial Statement Analysis

Faculties are also actively involved in research projects funded by sponsoring agencies like SPPU, AICTE and ICSSR.   Individual and collaborative research projects in various departments are presented in Table 3.1.5 (b).

Table 3.1.5 (b) : Individual/Collaborative Research Project

Sr. No	Title of Project	Sponsoring Agency	Name of Researcher	Collaborative / Individual
Department of computer Engineering				
1	HMM Based enhanced security system for ATM payment.	AICTE	Prof. V.V. Jog Prof.A. A. Deshmukh	Collaborative
2	Public key Cryptography Cross – Authentication in Kerberos	BCUD SPPU	Prof. S.K.Pathan Prof. N.A.Mhetre	Collaborative
3	IS-IS Routing Protocol – A better approach for routing mechanism	BCUD SPPU	Prof. A.A.Deshmukh Prof. S.P.Pingat	Collaborative
4	Idea generation Algorithm	BCUD SPPU	Prof. S.P.Pingat Prof.U.A.Joglekar	Collaborative
5	Future Architecture for security of IoT	BCUD SPPU	Dr. P.N.Mahalle Prof. P.N.Railkar	Collaborative
6	Lightweight group Authentication for IoT	BCUD SPPU	Prof. G.R.Shinde Dr. P.N.Mahalle	Collaborative
7	Performance & energy	BCUD	Prof. S.P.Pingat	Collaborative

	efficient routing protocol for WSN	SPPU	Prof. S.P.Dugam	
Department of Electronics and Telecommunication Engineering				
1	Implementation of structural Health monitoring system using WSN on FPGA	BCUD SPPU	Prof.P. G. Chilveri Prof. S. M. Borawake	Collaborative
2	Car security and automation using speaker and speech recognition	BCUD SPPU	Prof. R.G.Kulkarni Prof. R.P.Patil Prof. R.K.Kulkarni	Collaborative
3	Implementation of HDL communication controller using DALI protocol	BCUD SPPU	Dr. S.K.Shah Prof. P.S.Kokare	Collaborative
4	FPGA Implementation of AMBA AHB BUS for OF Image AND Video IP Cores	BCUD SPPU	Prof. R.P.Patil Prof. S.C.Sawant	Collaborative
Department of IT Engineering				
1	Energy Efficient Medium Access Control for Wireless Sensor Network	BCUD SPPU	Prof. Pranav M. Pawar Prof. Smita Shukla Patel Prof. YogitaWagh	Collaborative
2	Simulation of 2ACK Scheme to Detect Routing Misbehavior in MANETs	BCUD SPPU	Prof. Saraswati Nagtilak	Individual
3	Next Generation Intelligent Transport System based on IoT for Indian Traffic Scenario	BCUD SPPU	Prof. Ravindra H. Borhade	Individual
4	Optimized Node Deployment for Wireless Sensor Network	BCUD, SPPU, Pune	Prof. Arvind M. Jagtap	Individual
Department of Mechanical Engineering				
1	Simulation & Analysis of Thermal Energy Storage system using phase change material.	BCUD SPPU	Prof. V.H. Bansode	Individual
2	Performance Evaluation of Liquid column Ball Damper for Controlling the vibrations of Huge	BCUD SPPU	Prof. G.A. Jagdale	Individual

	Structure.			
3	Expt. Evaluation of semi active Magnetorheological Damper.	BCUD SPPU	Prof. N.P.Sherje	Individual
Department of Engineering Sciences				
1	Adsorptive regeneration of heavy metals via nanoparticles and its reuse as a chemical vapour/gas sensor	BCUD SPPU	Prof. Mrs. A. J. Kulkarni	Collaborative
2	Layered Double Hydroxides as catalysts in Biodiesel Synthesis	BCUD SPPU	Dr. Mrs. S. G. Wagholikar	Individual
3	Rainfall-Runoff analysis using Nearofuzzy Inference system	BCUD SPPU	Prof. Mrs. A. M. Pendse	Collaborative
Department of Management studies				
1	Study of Trade Unions in Pune City	ICSSR	Dr.M.R.Shaikh	Individual
2	Stress Management among Female Candidates in Pune City	BCUD SPPU	Mrs.S.A.Navale Dr.M.R.Shaikh	Collaborative
3	HRD in Basic Sciences	BCUD SPPU	Dr.M.R.Shaikh	Individual

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

Institute and all the departments are very active in organizing conferences, seminars, FDPs and workshops for imbibing research culture among staff and students. The details are depicted in Figure 3.1.6
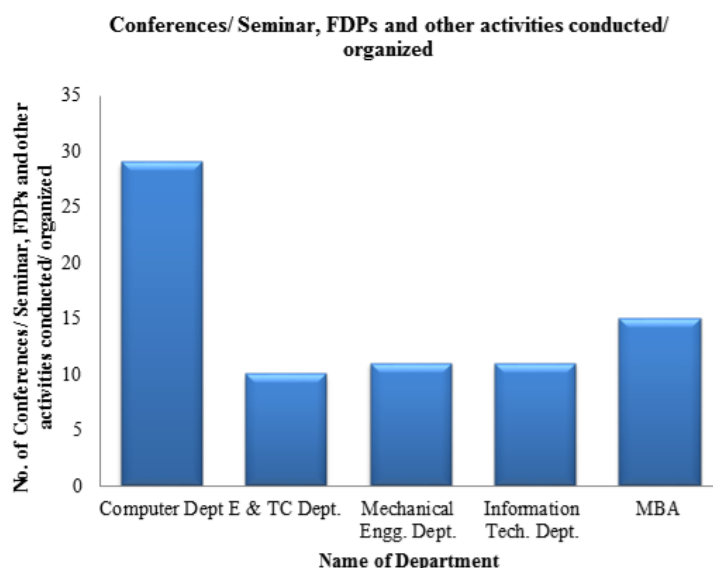
Figure 3.1.6: Conferences/ Seminars, FDPs and Other Activities in Various Departments

All departments of the institute are always committed towards capacity building research activities and inculcating research culture amongst students and faculties. We are committed towards quality conduction and excellent management and coordination of the events. Institute has also tie ups and association with many European and US universities for resource exchange and sharing through national and international conferences. The details are given in Table 3.1.6 (a).

Table 3.1.6 (a): National/International Conference Conducted

Sr. No.	Details of programs conducted	Month and Year
1	International Conference on Internet of Things, Cloud computing and Next Generation Networks (ICINC 2016)	26th to 28th Feb. 2016
2	International Conference on Advances in Engineering and Technology (ICAET 2014)	1st to 3rd Sep 2014
3	Third Post Graduate Conference (iPGCON-2014) for Information Technology	4th and 5th April 2014
4	International Conference on Business Management in Turbulent Times	21st and 22nd October 2011.

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

Institute has 14 PhD holders working in the capacity of Professors and Associate professors who have completed their PhD's from reputed national and international universities. The largest area of action encompasses the full breadth of ICT in the fields of computer engineering, electronic systems, telecommunications, manufacturing, energy, materials, robotics, bioinformatics and transport. Following in Table 3.1.7 are the details of prioritized research areas and the expertise available with the institution:

Table 3.1.7: Research Areas and Expertise

Sr. No	Research areas	Faculty Expertise
Department of Computer Engineering		
1	Image processing	Dr. A. V. Deshpande
2	Security in Internet of Things	Dr. P .N. Mahalle
3	Secure Network Storage	Dr. K. N. Honwadkar
4	Information and Network Security	Dr. S. K. Pathan
Department of Electronics and Telecommunication Engineering		
1	Digital Image Processing	Dr.S.K. Shah Dr.A. D. Kumbhar Prof.A. B. Deshmukh Prof. S. A. Panwar
2	Communication	Dr. S. M.Koli Prof. A. S. Shirsat Prof. A. A. Yadav Prof. S. M. Mohalkar
3	Signal Processing	Prof. M. S. Navale Prof. V. S. Kulkarni
4	VLSI Design	Prof. R. P. Patil Prof. R. K. Kulkarni Prof. S. M. Borawake Prof. S. P. Deshmukh
5	Embedded System	Prof. S. K. Sahastrabuddhe Prof. P. G. Chilveri Prof. S.C. Sawant
6	Microwave	Prof . S. M. Ingawale Dr. S. K. Jagtap
7	Speech Processing	Prof. P. S. Deshpande Prof. S. S. Padmawar
8	Video Processing	Dr. S. S. Agrawal Prof. P. D. Garje Prof. S. S. Vasekar
9	Solar Energy System.	Prof. A. V. Padgavankar
Department of IT Engineering		
1	Wireless Communication	Mr. R. H. Borhade, Mr. N. P. Kulkarni, Mr. P. M. Pawar, Mrs. SmitaShukla Patel, Mr. A. M. Jagtap
2	Software Engineering , Software Quality Assurance and Database	Dr. L. V. Patil, Mr. V. S. Bidve
3	Cloud Computing	Mr. M. L. Bangare, Mr. N. S. More
4	Image Processing	Mrs. A. S. Narote
5	Network Security	Mr. S. N. Gujar
6	Mobile Communication	Mr. T. A. Chavan

Department of Mechanical Engineering		
1	Suspension and vibration analysis	Dr.K.R.Borole
2	Alternative fuels for I.C.Engine	Dr. A.P.Pandhare
Department of Engineering Sciences		
1	Materials Chemistry (Organic & Inorganic)	Dr. S. G. Wagholikar
2	Graph Theory	Prof. H. R. Bhapkar
3	Solar energy	Prof. S. A. Sawant
4	Analytical Chemistry	Prof. R. B. Jadhav
5	Theory of Relativity	Prof. S. P. Bhilare
Department of Management studies		
1	HRM and General Management	Dr.M.R.Shaikh

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

Following are the efforts taken by the Institute for attracting researchers of eminence to visit the campus and interact with teachers and students by:

- Working closely together with the surrounding society and at nationally and internationally.
- Participating in several international educational cooperation programmes like ERASMUS MUNDUS programmes, French students exchange programs.
- Organizing FDPs, conferences and signing MoUs is also another channel attracting researchers of eminence to visit the campus and interact with teachers and students.
- Formation of centralized student council and various clubs for knowledge dissemination by international resources.
- Encouraging faculties to talks and interaction with eminent personalities from industries, research and development organization from many reputed national and international institute.
- Striving to adapt and inculcate best practices in research methodology and emerging trends amongst students and faculties. The statistics of number of eminent professors and scientists visited to the institutes is given in Figure 3.1.8.
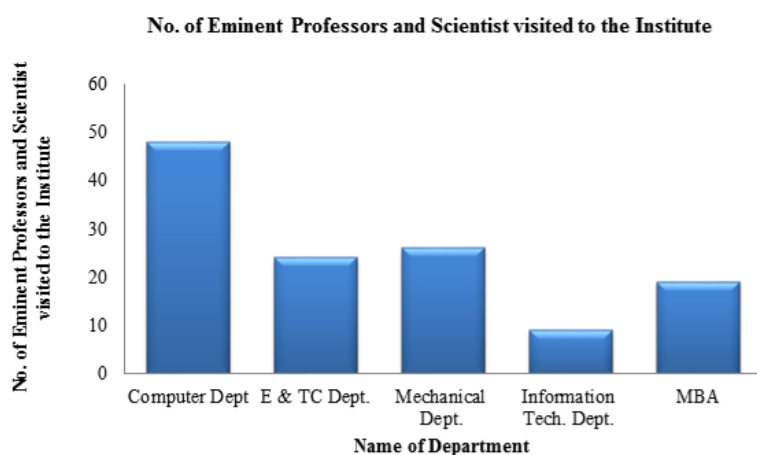
Figure 3.1.8: Number of Eminent Professors and Scientists Visited to the Institute

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 Institute has the provision of sabbatical leave.
- In addition to this, the Institute strongly believes in promoting a research culture by granting study leave for faculty pursuing their PhD and research work.
- Institute has also 100% funded 5 international PhD's including their tuition fees, transport, stay and paid leave during the period of their stay at abroad.
- This policy has improved research collaboration and interaction with outside world.
- This has also helped faculties to establish international connect and as a result of it, many faculties are on advisory board of many international conferences/symposiums and reviewers for many reputed international journals in their research areas.
  The details of sabbatical leave utilization by faculty for research activities are shown in figure 3.1.9
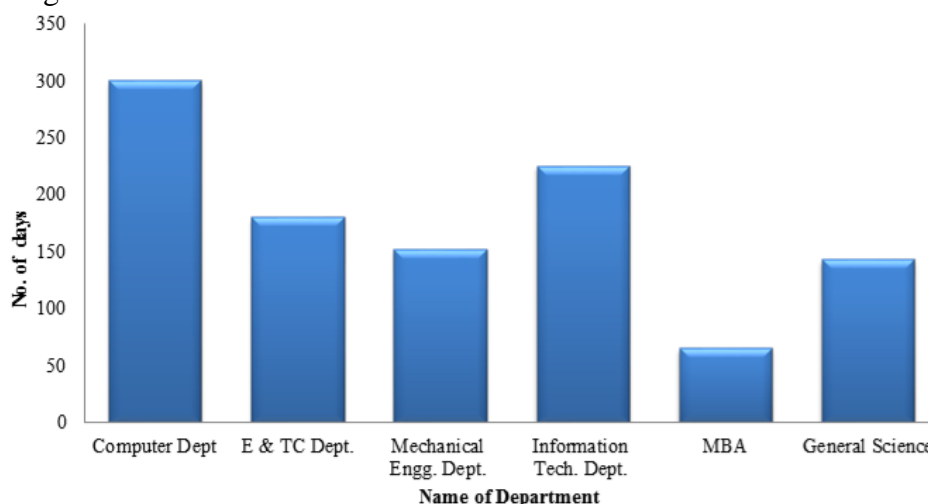
Figure 3.1.9: Details of Faculties used Sabbatical Leaves for Research Work

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)

- Various activities and initiatives are undertaken by institute for creating awareness and transfer of research outcome to students.
- There are many in-house research projects undertaken by students under the guidance of faculty and an outcome is extended for societal benefits.
- Computer awareness program at schools, career guidance and men, women empowerment in rural India has been conducted regularly.
- These initiatives are also supported by industries like ATOS India, CAPGEMINI by providing computers and financial assistance.
- E-cell of the institute is also actively involved in developing products and application for the benefit of society like Mobile Apps for elder people, websites for student's community like codewall.in and skncomp.cloudaccess.host.
- PG students and faculty have undertaken useful IT project based on emerging area like Internet of Things and IoT-based Email system.

- Support for establishing MoUs with industries so the products can be developed based on research findings. Research findings are published in peer-reviewed journals both at the national and international levels.
- College encourages faculty to innovate and apply for patents.
- UG students are given parts of the research work as projects and are encouraged to innovate and get an experience of working on real-time projects.
  The details of publications are presented in Figure 3.1.10.
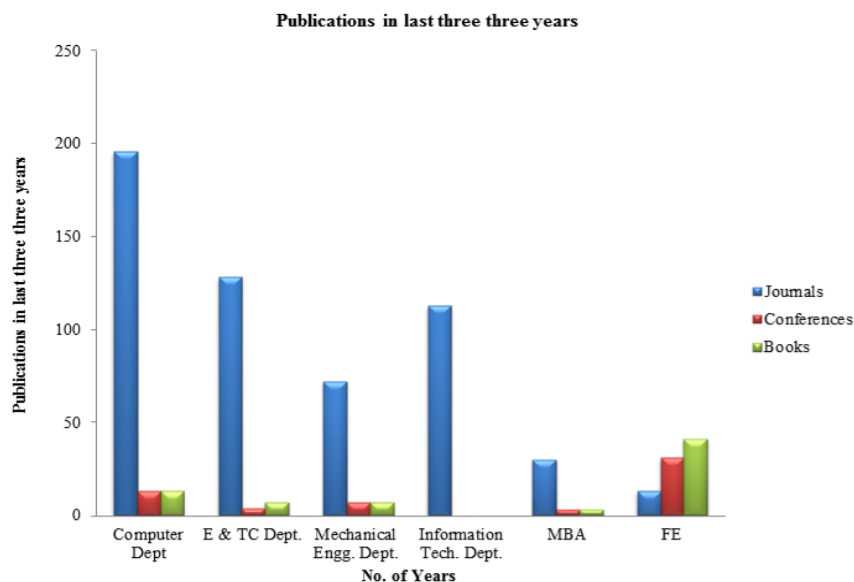
Figure 3.1.10: Details of Publication in Last Three Years

3.2 RESOURCE MOBILIZATION FOR RESEARCH

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.

Institute keeps adequate budget for the promotion of research. Major heads of the expenditure includes workshop/conference registration fees, sponsorship for PhD scholars, expenses for the resource person hospitality and other areas for research promotion. Following Table 3.2.1 (a) and Table 3.2.1 (b) depict the amount allocated & actual utilization on research and development activities. Table depicts that the budget reserved for the research is sometime exceeding the sanctioned budget.

Table 3.2.1 (a): Institute Budget

Year	Total Budget (In Lakhs)	Equipment (In Lakhs)	Software (In Lakhs)	Books (In Lakhs)	Building (In Lakhs)	Others (In Lakhs)
2012-13	1286.46	48.00	14.48	12.50	8.47	1203.01
2013-14	1544.40	50.51	------	6.00	4.90	1482.99
2014-15	1936.82	24.00	1.96	2.50	2.89	1905.47

Table 3.2.1 (b): Budget Reserved for the Research

Sr. No.	Financial Year	Institute Total Sanctioned Budget for Research (Staff Welfare) (%)	Utilization of Research Budget (%)
1	2012 - 13	11	6
2	2013 - 14	12	12
3	2014 - 15	15	13.5

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, every year institute receives research grant from various funding agencies like BCUD and AICTE. In the initial phase of research initiation, institute provide around 2-3% seed money for continuing research.
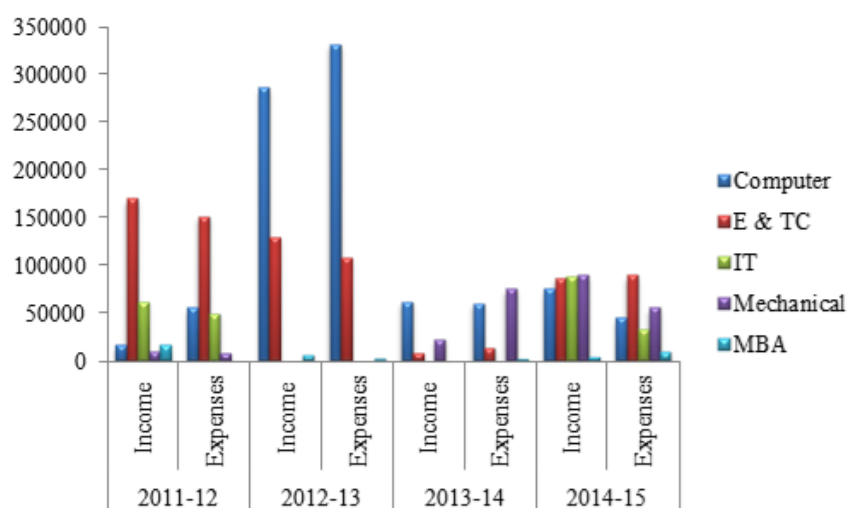
Figure 3.2.2: Details of Seed Money

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

Institute has very simple and flexible policy for providing finance to student's research projects. Institute constantly encourage and provide financial support to students for their research:
- By providing fund to the department for purchasing hardware equipment's and software for students projects
- By sponsoring students to national and international summits where they can interact with the eminent resource persons
- By providing travel grants to attend international racing competition abroad like BAHA, Formula SAE, SUPRA.
- By providing financial assistance to students to manufacture ROBOTS, design to

- participate in events like ROBOCON etc.
- Grants are also provided to the students for building state of the art equipment for the purpose of laboratory experiments.
- Department's E-cell provides finance for purchasing project equipment (Hardware & software). Table 3.2.3 gives list of Equipment's purchased for Student Projects.
- The national level technical event Techtonic is organized by institute.
- To promote research activity amongst the students guest lecture, workshops, seminars, industrial visits, STP etc are organized.

Table 3.2.3: Equipment's Purchased for Student Projects

Sr.No	Year of purchase	Item/Equipment	Price	Qty
Department of Computer Engineering				
1.	2013-2014	Fingerprint Sensor	2,790	1
Department of Electronics And Telecommunication Engineering				
1.	2012-2013	Virtex 5 FPGA board	1,26000/	1
2	2013-2014	PSOC Module	20,400/	4
3	2014-2015	Intel Atom board	4,97,644/	10
4	2014-2015	FPGA –B Board	17,000/	1

3.2.4 How does the various departments/units/staff of the institute interact in undertaking inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.

- Interdisciplinary research projects are encouraged at SKNCOE. The Institute encourages faculty of different departments to join together for collaborative research projects in the interdisciplinary areas.
- The institute has recently proposed for establishing the centre of excellence in the two interdisciplinary areas like Internet of Things, robotics and formula car.
- RDC is also functioning at institute level which comprises experts from every department.
- E-Cell is also actively functioning which continuously work on idea and problem incubation to identify valid problems which are beneficial for societal cause.
- Objective of E-cell is to essentially work on inter-disciplinary projects so that teachers from all departments can be involved in research. The list is given below in table 3.2.4:

Table 3.2.4: Inter-Disciplinary Research Project

Sr. No	Name of the Project	Participating Departments	Name of the Guides
Department of Computer Engineering			
1.	Med-Tech 2015, Ayalists PHC to THC Maternal Tele-monitoring System	Computer Engineering, Mechanical Department	Dr. A.P.Pandhare Mr. S.S.Barde Mrs. P.S.Raskar
2.	IoT Enabled Email Communication System	Computer Engineering, E&TC Department	Dr. P.N. Mahalle Dr. D.M. Bhalerao Prof. V.V. Kimbahune
Department of Electronics And Telecommunication Engineering			

1	Quint Robotics 2012	Computer Engineering, Mechanical Department, E&TC Department, IT Department	Prof. Amrut Patil
2	METEOR 2013 – Design and development of line tracer Robot	Computer Engineering, Mechanical Department, E&TC Department, IT Department	Prof. Amrut Patil
3	METEOR 2014 Design and development smart phone controlled Robot	Computer Engineering, Mechanical Department, E&TC Department, IT Department	Prof. Amrut Patil
4	METEOR 2015 Design and development of obstacle avoider Robot	Computer Engineering, Mechanical Department, E&TC Department, IT Department	Prof. Amrut Patil
Department of IT Engineering			
1	METEOR 2013 – Design and development of line tracer Robot	Computer Engineering, Mechanical Department, E&TC Department, IT Department	Prof. Amrut Patil
2	METEOR 2014 Design and development smart phone controlled Robot	Computer Engineering, Mechanical Department, E&TC Department, IT Department	Prof. Amrut Patil
3	METEOR 2015 Design and development of obstacle avoider Robot	Computer Engineering, Mechanical Department, E&TC Department, IT Department	Prof. Amrut Patil
Department of Mechanical Engineering			
1	Design and development of formula racing car at FSAE Lincoln - 2013, USA	Mechanical Department, Computer Engineering	Dr. A.P.Pandhare Prof. P.S. Raskar
2	Design and development of formula racing car at FSAE - 2014, Italy	Mechanical Department, Computer Engineering	Dr. A.P.Pandhare Prof. P.S. Raskar
3	Design and development of formula racing car at FSAE - 2015, Italy	Mechanical Department, Computer Engineering	Dr. A.P.Pandhare Prof. P.S. Raskar

Challenges faced in organizing interdisciplinary research
- Difficulties in understanding the fundamental concepts required in interdisciplinary project works.
- Allocating the project guides for projects contain interdisciplinary work. Also, to motivate faculties as well as students to handle the interdisciplinary work.
- Coordinating the facilities required for interdisciplinary work like laboratories, instruments etc.

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

There are various initiatives started at institute level in order to optimize the use of various equipment and research facilities:

- Computing laboratory is open 24 X 7 for students to carry out research related activities and inter disciplinary research projects from E-cell.
- Institute central library is open for the students and faculties till 1 am daily and 24 X 7 during the period of preparatory leave.
- Department laboratories are open after the college hours for students to perform experimentation and practice of their laboratory assignments.
- Laboratories and class rooms are also utilized for technical and non-technical courses such as technology (.Net, C/C++) certification courses, online aptitude test, GDPI sessions, T&P tests.
- Laboratories are also used to conduct IIT spoken tutorial test, NPTEL courses and for various FDPs and STTPs.
- Log books are also maintained to keep track of usage of equipments and laboratories.

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.

- Institute is involved in promoting partnership with academics and industries like IITs, IISc, and research organizations like ARAI, NCL, C-DAC and corporate houses like Infosys, Intel and Atlas Copco.
- Institute has received several research grants from the funding agencies like SPPU, AICTE.
- For promoting training, research and extension activities in technical education the Institute has signed MoUs with many IT companies.
- Grant is also received by various departments for setting up the laboratories and developing research facility. For details refer, Table 3.1.5 (b) and Table 3.1.5 (c).
  The details of grants received from industry are given in Table 3.2.6.

Table 3.2.6 : Grant from Industry

Sr. No.	Industry or Other Beneficiary Agency	Instruments / Facilities Created	Year	Grants Or Finances Received in Lacs
Department of Computer Engineering				
1	Zensar Technologies	Centre of Excellence Lab	2009-10	4.00
Department of Electronics And Telecommunication Engineering				
1	FICE/ Intel	Intel Atom Development Board	2014	5.00
2	Trident Techlab Pvt. Ltd.	MSP 430 development kits TI platform	2013	0.60
Department of Mechanical Engineering				
1	Atlas Copco, Pune	Soundless Compressor	2014-15	4.50

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.

As mentioned, RDC is actively involved in encouraging faculty members to write research proposals for various funding agencies. There are many senior staff members in institute having outstanding research track with good research publications. These senior faculty members guide other faculty members in preparing research proposals and advise them about current trends in research in their area of expertise. The details of Grant received are as follows:

Table 3.2.7: Details of Ongoing and Completed Projects and Grants received

Sr. No	Name of Dept.	Title of project	Grant Received (Rs.)	Completion of project (%)
1	Information Tech	Next Generation Intelligent Transport System based on Internet of Things FOR Indian Traffic Scenario	1,30,000.00	100
2	E & TC	Implementation of Structural Health Monitoring System Using Wireless Sensor Network on FPGA	2,15,000.00	100
3	E & TC	Car Security and Automation using Speaker and Speech Recognition	2,25,000.00	100
4	E & TC	Implementation of HDL Communication Controller using DALI Protocol	1,30,000.00	50
5	E & TC	FPGA Implementation of AMBA AHB BUS For Interfacing of IP Cores of Image & Videos	1,30,000.00	50
6	Information Tech	Optimized Node Deployment Using Enhanced Particle Swarm Optimization for WSN	80,000.00	50
7	Information Tech	Performance & Energy Efficient Routing Protocol for Wireless Sensor Networks	65,000.00	60
8	Computer	Light Weight Group Authentication for Internet of Things	90,000.00	50
9	Computer	Future Architecture for Securing Interaction with Things(FAST)	1,70,000.00	60
10	Mechanical	Performance Evaluation of Liquid Column Ball Damper	1,40,000.00	50
11	Mechanical	Semi Active Control for Vehicle Suspension System Using Magnetoreholigical Damper	1,20,000.00	60
12	Management	Identification of Skill Gap Among Management Graduates: A study of Employers Expectations & Student Current Skill Level in Pune City	80,000.00	10

3.3 RESEARCH FACILITIES

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

The Institute provides facilities like central library and internet with various information resources and access to digital libraries. Apart from computer systems, sophisticated instruments, modeling tools, data processing software and modern equipment's are provided to create infrastructural facilities to meet the needs of new and emerging areas of research.

Internet facility: Institute has 64 Mbps 1:1 lease line.

Computing Facility: Institute has state-of-art computing facility where all the laboratories are equipped with latest high end configuration. There are modern laboratories for skill development and software like CAD/CAM and CREO.

Servers: Institute has high end rack and blade server for campus wide networking. Every department is also equipped with individual set of 4 to 5 servers for conduction of mock online exam, SPPU exam and DHCP servers. Institute also owns Eucolyptus-based private cloud for doing research in cloud computing and creating specific instance of the lab as and when required.

Devices: There are set of devices enabled with ZIGBEE module, Raspberry Pi, smoke detectors, temperature sensors, IR sensors, RFID readers, tags, humidity sensors and camera for carry out research in emerging areas like Internet of things.

Table 3.3.1 gives list of Major research facilities are provided in various departments.

Table 3.3.1: Major Research Facilities in Various Departments

Sr. No.	Research Facilities	Name Of The Laboratory
Department of Computer Engineering		
1	Wireless Sensor nodes	Central Server Room
2	Cloud setup	Server Room
3	Supermicro server 6000 xeon series 2x intel xeon peocessor E5506(8m cache,2.30 Ghz),16 GB DDR3 RDIIM	Server Room
4	HP Sever Quad core intel xeon E5504 processor (2.0Ghz)300GB HDD	Server Room
5	CISCO 1921 K9,CISCO 1941 K9,CISCO 1841,	Server Room
6	ThinMax, VIA C3 800 Mhz., RAM 64 MB Flash disk32 MB	Research Laboratory
7	Raspberry Pi module,8GB memory card with OS loaded HDMI to VGA Cable for monitor, Zigbee daughter board,Sensor for Smoke& LPG, Camera interfaced to Pi-2 board, RFID Tag	Microprocessor Laboratory
8	Raspberry Pi module,8GB memory card with OS loaded HDMI to VGA Cable for monitor, Zigbee daughter board, Sensor for Smoke& LPG,Temperature& IR, RFID Reader with serial & Wigand o/p, RFID Tag	Microprocessor Laboratory
9	Raspberry Pi module,8GB memory card with OS loaded,HDMI to VGA Cable for monitor,	Microprocessor Laboratory

	Zigbee daughter board, Sensor for Temperature& PIR , D-link Wi-Fi Dongle	
Department of Electronics And Telecommunication Engineering		
1	POSC,ARM KITS,8051 kits, Triton IDE	Embedded System
2	PIC & 8051 Microcontroller boards, Keil,	Programing LAB
3	Matlab	Signal Processing Lab
4	Test Bench with Klystron Source	Microwave LAB
5	FPGA boards, Xilinx Web Pack ISE	VLSI Lab
6	Intel Atom Boards, ARM Kits, Virtex 5 FPGA Board, Xilinx, Triton IDE	PG Lab
7	Spectrum Analyzer, Mixed Signal Oscilloscope, High Frequency DSO, Very High Frequency Oscillator, GSM Kit, High Definition Kit, OFC Bench Mark Kits	Communication Lab
8	PCB Manufacturing Kit	Project Lab
Department of Mechanical Engineering		
1	Autodesk Inventor Professional 2008 Educational Version AutoCAD 2009 Pro/Engineering Wildfire 4.0 (CREO) Altair Hyperworks Ansys 13.0 Mastercam X5 perpetual seat License on Net hasp Catia V6 MatLab Automation Studio Nastran	CAD Lab
2	1.Linear Conveyor Control System – Bottle Filling System 2. Load cell with load indicator Trainer 3.Switches & Relays 4.Level Measurement using capacitance Transducer	Mechatronics
3	1. Exhaust Gas Analyzer 2.Computerized Single Cylinder Four Stroke Diesel VCR Engine 3. Three Cylinder Four Stroke Maruti800, MPFI Engine 4. 5 Gas Analyzer, AVL, Model444 5. Piezo Sensor 6. Gas Analyzer	I.C. Engine Lab
Department of Management studies		
1	SPSS 18 Software for Data analysis purpose	10 Users

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?

Strategies for Planning for creating research infrastructural facilities
The institute is very keen to upgrade infrastructural facilities in order to facilitate research in new and emerging areas. Continuous reviews are collected from the industry experts visiting institute with respective up-gradation of hardware and software infrastructural

facility. Faculties doing research in emerging areas are submitting their list of equipment required along with the budget. Management approves the budget after verification of the requirements in LMC. In addition to this the institute also receives various equipments to carry out dedicated research at various departments. All departments conduct various workshops and seminars to motivate the faculties in the emerging areas of research from various organizations, research institutes and industries. Institutional library has various ranges of national and international journals as well as books. Online IEEE and Science direct Journals are accessible in library. The details of some of the equipments received from industries are as follows:

- Under Industry- Institute interaction, HP has set up the lab and donated four I-7 computing nodes for undertaking PG and PhD research.
- Department of ENTC also has Intel lab equipped with Intel boards which includes Atom and Galileo kits.
- A laboratory with wireless sensor nodes along with private cloud has been set up in computer engineering.
- State of the art Internet of Things computing laboratory with Raspberry PI development kit, sensor like LPG gas detector, IR sensors, Temperature sensors, smoke sensors and RFID tags/readers has been set up.
- Robotics club in addition to the robotics laboratory has been set up which is equipped with all latest micro controllers, microprocessors and interfacing kits.
- Atlas copco has donated high end soundless compressors for research work in Mechanical engineering.

Strategies for Up-gradation of research infrastructural facilities

- Each department of the institute is upgrading their existing research infrastructural facilities.
- The department while upgrading make sure about the latest technology and make them available in the department.
- Computers and software's are upgraded with latest versions.

Strategies for other research facilities

- Students as well as faculties are encouraged for selecting the sponsored projects.
- Faculties as well as students are always motivated by the institute to participate in workshop, seminar, conferences and research programmes conducted by other organization.
- The facilities like on duty leave, registration fee, TA/DA are provided by the institute to attend workshop, seminar, conferences and research programmes.

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, support is provided by many industries and research organizations. For details regarding grants from industry refer Table 3.2.6.

- There are many national and multi-national companies associated with the institute to establish state-of-art computing laboratories and training programs for the students and faculties.
- Books procured through departmental BCUD grants are made available in library reference section.
- Many companies have also extended training programs to students and faculties with

the help of institute resources at subsidized cost. Computing facilities created in association of industries are:

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

- Institute encourages students to visit relevant industry under industry institute interaction cell.
- Institute also provides internship to the students for carrying mini projects in industries so that they can apply curriculum knowledge to product development.
- Significant number of students participates in programming contests, tech fests and exhibitions to enhance their research potentials.
- Students also have access to digital libraries and Wi-Fi from their hostels.
- There are many digital content repositories developed by students as part of their project which they can access from outside the campus.
- There is also provision for students to practice mock online test, aptitude test which they can appear from outside the campus.

Table 3.3.4: Research Facilities Available to Students Outside Campus

Sr. No.	Name of the research facility	Location and details	Purpose
Common to All Branches			
1	Technical courses and projects based on emerging trends	TUS, Bulgaria	Research &Internship
Department of Computer Engineering			
1	Computing facility	BMS Solutions, Pune	Research &Internship
2	Android app development	Ninad Webtech, Pune	Research &Internship
Department of Electronics and Telecommunication Engineering			
1	Internet of Things(Java Development)	Avaya Pune	Research & Internship
2	Test Bench Development and automation	Cummins India	Research & Internship
3	Software research and development	Expo OPTO Electrical Engineering India	Research & Internship
4	Analog CMOS design	RFIC solution	Research &Internship
5	AICTE-BSNL Employbility enhancement training Programme	Regional Telecom Training centre,BSNL, Chinchwad,Pune	Research &Internship
Department of Mechanical Engineering			
1	Assembly of Engine	Tata Motors, Pune	Research &Internship
Department of Information Technology			
1	.Net Technology	NCL	Research & Internship
2	Software Testing	BMS Solutions	Research & Internship

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

- There is central library equipped with 33916 numbers of volumes which is open after college hours also.
- Institute has online journal subscription to science direct and IEEE.
- Institute also has subscription to many print magazines in all the disciplines.
- Reference books and proceedings are also available for different topics in engineering, management and science.
- Membership of library of Automotive Research association of India (ARAI) and British Council library.

3.3.6 What are the collaborative research facilities developed/ created by the research institutes in the college. For ex. Laboratories, library, instruments, computers, new technology etc.

Name of Dept.	Collaborative Research facility
Mechanical	Hydraulic and Pneumatic trainer kits, Air compressor, sensors and actuators are made available in laboratories to do the required tasks in research projects.
Computer/IT	Necessary softwares, dedicated lease line to perform research experiments and computers with latest versions are made available in research laboratory of department. Wi-fi facility is provided is whole campus.
ETC	As Intel has proven its usage in embedded applications such as smart phones and tablets to compete ARM applications, they are promoting academicians to carry out application development on Intel Processors to prove their technology. Hence we developed "Intel Intelligent Systems Lab" for Intel Atom and Gallilieo Processors. The objective of this certification program is to introduce engineering students to state of art platform of Intel Galileo/Atom board to design and develop Embedded Systems, to help them carrying out their innovative ideas.

- Institute has received funding from many agencies. From the grants received, many state-of-art networking and other computing devices have been procured.
- Thin client laboratory is set up for students and faculties so that they can perform various research works.
- Intel laboratory is set up and kits are also provided by Intel to develop research projects.

3.4 RESEARCH PUBLICATIONS AND AWARDS

3.4.1 Highlight the major research achievements of the staff and students in terms of Patents obtained and filed (process and product)

Institute owns two patents, one copyright and two patents are in process. List of Copyrights Patents achieved are given in Table 3.4.1.

Table 3.4.1 (a): Copyrights /Patents Achieved

Sr. No	Reward Type& Number	Name of the Applicant	Issuing Authority	Year of achievement	Title of work
Department of Computer Engineering					
1	Patent	Dr. P. N. Mahalle	Indian Patent Office , The patent act 1970	01/03/2016	Patent on Renewable Portable battery charger using wind energy
2	Copyright L-59236/2014	Mr. Vivek V. Jog and Mr. Nilesh Pardeshi	Deputy Registrar of Copyrights Copyright Office, Govt. Of India	04/08/2014	HMM Based Enhanced Security System for ATM Payments
3	Copyright Diary Number: 8569/2015CO/L	Mr. Vivek V. Jog and Mr. Sachine Hangargekar	Deputy Registrar of Copyrights Copyright Office, Govt. Of India	Under Processing	System Automated Blood Diagnosis for Detection of Desired Patterns Using Customized Hough Transform
Engineering Sciences					
1	3108/MUM/2012A	Prof. Sadhana. A. Sawant	Patent office journal	2012	Three in one process for water purification employing chemical degradation of organic materials.
2	1915/MUM/2014	Prof. Sadhana. A. Sawant	Patent office journal	2014	Solid state, solvent free synthesis methods for zinc oxide doped with metals and or Zinc oxide based mixed oxides.

- **Original research contributing to product improvement**

There are 3 in-house projects under development and objective is to convert these projects into the products useful to the department and institute. Table 3.4.1 (b) gives list of Student

In-house projects under E-Cell.

Table 3.4.1 (b): Student In-house Project under E-Cell

Sr.no	Name of projects	Description	Objective	Status	Technology used
1	Codewall.in	This website is for introduction to programming	It is developed to help students to improve their programming skills.	Complete	HTML 5, JavaScript, CSS
2	E-exam portal	It is a platform made for online Mock exams.	To conduct online mock exams successfully	complete	Moodle
3	E-Notice	It is an easy way to deliver notices via internet	To make it easy for students and teachers to get notices online instead of in written format	On going	.Net ,PHP,HTML, Python, MySQL
4	E-Cell website	It's a website to introduce S.K.N.C.O.E. E-cell on internet	To represent E-cell to other people all over the world	On going	Word Press, PHP, JQuery, css, bootstrap
5	Feedback system	It's a website to enable feedback system online	It is being developed to give feedbacks in an easy way.	On going	Microsoft visual studio, MySQL, Joomla, Word Press
6	Attendance atomization	This system is used to automize attendance process	To make it easy for teachers to keep record of attendance	On going	Embedded C, Croteus, Eagle, C#, SQL

- Many students groups are also associated with multi-national companies in product development.
- Many research projects funded by BCUD are targeting product useful in the respective areas.

Research studies or surveys benefiting the community or improving the services

Table 3.4.1 (c): Research Benefitting the Community or Improving the Services

Sr. No.	Research Study	Benefiting the Society for improving the services
1	Implementation of structural Health monitoring system using WSN on FPGA	The prototype proposed in the scope of this project was appreciated by symposium and medical industries which helped to improve health monitoring through technology.
2	Car security and automation using speaker and speech	Speaker and speech recognition has been effectively used in this project to avoid vehicle theft. The

	recognition	outcome of this project has been appreciated by all the stakeholders.
3	Next Generation Intelligent Transport System based on IoT for Indian Traffic Scenario	The problem of traffic is becoming daunting in India. The prototype of the project helped to improve traffic scenario in India with the help of Internet of Things.

Research inputs contributing to new initiatives and social Development

Table 3.4.1 (d) Research Contributing to New Initiative and Social Development

Sr. No.	Research Study	Contributing to new initiative and social development
1	Rainfall-Runoff analysis using Nearo fuzzy Inference system	This project has given new insight to predict rainfall and runoff and its analysis helped to design new inference engine. In agriculture-based country like India, it is one of the significant contribution.
2	Stress Management among Female Candidates in Pune City	Due to increasing work pressure and life style, stress is serious problem faced by an individual essentially for the females. This study has contributed to alleviate the stress among female candidates in Pune city.

3.4.2 Does the Institute publish or partner in 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?

Institute is in the process of collaborating with few of the reputed publication for publication of research journals in engineering and sciences.

3.4.3 Give details of publications by the faculty and students
Count of department wise publication details are given in following table 3.4.3 (a).

Table 3.4.3 (a): Publication Details

Sr.No.	No. of Papers Published in Peer Reviewed Journals	No. of Publications listed in International DB	Chapter in books	Books Edited	Books Edited with ISBN in International Database
Department of Computer Engineering					
1	496	496	3	13	13
Department of Electronics and Telecommunication Engineering					
1	128	128	-	7	4
Department of IT Engineering					
1	113	113	-	-	-
Department of Mechanical Engineering					
1	72	72	-	7	7
Department of Engineering Sciences					
1	13	13	-	41	31

Department of Management studies					
1	30	30	3	3	3

Table 3.4.3 (b) gives the details of books authored by the faculty.

Table 3.4.3: Details of Books Authored by Faculty

Name of Department	No. of Books Authored
Computer Engineering	11
Electronics and Telecommunication	6
Mechanical Engineering	7
Information Technology	5
Engineering Sciences	11
MBA	4

3.4.4 Provide details (if any) of research awards received by the faculty recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally incentives given to faculty for receiving state, national and international recognitions for research contributions.

Dr. M. R. Shaikh
Selected for award of Junior Research Fellowship (JRF) of UGC, 1998

Dr. P. N. Mahalle
- Reviewer for Springer journal of Wireless Personal Communications
- Reviewer for Elsevier journal of Applied Computing and Informatics
- Technical program committee member for International conferences and symposium like IEEE ICC 2014, IEEE ICC 2015- SAC-Communication for Smart Grid etc.

Dr. S. K.Pathan
- Reviewer for Springer journal of Wireless Personal Communications

Dr. Amar Pandhare
- Received Dronacharya Award for best faculty advisor by Society of Automotive Engineers at National Level competition.
- Best Paper Publication in International Journal of Mechanical Engg. (IJME) ISSN (Print) 2319-2240, ISSN (Online) 2319-2259 Impact factor 3.6234.
- Indo Global Engineering Excellence Award 2015

Prof. G. A. Jagdale
- Received Scholastic award for Research paper on "Experimental stress analysis of hollow stabilizer of an automobile" presented in the International Conference at Ahmadabad.

Prof. V. L. Bhanavase
- Selected on assessing body of advanced technical institute of central government undertaking project under the banner of skill India make in India for Pune region for year 2014 – 15.

Prof. Dr. S. K. Shah

- Received Nawab Jain Yarjung Bahaddur Memorial Prize of Institute of Engineerrs Pune.

3.5 CONSULTANCY

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

Institute believes that industries and research organizations are the backbones for any academic institute. SKNCOE always encourage inviting industries in all the disciplines to in order to receive inputs on curriculum and required efforts to be taken to bridge the gap between industry and academia.

Systems
- Institute works on several knowledge projects from industries which help to get knowledge and hands on experience which also gives opportunities to interact with industry experts.
- Student council is actively functioning which is a perfect blend of clubs to produce competent students to face the newer challenges of today's globalized world through holistic development.
- This council also provides a platform for students to support, share and excel in potential qualities. It also helps to build knowledge sharing, attitude building, integration and implementation.
- Institute gives more stress to develop Entrepreneurship skills amongst students and every year E-cell organizes Entrepreneurship conclave where successful Entrepreneurs are invited for panel discussion with the students. As an outcome, around 10 to 15 starts ups have been witnessed every year.
- Institute also conduct industry-driven training in association with experts from industry which helps students to get industry perspective for technologies and its application in real life.
- Institute also offer Open elective in final year in association with industries like Infosys, EMC2 etc.

Strategies
- Institute arranges industrial visits, industrial trainings, workshops, FDP and STPs.
- Internship programs are planned for the students in industries every semester.
- Hands on training programmes are arranged by each department viz. Ansys, Hypermesh, CREO etc.

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

Consultancy always helped institute to disseminate knowledge and expertise. There are many industries approaching institute and inviting students to collaborate on industry live problems. Many industry oriented courses are also conducted for the students and faculties.
Policy

- Agreement is signed between institute and industry mentioning sharing of revenue towards the use of institute resources.
- Consultancy work should benefit institute for IPR and should not hamper the routine process.
- Research account should be maintained for all departments and all the transactions related to research project should be done through same account and the revenue generated must be used for research and development purpose only.
- Consultancy work can also be carried out at department level in consultation with concern HoD with the approval of principal.
- College resources and man power is available for consultancy and research activities.
- There is also provision of grants to be given to in-house faculties for initiating consultancy and research.

Expertise advocated and publicized in the following manner
- There is central overseas placement cell which always explores the possibility of international collaboration with industries and universities.
- There is a provision of study leave, duty leave for the faculties who are involved in consultancy work.
- Major areas of expertise are advertised through the college website at www.sinhgad.edu.
- The departmental section and also through technical events/Programmes.

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

Institute encourages the staff to utilize their expertise and available facilities for consultancy services in the following ways:
- Faculty members are always encouraged to attend reputed national and international symposium where they get an opportunities to interact with eminent resources across the globe and establish some rapport to start consultancy.
- Adequate flexibility is provided to faculties involved in consultancy work to reduce their academic and administrative load during the period of consultancy work.
- Facilities like free Wi-Fi, high computing labs, generator back up and well furnished infra structure with dedicated instruments/ equipments are made available for research work.
- Certificate of appreciation is also issued by respective HoDs for their outstanding contribution.
- Attractive share of income generated through consultancy as per the institute policy is given to the faculty.
- Seed money is provided to the faculty during the consultancy work.

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 institute has generated revenues through the following sources
- Workshops, FDP's are conducted by institute in the areas like automobile, cloud computing, Operating system etc.

- The institute infrastructure is utilized to conduct external exams from Government and Private sectors on holidays.

3.5.5 What is the policy of the institution in sharing the income generated through consultancy and its use for institutional development?

The policies of the institution in sharing the income generated through consultancy, utilization of infrastructure and its use for institutional development are as follows:
1. Resolution is made at institute level to share the revenue generated from consultancy in the division of 60:40 (Industry: Institute).
2. Remuneration to faculties is given for exams conducted by external agencies as per there agreement.
3. The revenue generated by internship programs is utilized for procurement of equipments.

3.6 EXTENSION ACTIVITIES AND INSTITUTIONAL SOCIAL RESPONSIBILITY (ISR)

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?

The Institute believes in inculcating a strong sense of moral and social values in its students. A number of activities are organized by the Institute for contributing to society which are listed in following table 3.6.1.

Table 3.6.1: Activities Organized by Institute for Contributing to Society

Sr. No.	Name of the activity	Description
Department of Computer Engineering		
1	Kirloskar VasundharaEcoRangers (KVER)	On the occasion of World Environment Day, Kirloskar Vasundhara has launched 'Eco Rangers' a platform for youngsters who wish to contribute positively for the environmental cause from 25/11/2014 to 10/12/2014
2	Mission Blood Donation	One of the biggest blood donation drive 'Mission Blood Donation' initiated by R M Dhariwal Foundation has already registered over 25,000 donors across 22 locations in the city to contribute their share. As part of the 75th year celebrations of Mr. Dhariwal, over 750 bottles of blood was donated in a single day.
3	PRAYAS-13	"Prayas" means Endeavour. We endeavour to help others. Prayas Youth Forum & Social Research Foundation is a registered Social Service NGO with Non-Political, Non-Religious & Non-Regional view.Incepted in the year 2008.
4	Birth Anniversary of "Swami Vivekananda" and "Youth Day"	Celebrated the 150th Birth anniversary of swami Vivekananda along with National Youth Day in front of classroom no. 14, it was a short program conducted at

		11:00 a.m.
5	Discourse on "Secret of Life"	A discourse was conducted on topic "Secret of Life" by Shri.Rajsekhar, Vedanta Academy, Lonavla on 25th February 2013. Students of SE I,II and III division were audience.
6	Seminar on Self Defence	TE students were settled in classroom by 3:00.Guests arrived soon after. The seminar basically was to introduce the girls with self defence.
7	Teacher's Day Celebration	A program was organised on the occasion of Teacher's Day. All faculty members of Computer Dept.a skit was performed by ACE members.
8	Engineer's Day Celebration	Engineer's day organized by Computer Society of India – Association of Computer Engineers (CSI-ACE) on 15th September 2015. All CSI-ACE members and teachers were present for the programme.
Department of Electronics And Telecommunication Engineering		
1	PRAYAS (Computer literacy, career guidance, Sport game etc.)	This activity is conducted as career guidance for students. Some sport activities are also conducted under it.
2	Blood donation	Blood donation camp is organized as helping purpose of patients
3	Pune Learns	Teaching activity is conducted in rural area for economically poor children. This activity is conducted during one year.
4	Teachers Day Function	Teacher day function is conducted by ELESA members in present of all faculties of E&TC staff members. Different activities are performed by students.
5	Engineer's Day Function	Engineer's day function is conducted by ELESA members in present of all faculties of E&TC staff members. Different technical activities are performed by students.
Department of IT		
1	Teacher's Day Celebration	A program was organized on the occasion of Teacher's Day. All Vision IT members of Information Technology were performed by Vision IT members.
Department of Mechanical Engineering		
1	Teachers day Function on 5th September	Teachers were felicitated
2	Cleaning of Shivajinagar Bus Depot by students on 2nd October on account of Gandhi Jayanti	15 students from mechanical dept. cleaned shivajinagar bus depot.
3	Blood Donation	20 Students actively participated in blood donation.
4	Tree Plantation on account of Teachers Day	50
5	Blood Donation on account of Prof. M. N. Navale sir's birthday	Students actively participated in blood donation.

6	Lecture by Mr. Dipen Ambalika author of 3 National Best sellers	How to write books was briefed.
7	BE farewell	MESA organized send off function.
8	Lecture by Shirish Karnik on account of Engineers Day	Er. Shirish Karnik shared his experiences as a entrepreneur
9	Interdepartmental Cricket Match	8 teams participated from different classes
Department of Management studies		
1	Utthan	10 February 2014 Traffic Control in Ambegaon village
2	Computer Literacy Program	5 February 2015 at Khadakwasala Goan
3	Team Building and Self Awareness by Art of Living	Ms.Anumeha Agarwal, Associate Coordinator, Art of Living conducted event for team building and self awareness on 13th March 2014

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

A student record file is maintained for all the students at the departmental level which includes all necessary details of the students, including their personal details, performance in technical and cultural events. This ensures a proper tracking mechanism of student. The various activities involving students which promote citizenship are as follows:

1. Periodic and regular meetings are conducted for highlighting social and ethical values
2. Faculty advisors are allotted who tracks the student involvement in various social movement activity is observed and motivated
3. Faculty advisors are responsible to give the required permission to student for participating in such activities and continuously monitor their progress in such extension activities.
4. Numerous events are arranged and coordinated by students, developing their leadership quality
5. Department student association identify the student those who can work in a team and interested in social program.
6. Institute is actively participating in social activities like NSS and PRAYAS.
7. Institute has started Earn and Learn scheme where every year more than 140 needy students are benefited in association with SPPU.
8. The groups of students are actively involved in carrying out various social activities under Student welfare organization of SPPU.

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

Stakeholders such as Students, Parents, faculty members, University and the society are critical elements of the education system that decide the overall performance and quality of the institution. For smooth functioning of the Institute and to cater to the competitive environment, it is mandatory that certain processes be laid down in order to establish effective linkages between these elements, thereby contributing to the overall improvement

in the existing system. In order to address these issues, following steps are undertaken at the Institute level:

- Certain forms and formats have been designed to collect feedbacks from the stakeholders. This includes Alumni feedback form, student feedback form etc.
- During Alumni meets Alumni feedback is taken. Any suggestions given by the Alumni are analyzed and suitably implemented. Feedback is also collected from companies (who recruit students through campus placements). This feedback is discussed in meetings of Training and Placement (T & P) cell and shortcomings are addressed.
- Student feedback for the respective course is conducted twice in each semester. At the end of the Programme an exit survey is conducted for the final year students.
- Suggestion box is placed in each department.
- Additionally, other assessment mechanisms such as Placement survey, Result analysis, and feedback analysis are also carried out simultaneously.

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.

Every academic year various extension and outreach Programmes are planned and executed. Few of the organized Programmes are:

Blood donation camp	Engineers Day
Awareness Programme	NSS camp
Teachers Day	STP Programs

The impact of extension and outreach programs helps in developing the social awareness amongst the students. Also the effect of the same is reflected in academic performance of students and placement.

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 college organizes various activities of community development services. During induction Programmes coordinators of the extension activities interact with the students and discuss about the benefits and scope of the activities. The information about the proposed activities is disseminated on the college notice board, Academic calendar, circulars, web notifications and also by word of mouth. This imbibes self-discipline, self-initiative and strengthens the sentiment of nationhood. Students are encouraged to participate in street plays in order to spread social messages.

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?

- "Prayas" means Endeavour. We endeavour to help others. Prayas Youth Forum & Social Research Foundation is a registered Social Service NGO with Non-Political, Non-Religious & Non-Regional view. Incepted in the year 2008, with a mission to

promote self-awareness among the youth; Prayas is an organization which believes in creating responsible Youth who will build India of tomorrow.

- Our hopes and efforts are directed towards achieving a versatile, multifaceted & sustainable development of society; by channelizing dynamic youth power & bridging the gap between rural and urban society.

- If we seek to bring a change in the society, we should be a part of it. Youngsters can be the vital catalyst and bring about this change in no time. At Prayas, we strive to make this idea a reality. With the vision of developing a better future for the young generation of India, Nikhil Pathare and his team chalked out a plan of a Computer Literacy camp in the year 2008. They visited few schools in nearby area. The team interacted with the rural students and taught them the basics of computers, environmental awareness, and boosted their morale. Named 'PRAYAS', The Prayas team organised the next camps with rising support from Corporates and mentors. Software companies Capgemini, Cognizant, and Persistent came forward to make Prayas successful each year. SPPU also supports and appreciates the efforts of 'Prayas' Prayas was then formed into an organization "Prayas Youth Forum & Social Research Foundation" in July 2010.

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.

Objectives
- Engineers are the backbone of a nation. They must be aware of the weaknesses and strengths of a society and what reforms are required to evolve as a better society. The objectives of the extension activities organized by the institution is to sensitize students with respect to critical issues concerning the society and environment such as poverty, social injustice, gender bias , pollution evils and the corrective measures to counter them.

Outcomes
- This makes them aware of their roles to be played in the society. Hence, all these extension activities groom their personality and enable them to take part in the Nation building process. Each engineering department has a technical society such as ACE, SAE, IET and ISTE. These extension activities boost the overall confidence of students, instill a sense of leadership and develop team building skills.

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

The institution is roping in communities to actively participate in all the extension activities. This has contributed to both community- institution networking and development of institute. The institution organizes various activities like:
1. Blood Donation Camps
2. Cleanliness Drives
3. Tree Plantations

4. Visits to rural areas and spreading awareness about social issues such as the dowry system, female Feoticide and Environment protection to name a few.
5. Educating the youth about underlined traffic rules.

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.

Constructive relationship with other institutions has been developed through following measures:
1. Blood donation camps are organized in association with SKN Hospital
2. Students from various departments actively participate in cultural programmes at the inter-collegiate level.
3. MoUs signing with reputed companies and groups are carried out. This also provides a platform for relationship building.

Table 3.6.9: Details of Outreach/Extension Activities

Sr. No.	Name of research laboratory/Institute/Industry/Organization (MoU)	Outreach/Extension Activities
Department of Computer Engineering		
1	Microsoft	Software Products Testing & Licensing
2	IBM	Training & Research SKNCOE-IBM Centre of Excellence
3	Aalborg	PhD programmes
4	Cognizant	In Campus Training
5	CayTech Sol.	Website/Webportal Maintenance of SKN College
6	Infosys	Campus Connect Program
7	Quick Heal	AntiVirus Software Products & Licensing
8	Wipro	Training on FDP " Mission 10X"
9	C-DAC	High End Training Programs of CDAC Courses
10	KPIT Cummins	Undertaking Projects, Training & Research
11	Zensar	SKNCOE-Zensar Center of Excellence
12	B M S Solutions, Dubai, U.A.E.	Enterprenuership activities
Department of Electronics And Telecommunication Engineering		
1	FICE	Hardware installation and Development Training programme conducted based on development board
2	Trident Tech lab Pvt. Ltd.	Training programme conducted based on development board
Department of Mechanical Engineering		

1	Designtech Solutions Pvt. Ltd, Kothrud, Pune	Conducted a Training program on Altair Hypermesh 10.0, Ansys
2	3M Solutions Pvt. Ltd, Dhayari, Pune	Will conduct training program on Unigraphics
3	Experts Hub Industry Skill Development Centre, Chennai.	Conducted 9 Internship programs for Mechanical and Civil Students
Department of Management studies		
1	NAIP Education Private Limited	Training payroll to HR executives
2	Rural Relations	Rural Marketing
3	Pragmatic Solutions Private Limited	International Marketing
4	Palande Courier Private Limited	Supply Chain Management
5	Technoheat Manufacturing & Control	New Product Development
6	Technowing Solutions Private Limited	Android Application Development

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.

- Students won first in national level event "E-BAJA" held at Indore from 17 Feb 2016 to Feb 2016.
- Students won first prize for cost analysis in the International Event "FSAE" held at Italy from 11 Sept. to 14 Sept. 2015
- Student from Mechanical Engineering Dept. won first and second prize in National level Poster presentation competition "JATAN-2015' organized by PMC, Pune at SKNCoE, Pune on 13 Feb 2016.
- Students have participated in ROBOCON competition and won first prize
- One of the team presented concept for Angel Ambulance in heavy traffic condition and won first prize in the competition.

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.

- Atlas Copco India Ltd, Pune has set compressor lab in Mechanical Engineering Dept. for helping the research activities in department.
- The students are encouraged to visit various industries and research institutes to develop research culture in students. One of the groups is doing project at DRDO
- Institute has collaboration with various research institutes like ARAI and industries.

- Various hands on training programs are arranged by the departments to fulfill the requirements of industries.
- MOU has been signed with Allborg University Denmark in order to carry out research activity and doctoral studies.
- Faculty members from department of Mechanical Engg are doing research work at reputed institutes like SVNIT, DIAT etc.

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.

Table 3.7.2 gives list of Collaborations with Industries and Objectives as well as activities conducted by collaborating parties.

Table 3.7.2: Collaborations with Industries and Objectives

Sr. No.	Name of research laboratory/Institute /Industry/Organization (MoU)	Activities conducted by collaborating parties	Benefits accrued
Department of Computer Engineering			
1	Microsoft	Software Products Testing & Licensing	To Impart Knowledge of new Softwares
2	ATS InfoTech	Training & Certifications in .Net, Cloud Computing, Ethical Hacking etc.	Certifications
3	Aalborg	PhD programmes	International connect and exposure to research culture
4	Cognizant	In Campus Training	To Impart Knowledge of new Softwares
5	CayTech Sol.	Website/Webportal Maintenance of SKNCollege	To Impart Knowledge of Microsoft Live@edu Service
6	Infosys	Campus Connect Program	Placement Drives & Training to Faculty & Students
7	Quick Heal	AntiVirus Software Products & Licensing	To Impart Knowledge of new AV Softwares
8	Wipro	Training on FDP " Mission 10X"	To Impart Knowledge of new Learning Techniques
9	KPIT Cummins	Undertaking Projects, Training & Research	Projects Guidance, Training & Research

10	Zensar	SKNCOE-Zensar Center of Excellence	Training to Faculty & Students under X-tend program
11	B M S Solutions, Dubai, U.A.E.	E-Cell	Entrepreneur Skill Development
Department of Electronics And Telecommunication Engineering			
1	FICE	Hardware installation and Development Training programme conducted based on development board	To Impart Knowledge of new Software and hardware based on embedded system
2	Trident Tech lab Pvt. Ltd.	Training programme conducted based on development board	To develop the skill to work on MSP 430 boards
Department of Mechanical Engineering			
1	Designtech Solutions Pvt. Ltd, Kothrud, Pune	Conducted a Training program on Altair Hypermesh 10.0	To Impart Knowledge of Meshing and Analysis software which are used for research work.
2	3M Solutions Pvt. Ltd, Dhayari, Pune	Conducted training program on Unigraphics	To Impart Knowledge of Modeling software which are used for research work.
3	Experts Hub Industry Skill Development Centre, Chennai.	Conducted 7 Internship programs for Mechanical and Civil Students	Imparted practical knowledge related to I.C.Engines for Mechanical students and Concrete technology for Civil Engineering students
4.	Educate to Automate Pune	Conducted a training program on Industrial Automation	Imparted knowledge about about Industrial Automation
Department of Management studies			
1	NAIP Education Private Limited	Training payroll to HR executives	To impart knowledge of Payroll System to students
2	Rural Relations	Rural Marketing	Developing entrepreneurship &internship
3	Pragmatic Solutions Private Limited	International Marketing	To impart knowledge of

			international marketing
4	Palande Courier Private Limited	Supply Chain Management	Providing internship, entrepreneurship development
5	Technoheat Manufacturing & Control	New Product Development	Entrepreneurship, Helps student to understand distribution
6	Technowing Solutions Private Limited	Android Application Development	App Marketing , Designing new apps

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

Interaction with eminent personalities from various reputed Universities and industries are very useful for the creation of establishing better academic facilities for staff and students. The Institute often interacts with industry people through industrial visits, seminars/Guest Lectures, workshops, conferences and placement. The Institute has signed MoUs with different industries. Many reputed industries visit the institution for placements.

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

In order to bring researchers and industries together, various departments have organized national and international conferences on emerging areas.
Many eminent scientists have been visited and contributed to the various events (Guest Lectures, Seminars, Workshops, and Conferences etc.).List of International/National conferences organized by department is given in table 3.7.4 (a).

Table 3.7.4 (a): International/National Conferences Organized by Department

Sr. No.	Details of programs conducted	Eminent personalities visited	Month and Year
1	International Conference on Internet of Things, Cloud computing and Next Generation Networks (ICINC 2016)	Dr. Neeli R. Prasad, USA Dr. Ashok Chandra, Delhi Dr. Nilanjan Dey, Kolkatta	26th to 28th Feb. 2016
2	International Conference on Advances in Engineering and Technology (ICAET 2014)	Dr. Andres Nauerz, Germany Dr. P. R. Apate, IITB Dr. Deepak Sharma, IITG	1st to 3rd Sep 2014
3	Third Post Graduate Conference (iPGCON-2014) for Information Technology	Dr. Vilas Kharath , Pune Dr. G.V. Garje Dr. G.K kharate, SPPU	4th and 5th April 2014

4	International Conference on Business Management in Turbulent Times	Dr. Aha Kie Lim, HRD,USA, Dr. Timothy Wallis, Australia	21st and 22nd October 2011.

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

- Individual departments are always engaged in developing linkages and association with industries.
- MoUs and agreement are signed at department and institute level for extending guidance and discussion with students and faculties.
- Department wise list with list of activities and benefits to the stakeholders is given below in tables 3.7.5.

Table 3.7.5: List of Activities and Benefit to the Stakeholders

Sr. No.	Name of Industry	Objectives of the collaboration
1	M/s ATS InfoTech Pvt. Ltd., New Delhi	Microsoft IT Academy will provide training & Certification in various technologies like Dot Net, Cloud Computing, Ethical hacking, Network Security & Android without Certification & will also provide projects in groups to STES students. Free Faculty Development Program per year.
2	IT-ITeS Sector Skills Council NASSCOM	Design & Development of Add-on Program called Foundation Skills in Integrated Product Development. Train- the-Trainer program for faculty members & students.
3	KSPG Automotive India Pvt. Ltd., Pune	Set up Centre of Excellence in the field of Technical, Managerial & Social Knowledge Sharing. Faculty Development Program, Industrial Visits, Placement & Internship, Product Research or Product Development Projects & Social Programs.
4	Universal Construction Machinery & Equipment Ltd., Pune	Set up Centre of Excellence in the field of Technical, Managerial & Social Knowledge Sharing. Faculty Development Program, Industrial Visits, Placement & Internship, Product Research or Product Development Projects & Social Programs.
5	Atlas Copco (India) Ltd., Pune	Set up Centre of Excellence in the field of Technical, Managerial & Social Knowledge Sharing. Faculty Development Program, Industrial Visits, Placement & Internship, Product Research or Product Development Projects & Social Programs.
6	Frugal Labs Tech	Collaboration for preparing students & faculty

	Solutions Pvt. Ltd., Bangalore	members in their ability to built Robotic Devices. Provide Robotics related Hardware & Software kits to students & faculty members. Free of cost technical support for Workshop, Training & Participation in national & International Competitions.
7	M/s NAIP Education Pvt. Ltd, Navi Mumbai	To offer Certification in Payroll Processing & Labour Compliance for students & faculty members.
8	CFP Asie, Paris, France	To offer internship & Training for French Students in Indian Organizations.
9	ECTA, Kigali, Rwanda	To provide academic support & consultancy for establishment and running of MBA & Engineering courses in Kigali, Rwanda
10	Aalborg University, Aalborg, Denmark	To initiate patent based research in Engineering & Technology. To conduct academic & research activities with a focus on Ph.D. education.
11	BMS Solutions, Dubai	Paid Internship & Training to students in Product Development tools & environment.
12	Trident Techlabs Pvt. Ltd., Pune	To establish a teaching laboratory facility in the area of MSP430.FDP, Workshop in the area of MSP430.
13	Infosys , Pune	Industry academia partnership program under campus connect initiative.
14	Zensar Technologies Ltd., Pune	Special education & employment enhancing vocation skills to students
15	Foundation for Innovation & Collaborative Education, Bangalore	Intel Intelligence Systems Certification Program for students & faculties
16	Truecopy Credentials Pvt. Ltd., Pune	To provide electronic transcript support to the students
17	Designtech Systems Ltd., Pune	Hypermesh Software Training Program
18	SIEMENS Industry Software India Pvt. Ltd., & Three M Software Solutions, Pune	Training partnership program
19	Experthub Industry Skill Development Center	Certificate courses & Internship program in Mechanical Engg
20	deAsra Foundation,Pune	Promotion of entrepreneurship & starting new ventures by the STES college students.

Activities conducted by collaborating parties
1. Software Products Testing & Licensing
2. Training & Research

3. In Campus Training
4. Website/Webportal Maintenance of SKNCollege
5. Campus Connect Program
6. Mission 10X
1. High End Training Programs of CDAC Courses
2. Guest Lectures
3. Workshop
4. Entrepreneurship Development
5. Summer and Winter Internships
6. Live Projects

Benefits to stake holder
1. Knowledge of new Softwares Certifications
2. Training & Curriculum Modules
3. Knowledge of Microsoft Live@edu Service
1. Placement Drives & Training to Faculty & Students
2. Market Research
3. Data Collection and Analysis
4. Promotional Management

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.

Institute has very strong bonding with industry and academia from research organization form inception. Planned and targeted efforts are made to enrich all the program includes:

1. Inviting expertise from various industries for delivering Guest Lectures
2. Signing of MoUs with industries for providing exposure of new technologies to faculty and students
3. Planned and established linkages/collaborations related to academic and research activities for students and faculty members in various specializations.
4. Organizing Conferences, speaker in workshops and symposiums**.**
5. Facilitate collaborative interdisciplinary research and projects**.**
6. Provide hands on trainings to students.

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CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

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4.1 PHYSICAL FACILITIES

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

The Institute focuses on developing good and modern infrastructure like classrooms, laboratories, library with reading rooms, internet facility, parking facility, canteen, and hostel with mess for boys and girls separately in the campus. The Institute strives to create or enhance the infrastructure in view of a healthy, comfortable and technology based environment required for effective teaching and learning.

A standard process is set when institute needs creation and enhancement to the infrastructure that facilitate effective teaching learning. The process is as follows:

- The Institute follows the norms provided by AICTE and SPPU for creating and enhancing the infrastructure that facilitate effective teaching and learning in proportion to the student strength in different streams.
- The institution constantly and continuously expands and upgrades the required infrastructure facilities, in view of the changes of the university syllabus.
- Requirements collected from various departments with justification are put up to the LMC by Principal for approval.
- After getting approval from LMC, it is then put to governing body for final approval.

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, specialized facilities and equipment for teaching, learning and research etc.

- Institute has an infrastructure in line with AICTE norms. The Institute has planned and constructed the infrastructure which facilitates the curricular and co-curricular activities. All the departments are fully equipped with the necessary infrastructure to meet the ever increasing requirements with adequate class rooms, seminar halls, tutorial rooms, laboratories and sufficient space for hosting all academic activities.
- All the departments are equipped with state of the art computing facility with latest set of hardware and software.

1) **Common Instructional Area in Square Meters**

   Information of Common Instructional Area in Square Meters is given in Table 4.1.2 (a).

Table 4.1.2 (a): Common Instructional Area

Particulars	Room No	Required Area in Sq. Mtrs.	Available Area in Sq. Mtrs.
Computer Centre-III	CC	150	160
Drawing Hall/s	DH	132	150+116=266
Common Workshop	W/S + AWS	800	1010
Library and Reading Room	96	1050	1142
Language Laboratory		66	67
Total		**2726**	**3245**

2) Administrative Area in Square Meters

Details of Administrative Area in Square Meters is given in Table 4.1.2 (b).

Table 4.1.2 (b): Administrative Area

Particulars	Room No	Required Area in Sq. Mtrs.	Available Area in Sq. Mtrs.
Principal/Director Office	97A	30	52
Faculty Rooms	F1 to F285	1425	1533.3
Board Room	97E	20	23
Office	97B	150	345
Exam Control Office	97N	30	42
Placement office	97O	30	45
Maintenance	97J	10	12
Central Stores	971	30	35
House Keeping	97L	10	12
Pantry	97M	10	12
Security	97K	10	12
Total	11	**1755**	**2123.3**

Table 4.1.2 (c): Head of Department Cabin Area

Branch/Course	Room No	Required Area in Sq. Mtrs.	Available Area in Sq. Mtrs.
Engineering Sciences	97H	10	22
Electronics & Tele Communication Engineering	97H	10	20
Information Technology	97H	10	15
Computer Engineering	97H	10	15
Mechanical Engineering	97H	10	40
Master in Business Administration	97H	10	40
Total	**06**	**60**	**152**

Detail information of HoD Cabin Area, Area for Department Office and Amenities Area in Square Meters are given in Table 4.1.2 (d), Table 4.1.2 (d) and Table 4.1.2 (d) respectively.

Table 4.1.2 (d): Area for Department Office

Branch/Course	Room No	Required Area in Sq. Mtrs.	Available Area in Sq. Mtrs.
Engineering Sciences	97G	20	22
Electronics & Tele Communication Engineering	97G	20	20
Information Technology	97G	20	20
Computer Engineering	97G	20	20
Mechanical Engineering	97G	20	40
Master in Business Administration	97G	20	28
Total	**06**	**120**	**150**

3) **Amenities Area in Square Meters**

Table 4.1.2 (e): Area for Amenities

Particulars	No's / Capacity	Required Area in Sq. Mtrs.	Available Area in Sq. Mtrs.
Canteen+Mess	5+5+(14+8)	150	300
Staff Quarters	45	Adequate	Adequate
Health Care facilities	2	10	160
Common Room – Boys	1 (BCR)	100	100
Common Room – Girls	1 (GCR)	100	100
Boys Hostel	10 (B1 to B 182)	Adequate	1074*29.63= 31822.62
Girls Hostel	11 (G1 to G80)	Adequate	844*32.96= 27818.24
Principal Quarters	1 (PQ)	150	160
Guest House	(GS)	30	50
Reprographic facilities in the Institutions.	1	10	12
Play Ground	3	Adequate	19,103.76
Any Other			
Total		**550**	**882**

4) Other Essential Facilities Available on the Campus of the Institute

Essential facilities and desirable facilities available on the Campus are listed in Table 4.1.2 (f), Table 4.1.2 (g).

Table 4.1.2 (f): Essential Facilities Available on the Campus

Sr. No.	Particulars *[Please Attach Attested Photocopies if applicable]*	Remark, if any
1	Recreational facilities (Details)	Cultural Center, Student Activity Center
2	Sports facilities if any	Cricket Ground, Swimming Pool, Football Court, Gymkhana, Table Tennis, Carom Board
3	Disabled friendly infrastructure created	Yes
4	All Weather Approach Road	Yes
5	Potable Water Supply	Yes
6	Electrical Generator	500 KVA D.G. Set
7	Parking facilities	Yes
8	Medical facilities	Campus Clinic, SKNGMHRC
9	General Insurance Policy for assets	Yes
10	Sewage Disposal	Yes
11	General Notice Board and Departmental Notice Boards	Yes
12	Medical and Counseling Facilities	Yes
13	Institution web site	www.sinhgad.edu
14	First Aid facility	Yes
15	Backup Power Supply	500 KVA D.G. Set
16	Telephone and FAX	03 + 01 (Zero dialing facility is available with all Heads)
17	Safety Provision – Fire	Yes
18	Any Other	-

5) Other Desirable Facilities Available on the Campus of the Institute

Table 4.1.2 (g): Desirable Facilities Available on the Campus

Sr. No.	Particulars *[Please Attach Attested Photocopies if applicable]*	Remark, if any
1	CCTV Security System	Yes
2	LCD Projectors in classrooms	Yes
3	Post / Banking Facility ATM	Central Bank of India Branch and ATM, Bank Of Baroda and ATM,ICICI Bank ATM, Bank of Maharashtra, Bank of India, Post Office
4	Audio-Video Room	Yes
5	Virtual Classrooms	No

6) Availability of Transportation/Conveyance Facilities:

Table 4.1.2 (h): Transportation Facilities

Sr. No.	Particulars *[Please Attach Attested Photocopies if applicable]*	Available Yes / No	Remark, if any
1	Bus facility for Students	NO	Public Transport

2	Bus facility for Staff	NO	YES
3	Principal car	YES	YES
4	Staff Vehicle / Car	NO	NO
5	Ambulance	YES	Available as and when required from SKNGMHRC

Details of availability of Transportation/Conveyance Facilities are listed in Table 4.1.2 (h).

Class rooms and Tutorial rooms: The Institute has 66 well equipped class rooms and 17 tutorial rooms for conduction of tutorials which ensures the continuous evaluation of students.

Seminar Hall: The Institute has auditorium-IT Seminar Hall in the campus for conducting various activities. The College has one fully air conditioned seminar halls with LCD projectors, white boards and a public addressing system. Nearly 100 students can be accommodated in the seminar hall. These halls are regularly used for conducting seminars and conference at the college, state and national level. Students are encouraged for active participation in paper presentations and group discussions. The Institute has an additional seminar hall which is used for extra-curricular activities.

Co-curricular activities: The Institute regularly conducts a number of technical events. The events include activities such as technical quizzes, debates and robotics competition to name a few. Students actively participate in these events. In the recent past, the college students have won many prizes in such technical events at the inter-college level. Each department has also organized national and international level conferences.

b) Extra –curricular activities – sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc.

The Institute encourages and provides facilities for students to participate in various extra-curricular activities in order to build team spirit and leadership qualities. The team of faculty member and director of physical education looks after all cultural, sports and extra-curricular activities of the college.

Sports
The Institute has a three playground having an area of 19,103.76 sq.mtrs for playing several sports. A separate gymnasium facility for boys and girls is provided in the college campus. Students are encouraged to play different sports like football, boxing, cricket, volleyball, basketball, swimming, table tennis and lawn tennis. The Institute has a physical director to guide students.

PRAYAS Social Activity
"Prayas a Step Ahead"- it is a small step to understand our responsibilities towards society. It is a way to take a real education. Prayas is always trying to follow this saying and Samarth Bharat Abhiyan is giving the hands to Prayas to follow it. Social activities are listed in Table 4.1.2 (a).

Table 4.1.2 (a): Social Activities

Sr. No.	Activity	People Benefited
1	Computer Literacy	10,000+ Students
		250+ Teachers
2	Vedic Mathematics	10,000+ Students
3	Scientific Toys	10,000+ Students
4	Sky Gazing	500 Villagers/Students
5	Career Counselling	4000+ Students
6	Blood Donation	52 Villagers
		49 Volunteers
7	Free Dental Check up	641 Students
		920 Villagers
8	Free Health Check up	503 Villagers
9	Street Play (9 times)	3000 Villagers/ Students

Cultural Activities

The college has a committee for cultural activities. This committee along with the staff and students of the college organizes an annual cultural function by the name ―SINHGAD KARANDAK. The aim of SINHGAD KARANDAK is to provide a platform for students to showcase their talents and organizational skills. It comprises of events in the form of competitions, workshops and stage performances such as, Mr.& Miss SINHGAD, Lead the Youth, Treasure Hunt, Art Gallery ,Fashion Show to name a few. To broaden the horizons of the students, they are encouraged to participate in several inter-colligate events such as Firodia Karandak, Purushottam Karandak, Suman Karandak and the Symbiosis Karandak.

Under the banner of ANVITA a cultural group, students are encouraged to share their ideas, through a Wall magazine and debate competitions on social and cultural issues. The Institute believes in maintaining a healthy, safe and hygienic environment with the help of the house keeping staff.

Yoga

Facility for Yoga is available at the facility block in the hostel building. The campus has a medical center with visiting doctors to attend to the needs of the staff and students,for mediation Institute facilitates The Art of Living of Shri Shri Ravi Shankar conducted for peace of mind.

NSS

As per the guidelines from SPPU, the institute has formed the NSS unit of students and staff. Recently, the NSS camp has been conducted at village Khopi, Tal-Bhor, Dist-Pune.

4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? 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 Institutes society has a committee of life members which consists of teachers who are well aware of the college needs for infrastructure and are connected with day-to-day developments in the college. This ensures that the proposed expansion of infrastructure is in

line with the academic growth of the institution. The Institute expands the infrastructure as per AICTE norms .

The College is situated in an area of 5 acres. The total built up area of the building is 26,932.2 sq.m. Institute has provision of sufficient budget for enhancing infrastructure and facilities.

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

The institute ensures availability of infrastructural facilities for students to meet the requirement of physically disabled in following ways:
- Wheel chairs are made available in the institute in case of emergency.
- Examinations for such students are conducted on ground floor.

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

The details of residential facility and various provisions for faculty and students are described below:

Hostel facilities
The Hostel accommodation is offered to the students on a first come first serve basis. A Mess facility is available near hostel building. Five messes are available specifically for girls hostel named as Rohini (Seating Capacity 180), Annapurna,-I (Seating Capacity 250), Annapurna-II (Seating Capacity 250), Om Sai (Seating Capacity 180), Abhilasha mess (Seating Capacity 150), Vastalya (Seating Capacity 232). For Boys Anuradha (Seating Capacity 180), Annchchhatra (Seating Capacity 200), Amprapali (Seating Capacity 200), Mahalaxmi (Seating Capacity 200), Nandini (Seating Capacity 200, Geetanjali (Seating Capacity 200), Ashwini (Seating Capacity 200). Food is cooked in the mess in most hygienic condition & cleanliness is given highest priority in the kitchens

Canteens
There are seven canteens & seven snacks centers available in the campus canteens are available in the campus. Canteens are situated in the close proximity to the hostel and are open from 7.00 a.m. to 10.00 p.m., Fruit Shop, Amul snack center, Milk parlor, Sinhgad Coffee center & tea shop are also available.

Security
Security guards available on shift basis, no gents are allowed to enter in the girl's hostel buildings Movement register is maintained to keep a tab on the girl's movements in & outside the hostel, which the girls should sign before leaving the hostel & after returning. Late coming register & Attendance Register is maintained. At the time of night out permission is taken from Parents & then students are allowed. Night out permission is given by hostel in charge/ warden/clerk. Students are allowed to take night out twice in a month, they are permitted to go to legal guardian/ parents place strictly. A girl hasn't return to the hostel, after mentioned night out date, parents are informed by telephone

Cleanliness
The College buildings & departments are always kept clean & clear by dedicated sweepers & peons. Two lady sweepers & peons per department are dedicated for cleanliness. The weekly reporting to Registrar about the cleaning & Registrar keenly observes their

performance. At the time of returning back duty their bags are checked by warden.

Entertainment & Sports

Daily News paper serves as source of information for the Girls. Institute cultural center gives wide scope for student's extra-curricular activities, Swimming pool is available between 5.00am to 7.00p.m, and Lawn tennis court is available.

Medical

Doctor is available 24 hrs. in the campus for any medical emergency, Medical Store is also available in the campus, as per seriousness of illness students are taken to Smt. Kashibai Navale General Hospital, run by own where all treatments along with medicines are available for patients at free of cost, students are taken to the hospital in four wheelers or Ambulance of Society, by night warden.

Safe drinking water

Safe drinking water is provided to the hostel students. The hostel has a facility of water coolers.

Recreational facilities

A Gymnasium facility is available for boys and girls in the college campus. Essentials for playing Carom, Badminton, Cricket, Football, Basketball, Chessboard and Table Tennis are available in the campus. Television sets for entertainment are available in the hostel mess.

Other Facilities

In the campus various facilities available to the student as Laundry, Gents & Ladies Parlor, Sinhgad Shopping Centre, Fruit stall & Fruit juice Centre.

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?

A free medical checkup is arranged for students taking admission in the college. Each department has first-aid kit for minor injuries. Besides this the campus has a medical center with one full time doctor and an attendant. As per seriousness of illness, students are taken to Smt. Kashibai Navale General Hospital, run by own organization where all treatments along with medicines are available for patients at free of cost. Medical Insurance facility for every student is mandatory from SPPU and STE society.

4.1.7   Give details of the Common Facilities available on the campus–spaces for special units like IQAC, Grievance Redressal unit, Women's Cell, Counseling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.

Training and Placement Cell

The institution has a training and placement cell to support the students for their placement related activities and for career guidance.

Counseling and Career Guidance: Each department takes care of the counseling and career guidance to the students. Parent teachers are appointed for a group of 20 to 25 students. The parent teacher counsels and guides the students on a regular basis. The parent teacher contacts the parents of the students whenever necessary. For more details, refer section 4.1.5.

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, students/user friendly?

Yes, Institute has formed a library committee

Table 4.2.1: Library Advisory Committee

Sr.No.	Name	Designation
1	Dr. A.V. Deshpande	Chairman
2	Prof.Mrs. R.A. Kudale	Member
3	Prof. S.K.Patil	Member
4	Prof. N.P. Sherje	Member
5	Prof. Mrs. V.S. Khandekar	Member
6	Prof. V.V. Sangamnerkar	Member
7	Prof.B.V. Raigaonkar	Member
8	Mr. Jai Kalra-T.E E&T/C	Student Representative
9	Mr. V.M. Bansode	Asst. Librarian

The library advisory committee takes following initiative
- Ensure all recent reference books are available in the library
- NPTEL video lectures are made available to faculties and students.
- Online journals like IEEE, Science Direct etc are made available in the Digital library.

4.2.2 Provide details of the following

- Total area of the library (in Sq.Mts.): 1145
- Total seating capacity: 1000
- Working hours (on working days, on holidays, before examination days, during Examination days, during vacation) are listed in Table 4.2.2 (a).

Table 4.2.2(a): Library Timings

Sr.No.	Details	Library Timing
1	On working days	8.00 a.m. to 12.00 midnight Book Issue counter
2	On holiday	8.00 a.m. to 12.00 midnight Book Issue counter
3	Before examination days	8.00 a.m. to 12.00 midnight Book Issue counter
4	During examination days	8.00 a.m. to 12.00 midnight Book Issue counter
5	During vacation	8.00 a.m. to 12.00 midnight Book Issue counter
6	Reading hall	24/7

- Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources).

Layout of the Library is shown in Figure 4.2.2.
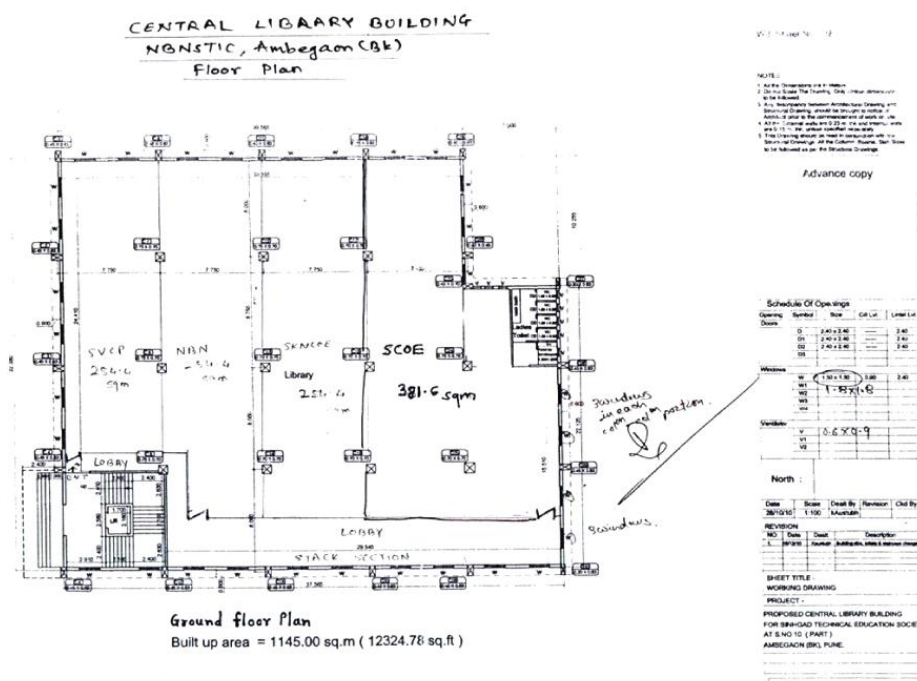
Figure 4.2.2: Library Layout Plan

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

- Requisition from concern faculty as per university syllabus and AICTE norms are taken before the start of semester and which is being finalized by library committee.

For the details of books and journals in the library refer following Table 4.2.3.

Table 4.2.3: Library Details

Library holding	Year -1 (15-16)		Year -2(14-15)		Year -3(13-14)		Year -4 (12-13)	
	Number	**Total cost**	**Number**	**Total cost**	**Number**	**Total cost**	**Number**	**Total cost**
Text Books	211	100291	512	224332	1317	549291	2730	1085788
Reference Books	55	31185	52	51705	38	21648	48	72374
Journals/ Periodical	135	275000	135	275000	135	320752	121	202200
e-resources	01	651422	02	974350	9 e-resources	1505585	10 e-resources	1284927
Any other (specify)	04	4780	04	6091	13	12782	14	13746

4.2.4   Provide details on the ICT and other tools deployed to provide maximum access to the library collection?

- OPAC   **Yes**
- Electronic Resource Management package for e-journals   **Yes**
- Library website sharing in institutional website   **Yes**
- In-house/remote access to publications :-   **Yes**
- Library automation   **Yes**
- Total number of computers for public access   **30**
- Total numbers of printers for public access   **08**
- Internet band width/ speed   64 Mbps
- Institutional Repository   **Yes**
- Content management system for e-learning   **Yes**
- Participation in Resource sharing networks/consortia (like Inflibnet)   **Yes**

4.2.5   Provide details on the following items

- Average number of walk-ins   **350 per day**
- Average number of books issued/returned   **300**
- Ratio of library books to students enrolled-   **9:1**
- Average number of books added during last three years   **4697**

2014-15	2013-14	2012-13
564	1355	2778

- Average number of login to e-resources   **No**
- Average number of e-resources downloaded/printed   **No**
- Number of information literacy trainings organized   1/ Sem
- Details of "weeding out" of books and other materials   **No material weeded out**

4.2.6   Give details of the specialized services provided by the library

- Manuscripts : No, Library does not have old documents or Manuscripts of 1940's
- Reference: Yes, Library has well developed reference section of 3445 Books belonging to all branches
- Reprography: Yes, Library has photocopy facility for Reference Books.
- ILL (Inter Library Loan Service):- Yes, amongst all technical institutes of STES IIL facility is extended. Ones in a month the books are exchanged
- Information deployment and notification:-Yes, new arrivals are notified and displayed. Gems (Institutional ERP) software is used for Information Deployment and Notification.
- Download:-Yes, this facility is available in digital Library.
- Printing: - Yes, facility is provided to students demand for curriculum topics.
- Reading list/ Bibliography compilation is done, on demand for the faculty.
- In-house/remote access to e-resources: - Yes, there is IP enables access in the campus.

- User Orientation and awareness: - Yes, orientation is conducted in batches at the time of admission.
- Assistance in searching Databases: - Yes, The help of professional staff is extended to users for searching right information.
- INFLIBNET/IUC facilities: Yes, NLIST database is shared with other institutes with user name and password.

4.2.7   Enumerate on the support provided by the Library staff to the students and faculty of the institute.

Circulation service	Current awareness service
References service	e-library service
Periodical service	Newspaper clipping service
New Arrival Services	Previous Question Papers of SPPU are available for reference
User orientation programming	Overnight book issue facility available

4.2.8.   What are the special facilities offered by the library to the visually/ physically challenged persons? Give details?

- Lift is available for physically challenged persons
- Multimedia resources (audio/video peripherals) are available in the library.

4.2.9   Does the library get the feedback from its users? If yes, how is it analysed and used for improving the library services. (What strategies are deployed by the Library to collect feedback from users? How is the feedback analysed and used for further improvement of the library services?)

Yes, Feedback system has been introduced by the college to take the feedback from all the stake holders about difficulties faced and suggestions to improve the functioning of the library and also library have a suggestion box fixed outside the library where the students can put their grievances and also suggestions. The library staff and faculty members also have interaction with the students in this regards**.**

4.3 IT INFRASTRUCTURE

4.3.1 Give details on the computing facility available (hardware and software) at the institution.

All departments are equipped with state of the art computing facility. Adequate number of PCs with latest configuration and equipment's are present in the department. Summary of computing facility is depicted in Table 4.3.1 (a).

Table 4.3.1(a): Computing Facility

Sr. No	Description	E&T /C	Comp	I.T	Mech	F.E	MBA	Office	Total Qty
1.	Server	01	05		01	0	0	03	10
2.	Desktop Computers	202	314		109	156	07	14	1003

3.	Laptop	02	01		02	01	01	0	07
4.	Laser Jet Printers	18	11		04	08	01	09	131
5.	Dot matrix Printer	12	35		0	0	0	0	47
6.	LCD Projectors	11	11		11	14	02	0	57
7.	Scanners	3	1		01	01	01	01	10
8.	OHP	6	5		08	04	0	0	57
9.	Plotter		0		01	0	0	0	01
10.	Color Laser Printers		0		01	0	0	01	02

List of software available at various departments is as follows:

Red Hat Linux V. 9.0	MATLAB, 6.5 WIN CD Simulink with accessories	Application Software
V. Studio Dot Net Pro Media Pack	AccMultisim 7 CD- Education Version	Application Software
V. Studio Dot Net Pro. 2003 OLP NL AE	VLSI Design software Xilinx makle-1SE series US-ISE-FND version 6.2	Application Software
Borland C++ Suite Scholar FPP	Triton IDE Executive Edition Debugger	Application Software
Rational Suite Enterprise V. 2003 .06.00	Code Composer Studio	Application Software
Microsoft Office Project Std. 2003	Microwind 3	CNC Simulation Software (10)
IBM Seed for Quality Includes	Office XP Pro.OLP NL	Hyper works Software (125)
IBM Rational Functional tester	COBOL	ANSYS Version 13.0 (25)
IBM Rational Quality Manager	DSP Simulator Software	Mastercam X 5 (18)
Aptitude Lab Software	Novell small business suite 6.0	Automation Studio Version 5.6 (10)
Oracle-11	IBM Rational Software	ETNL Language Lab Licensed
Auto Desk Inventor Professional 2008 (10)	MATLAB 10	PASW Statistics Base 18.0 (SPSS)
Pro/ Engineer Wild Fire 3.00 (50)	Rational Suite Enterprise V. 2003 .06.00	MD FEA and MD Motion Software/ NASTRAN (50)
Auto CAD 2009 (20)	Aptitude Lab Software	Oracle-11

4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus?

- Internet facility of speed 64 Mbps is provided by the institute.

- The Institute provides LAN and Wi-Fi Facility to the faculty and students to meet connectivity requirements.

The details of Internet facility are shown in Table 4.3.2

Table 4.3.2: Details of Internet Facility at SKNCOE

Number of servers for Institute	10
Number of PCs in Institute	1003
Name of the Internet Provider	Tata Communications Ltd, Pune
Available Bandwidth	64 Mbps
Access Speed	Around 24 Mbps
Availability of Internet in an exclusive Labs	Yes
Availability in most computing Labs	Yes
Availability in Department and other units	Yes
Institute own Email facility to Faculty/students	Yes (mail.sinhgad.edu)
Security/Privacy to Email/Internet Users	Hardware firewall is installed

4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

The college upgrades the computer systems of the different laboratories as per the requirements of the University syllabus. All the classrooms of the college are equipped with LCD projectors. The Institute provides Wi-Fi facility for staff and final year students for their research and project work.

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 regarding annual budget is given in Table 4.3.4.

Table 4.3.4: Annual Budget for Last Three Years (In Lakhs)

Items	Financial Year 2014-15		Financial Year 2013-14		Financial Year 2012-13	
	Allocated Budget	Expenses	Allocated Budget	Expenses	Allocated Budget	Expenses
Component &Lab. Material	10.00	7.33	8.29	8.98	8.50	5.94
Computers	43.22	42.58	68.83	53.30	58.00	57.02
Software	1.96	8.48	00	6.56	14.48	11.21
Repairs, Maintenance on computers & others	5.00	66.64	6.54	18.44	18.10	33.82

Details of Annual Budget for Last Three Years are depicted in Table 4.3.4.

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 Institute has access to on line NPTEL video material.
- Recorded lectures of the all expert subject teachers are also available on K-point.
- Faculty members make use of power point presentation for effective instruction delivery.
- All the class rooms are well equipped with LCD projectors. All Staff rooms have the facility of computing and Internet connections.
- The Institute maintains a data base of objective questions for all courses. This helps to verify the knowledge grasped by students.
- Students can avail the facilities of photocopying, printing and CD writing in the college building.

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 spaces etc.) by the institution place the student at the center of teaching-learning process and render the role of a facilitator for the teacher.

- The Institute has access to on line NPTEL video material.
- Recorded lectures of the all expert subject teachers are also available on K-point.
- Learning resources, independent learning, ICT enabled classrooms/learning spaces etc. by the institution place the student at the center of teaching-learning process and render the role of a facilitator for the teacher.
- The Institute provides on line NPTEL video material for students and staff. Content beyond syllabus is covered by conducting workshops and guest lectures by experts from the industry. Webinars are also conducted by subjectexperts.
- IIT spoken tutorials, EDX courses and K-point facilities are also available for enriching the student knowledge and learning skills.

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?

The institute avails national knowledge connectivity directly facility provided by spoken tutorials and NPTEL.

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)?

For details of optimal allocation and utilization of the available financial resources for maintenance refer following Table 4.4.1 (a).

Table 4.4.1(a): Utilization of the Financial Resources

Type of Maintenance	Resource	Remark
Civil maintenance	Through Estate office for minor maintenance work Through Civil Contractor for major maintenance work	Weekly or after 15 days checking of all toilets is carried out and if needed Maintenance is carried out.
Electrical Maintenance -	In house electrical staff Number of electrical Staff : 14	Maintenance after every six months & after receiving the complaints
Maintenance of computing Facilities	In house staff. number of staff: 02	Maintenance after every three months & after receiving the complaints
Maintenance of water supply Facility	In house plumbing staff. Number of plumbers : 09	Maintained every months & after receiving the complaints
Housekeeping	Number of Housekeeping staff: 40 (on Contract Basis) Anand Enterprise	Daily cleaning of corridors, lecture halls, toilets and parking is done.
AMC for generators	Name: Omkar Engineers, M.K Services Generator Operating :05	Maintenance is carried out after every 6months or annually depending on the use
Garden Maintenance	40	Daily Maintenance
Plumbing Maintenance	No. of Plumbers :06	Maintenance after every six months & after receiving the complaints
Carpentry Maintenance	Carpenters :03	As per requirement
Civil Maintenance	Civil Maintenance :03	As per requirement
Acqua Guard, Water Coolers, Washing Machines,AC, Geysers	No of Persons: 03	Maintenance after every six months & after receiving the complaints

A review of the requirements of infrastructure is done before the commencement of each academic term. Details if the budget allocated for infrastructure and others are shown below for the last four years in Table 4.4.1 (b).

Table 4.4.1(b): Details of the Budget Allocated for Infrastructure

Items	2015-16		2014-15		2013-14		2012-13	
	Allocated Budget (in Lakhs)	Expenses (in Lakhs)	Allocated Budget (in Lakhs)	Expenses (in Lakhs)	Allocated Budget (in Lakhs)	Expenses (in Lakhs)	Allocated Budget (in Lakhs)	Expenses (in Lakhs)
Acquisition of Land &New Building & Infrastructural built up	2.00	26.62	10.00	116.86	20.00	64.61	--	743.35
Library Books, Journals, Magazines, Library Equipments	9.00	1.43	6.00	3.62	27.75	8.18	32.50	39.67
Laboratory Equipments	59.44	23.59	67.22	27.87	119.34	36.51	106.00	47.44
Computers		22.87		42.58		53.30		57.02
Softwares	8.77	3.47	1.96	8.48	00	6.56	14.48	11.21
Games/ Sports/ Student Activity	3.00	1.82	1.50	30.58	2.75	3.60	3.00	33.34
Furniture	10.5	10.59	12.14	18.34	40.85	88.73	50.00	48.39
Administrative & others	2209.75	1745.82	1738.18	2971.37	1549.64	2601.90	64.03	2179.45

4.4.2 What are the institutional mechanisms for maintenance and upkeep of the Infrastructure, facilities and equipment of the college?

Table 4.4.2: Details of the Budget for Maintenance

Items	2015-16		2014-15		2013-14		2012-13	
	Allocated Budget (in Lakhs)	Expenses (in Lakhs)	Allocated Budget (in Lakhs)	Expenses (in Lakhs)	Allocated Budget	Expensed	Allocated Budget	Expensed
Building		25.69	--	--	--	--	--	565.65
Furniture	10.5	10.59	12.14	18.34	40.85	88.73	50.00	48.39
Equipments & Computers	59.44	46.46	67.22	70.45	119.34	89.81	106.00	104.46
Vehicles	--	4.15	--	16.35	--	9.76	--	19.92

Above table 4.4.2 give details of the budget for maintenance. The Institute has a Building maintenance committee. The committee monitors the maintenance of infrastructure and facilities. Responsibilities of the committee are listed below:

Building/Furniture Maintenance committee
- Proper and regular maintenance of infrastructural facilities.
- Maintenance of surroundings

- Carrying repair and maintenance work of internal roads, pest control, electrical, sanitary and furniture

Functions of the committee
- Proper upkeep and maintenance of the buildings
- Maintenance of the surroundings
- Carrying out minor repairs of furniture, electrical and sanitary fittings
- Maintenance of the roads, water tanks and other services in the compound
- Maintaining security
- Ensuring the safety requirements in the college

Equipment and Computer Maintenance Committee
The Institute has a committee who overlooks the maintenance and upkeep of the equipment and computer facilities of the institution and the details are as all the stand alone and dedicated computers, network systems connecting these computers are taken care of by the respective departments, System Engineers and Junior Technical officers. All the electrical and electronic equipments deployed in different positions in the Institute are looked after by the team of Electrical maintenance staff consisting of electricians and engineers.

Housekeeping supervisor of the Institute
The Institute has a house keeping supervisor for overlooking the maintenance of cleanliness and minor repairs (sanitation, carpentry) required on a day to day basis. The housekeeping is outsourced.

4.4.3 How and with what frequency does the Institute take up calibration and other precision measures for the equipment/ instruments?

All the devices, equipment and instruments which require calibration undergo periodic calibration process by the authorized agencies in every semester.

4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?
Any other relevant information regarding Infrastructure and Learning Resources which the college would like to include.

The steps taken for location, upkeep and maintenance of sensitive equipment are listed below:

1. Fire extinguishers are provided at multiple locations as per requirement.
2. Multiple exits in case of emergency are provided.
3. Firefighting equipment training is provided.
4. Exit signs and floor indication boards are given at strategic locations.
5. Electricity: - 3-Phase line with LT 45 kW electricity supplies from Maharashtra State Electricity Distribution Co. Ltd.
6. Power Backup: - Power back up from Kirloskar Genset 500KVA.
7. Telecom: - BSNLs one line (Telephone No/FAX No. 24354938) is available with EPBX system (400 intercom lines.), Reliance line-(32518689)
8. Water supply: - Municipal Corporation water supply is available in the campus round the clock and it is utilized for drinking purpose after filtration. Beside this well

water is also available in carpentry campus, which is used for all purposes other than drinking.

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 institute publishes its updated prospectus/handbook annually in the form of hard copy.

Information provided in the prospectus
- The copy of such prospectus is given to the students at the time of issuing the application form. The prospectus contains the information about vision and mission of SKNCOE, all the common facilities, resources and infrastructure available under the umbrella of institute.
- The information regarding admission procedure, intake capacity and various other courses offered by institute is provided in the prospectus. It provides the information about student's achievements in that year.
- The information about all the departments such as faculty achievements, number of books published, number of papers published, research grant received and university toppers in the department etc. is made available in the prospectus.
- The highlights about MoU's with various companies/organizations, prominent recruiters, alumni associations, central placement cell, cultural activities, technical events, student council are provided. It also gives information about Maharashtra prohibition of ragging act, anti-ragging policy, and preventive measures taken by institute to avoid ragging, anti-ragging committee.
- All the information which is published in prospectus is also published on the website of the institute.

Commitment and accountability
- The institute carries out induction program for the students on the first day of joining to the course. During this program the university examination pattern, tentative schedule of examination, students result analysis, information regarding STP, information about student mentoring scheme, faculty class coordinators, academic calendar, laboratories, anti ragging drive, women grievance cell and extra-curricular activities conducted are explained to students and parents. Also the departmental and campus visit tour is carried out for students and parents.
- The institute follows the academic calendar, rules and regulations laid by institute strictly to ensure its commitments. To ensure the accountability, at the end of every academic year a detailed academic report is prepared and submitted to management.

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?
- There is no provision of institutional scholarship however scholarship and free ship are given by state GoM on the basis of parental annual income and based on

reservation policies of the government and GATE scholarships.

- The institute offers 'Earn and Learn Scheme' of university to the students. During last four years 66 students are enrolled under this scheme and financial aid of Rs. 1,09,500/- was made available and disbursed among them on time.
- Scholarships for student talent promotion are also available from the various NGOs and companies like Kirloskar group, RM Dhariwal group, Atlas Copco, Cummins India etc.
- The information regarding scholarship is notified to the students through HoD.
- The scholarship section ensures that all students have filled the scholarship forms and scholarship amount is disbursed from time to time.

5.1.3 What percentage of students receives financial assistance from state government, central government and other national agencies?

The information about the scholarships available in the institution is given through the class Tutors and the application forms are circulated to them. The scholarship section, registrar & the student section ensure that the above said amounts are disbursed in time to the students. Table 5.1.3 gives details of the Financial Assistance from State and Central Government.

Table 5.1.3: Details of the Financial Assistance from State and Central Government

	Financial assistance from state government, and other national agencies	Total no. of students	Percentage of students
Year 2012-13			
SC/ST	Free ship / Scholarship		9.15
Minority	NA		NA
Other (NT, OBC, SBC & EBC)	Free ship / Scholarship	3321	36.77
PH	Nil		Nil
	TFWS	36	1.08
	GATE	18	19
Total		3321	45.92
Year 2013-14			
SC/ST	Free ship / Scholarship		10.02
Minority	NA		NA
Other (NT, OBC, SBC & EBC)	Free ship / Scholarship	3744	33.23
PH	Nil		Nil
	TFWS	77	2.05
	GATE	19	14.6
Total		3744	43.24
Year 2014-15			
SC/ST	Free ship/Scholarship		8.38
Minority	NA	4784	NA
Other (NT, OBC, SBC	Free ship / Scholarship		29.79

& EBC)			
PH	Nil		Nil
	TFWS	118	2.46
	GATE	18	16
Total		4784	38.17
Year 2015-16			
SC/ST	Free ship / Scholarship		9.91
Minority	NA		NA
Other (NT, OBC, SBC & EBC)	Free ship / Scholarship	4913	33.76
PH	Nil		Nil
	TFWS	159	3.23
	GATE	7	5.5
Total		4913	52.4

1.1.4 What are the specific support services/facilities available for

i) **Students from SC/ST, OBC and economically weaker sections**
   - The institute identifies and guides the students from the economically weaker sections for applying to government scholarships.
   - Institute also conducts extra free coaching to needy students.
   - Earn and learn scheme in association with SPPU enables the socially and economically weaker students to earn money by working in various departments after college hours.
   - Book bank scheme to SC/ST students by SWD.
   - Scholarship is also available under EBC scheme.

ii) **Students with physical disabilities**
   - The college allocates class room for physically disabled students on the ground floor.
   - They are allowed to use suitable wheel chair inside the campus.
   - The adjustable chairs are made available in the laboratories.
   - Extra time is given for SPPU theory examination.
   - Separate quota is reserved for physically handicapped students.

iii) **Overseas students-** Institute does not have admission quota for overseas students.

iv) **Students to participate in various competitions/National and International**
   - The institute encourages students to focus on this particular area for the exposure in the international domain in association with the faculty members such as Avishkar,Anveshan, Robocon, IIT Techfest and Techtonic.
   - Faculties and staff members are deputed to assist and guide the students from this institution have participated in various international, national and state level competitions and have been proved as a valuable contributor in the field of education and research.
   - Faculties also guide students to publish research papers in several national and international journals and conferences. The institute itself conducts an annual cultural event called "Sinhgad Karandak". It is an inter-collegiate cultural event which provides a platform for students to showcase their cultural talents.
   - The students are supported by financial support in events like BAJA, ROBOCON, SUPRA, TECHTONIC, FSAE etc

v) Medical assistance to students: health center, health insurance etc.
- The services of a Full Time Medical officer are available in the campus of the institute. The RMO who resides in the hostels attends the cases of emergency.
- The first aid box is available at every department.
- The medical store is available in the campus.
- The institute has provided an ambulance service for emergency medical support.
- Free medical facilities are provided at SKNMC & H and Sinhgad dental college.
- The institute offers insurance policy of University and society.

vi) Organizing coaching classes for competitive exams
- The institution supports the students by arranging special training programs, soft skill training programs on the regular basis conducted by the internal and external experts.
- Academic collaborations is made for GATE, GRE, CAT with premier training institutes.
- Institute has Language Laboratory facility.

vii) Skill development (spoken English, Personality development programme, technical certifications etc.,)
- The medium of instruction of all the programs at the institute is English. For the students who need help in spoken and written English is coached in the SILC (Cambridge) courses run by the society.
- Soft skill development (SSD), Technical Skill Development(TSD), AMCAT, EDX and IIT Spoken Tutorial, SILC language labclasses are regularly arranged. It helps the students to enhance their communication skill, logical, numerical ability and problem solving skills.
- Faculties and students are encouraged to use NPTEL learning resources.

viii) Support for "slow learners"
- The institution believes that slow learners can go steadily. So, personal care is taken by individual faculty member for these students.
- The students are allowed to ask their problems without any hesitation. For such students, remedial classes, extra hour classes, frequent tests are arranged on regular basis.
- Various MCQs, question banks and K-point video lecture series for theory and labs are made avilable to the students.
- Weekly TG meetings are organized to understand the details regarding personal growth and performance of students.
- Set of SPPU question papers, solutions are provided alongwith model answers.

ix) Exposure of students to other Institution of higher learning/corporate/business house etc.
- The students are exposed to industrial environment through internship program through projects with Persitent and Zensar, Industrial visit, participation in Seminar/ Workshops/ Conferences/Alumni Meet/ R & D program etc.
- Internship support is also provided by institute for many reputed companies in various diciplines as well as many European universities.
- Overseas cell helps and guides students to pursue higher education in foreign universities and also to get placed in international corporates.
- Institute encourage students to participate in national and international level competitions like ROBOCON, BAJA, SUPRA, FSAE.

x) Publication of student magazines
- Institute has its own magazine called "Kaliedo" which consists of technical, non-technical articles, poems, arts.
- This helps the students to produce many good quality and creative writing.
- The professional students association also publishes their byannual report.

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 an entrepreneurship development cell (E-Cell) in the Computer department. This E-Cell is a part of the ACE as Independent committee. The E-Cell establishes and provides co-ordination and implementation mechanism for Entrepreneurship. The objectives set by E-cell are:
- To share the resources, increase co-operation, co-ordination.
- To facilitate Science and Business collaboration by hosting the events to create dialogue between academia and business.
- To share Intellectual Expertise with various organizations to help them to get expert scientific insight in various problems.
- To achieve these goals the institute has planned series of technical events like seminars, debates, competitions etc. This helps our aspirants to get acquainted with various aspects of the business plans and the challenges involved.

The E-Cell focuses on development of a coordinated outreach strategy ensuring the overall development of Entrepreneurial Skills of the Students through mechanisms such as seminars, workshops, market opportunities, competition analysis, business plan competitions, financial projections. The students are allowed to become a member of any of the active working team of students such as coding, marketing, advertisement, campaigning, sponsorship and one reserve group. The working groups or team is responsible for overall planning of various events, encouraging student participation, selecting appropriate venues, developing budget, preparing agendas, working own specific ideas approved by E-Cell, collaborating with industry (mostly start-ups) to have knowledge transfer. The E-Cell Core-committee meetings are hold regularly. These committee members are responsible for the profile development, document preparation, budgeting, communications and event planning, optimizing the proper usage of available resources.
Institute has signed MoU with dASRA foundation which is an initiative of Persistent Systems Pvt. Ltd to promote entrepreneurship skills among the students.
Impact
- Students are exposed to industry oriented live projects and culture. They also get an opportunity to work on various phases of product development life cycle.
- It helps them to make them employable or it also motivates them to start their startups.
- Eventually, it also gives them good platform to become the successful entrepreneur.

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**

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* Any other

The following policies and strategies are framed by the institution to promote participation of students in extracurricular and co-curricular activities.

- Remedial classes and lab sessions are conducted to compensate any academic loss of the students.
- The institution has supportive environment to encourage students to participate in activities of their interest. The cultural and sports committees give opportunities to students to explore their talents.
- The institution also promotes the participation of the students in inter-collegiate competitions.
- All the departments of institutes facilitate best outgoing boy and a girl student every year.
- Students are encouraged to participate in events organized at zonal level, state level and national level.

Additional academic support, flexibility in examinations

- Flexibility in the examination is provided by institute as well as university by conducting special examination.
- The institution is providing financial support for transportation, registration fee and expenditure for sport kits and uniform of the sports / cultural/technical competitions.
- Institute provides financial support for Purushottam and Firodiya karandak activity, Robocon and FSAE event.

5.1.7 Enumerating on the support and guidance provided to the students in 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.

Yes, the institution motivates the students for higher studies, research career, various exams at the district, state and national level. Many students from this institution are pursuing their higher studies in abroad as well as in India. The institute arranges various practice sessions of aptitude tests and group discussion for the students. As a part of this training the institute has designed STP specifically STP-III & STP-IV. The institute is also organizing workshops for identification of career opportunities, a work shop on developing soft skills. As a result of these efforts a good number of students are pursuing their higher studies. The branch wise details are as follows in table 5.1.7.

Table 5.1.7: Details of the Students with GRE Score

Branch: E&TC				
Year	GATE	GRE/TOFFEL	CAT	CET
2012-13	1	---	---	---
2013-14	---	8	---	---
2014-15	4	1	---	---
Branch: INFORMATION TECHNOLOGY				
Year	GATE	GRE/TOFFEL	CAT	CET
2012-13	2	6	2	---

2013-14	3	5	3	---
2014-15	4	4	2	---
Branch: COMPUTER				
Year	**GATE**	**GRE/TOFFEL**	**CAT**	**CET**
2012-13	---	12	---	---
2013-14	---	12	---	---
2014-15	6	12	---	---
Branch: MECHANICAL				
Year	**GATE**	**GRE/TOFFEL**	**CAT**	**CET**
2012-13	4	---	---	---
2013-14	21	5	---	---
2014-15	6	---	---	---

5.1.8 What type of counseling services are made available to the students (academic, personal, career, psycho-social etc.)

 The institute provides regular counseling to the students to address various issues viz. academic, personal, career, and psycho-social.

1) Academic
Related to the academic counseling, the institute has TG scheme. In this scheme one TG is assigned to a batch of students. The TG is required to conduct meetings twice in a month with the students. The TG looks after their academic requirements such as attendance monitoring, exam preparation, books requirements, notes requirements and makes arrangements for remedial classes.

 2) Personal
The TG regularly interacts with the students on one to one level. The TG is responsible to develop friendly and faithful relationship with every student to make them comfortable to share their personal problems. The student is encouraged to share his/her personal problems. Such personal problems are kept as secrete between that student and TG only. The solution for such problems is found out through the consultation with senior faculty members.

3) Career
The institute encourages the students to go for higher studies and research. The following notable actions are taken to achieve this.
- STPs (Level I, II, III, IV,V) are conducted
- Guest Lectures from Industry people. Different workshops where conducted irrespective of their regular academics.
- Training and placement cell of the institute organizes lectures to guide the students with respect to their career development.
- E cell is also actively involved in giving proper inputs to the students to become an entrepreneur.
- STP is supported with AMCAT which is responsible for deciding the right career path for the student based on their strengths.
- Overseas cell is active at society level to assist the students in training and guiding them to get admission in foreign universities.
- Overseas placements and internship are also provided by the cell.

 4) Psycho-social
Few students are facing psychological disorders because of peer pressure, fear, anxieties,

depression, sadness, family problems etc.. These students are facing difficulties in coping up with academic development particularly at entry level. The senior faculty members along with HoD and Principal are helping these students through counseling. The TG is in constant touch with all students to handle all sorts of their academic and personal problems. During the meetings, TG can detect a student having psychological disorders and report to HoD. Corrective action is initiated from TG, HoD up to principal depending upon the severity of psychological disorders. Sometimes medical treatment is advised for few serious cases.

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 interview and the percentage of students selected during campus interviews by different employers (list the employers and the programmes).

Yes, the institute has a structured mechanism for career guidance. Various programs are arranged to guide the students for career.

- Students are made aware of importance of communication and soft skill in the corporate world.
- Student's history card containing academic record from FE to BE is maintained.
- Various STPs are arranged to enhance aptitude and soft skills.
- Various VAP courses are conducted.
- The placement of the students is done by the training and placement cell of the institute. This cell takes care of conducting placement process for the final year students. The 'job profile training' is provided to second year students who have been shortlisted for job interviews at various companies.
- They are given guidance through MOC placement prior to their interviews regarding the sector, industry, company, specific job profile, personal appearance from industry experts and guest lecturers are arranged to guide the students.
- Apart from the job profile training, the company profile training is provided to the students which includes group discussions, Sectoral/Company Presentations, personal interviews, company profile training.

The percentage of students selected during campus interviews by different employers are as follows in Table 5.1.9 (a).

Table 5.1.9 (a): Details of Students Selected during Campus Interviews

Academic Year	Number of companies visited	Number of students placed			Percentage of placement out of eligible students		
		UG	PG	MBA	UG	PG	MBA
2012-13	41	200	Nil	23	77.52	Nil	48
2013-14	91	204	Nil	25	75.28	Nil	55.55
2014-15	76	296	23	17	80	54.76	40.48
2015-16	51	396	23	27	58.23	33.82	60

Some of the prominent companies visited at SKNCOE are given in table 5.1.9 (b)

Table 5.1.9 (b) List of industries as employers visited for campus placement

Sr. No.	Company	Sr. No.	Company	Sr. No.	Company
1	Atlas copco	23	Tata alia insurance	45	Nihilent
2	Aci world wide	24	Ntt data	46	Johnson controls
3	Eq technologies	25	Amdocs	47	Kirloskar group of companies
4	Mu-sigma	26	Tcs (off campus)	48	Ingram micro
5	Softlink International	27	Hi tech auto	49	Bosch chassis
6	Barclays	28	Kalyani forge	50	Piaggio
7	Accenture	29	Smc pneumatics	51	Volkswagen internship
8	Cognizant	30	Suprabha	52	Bitwise global
9	Infosys	31	John deere	53	Markets and markets
10	Inautix	32	Aci	54	Burckhardt compression
11	Hsbc	33	Eq technology	55	Symantec
12	Zensar	34	Whirlpool	56	Wns
13	Cybage	35	Tavisca	57	Satyam
14	Nihilent	36	Eaton	58	Rinac
15	Igate	37	Synechron	59	Garware wall ropes
16	Atos	38	Mindtree	60	Vodafone
17	Sanmar group	39	Persistent project	61	Ibm
18	Accelya kale	40	Harbinger	62	Jonhson control
19	Symantec	41	Hsbc	63	Oracle (ofss)
20	Techmahindra	42	Zycus	64	Icertis
21	Kirloskar pneumatic	43	Infostretch	65	Convonix
22	Dana india technical center	44	Faurecia	66	Mercedes

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.
- Students give their suggestions through TG/ HoD /Principal either orally or in written.
- To understand the actual problem the necessary information is understood from students or parents and the problem is further analyzed.
- During last four years some of the issues were reported and are resolved.

5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?

To solve the issues pertaining to sexual harassment 'a women grievance redressal

committee' is formed in the institute. The committee is headed by senior lady faculty. Till date no such case of sexual harassment has been reported in the institute.

5.1.12 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what act has been taken on these?

Yes, the institute has formed anti-ragging committee including heads of department. No such instance of ragging reported during last four years.

Anti ragging committee

The anti ragging committee is formed as per the rules and regulations of AICTE / UGC / DTE/ SPPU. The objectives of the committee are as follows:

- Ragging free atmosphere in campus and hostel is created.
- Creating awareness among the students
- Cell numbers of anti ragging committee are made available to all the students.

5.1.13 Enumerate the welfare schemes made available to students by the institution.

The welfare initiatives available to students by institution are as follows

Earn and learn Scheme

- The main objective of the scheme is to develop a student as a multifaceted personality with academic excellence and a commitment to an egalitarian society. This scheme is basically undertaken by the university for the benefit of students coming from the rural areas, who are economically backward, intelligent and meritorious but cannot afford higher education, needy and financially hard pressed. The scheme will make higher education accessible and available to the poor, meritorious and the marginalized. The scheme offers financial assistance to the extent of fifty percent of the expenditure incurred by the affiliated Colleges/ Institute is reimbursed to the concerned on submitting the necessary papers to the Director, Board of Students' Welfare.
  The number of students enrolled under this scheme is as follows in Table 5.1.13.

Table 5.1.13: Number of Students Availing Earn and Learn Scheme

Sr. No.	Academic year	No of students
1	2013-14	22
2	2014-15	23
3	2015-16	21

Book Bank scheme

- There is a provision by social welfare department to provide book bank to the needy student in SC/ST category. These books are issued to one student per semester.
- The institute also offers health insurance scheme of university, student's health service scheme, book bank scheme and overseas educational support scheme to the students.

Student Group Insurance scheme

- Every student is covered under accident insurance policy by SKNCOE and gets reimbursement of Rs. 20,000.00 against hospital expenses and also includes

Rs. 1,00,000.00 for life cover. SPPU also provide student insurance which include claim of Rs. 5,000 and life cover of Rs. 50,000.

Overseas Educational support scheme

- Institute guides students to prepare for PG/PhD programme at foreign universities.

5.1.14 Does the institution have registered Alumni Association? If 'yes', what are its activities and major contributions for institutional, academic and infrastructure development?

Yes, the institute has registered Alumni Association (Registration Number: Maharashtra/1989/2006/pune Date: 30/10/2006). The association organizes alumni meet every year. The institute invites its alumni for motivating and guiding students for higher studies and also as judge for various events. The alumni groom the students by giving the feedback about expectation of industries from fresher. The self-employed alumni conduct value addition programs for students.

Table 5.1.14: Number of Students Attended Alumni Meet

Sr. No.	Duration	No of Students attended the alumni meet
1	2012-2013	314
2	2013-2014	227
3	2014-2015	106

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: Details of the Students Progressing to Higher Education

Student Progression	Year (Figures in)			
	2012-13	2013-14	2014-15	2015-16
UG to PG	2.4	4.3	5.2	Not Available
PG to PhD	5.2	Nil	Nil	Not Available
Employed 1)Campus Selection	30	25.3	34.2	58.23
2)Other than Campus recruitments	7.2	6.1	8.6	Not Available

From Table 5.2.1, it is clear that, number of students progressing for higher education is increasing. Awareness and importance of higher education in students and parents is positive factor for improving upon the number of students joining for PG.

5.2.2 Provide details of the programme-wise pass percentage and completion rate for the last four years (cohort 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.

Details of the programme-wise pass percentage and completion rate for the last four years are shown in Table 5.2.2 and also the comparative analysis is depicted in Figure 5.2.2 (a) and Figure 5.2.2. (b).

Table 5.2.2: Programme-wise Pass Percentage

Branch	Year	No. of students appeared	No. of students passed	% of passing	Institute I	Institute II	Institute III
E&TC UG	2011-12	125	118	94.4	95.7	97.8	100
	2012-13	137	136	99.28	93.4	92.3	97.23
	2013-14	187	183	97.86	94.5	93.5	98.57
	2014-15	259	251	96.81	92.5	94.5	96.5
E&TC PG (SP)	2011-12	16	06	37.5	62	61	71
	2012-13	16	05	31	60	62	68
	2013-14	17	10	58	72.65	70.52	79.86
	2014-15	17	14	82.31	70.68	71.85	75.62
E&TC PG (VLSI)	2011-12	18	8	44	68	63.51	79.13
	2012-13	18	11	61.1	82	74.56	70.00
	2013-14	17	08	47	73	77.24	69.39
	2014-15	41	31	75.60	72.65	70.52	79.86
IT UG	2011-12	127	126	99.20	83	81	91
	2012-13	127	126	99.21	79	76	89.33
	2013-14	129	128	99.20	78	73	90.00
	2014-15	139	139	100	72	73	96.67
IT PG	2011-12	15	07	46.66	59.36	60	59.6
	2012-13	18	14	77.77	70.55	72	62.4
	2013-14	16	15	93.75	86.11	84.56	83.00
	2014-15	15	13	86.66	80	70.22	71.21
MECH	2011-12	68	55	80.8	87	82	96
	2012-13	87	73	84	77	79	98
	2013-14	142	134	94	85	82	97
	2014-15	205	201	98	83	81	99
COMP UG	2011-12	160	123	76.80	82	81	91
	2012-13	160	136	85	79	77	92
	2013-14	160	126	78	74	75	95
	2014-15	218	198	90	95	98	93
COMP PG (CE)	2011-12	18	05	44.44	73	77.24	69.39
	2012-13	48	46	95.33	80	70.22	71.21
	2013-14	48	44	91.66	85	82	97
	2014-15	48	42	87.5	70.68	71.85	75.62
COMP PG (CN)	2011-12	18	05	66.66	70.55	72	62.4
	2012-13	24	16	66.67	68	63.51	79.13
	2013-14	24	16	66.67	59.36	60	59.6
	2014-15	24	20	83.33	70.61	71.80	75.74
MBA	2011-12	58	51	87.93	85	82	97
	2012-13	58	46	79.31	80.1	70.52	71.36
	2013-14	58	49	84.04	92.5	94.5	96.5
	2014-15	58	53	91.30	74	75	95
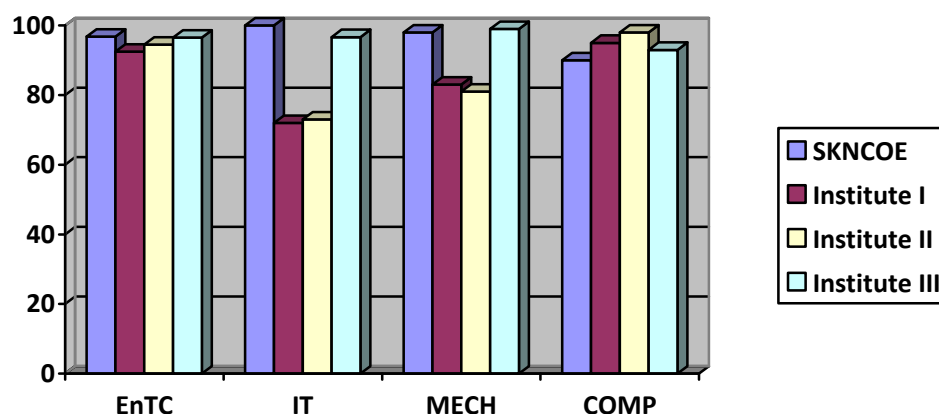
Figure 5.2.2 (a): Comparison of % of Passing (UG) per Branch for 2014-15
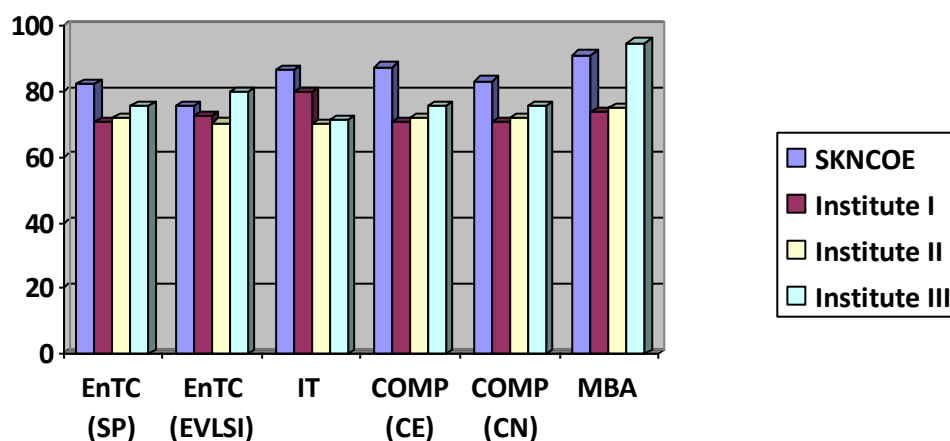
Figure 5.2.2 (b) : Comparison of % of Passing (PG) per Branch for 2014-15

5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?

- The institution facilitates student progression to higher level of education and towards employment. The institute trains the students through STP (Level I, II, III, IV,V), QA & LR tests, through career opportunities workshops, VAP, GATE coaching and various clubs under SSC.
- The institute assists the students for their placements through training and placement cell which organizes the campus interviews of many reputed organizations for the students.
- Special lecture on soft skill technical aptitude are arranged for the students to make them industry ready.
- Soft skills and AMCAT classes are arranged by the institute for the students.

5.2.4 Enumerate the special support provided to students who are at risk of failure and dropout?

The students who are academically weak are identified and special support is provided to these students such as extra or remedial classes, assignments, retests, personal care through TG and CT. Also, they can practice and assess themselves with mock online tests. Special counseling by teacher guardian is done. The candidates who are at the risk of failure are allowed to take provisional admission and attend the classes till their results are declared.

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 program calendar.

Following table 5.3.1 (a), (b) and (c), gives detail information of student's participation in Sports, in Cultural Events and in Extracurricular Activities respectively.

Table 5.3.1(a): Students Participation in Sports

Sr. No.	Name of Events	Year	Duration	No. of students participated
E&TC –Sports				
1	MESA Cup cricket tournament	2012-13	4 Days	08
2	Intercampus cricket Tournament	2012-13	1 week	03
Mechanical –Sports				
1	Techtonic-Box Cricket	2014-15	2 Days	100 teams
2	Interdepartmental Cricket Match	2012-13	2 Days	8 teams
IT –Sports				
1	Neon-2015	2015-16	3 Days	18
2	Neon-2014	2014-15	3 Days	14
3	Sinhgad Karandak-2013	2013-14	3 Days	12
4	Sinhgad Karandak-2012	2012-13	3 Days	13
Computer- Sports				
1	Sinhgad Karandak –2015	2015-16	7 days	16
2	Sinhgad Karandak –2014	2014-15	7 days	21
3	Sinhgad Karandak –2013	2013-14	7 days	17
4	Sinhgad Karandak –2012	2012-13	7 days	12

Table 5.3.1(b): Students Participation in Cultural Events

	E&TC – Cultural Events			
1	Sinhgad Karandak-2014	2014-15	3 day	250
2	Teachers Day	2013-14	1 day	200
3	Sinhgad Karandak-2013	2013-14	3 day	150
4	Sinhgad Karandak-2012	2012-13	3 day	120

Mechanical - Cultural Events				
1	Sinhgad Karandak	2014-15	6 days	100
2	Engineer's day function	2013-14	1 day	150
3	Sinhgad Karandak	2013-14	6 days	100
4	Teachers day function	2012-13	1 day	100
5	Sinhgad Karandak	2012-13	6 days	100
IT - Cultural Events				
1	Sinhgad Karandak – 2015	2015-16	7 days	24
2	Sinhgad Karandak – 2014	2014-15	7 days	13
3	Neon – 2013	2013-14	7 days	12
4	Neon – 2012	2012-13	7 days	14
COMP- Cultural Events				
1	Pre Karandak–2015	2015-16	2 days	18
2	Pre Karandak–2014	2014-15	2 days	20
3	Pre Karandak–2013	2013-14	2 days	15
4	Pre Karandak–2012	2012-13	2 days	12

Table 5.3.1(c): Students Participation in Extracurricular Activities

E&TC – Extracurricular activities				
Sr. No.	**Name of Events**	**Year**	**Duration**	**No. of students participated**
1	Tech-tonic	2014-15	5 Days	25
2	Paper Presentation Competition	2014-15	3 Days	7
3	Quiz Contest	2014-15	3 Days	10
4	Aptitude test	2014-15	1 Days	300
5	Blind sea	2014-15	2 Days	10
6	Tech-tonic	2013-14	5 Days	12
7	Paper Presentation Competition	2013-14	3 Days	5
8	Paper Presentation Competition	2012-13	3 Days	4
IT -Extracurricular activities				
Sr. No.	**Name of Events**	**Year**	**Duration**	**No. of students participated**
1	Techtonic -2015	2015-16	3 days	93
2	Techtonic -2014	2014-15	3 days	101
3	Sinhgad Karandak -2013	2013-14	3 days	22
4	Sinhgad Karandak -2012	2012-13	3 days	17
Mechanical -Extracurricular activities				
Sr. No.	**Name of Events**	**Year**	**Duration**	**No. of students participated**
1	Meteor	2013-14	2 days	100
2	Advanced IC Engine	2013-14	5 days	200
3	Meteor Workshop	2013-14	2 days	150
4	Skill Development	2013-14	1 day	100
5	Assembly Challenge	2014-15	2 days	100
6	AutoCAD Competition	2014-15	2 days	75
7	Automatrix	2014-15	2 days	100
8	Automobile maintenance training	2014-15	2 days	100

9	Automotive IC engine Design And Development	2014-15	2 days	150
10	Automotive industry simulation internship	2014-15	2 days	100
11	Box Cricket	2014-15	2 days	200
12	CFD	2014-15	4 days	50
13	Computer Literacy and Social Awareness camp	2014-15	2 days	75
14	Crenovate	2014-15	2 days	100
15	Design of formula 1 car	2014-15	2 days	50
16	Engine 360	2014-15	2 days	100
17	Entrepreneurship	2014-15	1 day	50
18	Exper Hub	2014-15	2 days	50
19	Fundamentals of CFD	2014-15	2 days	50
20	Hacktrak	2014-15	2 days	100
21	Hydraulic weight lifter	2014-15	2 days	50
22	Internship	2014-15	15 days	100
23	IQ Master	2014-15	2 days	50
24	Jet Propulsion	2014-15	2 days	50
25	Lathewar	2014-15	2 days	100
26	Propultion Techtronic	2014-15	2 days	100
27	Robo Race	2014-15	2 days	15
28	Stallion motor sport	2014-15	6 days	50
29	Supra SAEINDIA	2014-15	6 days	50
30	Technical Quiz	2014-15	2 days	50
31	Techtronic, Sociobots	2014-15	2 days	100

COMP -Extracurricular activities				
Sr. No.	**Name of Events**	**Year**	**Duration**	**No. of students participated**
1	CONVENE 15	2015-16		9
2	NNSC 2015 network security	2015-16		14
3	Spoken tutorial based software Training on 'C' by IIT Mumbai and MHRD.(SE Comp)	2015-16	7 days	194
4	E-cell Business plan workshop	2014-15	1 day	5
5	E-cell "ENVOYAGE"	2014-15	1 day	9
6	Orientation program on red hat linux training by red hat academy pune	2014-15	1 day	4
7	Orientation program on SWEBOK certified professional course design by IEEE-CS	2014-15	1 day	6
8	Techothon '14" Ethical hacking	2014-15	2 days	8
9	Spoken tutorial based software Training on 'CPP' by IIT Mumbai and MHRD.(SE Comp)	2014-15	7 days	242
10	CONVENE 14	2013-14	1 day	7

11	NNSC Ethical hacking	2013-14	1 day	12
12	Mission C	2013-14	1 day	10
13	Android Development workshop	2013-14	2 days	6
14	NNSC workshop	2013-14	1 day	8
15	Orientation program on Microsoft certification training by ATS infotech pune	2013-14	1 day	4
16	A talk on recent trends in IT and project life cycle execution	2013-14	1 day	10
17	CONVENE 13	2013-14	2 days	6
18	CONVENE 12	2012-13	2 days	9
MBA -Extracurricular activities				
Sr. No.	**Name of Events**	**Year**	**Duration**	**No. of students participated**
1	Induction Programme	2012-13	2 Day	All
2	Teachers Day Celebration	2012-13	1 Day	All
3	Farewell function	2012-13	1 Day	All
4	Induction Programme	2013-14	3 Day	All
5	Inauguration of Marketing Club	2013-14	1 Day	All
6	Inauguration of Finance Club	2013-14	1 Day	All
7	Inauguration of HR Club	2013-14	1 Day	All
8	Corporate Social Responsibility - Ambegaon village.	2013-14	1 Day	All
9	Spectrum : Mega Fest	2013-14	3 days	All

Prayas: Each year Prayas camp is arranged for students where students will visit to nearby rural place and provide some social services to rural students. The team consists of 20 to 25 students with one teacher coordinator from Information Technology Branch. The information or knowledge about computer, current technology and computer games is given to the rural students.

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.
Details of major student achievements in co-curricular, extracurricular and cultural activities at different levels are depicted in Table 5.3.2.

Table 5.3.2: Student Participation at Different Levels
(University/State/National/International)

Year	Achievements
2014	Girish Chandankar, Tanmay Atkekar,Sujit Joshi & Abhishek Deokule had won 1st prize in Waste Management in scapcity, SHAASTRA2014 at Indian Institute of Technology(IIT), Madras
2014	The team of College students bagged Vision Championship- Mahindra Engineering's Trophy at Vision-2014 held at Walchand College of Engineering,Sangli.
2014	Mohit Baste & Rushikesh Mane bagged 1st Prize in Paper Presentation at Vision-2014 held at Walchand College of Engineering,Sangli.

2014	Karansingh Naglot & Rushikesh Mane bagged 2st Prize in Spider Instinct at Vision-2014 held at Walchand College of Engineering,Sangli.
2014	Ameya Chikode, Sanket Deshpande & Dipankar Chivare bagged 2nd Prize in Project Presentation at Vision-2014 held at Walchand College of Engineering,Sangli.
2014	Rajul Gupta & Darshan Bakshi bagged 2nd Prize in Circuitose at Vision-2014 held at Walchand College of Engineering,Sangli.
2014	Piyush Wani, Shubham Khindre & Suraj Pulkute bagged 2nd Prize in Pick & Place Robot at Vision-2014 held at Walchand College of Engineering,Sangli.
2014	Shubham Lutade & Vipul Bhole bagged Consolation Prize in Paper Presentation at Vision-2014 held at Walchand College of Engineering,Sangli.
2014	First year student Piyush Suryawanshi & Saurabh Chaudhari secure 3rd position in ROBOSAPIEAN at Indian Institute of Technology(IIT),Roorkee.
2014	The "Smt. Satrupi Tolaram and T.K. Mirchandani Prize" of Rs.8600/- has been awarded to Bharat Kachhwala for securing highest number of marks and standing First at the S.E.(E&TC)Examination held in April2012.
2014	Devendra Pralhad Jadhav, T.E. (Mech. Engg.), bagged Consolation Prize in the State Level Graduate Excellence Examination in Stream Administrative conducted on 2nd Feb.,2014.
2014	National Event Shastra - 2014: Venue: IIT Madras.Team of students lead by Prof. A.J. Patil secured I^{st} Prize in the Robocon Event organized by IIT Madras.
2014	The team of students won a 3rd prize in "Suman Karandak 2014"
2014	Mr. Chinmay Datar declared winner in "Pune District Table Tennis- 15th Le Merdian Trophy 2014-15"
2014	The student team of Dhyaas Youth Forum rewarded with International Level"Manthan Award 2014-15"
2014	Mr. Abhijeet Chavan stood the 1st prize winner of "National Geographic Photography" award on 15th July,2014
2014	The project team of E & TC students won the 1st prize at "IBM Cloud Hackathon National Level Project Competition" organized by IBM,India
2014	The team of Mechanical Engineering Students participated in Formula SAE Event –FSAE at Italy. The team was the only Indian team to qualify the technical inspection round, additionally qualified & secured 10th place for the most cost effective racing car.
2014	The team of students won 1st Prize of A. K. Hangal Karandak competition along with one individual prize for best script.
2014	Ms.Murgude Supriya Kishor was awarded by "The Late Smt. Sarawatibai Tulpule Prize"of Savitribai Phule Pune University for having secured highest number of marks among the Female candidates at the B.E.(All Branches) examination held in May2013.
2014	Chinmay Datar secured runner up position in Men's Single event in Aamdar Chashak, 3rd Maharashtra State Ranking Table Tennis Tournament, 2014 held at Dombivili Gymkhana,Dombivali.
2014	Chinmay Datar secured runner up position in Youth Boys Single event in Aamdar Chashak, 3rd Maharashtra State Ranking Table Tennis Tournament, 2014 held at Dombivili Gymkhana,Dombivali.
2014	Chinmay Datar secured Quarter Finalist position in Men's Single event in Sharada Belvalkar Cup, 2nd Maharashtra State Ranking Table Tennis Tournament, 2014

	held at Mhalunge Balewadi,Pune.
2014	Chinmay Datar secured Semi-Finalist position in Youth Boys Single event in Sharada Belvalkar Cup, 2nd Maharashtra State Ranking Table Tennis Tournament, 2014 held at Mhalunge Balewadi,Pune.
2014	Mr. Chinmay Datar declared winner in "University of Pune, Pune City Zone- Inter Collegiate Sports Table Tennis Tounament 2014-15"
2014	Mr. Chinmay Datar declared best player in Table Tennis (Mens) at "National Level Inter-Engineering Sports Meet SUMMIT'14 held at MIT,Pune
2014	Mr. Chinmay Datar declared winner in Table Tennis (Mens) at "National Level Inter-Engineering Sports Meet SUMMIT'14 held at MIT,Pune
2015	Snehal Thorat, Vijay Y. Jirange & Sonali R. Jadhav qualified for the Final Round of Talentia2015- A State Level Leadership Competition & successfully completed the District Level Rounds.
2015	Madhura Ubhe declared best athlete(Women) at "ZEST 15" held at COEP,Pune
2015	Madhura Ubhe declared winner in 400m running for women at "ZEST 15" held at COEP
2015	Madhura Ubhe declared first runner in 800m running for women at "ZEST 15" held at COEP
2015	Madhura Ubhe declared first runner in 200m running for women at "ZEST 15" held at COEP
2015	Madhura Ubhe declared first runner in 100m running for women at "ZEST 15" held at COEP
2015	Madhura Ubhe declared first runner in 400m hurdles running for women at "ZEST 15" held at COEP
2015	Jitendra Ingle Cleared MPSC examination and appointed as Class I officer
2015	Suryansh Rajan "ICICI Virtual Stock's Trading Competition 2k15"
2015	Abhishek M. Kulkarni won 2nd Prize in Project Competition held by Sinhgad Student Council, Pune
2015	ChinmayPathak & Abhishek M. Kulkarni won 3rd Prize in Project Competition held by IET, Pune Chapter.
2015	Chinmay Pathak declared winner in HR Club C2C event.
2015	AshwiniKale & Anuja Jaibahar declared winner in Paper Presentation Competition held by PES's Modern College of Engg, Pune.
2015	Aaksh Dave won the 2nd Prize in Dance Competition at AFMC, Pune
2015	TusharBinnar,Pratik Patil & DarshanDeoghare declared 1st Runner Up in Vision 2015
2015	TusharBinnar declared Winner in Project Competition
2015	Mayur Gandhi, PiyushWani,Chinmay Borde & Siddharth Bhonge won1st prize in Robotics Challenge held by TECHNOVANZA-2014,VJTI, Mumbai
2015	Shubham Khindre,Prathamesh Bhamre,Suyogdhar Madhikari,Aaditya Gupte& Balaji Andhare won 2nd Prize in Robotics Challenge held at TECHNOVANZA-2014,VJTI, Mumbai
2015	Yugandhar Jadhav,Prathamesh Bhamre,Suraj Muley & Virendra Patil won 3rdPrize in HYDRAULIC Rope Climber held by TECHNOVANZA-2014
2015	Prathamesh Bhamre,Mayur Gandhi,Balaji Andhare & Yashgo Girwar won 2nd Prize SARDAR PATEL COLLEGE TECHNICAL EVENT
2015	Mayur Gandhi,Prathamesh Bhamre,Yash Gogirwar,Shubham Khindre,Siddharth

	Bhonge,Suyogdhar Madhikari & Chinmay Borde IIT BOMBAY MECHTRON IN TOP 30 NATIONAL LEVEL CERTIFICATE OF APPRECIATION
2015	Piyush Wani,Suyog Dharmadhikari,Chinmay Borde,Rujuta Advent,YashGogirwar,Shubham Khindre,Rohit Gayakwad,Yugandhar Jadhav & Salil Vartikar won 1st & 2nd prize at MITCOE Robotics Challenge
2015	Yash Gogirwar,Shubham Khindre,Rahul Ahire,Balaji Andhare & Rshike Shgujar won 2nd prize in ROBORACE held at PVGCOE, PUNE
2015	Prathamesh Bhamre,Shubham Khindre,Rahul Ahire & Yash Gogirwar won 2nd prize at PICT CREDENZZ-14
2015	Yash Gogirwar won 2nd prize at MMCOE DEXTERTY
2015	Siddharth Bhonge WINNER CUBITRIX AISSMSCOE, Pune
2015	Piyush Suryavanshi,Swapnil Khedkar & Rushikesh Vadgaonkar won 4th Prize In MANEOUVRE held at IIT Kanpur
2015	Divyesh Ubale National Level 3D Design Context.Trophy + Digital Camera
2015	Ketan Sarode NKFI open international karate & kickboxing championship – 2015
2015	Pallavi Kale NKFI open international karate & kickboxing championship – 2015
2015	Priyanka Awade won 3 Gold medals in State Level Swimming Competition
2015	Arpit Jayaswal won 3rd Prize In Escapade in National Students Space Challenge'15 held at IIT Kharagpur
2015	Dhirajsinh Deshmukh, Rajdeep Pawar & Arpit Jayaswal won 2nd Prize In Mauler in National Students Space Challenge'15 held at IIT Kharagpur
2015	Nitin Waman,Piyush Surayawanshi, Dhirajsinh Deshmukh & Rajdeep Pawar won 2nd Prize In Rosetta in National Students Space Challenge'15 held at IIT Kharagpur
2015	Nitin Waman,Piyush Surayawanshi, Dhirajsinh Deshmukh & Arpit Jayaswal won 2nd Prize In Escapade in National Students Space Challenge'15 held at IIT Kharagpu
2015	Rajdeep Pawar won 1st Prize In Rosetta in National Students Space Challenge'15 held at IIT Kharagpur
2015	Nitin Waman,Aneesh Thakur, Vinay Thorat & Priyanka Katre secured 1st position In Escapade in International Robotics Challenge Competition in Techfest held at IIT Bombay
2016	Piyush Surawanshi,Nitin Waman, Aditya Ratgure & Gaurav Devdikar won 3rd Prize In ROBORACE in Fluxus'16 held at IIT Indore
2016	The Team of Mechanical Engineering students bagged overall First Prize at All India "2nd JK Tyre EBAJA SAE INDIA – 2016" track events held at Pithampur, Indore.
2016	The Team of Mechanical Engineering students bagged 2nd Prize for Maneuverability at All India "2nd JK Tyre EBAJA SAE INDIA – 2016" track events held at Pithampur, Indore.
2016	The Team of Mechanical Engineering students bagged 1st Prize for Cost Presentation at All India "2nd JK Tyre EBAJA SAE INDIA – 2016" track events held at Pithampur, Indore.
2016	The Team of Mechanical Engineering students bagged 1st Prize for Business Presentation at All India "2nd JK Tyre EBAJA SAE INDIA – 2016" track events held at Pithampur, Indore.

2016	The Team of Mechanical Engineering students bagged 1st Prize for Static at All India "2nd JK Tyre EBAJA SAE INDIA – 2016" track events held at Pithampur, Indore.
2016	The Team of Mechanical Engineering students bagged 1st Prize for Acceleration at All India "2nd JK Tyre EBAJA SAE INDIA – 2016" track events held at Pithampur, Indore.
2016	The Team of Mechanical Engineering students bagged 2nd Prize for Durability at All India "2nd JK Tyre EBAJA SAE INDIA – 2016" track events held at Pithampur, Indore.

5.3.3 How does the institute seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?

A feedback of a placed student is taken from employers every year in order to enhance the skills of the students. On certain occasions the institute calls its alumni for guiding the students. After such meeting, the institute asks for feedback or suggestions for overall improvement of the institute and suitable steps are taken for implementation of suggestions received from the graduates and employers.

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 publications/ materials brought out by the students during the previous four academic sessions.

The institute publishes its annual college magazine 'Kaleido' to appreciate the extra-curricular activities of the students. The magazine consists of non-technical articles, poems, art, news-letters run by each department producing good quality of creative writing. It also consists of achievement of the students in their extra and co-curricular activities in different departments. The interested students post their poetry, story, article and other material.

5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding. Yes

- Yes, the institute has its independent student Council as per the UGC and SPPU norms. The Principal is the chairman and one faculty member is the student welfare officer of this council. The council also includes director of sport and physical education, student coordinators from FE to BE and lady student members.
- Sinhgad student council for Vadgaon and Ambegaon campus is established in year 2013 and includes student and faculty representation from both the campuses.
- Other departments also have professional bodies working independently such as SAE at Mechanical department, CSI at Computer department, IETE at E&TC department.
- All these bodies are formed by selection of members. The members of the body are selected by the committee headed by the Principal. These bodies conduct various technical, non-technical, cultural activities for the students. The funds for running these bodies are raised by the students through membership fees.

5.3.6 Give details of various academic and administrative bodies that have student representatives on them.

Academic bodies	Administrative bodies
Seminar/Conference committee	Anti-ragging committee
Kaleido Magazine committee	Cultural and social committee
STP committee	Alumni committee
Innovative Project committee	Media committee
CSI Committee	Canteen committee
Mozila Committee	Discipline committee
Byte news letter committee	Students grievance committee
Placement Committee	
SAE Committee	
Robocon Committee	
IETE Committee	
NSS	
SSC	

5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution. Any other relevant information regarding Student Support and progression which the college would like to include.

The institute network and collaborate with the alumni of the institution through

Alumni Meet: Every year alumni meet is organized by institute in order to bring all alumni together. It provides all students to share their ideas and suggestions towards betterment of the institute.

Seminar/Conference/Workshop: Every semester at least one FDP/STTP is organized by every department where institute invite senior alumni and ex-faculty from industry. It helps to create strong network and rapport with the industry.

Placement assistance: Successful alumni who have become entrepreneur visit to the institute to provide placement to their juniors.

CRITERION VI: GOVERNANCE, LEADERSHIPAND 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
We are committed to produce not only good engineers but good human beings, also.

Mission
OUR MISSION is to do WHAT it takes to foster, sustain and upgrade the quality of Education by way of harnessing Talent, Potential and optimizing meaningful Learning Facilities. OUR ENDEAVOR is to provide the Best Learning, conductive environment and equip the students with effective Learning Strategies.

The vision of India is to become a developed country by year: 2020. To achieve this, we need to create capital manpower to cater to the needs of the service sector. We have to focus towards building IP capital. The technical man power so developed needs to be good citizens also. The vision and mission of the institution are in tune with our needs of the society.

6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?
Table 6.1.2 shows role of top management and responsibilities assigned to them.

Table 6.1.2: Role of Top Management

Sr.No.	Plan for achieving mission and Vision	Responsible Authority (Management/Principal/HOD/Faculty)
1	To spread technical education in rural and urban areas.	Management
2	To organize institution so that it can contribute to the overall development of nation and society.	Management
3	To create citizens who are responsible with right attitude and value.	Management, Principal
4	To promote research activity.	Management, Principal
5	To educate economically backward students for their upliftment.	Management, Principal
6	To recruit qualified faculties	Management, Principal
7	To maintain teaching quality before starting of every semester course files of theory and practical and lab manuals are prepared & same are monitored at	Principal, HoD, Faculty

	various levels.	
8	To monitor that the lectures-practical are conducted strictly as per time-table.	Principal, HoD
9	To ensure that feedback from parents is obtained on teaching – learning so that improvement is made	HoD, Faculty
10	To ensure that faculty development programmes are arranged on the topics beyond the curriculum to keep the faculties updated.	Management, Principal
11	To carry out university result analysis and do the comparison between the current and previous results to find out shortcomings and the corrective actions to be taken.	HoD, Faculty
12	To arrange the department wise expert lectures for the students. Eminent personalities form the academics and industries are invited for the expert lecture	Principal, HoD, Faculty
13	To ensure effective teaching learning process, adequate infrastructure has been provided to the students as per the AICTE norms.	Management
14	Department takes care of repair & maintenance of laboratories by AMC or on call support facility	Principal, HoD
15	To conduct TTT program for the newly joined faculties to introduce them to the institute quality policies.	Management, Principal
16	For weak students take extra efforts, bring them to the comfortable level.	Principal, HoD, Faculty
17	Implement TG scheme	Principal, HoD, Faculty
18	Arrange extra classes for the weak students as well as for the students who were admitted late i.e. join the institute in the Second Year of engineering after completing their Diploma course.	HoD, Faculty
19	Motivation guidance and appreciation to staff.	Principal
20	Motivation guidance and appreciation to students.	Principal, HoD, Faculty
21	Periodic meetings for interaction with teaching and non teaching staff	Principal, HoD
22	MOU with various industries for promoting industry institute interaction	HoD, Faculty

6.1.3 What is the involvement of the leadership in ensuring?

The policy statements and action plans for fulfillment of the stated mission

Long term goals
- To establish Research Centre for Doctoral programs and to undertake Research in focused areas from Electronics and Telecommunication Engineering, Computer Engineering, Information Technology and Mechanical Engineering.
- To develop strong Industry-Institute Interaction to offer Expertise for Projects, Training and Consultancy.

- To seek Academic Autonomy leading to University Status.
- To Serve as Engineering Knowledge Centre for Society in General.

Short term goals
- All round development of students relevant to the needs of Industries and making them competent to face the challenges due to globalization.
- Development of faculty and Staff by Deputation for Higher Studies and skill up-gradation.
- To strengthen Industry liaison by way of Faculty Training, Students Projects, Testing, MOUs etc.
- To promote R & D activities in the Departments.

Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan
- HoDs in consultation with Principal formulate the action plan for teaching learning process.
- Each Department prepares academic calendar as per the strategy decided in the HoD Principal meeting.
- Every department gets sufficient funds to execute plans decided by LMC and Governing body. Management ensures that the allocated funds are utilized.
- Departments prepare their plans for workshops, guest lectures and various events.
- For different technical activities like ISTE, CSI students' association, Activity Calendar is prepared and followed strictly.
- Effective design of STP and its delivery generates leadership quality among the students.

Interaction with stakeholders
- TG scheme has been introduced. Guardian teacher discusses issues of individual student and takes remedial action.
- Every TG is assigned to a batch of 15-20 students. The teacher-guardian conducts the meeting twice in the month.
- The meeting is an interaction between the advisor & students and the various problems they face in the curriculum as well as in the college campus are discussed. The personal problems are also discussed.
- At the end of every month attendance is compiled and analysis is done and the same is shared with the students.
- Parents are also informed about the attendance of their ward through letters and phone calls.
- After the mid-semester exam, the Parents -Teachers Meeting is organized to have the interaction with parents on progress of their ward.
- The ward's attendance, academics, university results, behavior, extra-curricular activities are informed to the parent and the same are recorded with their signature.
- Interactions with alumni during the alumni meet are done and feedback is obtained.
- Guest lectures/ Industrial visits are organized to interact with industry people and to upgrade specific domain knowledge.
- Various meetings such as GB, LMC and Principals meeting at management level are conducted.
- Different meetings such as Principal HoD meeting, departmental meeting, placement coordinators meeting, Hostel committee, mess committee etc. are conducted.

Proper support for policy and planning through need analysis, Research input and consultation with the stake holders

Need of an STTP/ analysis and Research inputs
- Find out the weak students by conducting the test before the FE classes start. Segregate the weak students for slow learners batch.
- After the university results are announced, each department analyses the result and arrange extra classes for weaker students.
- The term work marks evaluation is based on various parameters such as attendance, unit test performance, mock practical performance, participation in curricular and extracurricular activities and behavioural aspects
- AICTE, SPPU and industries supports research activities by funding the research projects.
- Parent teacher interaction is arranged for defaulter students to improve their performance.
- Our recruiters provide feedback to increase the employability.
- Arrange expert lectures for giving inputs beyond curriculum.
- Conduct STTP/ induction Programmes for faculty.

Reinforcing the culture of excellence
- Setting the standards of excellence.
- Monitoring whether these standards are practiced/ implemented correctly.
- Percolating the information regarding standards of excellence by IQAC, through Principal in HoD meetings.
- The information further is percolated to the faculties through HoDs.
- Organization of FDPs seminars workshops to enhance domain knowledge.
- Financial and moral support to faculty and students to carry out the research activity.
- Continuous assessment and analysis ensures reinforcing culture of excellence.

Champion Organizational change
Considering overall preceding year performance, last year results, accepted proposals, placement percentage and research contribution, SKNCOE follows well organized working structure for implementing the required changes in the system which will improve the overall performance of the system considering the stakeholders suggestions.

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?

The heads of various departments conduct weekly meetings with the staff to review the activities of the previous week and plan for the next week. During the weekly meetings with the HoD, the Principal reviews the processes and plans of each department. The Local Managing Committee, which has representatives from both teaching and non-teaching staff, meets twice in a year. In order to have effective implementation of the policies and to monitor and evaluate the same, various committees have been formulated.

Academic Monitoring Committee
- Members of this committee monitor the instruction delivery on a regular basis so as to record the progress in theory classes and practical sessions.
- Student's attendance is monitored and corrective actions are taken if required by informing   the parents.
- Feedback is taken from the students with regards to conduction of lectures and practical sessions. This feedback is conveyed to faculty for necessary action so as to improve the teaching learning process.
- Students are allowed to organize and participate in Seminars, Conferences, Competitions, Technical Festivals, Science Exhibitions and Cultural Programmes.

Examination Coordination Committee
- Conduction of tutorials/mid semester tests/mock practical examinations so as to judge the grasping of concepts by students.
- Corrective action is taken by conducting remedial classes after declaration of results by SPPU.

Projects- UG and PG Planning and Monitoring Committee
- Encouraging students to participate in project competitions and present/publish papers in National and International conferences/Journals.

Grants and revenue generation Committee
- To generate revenue from existing infrastructure and research facilities available in the Institute.
- To provide expert training Programme by internal and external resources for the students of the Institute and students from other Institutes.

Training and Placement/Alumni/Entrepreneurship skills development Committee
- Helping the students to get employment.
- Arranging hands-on-training, industrial visits and in-plant training.
- Arranging guest lectures by professionals from industry and academics.
- Guiding students for higher education in the country and in foreign universities.
- Arranging Alumni meet.
- STP, VAP, QALR, AMCAT and counseling sessions are arranged to develop personality of students.
- Recruiter's feedback also helps in improving communication skills of students.

Conferences/Publications Committee
- Organization of National/ International level conference.

Monitoring of Extra-curricular activities
- Celebrating Women's day, Engineer's Day, Independence Day, Republic Day etc.
- Organizing annual social gathering.
- Publication of newsletter every semester by each department.
- Publication of annual college magazine.
- Organizing events such as camps, blood donation camp and various other activities.

Each committee listed above has a group leader and four members, one from each department, viz. IT, Computer, Mechanical, E&TC and FE section. The group leaders in consultation with the committee members prepare a plan before the commencement of

each semester. Each committee meets weekly/fortnightly in the presence of the Principal of the Institute to Review/monitor various activities executed/to be executed.

6.1.5 Give details of the academic leadership provided to the faculty by the top management?

Academic Leadership provided to the Faculty as under:
- Principal lays down the policies and gives directions on academic and administrative matters.
- HoDs monitor the effective implementation of the policies and plans laid down by the principal.
- Within the department Coordinators are identified for the Institute level activities like NBA, NAAC & ISTE.
- The next level of leadership comes with the coordinators of the different intra department activities like examination, Industry-Interaction, Training& Placement, Student Associations, final year Projects, Class In-charges, Laboratory In-charges etc.
- Resources like laboratory equipment and software are provided from time to time.
- Guidance and consultancy is provided by HoD / Principal from time to time.
- HoD allocates specific subjects to appropriate faculties.

6.1.6 How does the college groom leadership at various levels?

Grooming of Leadership at various levels:
- The Principal nominates the Head of Department capable to manage the Departmental activities.
- Assigning specific activity to faculty at STES level.
- Some of the HoDs and coordinators are given exposure to work on institutional level.
- HoD appoints class teachers to control and monitor the academic activities of class.
- The HoD appoints suitable faculty for the different activities like examination, Industrial visits, Training & Placement etc.
- The class teacher plays an important role in the department. The Class Teachers are the main link between the students and the Department.
- The different activity coordinators for the cultural and extracurricular activities guide the students to make the events successful.
- The Institution encourages the faculty for the active participation of seminars, workshops, conferences (national and international), guest lecturers to other colleges and funds and duty leaves are sanctioned for the same
- All the faculties are involved in at least one of the activities thereby training them to accept various responsibilities.
- Encouraging students to conduct various activities.

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?

The college is working towards the decentralization of Governance as under:

- The management of the institute has two main committees Governing body and LMC.
- The role of GB is to decide vision and objectives of the institute based on which directions to LMC and head of the institute are given. The GB approves the budget recommended by LMC. In a academic year two GB meetings are conducted.
- The systematic approach is followed in the management of academics and administrative functions in the college.
- In the case of academics, the organization depicts the flow of authority and the functions of various heads.
- The individual department has its own freedom to prepare the time-table to conduct various activities such as seminars, workshops, STTPs etc.; within the academic calendar of the institute.
- The different activity coordinators for the activities, like students association, Industry interaction at the department level, guide, plan and conduct activities suiting their department.
- The departments are given their budget to carry out the events like expert lecture by outside guests or event like technical competitions between students like projects/ poster competitions etc...
- The departments are given freedom to revise the laboratory manuals every year. Most of the departments have their own libraries for the students as well as for the staff members.
- The issues which require deliberations and consultations at the college levels are taken up to the Local Management Committee. Table 6.1.7 shows member name of local managing committee along with their designation

Table 6.1.7: Local Managing Committee

Sr. No.	Name	Designation
1	**Prof. Maruti Nivrutti Navale** Founder President – S.T.E. Society	**Chairman**
2	**Dr. Mrs. Sunanda M. Navale** Founder Secretary, S. T. E. Society	**Member**
3	**Mrs. Rachana Navale Ashtekar** Vice President – S.T.E. Society	**Member**
4	**Mr. Rohit M. Navale** Vice President – S.T.E. Society	**Member**
5	**Dr. A. V. Deshpande** Principal, Smt. Kashibai Navale College of Engineering, Pune-41	**Member-Secretary**
6	**Shri G.K. Shahani**	**Special Invitee**
7	**Dr. K. R. Borole** Vice Principal	**Re- Presentative Teaching Staff**
8	**Dr. P. N. Mahalle** HOD Comp.	**Re- Presentative Teaching Staff**
9	**Prof. R. H. Borhade** HOD I.T.	**Re- Presentative Teaching Staff**
10	**Mrs. K. S. Borgave** Registrar, SKNCOE	**Re- PresentativeNon- Teaching Staff**

6.1.8 Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management

The Governing body takes major decisions regarding the functioning of the college. The following members are involved in the Governing body. Table 6.1.8 shows governing body

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Table 6.1.8: Governing Body

</div>

Sr. No.	Name	Designation
1	**Prof. Maruti Nivrutti Navale** Founder President – S.T.E. Society	**Chairman**
2	**Dr. Mrs. Sunanda M. Navale** Founder Secretary, S. T. E. Society	**Member**
3	**Mrs. Rachana Navale Ashtekar** Vice President – S.T.E. Society	**Member**
4	**Mr. Rohit M. Navale** Vice President – S.T.E. Society	**Member**
5	**Nominee of AICTE** New Delhi (Industry Expert)	**Nominee**
6	**Director of Technical Education** Maharashtra State, Mumbai, Ex-Officio, DTE	**Nominee**
7	**Prof. H. K. Abhyankar** Nominee, UNIVERSITY OF PUNE	**Nominee**
8	**GOVT. OF MAHARASHTRA**	**Nominee**
9	**REGIONAL OFFICER** WRO, AICTE, MUMBAI (EX-OFFICIO)	**Nominee**
10	**DR. A. V. DESHPANDE,** Principal, Smt. Kashibai Navale College of Engineering, Pune-41	**Member-secretary**
11	**SHRI G.K. SHAHANI**	**Special invitee**

- Principal has an authority to implement the decisions in all departments. All the HoDs along with Principal take decision to execute academic and administrative work.
- Each department conducts meeting in every week to convey the decisions made in principal- HoD meeting.
- Involvement of faculties in various committees makes academic and administrative system transparent.
- The student's feedback is taken into consideration to modify and improve system.

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 Institute has a formally stated quality policy. It has been formed after discussions with the top management, Principal, HoDs and staff members in order to achieve the vision and mission of the Institute. The Institute undertakes various activities to fulfill the quality policies.

Quality Policy is aimed at achieving excellence in Technical Education, by acquiring autonomous status to the Institutes with recognition at national & International level. All the activities are monitored by the committees that meet periodically to decide and discuss various quality issues.

For this, Management is committed to
- Provide excellent Infrastructure facilities.
- Employ highly qualified & experienced faculty.
- Encourage the faculty for improvement for qualifications.
- Promote the Industry- Institute Interaction.
- Create Environment for Research & Development activities, Consultation work &getting Industry- Sponsored projects for Students.

The Management has implemented a special internal Quality Assessment Program in each Institute, which monitors all the parameters needed for achieving the goals. Implementation of the Quality Policy will result in all round development of students relevant to the needs of Industries & will make them competent to face the challenges due to Globalization.

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 for development. The institution takes effort in finding the key performance indicators for performance assessment and development. It addresses the issues from the stakeholder's perspective and takes steps to fulfill their requirements. Following aspects has been consider by institute, which incudes,
- Serving engineering and knowledge society in general.
- To seek academic autonomy leading to university status.
- Overall development of faculty and staff by taking initiatives like deputation to higher studies and skill upgradations.
- Promoting research and consultancy activities in all departments.

6.2.3 Describe the internal organizational structure and decision making processes.

Figure: 6.2.3 shows internal organizational structure.
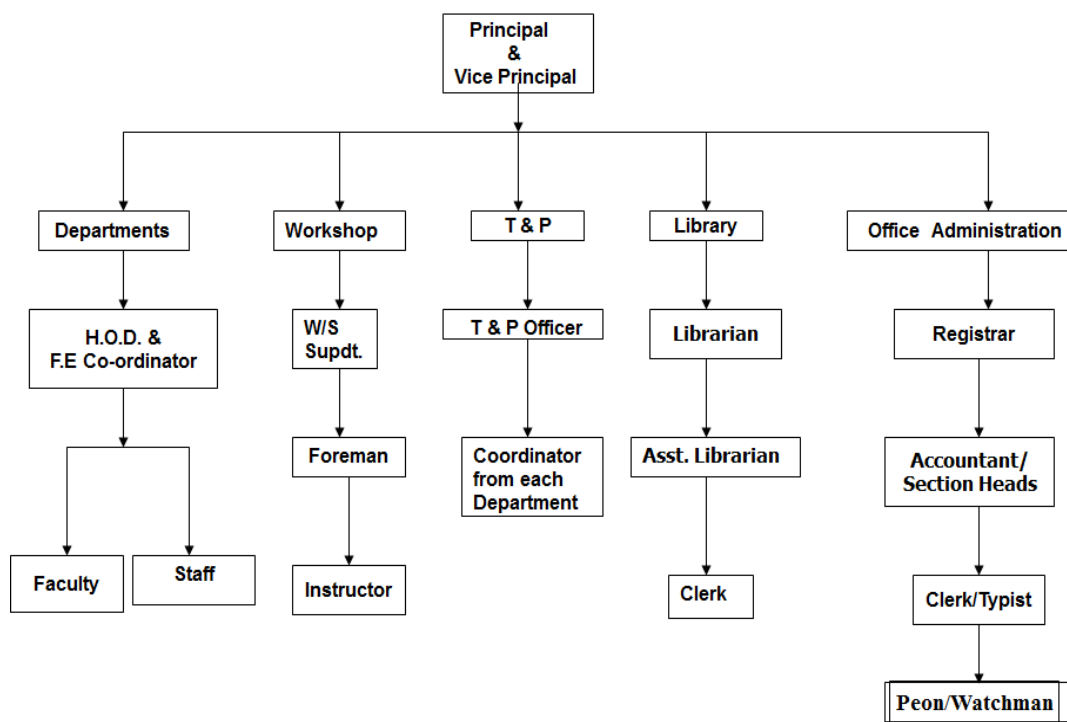
Figure 6.2.3: Internal Organizational Structure

6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following

Teaching & Learning
- Student analysis on the basis of previous results
- Lesson plan and notes
- Unit test conduction
- Remedial lectures for weak students
- VAP and guest lecturers from industry persons
- Student feedback
- TG scheme

Research & Development
- The Institute is closely working with core industries from Japan, France to train the students in this direction.
- The key goal of the Institute is to provide a creative atmosphere in which higher studies and research thrive amongst the faculty and students.
- It also promotes and manages Institute-Industry interaction.
- The major role of institute is in administrating research projects sponsored by various Government and non-Government, research funding agencies such as UGC, DST, AICTE, SPPU (BCUD) etc., and promotion of collaborative research partnerships for undertaking creative and advanced research.
- Improving the research through PhD program at Alborg University, Denmark
- Financial assistance

Community engagement
- NSS activities

- Blood donation camps
- Prayas

Human resource management
- Effective selection process
- TTT and TAP
- Support for academic advancement
- Systematic performance appraisal system and guidance to concerned faculty
- Systematic promotion policies
- Career Enhancement Scheme
- Well defined Recruitment Policy
- Effective administration participative management

Industry interaction
- Industrial visits
- Guest lectures by Industrial experts
- Certification programs through MoUs with Industries e.g. Intel, IBM etc.
- Internship programmes.

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?

The higher body of management is a vital body under the constitution of the STE Society. It meets periodically to take a review of the developments in the Society's institutions. During the Body meetings, information is shared from directors & principals regarding developments in their own institutions. The resolutions passed in the Body meetings are subsequently sent to Academic and Finance Councils which meet periodically. Thus, information regarding developments in the Society's institutions finally reaches to the top management. Once the top management approves of the information, it is circulated among other stakeholders, if necessary. The Principal imparts necessary information to the Heads of the departments in periodic meetings.

6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes? ?

The management always encourages faculty to involve themselves in ongoing institutional processes. Faculties are the Heads of various committees at college level. Management maintains communication with the staff and is open to their suggestions. The management gives regular increments and promotions based on performance. The management also sponsors faculty to pursue PhD. Management also organizes TTT, TAP to provide training to faculty. HoD does adjustment in workload of faculties while they pursue higher education.

6.2.7 Enumerate the resolutions made by the Governing Body in the last year and the status of implementation of such resolutions.

Agenda and minutes of Governing Body meeting

The Governing Body council meets twice in a year and contains external members. The

31st meeting of the General Body of Smt. Kashibai Navale College of Engineering, Pune 41 was held on Monday 13th April, 2015.

The meeting discussed agenda and confirmed for the meeting held on 20th Jan, 2015.

- Recommendation Finance committee: The budget was prepared taking into account existing intake and increase in intake and existing fee structure. The same was discussed and approved.
- Tuition fee and development fee: Tuition fee and development fee for the year 2014-15 and proposed tuition fee and development fee for the year 2015-16 were confirmed.
- Salary: Salary expenses of teaching and non-teaching staff were confirmed. Salary is paid as 6th pay norms and increase DA is also given as per rule.
- Students Welfare: Expenses towards students participating in sports and various events for the period of 2014-15 were sanctioned and budget for 2015-16 was sanctioned.
- Expenses towards travel and conveyance, affiliation fee, newspaper, internet charges and seminars and exhibition were sanctioned for 2014-15 and approval for 2015-16 was taken.
- Expenses towards purchase of non-recurring, recurring, consumables repair and maintenance was finalized.
- Recommendation of Staff committee for approval of teachers appointed, by SPPU was discussed and recommended.
- Decisions regarding staff welfare, recruitment, workload, leave records, training and placements, seminars and exhibitions were discussed and approved.

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, there is a provision. Every year institute has continuation of affiliation to SPPU. The institution has no immediate plans for obtaining autonomy.

6.2.9 How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder relationship?

The Institute has following committees for hearing grievances/complaints from students, teaching and non-teaching staff.
- Local Managing Committee
- Reservation Committee
- Anti-ragging Committee
- Anti-Ragging Squad
- Women's Grievance Cell
- Student Council
- Student Grievance Redressal Cell
- Weekly faculty meeting with HoD
- Suggestions through suggestion box.

Everybody in the institution is made aware of the existence of these committees. As and when the committee receives a complaint, they meet immediately, review and resolve the problems. They also ensure that necessary actions are taken. The complaint details are filed separately and kept confidential.

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 case filed against by the institute.

6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If yes, what was the outcome and response of the institution to such an effort?

Yes, institution has mechanism for analyzing student feedback on institutional performance:
- Academic Performance
- Acceptance of student in industry and institutes of national and international repute
- More Research activities are conducted
- Quality of intake is improved

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?

- The institute is taking continuous efforts for the professional development of its teaching and non-teaching staff.
- Creating conducive atmosphere for developing capabilities and upgrading skills through training to achieving higher quality and excellence.
- Enabling staff to make use of latest equipment's through awareness Programmes and technical trainings.
- Providing duty leaves to faculty and staff for attending workshops, seminars and national and international conferences.
- Providing access to Internet, audio-visual aids, software packages for upgrading knowledge and skills.
- Providing well equipped library and learning resources for effective instruction delivery.
- Providing NPTEL video lectures.
- Motivating faculty to take membership of known technical and professional bodies like ISTE, IEEE, IETE, IEI etc.
- Organizing various faculty development Programs e.g. TTT, TAP, FDP.
- Faculties are encouraged for higher studies by adjusting their duties.
- The non teaching faculties are promoted as teaching faculty after acquiring necessary qualification.

6.3.2 What are the strategies adopted by Institute for faculty Empowerment through training, retraining and motivating the employees for the role they perform?

Institute is always striving to motivate and empower the faculty to create sense of direction and positive awareness to all the departments in the teaching learning processes by:

- Sponsoring them to attend various Programmes like National / International conferences, workshops, STTPs and FDPs carried out at different levels.
- Creating a sense of belongingness amongst faculty members by involving them in various committees.
- Deserving faculties are promoted.
- Government norms are followed for DA, pay scale and HRA.
- Faculties are encouraged for higher studies with paid leave.
- Faculties are trained for soft skill development.

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

- The Institute strictly follows all the basic recruitment and promotional policies as stipulated by AICTE, SPPU as well as Government of Maharashtra.
- Each and every faculty member completes the self-appraisal procedure every year in the format prescribed by SPPU.
- Self-appraisal is done on the basis of the following points:
- Teaching learning process evaluation Specific duties / tasks assigned by Heads of the Department: student performance for internal and phase examinations is reviewed along with attendance and practical skills. Workshop, Seminar, Conferences attended by Staff for improving skills and update of recent technology
- Major contribution for the benefit of student/ staff / Institute: Meticulous study and implementation of Student Counseling and performance monitoring is carried out.
- Awards/ Rewards obtained by the faculty and staff.
- Results of subjects taught
- Contribution in Institutional and departmental activity
- Contribution towards extracurricular and co-curricular activities.
- Execution of exam duties assigned by SPPU.
- Research contribution of staff in terms of research projects, publications, patents and guidance provided to students for involvement in research.
- Books Published
- Industrial liaison
- Weakness in Teaching through students feedback
- Guest Lectures given to outsiders as an expert.

6.3.4 What is 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 management reviews the performance appraisal for suitable suggestions and remedial actions like regularizing the staff after probation period, deciding the regular increments and deciding promotions. Table 6.3.3 shows staff promotions:

Table 6.3.3: Staff Promotion

Sr. No.	Name of faculty	Dept.	Yr of promotion.	Post before prom.	Post after promotion
01	Dr. A.P. Pandhare	Mech	2014	Asst. Professor	Asso. Professor
02	Prof. S.K. Malave	Mech	2012	Technical Assistant	Asst. Professor
03	Prof. S.S. Musale	Chemistry (FE)	2012	Technical Assistant	Asst. Professor
04	Prof. P.S. Raskar	E &TC	2014	Technical Assistant	Asst. Professor
05	Dr P.N. Mahalle	Comp.	2014	Asso. Professor	Professor
06	Dr. S.K. Shah	E &TC	2012	Asso. Professor	Professor
07	Dr. A. D. Kumbhar	E &TC	2014	Asso. Professor	Professor
08	Prof. P.N. Railkar	Comp.	2012	Technical Assistant	Asst. Professor
09	Prof. S. M. Borawake	E &TC	2014	Technical Assistant	Asst. Professor
10	Dr. S.K. Jagtap	E &TC	2014	Asst. Professor	Asso. Professor
11	Prof. P.S. Kokare	E &TC	2013	Technical Assistant	Asst. Professor
12	Dr. S. S. Agrawal	E &TC	2015	Asst. Professor	Asso. Professor
13	Dr. S. M. Koli	E &TC	2015	Asst. Professor	Asso. Professor
14	Dr. S. K. Pathan	Comp.	2015	Asst. Professor	Asso. Professor
15	Prof. S. A. Phalke	Electrical	2014	Technical Assistant	Asst. Professor
16	Dr. L. V. Patil	IT	2015	Asst. Professor	Asso. Professor

Communication to stakeholders
- Appraisal forms of faculties with comments of HoD, Principal and AMC committee are forwarded to management.
- Counseling is done for faculties if required.

6.3.5 What are the welfare schemes available for teaching and nonteaching staff? What Percentage of staff has avail benefit of such scheme in the last four years?

- GIS (Group Insurance Scheme) is provided to 100 staff
- EMBF and Gratuity is provided to 100 staff
- Uniforms are provided to all security staff.
- Medical facilities and maternity is provided to staff
- Staff quarters are provide to 14.41 staffs

6.3.6 What are the measures taken by the Institute for attracting and retaining eminent faculty? The college has been taking efforts to attract and retain, learned people in the college in two ways:

- Induction to management cadre: The Institute tries to include eminent faculty in the decision making process by inducting him/her to the management cadre.
- Encouragement for Research: Faculty is encouraged to pursue PhD Programme by granting duty leave for research activity. The Institute supports them by giving duty

leaves for their research activities. Even the technical non-teaching staff is encouraged to upgrade their qualification by providing them necessary support. The technical staff is granted necessary support for upgrading their qualifications

6.4 INANCIAL MANAGEMENT AND RESOURCE MOBILIZATION

6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?

- The Institute has a well-defined procedure to monitor effective and efficient utilization of available resources for infrastructure, development and teaching learning process.
- Departmental requirement: Departmental requirements such as apparatus, equipment, instruments, consumables and semi-consumables items are listed for requirement by HoD. The details are given to Principal in prescribed format. The departmental budget is then discussed and approved by Principal and put into institutional budget and then forwarded for approval to GB. Quotations are put up to the vendors. After a comparative statement approval from the Principal, Purchase orders are placed to the vendors. Dead Stock registers are maintained and updated regularly. Servicing, maintenance and repair of instruments and equipment is carried out regularly.
- Budget: Budget required for all departmental expenditure is generated.
- Budget Approval through principal: Budget required for all departmental expenditure is generated put forth for approval by the Principal.
- Expenditure: Departmental Expenditure towards apparatus, equipment, instruments, consumables and semi-consumables items is listed. Record for expenditure towards advance required for miscellaneous items inclusive of details of purchase is maintained.

Billing
 (a) Advance utilized for departmental purchases is put forth to the Principal for sanction. The utilization of funds after expenditure along with bills is submitted to the Principal for approval and further submitted to the Accounts section.
 (b) Bills towards visiting faculty remuneration are submitted to the principal for approval.
(c) Billing for vendors are carried out after testing of all apparatus, equipment, instruments, consumables and semi-consumables items listed in requirements are appropriately delivered to respective departments.

Audit (internal &external)
- Internal audit: Inter-departmental examination of dead stock and records is regularly done. Reports are regularly submitted to the Local Management Committee for verification of departmental records. Visiting Staff records and remuneration records are included. External audit is conducted every year.
- LMC and GB take review half yearly.

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?
Internal /statutory audit is conducted quarterly every year.

External audit is conducted every year. Internal auditors are STES senior staff. Table 6.4.2 shows internal audit dates along with year.

Table 6.4.2 (a): Internal Audit dates

Year of Internal Audit	Date of Audit
2011-12	28/2/2013
2012-13	26/7/2014
2013-14	28/5/2015
2014-15	19/10/2015

Objections of External Audit and compliance reported are presented in Table 6.4.2 (b)

Table 6.4.2 (b): Objections of External Audit and compliance

Sr. No.	Period of Audit Report	Particulars of Objection in brief	Compliance by the Institute
1	2013-2015	Excess Payment of Salary to Mr. P.B. Mali for Rs. 66,825/-	Recovery of Mr. P.B. Mali is started from the month of November 2015.
2	2013-2015	Excess Payment of Salary to Mr. Nitin P. Sherje for Rs. 27,598/-	Recovery of Mr. N. P. Sherje is started from the month of November 2015.
3	2013-2015	Demand Draft of Tution Fee for the month of June 2014 yet not credited to current account of the college in Anand Co-operative Bank. (96,811/-)	Follow up in going on with Anand Bank.
4	2013-2015	Payment without Bills.	In future precaution will be taken.
5	2013-2015	Omission noticed in cash receipt.	Technical Problem.
6	2013-2015	Dead stock verification not carried out.	Work in Progress
7	2013-2015	Outstanding Fees.	Student recovery is in process and for fees receceivable from samaj kalyan follow up is going on

6.4.3 What is the major source 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 tuition fees and development fees of students.
- Audited income and expenditure statement of academic and administrative activities of the previous four years are available
- Income from sale of prospectus.
- Deficit, if, any is taken care by institute management through corpus funds.

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 Institute is taking efforts for getting additional funds from various agencies like AICTE, DTE& SPPU (BCUD). Details of grants received from BCUD, SPPU in the past years are mentioned in criteria III , Table 3.1.5 (b).

6.5 INTERNAL QUALITY ASSURANCE SYSTEM

6.5.1 Internal Quality Assurance Cell (IQAC)

a. Has the institution established an Internal Quality Assurance Cell (IQAC)?
If contributed in institutionalizing the quality assurance processes?

Yes, the IQAC has been proposed from next academic year. Currently teaching and learning process is monitored by AMC, which will become integral part of proposed IQAC. To ensure quality outcomes of institute the IQAC will try various mechanisms as explained in Figure 2.3.2.

b. How many decisions of the IQAC have been approved by the management/ authorities for implementation and how many of them were actually implemented?

Not applicable

c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.

Not applicable

d. How do students and alumni contribute to the effective functioning of the IQAC?
- Figure 2.3.2 explains the functioning of IQAC.
- Feedback is taken from alumni and students through alumni meet and Teacher Guardian scheme. The student feedback on teaching and teaching-learning process, infrastructure is also obtained during interaction by HoD with students and through suggestion box.
- Feedback will be also received essentially from alumni regarding emerging trends in the industry, efforts to enhance employability, initiatives to promote research components and encouraging students for entrepreneurship.
- These feedbacks and suggestions will be used to improve the functioning of IQAC.

e. How does the IQAC communicate and engage staff from different constituents of the institution?

IQAC is convergence of representatives from various verticals which includes academia, industry and alumni. They will be always invited to contribute towards effective functioning of IQAC.
Communication with staff will be through –
- Meeting with staff and IQAC members.
- Workshop conduction.

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 operationalization.

Yes, the Institution has integrated frame work for quality assurance in academic & administrative activities.

- Academic and administrative activities are achieved through periodical visits of AMC.
- There are predefined goals, formats and strategies of AMC to ensure quality in academics and administration.
- Operation & maintenance of infrastructure and utilities are synchronized so that there is no interference in academic activities.
- Lab equipment and expendable materials are provided, when required by the departments. There is a well-defined and effective support system.

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, the institution provides training to its staff for effective implementation of the quality assurance procedure.
  Staff training conducted for quality:

- The faculties are oriented towards maintenance of quality through lectures, workshops and during the meetings of principal and HoD.
- Counselling by AMC & HoDs to all the staff members on quality program and practices.
- Staffs are given specific directions for quality improvement. Time to time monitoring is carried out & corrective actions are taken.
- Above actions have shown positive results in certain areas, particularly in teaching learning process and academic results.

6.5.4 Does the institute undertake Academic Audit or other external review of the academic provisions? If 'Yes', how are the outcomes used to improve the institutional activities?

Yes, the institution undertakes an academic audit or external review of the academic provisions.

- Regular meetings are conducted by HoD with all faculty and staff for taking reviews and feedbacks regarding academic activities.
- Academic review of the department is carried out at the end of every semester and academic year by every HoD.
- Institute takes the review of academic audit through periodic reports from the departments and result analysis etc. and remedial measures are taken for improvement.
- Practices like self-appraisal reports and its review by HoD, Principal and management helps for continuous assessment of faculty, staff and resulted in significant improvement of the institute.

6.5.5 How is the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

The institution follows guidelines given by AICTE, UGC, DTE and SPPU in association with AMC. All the academic activities and processes are as per the instructions given by the bodies from time to time.

- Curriculum and its implementation, evaluation is as per the University.
- The infrastructure & staff is as per the norms laid down by AICTE.
- The admission to the program is governed by the directives given by DTE, Maharashtra state.
- The institute is monitored by SPPU & AICTE committees for compliance.
- AMC is always keen in observing performance of the institute by attainment towards mission and vision of the institute.
- IQAC will also help to enhance academic activities, administrative activities to ensure quality objectives of the institute.

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?

Mechanism to review the teaching learning process continuously consists of:

- Academic calendar: Date-wise detail planning of the entire semester.
- Lesson Plan: Details of topics to be covered and scheduled/actual dates.
- List of lab experiments for respective subject.
- Attendance record of theory and practical batches.
- Practical evaluation record of the students.
- Term work assessment record of the students.
- Result analysis of previous semester taught by the respective staff.
- Responsibilities under taken during the semester.

Every faculty member plans lecture and practical session of the semester to complete the syllabus of the university as per the academic calendar. Assignments and tests are conducted to verify the delivery of subject matter and the actual knowledge transfer. The students are appraised about their performances and counsel for the remedial actions required if any. Student feedback about the faculty is also taken to learn any lacuna from the faculty side. Corrective actions are also taken by HoDs to make sure about the content of syllabus delivery effectively. Corrective actions are taken, based on feedback of students and Teacher-Guardian scheme. The entire teaching learning process is governed and guided by AMC.

6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?

The quality policies are communicated to the stake-holders through institute website, by displaying on notice boards, by talk from HoD / Senior staff members, Parent-Teacher meet, alumni meet and time to time conversation with parents through induction programs.

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?

1. Green Audit of Campus

The agencies conducting green audit have been identified & conduction of green audit formalities is in process.

The audit has been carried out on the basis of overall environmental management, procurement policy, energy management, materials management, water management and waste water management etc.

7.1.2 What are initiatives taken by the Institute to make the campus eco-friendly?

1. Energy Conservation

The buildings have been planned in such a manner as to take advantage of natural ventilation and day light. Future, to create awareness amongst the students, faculty and staff, slogans has been put at appropriate places like classrooms, laboratories etc. mentioning about switching off lights and fans when not required. Solar water heaters have been installed in various hostels (Total=37575 LPD through 42 panels)

2. Water Conservation

As a pilot project WATER URINALS have been installed at two places in the campus (SCOE) and it is resulting in saving around 4000 to 5000 liters of water every day.

3. Use of Renewable Energy

Solar water heaters have been installed in various hostels (Total = 37575 LPD through 42 panels)

4. Solar Panels

Solar water heaters have been installed in various hostels (Total =37575 LPD through 42 panels)

5. Efforts for Carbon Neutrality

Proper landscaping and greenery over the entire campus is the first step towards curbing the pollution. More than 2500 trees have been planted in the campus & more trees will be planted in future. Organic waste generated in the campus is composted within the campus. As this waste is not going to landfill, ultimately it is helping in reduction of emission of Green House Gases (GHG). School children are provided with bus facilities, which results in huge saving of fuel and emissions.

6. E-waste Management

As agency named M/S- Poona, E-waste, Pune, has been appointed to collect & manage E-waste in the campus. The functioning of the said party is already in place of the campus.

7. Effluent Treatment and Recycling Plant

There are two sewage treatment plants installed: one in Vadgaon (BK) and one in Ambegaon campus [Capacity 300 m^3/d]. The treated sewage is currently being recycled and reused for gardening purpose.

8. Recognition/ Certification of Environment Friendliness

There is no certification till date. Environmental certification is in process.

7.2 INNOVATIVE PRACTICES

7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.

The Institute has many innovative practices which have helped in improving the functioning of the Institute.

Academic system

- Handouts with semester planning for theory and practical, course objectives, assignment questions, useful Uniform Resource Locators (URL), power point presentations, references and academic calendar are distributed to the students in the beginning of the semester.
- Close monitoring committee meetings are held periodically in a semester
- Regular monitoring of academic activities by respective heads of the department
- Periodic collection of student feedback on individual subject teachers
- Review of performance of teachers based on feedback and pass percentage of students at university examinations.
- Tutors for every 20 students till they completes their degree
- Remedial classes, bridge courses to make up for weak and slow learners
- Inviting experienced people from reputed institutions and industry experts for delivering guest lectures.
- Incentives for those carrying out research, publishing papers and participating in Seminars / Conferences / Workshops / Symposium / STTP / Summer training / Winter training etc.
- Institute has implemented Academic Performance Indicator- API system for the academic performance evaluation of faculty and staff.

Administrative system

Administrative mechanisms are in place for quality assurances are

- An exclusive Examination Section headed by CEO is constituted
- Training and placement cell takes care of all the aspects related to placements
- College administration is run through Management, Director, Principal, Deans, HoD's and Professors. All decisions are implemented after a consensus is arrived in.
- There is a centralized research committee with Principal, dean R & D. Associate dean R & D, all HoDs and Senior most faculties to overview all R & D related activities at institutional level.
- Maintenance of all buildings and other infrastructure is entrusted to maintenance team.
- HoD and senior faculty of each Department look after the teaching and learning process in each Department.

Quality assurance for academic programmes
Performance Monitoring

- Right from the time of admission, performance of every student is carefully monitored. Based on the examination results, tutors take up counseling of poor performers and try to assess the reasons for their poor performance.
- Periodic meetings are conducted by the Principal and HODs to review the results of internal and external examinations.
- The analysis of the results of end semester examinations is carried out and further discussed by HoD with the Principal.

Innovations in Research and Development and Extension
- Research committee overviews the R & D activities in the college
- R & D labs are established in each department.
- Inter-departmental research projects are encouraged.

Placement
A training and placement cell is established with necessary infrastructural facilities for providing training and placement assistance to students.

Learner centered Teaching
The college adopts a mix of different methods of teaching like interactive, discussion based, project based and seminars to supplement the normal lecture method, depending on the nature of the content of instruction.

Lecture method
The lecture method is used to the extent of 60 to 75 to explain abstract and conceptual parts of the subject which demand critical thinking and analysis. Teacher presents the relevant data and diagrams through power point/chalk board mode.

Interactive method
The lecture method of teaching is supplemented with "discussion and interactive method" whenever needed.

Project –based learning
This method is mostly used for self learning to improve the learning ability of student and to reinforce knowledge received during the lecture. Being a technical institute , this method is extensively used to provide practical evidence of the theory learned. Students are asked to prepare projects with a clear concept of the principles learned. The teacher guides the students at various stages of developing the project, further gives timely inputs during the preparation of the project work.

Seminar Method
From time to time, the teacher involves the active students into the seminar method. A student is advised to come prepared on an assigned topic and present a seminar before the faculty and stuents. This method makes the student to undertake extensive reading and preparation, further; helps to improve the student's communication and presentation skills.

E-learning applications
Classrooms are equipped with latest systems, projectors etc. for facilitating e-learning.

Innovative techniques in Assessment
Surprise tests, online tests, seminars, assignments etc. are conducted for assessment.

Biometric Attendance system
It helps to maintain the attendance of the staff in turn it makes the paperless office.

Earn and Learn scheme
The main objective of the scheme is to develop a student as a multifaceted personality with academic excellence and a commitment to an egalitarian society.

Anti-Ragging committee

Ragging in any form is strictly prohibited and students who indulge in any such activity will be dealt with seriously by the authorities of the college. Anti –Ragging committee has been established in the college as per the UGC rules and plays a vital role for the welfare of the students.

Shift from content to competency
The practice of giving assignments and their evaluation and assigning project module for improving competency is strictly followed.
Innovative Instructional Methods
Experiential learning (learning by doing), inquiry and discovery, problem based learning, collaborative and cooperative learning in groups is encouraged.
E learning Applications
Classrooms are equipped with latest systems, Projectors, etc.,for facilitating e- learning.
Innovative techniques in Assessment
Surprise tests, online tests, seminars, assignments, etc. are conducted for
Innovative Incentives and Reward Schemes
The institute encourages the students to do innovative projects with special awards and prizes. The college has instituted cash awards to best out going student, best out going girl student, branch toppers, and best project works, best out going sports person& sports woman and GATE & GRE rankers. Certificates of Excellence and Meritarealso awarded.
Computerization of Library:
The College has made the library fully computerized. The students are having their web browsing space in the library. The total working in the library is now on the computers.
Biometric Attendance system
It helps to maintain the attendance of the staff in turn it makes the paperless office.
Soft Skill programme
The Smt. Kashibai Navale College of Engineering has been offering the Soft Skills and language lab, spoken tutorial programe to all its students. Attendance is very important for this course. They are provided study materials for the course.
Health centre for students and staff
Health Centre has been established in the College campus to cater the basic health of students and staff. As well as Sinhgad Society's Smt. Kashibai Navale Medical College at Narhe Campus

7.3 BEST PRACTICES

7.3.1 Elaborate on any two best practices in the given format, which have contributed to the achievement of the institutional objectives and/or contributed to the quality improvement of the core activities of the college.

Best Practices- I

Title of the practice: STP

Goal
The student training programme makes the student's placement ready or ready to take on entrepreneurship. Students either are job creators or job seekers and it is responsibility of the institute to assist them in development.

It is one of the important objectives of the institute to develop the students such that they get placed in good companies in their field of specialization. Thus the college carries on activities like practicing aptitude, group discussion, general knowledge, current affairs, mock interview etc.

The context

Conduction of such a variety of events with expert supervision and advice involves a lot of specialists from each of the respective fields. It is challenging to arrange for resource persons and managing their schedules to coincide with academic activities.

It is important to track progress of the students in individual activities and give them feedback. Counseling critical cases is also necessary. The judgment given to students in activities which are subjectively evaluated should be fairly looked upon.

The practice
- Developing aptitude: aptitude tests are of paramount importance to prospective job seekers in today's competitive job market. employers use aptitude tests to distinguish between candidates and a poor score on a numerical or verbal reasoning aptitude tests could be the difference between getting an interview or not.
- General knowledge: general knowledge contributes to personal enrichment, and a better understanding of the world as a whole.
- Awareness about current affairs: current affairs refer to the important incidents that have occurred and hold social importance in the world. The important role of current affairs can be evident with the various eligibility criteria adopted by the job sector, where individuals are hired based on their knowledge of their surroundings.
- Developing domain knowledge: domain knowledge is the basis of the job the students will be acquiring in the organization. Strong foundation in domain knowledge is a stepping stone to further learning.
- Technical skills (excel, PowerPoint): many companies today hire employees by looking at their computer literacy. If you know how to operate Microsoft tools then it is a plus because many companies today use the software in their computers.
- Group discussion: discussions of any sort are supposed to help us develop a better perspective on issues by bringing out diverse view points. The understanding makes us better equipped to deal with the problem.
- Preparation for personal interview: interviews help the candidate and employer make an informed, mutually beneficial employment choice. Candidates who understand both sides of the interviewing process stand to have a more successful job search.

All the activities of the student training programme are conducted by faculty who has their expertise in respective areas. The activities are planned semester wise are weekly scoring and reporting is done to ensure continuous progress.

Evidence of success

It is observed that with regular practice the students get better understanding of various activities being carried out. There is seen a steady rise in scores amongst all the students. Also it has reflected in review from the company panels coming for interview. Students get better placements in terms of profile and package.

Problems encountered and resources required

Since a large number of activities are planned any student missing any activity leads to loss of marks in that activity. It becomes very difficult to re-conduct the activity again.

Best Practices- II

Title

Inculcation of research culture among faculty and students

Goals

- To identify the state-of-art(new area of research)
- To motivate the faculty and student to conduct research activities.
- To organize conference, workshop, seminar & symposium to create Awareness among faculty and students about emerging trend in related Area.
- To identify thrust areas to know the individual research interest
- To create the awareness about various funding scheme of government, AICTE, research organization and motivate the faculty to write good research proposals.
- To organize the visit to research organization and industry.
- To motive the staff to pursue higher studies specially PhD.
- To create the awareness about patent/innovating intellectual rights.
- To encourage the consultancy in related areas.
- To motivate the faculty & student to present the research paper at reputed journals and conference. To develop research culture in institute and lifelong learning skills among students.

The context

Creating engineering manpower of global standards will require involving Participation of faculty and students in the planning, decision making and implementation process. Encouraging faculty to do research will improve the reasoning skill of students in classrooms and awareness among the students about recent technological development in society, which in turn will make the students one of the best entrepreneurs. By inculcating research culture among faculty and students, teaching- learning process can be implemented innovatively .there is better conceptual understanding of the subject among the students.

The practice

It is necessary to inculcate research culture among faculty and student so as to develop a high quality engineers of global standards, however still below mentioned practices are followed by institute eminent speakers from related area guide the faculty and students for conducting good research .institute sponsors & deputes the faculty for summer & winter school, qip workshops, symposium, conference etc.

Institute organizes industry & research organization visits:

Institute has cosmic club to enhance the soft skills of the faculty and student. The experts from research organization like IIT, DIAT, ISRO and CWPRS have visited the institute & interacted with the faculty & students and made them aware about the various possibilities available to do good research work. Eminent professors from IITs, Nirma University, VIT, SPPU and NMU have contributed to organize conferences, seminar & workshop series arranged at our institute.

Institute organizes paper, project, mathematical quiz, poster competition, gamming and robotics competitions for student to get acquaint with state-of-arts technology.

Institute also organizes entrepreneurship development programs, awareness towards patent.

Faculty is motivated to pursue PhD. or higher degree to do research project with involvement of students and publish paper in journal and conferences. Institute has developed research lab by purchasing higher end equipment & software's according to the requirement of principal investigator student can use various equipments available in laboratories as and when required. Students are also motivated to participate in inter institutes / university level technical competition like AVISHKAR, PGCON etc. Institute provides financial support to the student in their research projects like robotics.

Evidence of success

- Many faculty members have applied for research grants and many have been provided research grants from various funding agencies.
- More than faculty members have registered for PhD and few more are in the process of registration.

Problems encountered and resources required

- More budget provision needs to be made to develop research oriented Lab, to give more exposure to the students for their overall Development.
- More awareness is needed to create among faculties and students about various funding agencies, writing good research proposal and PhD research Centre.

Best Practices- III

Title of the practice
TG Scheme
Goal
The main aim of this system is to bridge the gap between the student's staff and parents. This scheme is being established for better communication between staff and parents.

The context
Every student's academic performance and attendance is monitored on monthly basis and the students whose performance or attendance is poor are identified by the HOD and class teacher. Every TG receives a list of such students. Then every TG gives a call to parents of such students and informs about the same to them and they are called for counseling in the college as early as possible. Here the TG plays a vital role of mentor for the student.

The practice
A teacher guardian is assigned a group of 40 students. The interaction between TG and students (meeting) takes place twice a month. The TG discusses with the group to understand problems and views of the group. The TG also interacts with the student individually and confidentially. The outcome of the meeting is communicated as feed back to class teacher, HoD for remedial action.

Evidence of success
Few of the evidence of success are quoted as example as evidence.
- Students had difficulty in understanding the teaching of some staff members. The concerned staff members were counseled by the HoD and improvement was observed.

- At the time of submission period students wanted to use lab resources beyond college hours so one peon was allocated for the same

Problems encountered and resources required

The problems encountered are as follows:

- Adequate time is not available during college hours for conducting meet but this was overcome by conducting meeting after college hours.
- Initially the students were hesitating to speak about the problems then TG made them speak out by talking with them in informal way

Best Practices- IV

Title of practice

Self feedback of each faculty

The goal

The goal of this scheme is self-assessment of the faculty about their teaching practices.

The context

Every faculty member has to take self-feedback and based on that takes the corrective action if there are any problems.

The practice

In the second week after commencement of every semester every faculty takes self feedback for their respective subject. After analyzing the points given by the students as feedback the major problems are identified and discussed with the HoD. After that corrective action is taken by the respective faculty.

Evidence of success

Major feedback points given by students are:

- Low voice
  For this problem PA system was given to the respective faculty.
- Understanding the concepts with the help of more examples
  Faculty was counseled for the same and improvement was seen after taking final Online feedback

Problems encountered & resources required

- If some students are absent at the time of feedback then it becomes difficult to again take feedback
- Sometimes students do not give true feedback

Best Practices- V

Title of the practice: Practical Exposure to Students
Goal of thispractice
The goal of this practice is to impart practical exposure to students in upcoming technologies by conducting workshops, guest lectures and seminars by internal and external academicians / industrialists and through industrial visits.

The process
The students are expected to be strong in academics and have good industrial exposure. They are encouraged to update their knowledge with latest developments in their respective disciplines and allied subjects. In addition to good academic record, the students need to develop leadership qualities and good communication skills and soft skills. In this aspect, eminent personalities from various reputed institutes and industries are invited to impart the practical exposure to the students through workshops, seminars, guest lectures, etc. Also, the students are motivated to share their ideas with the outside world by presenting their research work in National / International conferences. The students are monitored regularly by class monitoring com Smt. Kashibai Navale College of Engineering conduct of remedial classes when necessary. Regular tests on aptitude are conducted by the college. To gain industrial knowledge, the students are encouraged to visit the industries.

Impact of the practice
The morale of the students is thus increased due to the expertise training and measures taken by the college. There is recognition and appreciation by the students and they are actively participating in all the programs. As the outcome, discernible positive change has been observed in them.
Problems: We will get little time in a semester to organize these all workshops in a semester.

Resources required
Provision is made in the budgetary allocations.

6-EVALUATIVE REPORT OF THE DEPARTMENT

6.1 Department of Computer Engineering

1.   **Name of the department:** Department of Computer Engineering

2.   **Year of Establishment:** 2001-02

3.   **Names of   Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**

Name of Program	Year of Establishment
First Shift in U.G. of Computer Engineering (Intake 60)	2001
First Shift in U.G. of Computer Engineering (Intake 90)	2003
First Shift in U.G. of Computer Engineering (Intake 120)	2006
First Shift in U.G. of Computer Engineering (Intake 180)	2011
First Shift in U.G. of Computer Engineering (Intake 240)	2013
Second Shift in U.G. of Computer Engineering (Intake 60)	2012
First Shift in P.G. of Computer Network (Intake 18)	2010
First Shift in P.G. of Computer Engineering (Intake 18)	2011
First Shift in P.G. of Computer Network (Intake 24)	2012
First Shift in P.G. of Computer Engineering (Intake 24)	2012
Second Shift in P.G. of Computer Engineering (Intake 24)	2013

4. **Names of Interdisciplinary courses and the departments/units involved**

Sr. No.	Class	Interdisciplinary courses	Department involved
1	FE	Engineering Mathematics III	Engineering Sciences

5. **Annual/ semester/choice based credit system (program wise)**
     UG: FE-Semester credit system & SE/TE/BE- Semester System
     PG: Semester based credit System.

6. **Participation of the department in the courses offered by other departments**

Sr. No.	Class	Courses	Offered to Department
1	FE	Fundamentals of Programming Languages-I	First Year

2	FE	Fundamentals of Programming Languages-II	First Year

7. **Courses in collaboration with other universities, industries, foreign institutions,etc.**

Sr. No.	Certificate Course	Participating institution/industry
1.	Spoken tutorial based software course on "C Programming"	IIT Mumbai and MHRD Government of India
2.	Spoken tutorial based software course on "CPP Programming"	IIT Mumbai and MHRD Government of India
3.	Spoken tutorial based software course on "Java Programming"	IIT Mumbai and MHRD Government of India
4	. Net technology	Microsoft , Pune
5	.Net technology	Microsoft , Pune
6.	Value Addition Program on Linux	CMS Institute, Pune
7.	Value Addition Program on Soft skills	Bulls Eye
8.	Science Conclave 2013	IIIT, Allahabad
9	Aspiration 2020	Infosys , Pune
10	Foundation Program 4.0	Infosys , Pune
11	Student Training Program –V (Module Big Data/ HADOOP)	MASS Technologies , Pune
12	Student Training Program –V (Module- JAVA & Adv. JAVA)	MASS Technologies , Pune
13	Student Training Program –V (Module- PHP / Web Tech.)	MASS Technologies , Pune
14	Face detection and gender recognition	Technical University of Sofia, Bulgaria
15	Analysis of High Performance computing System	Technical University of Sofia, Bulgaria

8. **Details of courses/programmes discontinued (if any) with reasons:**NIL

9. Number of teaching posts:

Teaching Posts	Sanctioned	Filled
	UG	
Professors	7	3
Associate Professors	14	1
Asst. Professors	45	57

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Sr. No.	Name of Faculty	Qualification	Designation	Experience
1	Dr. P. N. Mahalle	M.E. Comp Ph.D.	Prof. & HOD	15
2	Dr. K. N. Honwadkar	ME. Electronics Ph.D.	Professor	25
3	Dr. Mohd. Shafi A. Karim Pathan	M.E. CSE Ph.D.	Asso. Prof.	14
4	Ms. M. R. Patil	M.E. Comp Pursuing Ph.D.	Asst. Prof.	14
5	Mr. S. P. Pingat	M.E. Comp. Pursuing Ph.D.	Asst. Prof.	15
6	Mr. S. P. Kosbatwar	M.E. Comp. Pursuing Ph.D.	Asst. Prof.	21
7	Ms. D. H. Kulkarni	M.E. Comp.	Asst. Prof.	13
8	Mr. P. B. Mali	M.E. Comp Pursuing Ph.D.	Asst. Prof.	12.6
9	Ms. N. A. Mhetre	M.E. Comp Pursuing Ph.D.	Asst. Prof.	12.6
10	Ms. R. A. Satao	M.E. Comp Pursuing Ph.D.	Asst. Prof.	12.6
11	Ms. V. S. Deshmukh	M.E. Comp Pursuing Ph.D.	Asst. Prof.	12.6
12	Mr. Vivek V. Jog	M.E Comp. Pursuing Ph.D.	Asst. Ptrof.	9
13	Mr. S. A. Shinde	M.E. Comp	Asst. Prof.	12
14	Mrs. U. A. Jogalekar	M.E. CSE	Asst. Prof.	11
15	Mr. V. V. Kimbahune	M.E. Comp Pursuing Ph.D.	Asst. Prof.	11

16	Mr. J. N. Nandimath	ME Comp	Asst. Prof.	14
17	Mrs. S. V. Dabhade	M.E. E&Tc	Asst. Prof.	11
18	Mrs. S. Y. Kulkarni	M.E Comp.	Asst. Prof.	9
19	Ms. A. A. Deshmukh	M.E Comp. Pursuing Ph.D.	Asst. Prof.	14
20	Mrs. R. A. Kudale	M.E Comp.	Asst. Prof.	10
21	Ms. D. L. Phadke	B.E. Comp. Pursuing ME	Asst. Prof.	8
22	Mrs. G. R. Shinde	M.E. Comp Pursuing Ph.D.	Asst. Prof.	7
23	Mr. V. R. Ghule	M.E Comp. Pursuing Ph.D.	Asst. Prof.	7
24	Mrs. A. N. Ainapure	M. E. Comp	Asst. Prof.	7.6
25	Ms. T. H. Gurav	M.E Comp.	Asst. Prof.	9
26	Mrs. P. S. Desai	M.E Comp.	Asst. Prof.	4.8
27	Mrs. P. N. Railkar	ME Comp	Asst. Prof.	5
28	Mrs. P. S. Raskar	ME E&TC	Asst. Prof.	5
29	Mr. A. M. Wade	M. Tech. Comp.	Asst. Prof.	7
30	Mr. S. S. Barde	ME Comp	Asst. Prof.	4
31	Ms. S. S. Utpat	ME Comp	Asst. Prof.	2.8
32	Ms. P. D. Takalkar	ME Comp	Asst. Prof.	2.8
33	Ms. S. P. Dugam	ME Comp	Asst. Prof.	2.8
34	Ms. P. M. Kakade	ME Comp	Asst. Prof.	2.8
35	Mrs. N. K. Godbole	M. E. Comp	Asst. Prof.	2.2
36	Ms. S. R. Suryavanshi	ME Comp	Asst. Prof.	2.2
37	Mr. S. V. Dhande	ME Comp	Asst. Prof.	2.6
38	Mr. P. A. Sonewar	M. E. Comp	Asst. Prof.	1.8
39	Mr. V. V. Dakhode	ME. Comp.	Asst. Prof.	6.1

40	Ms. R. S. Patil	M. E. Comp	Asst. Prof.	1.8
41	Mr. R. Nasri	ME System Software	Asst. Prof.	1.8
42	Mrs. A. A. Bhawarthi	M. E. Comp	Asst. Prof.	6
43	Ms. M. M. Dharanguttikar	ME. Comp.	Asst. Prof.	1.8
44	Ms. V. K. Takalkar	M. E. Comp	Asst. Prof.	1.8
45	Mr. V. S. Phad	ME CSE	Asst. Prof.	9
46	Mr. S. S. Bhong	M. E. Comp.	Asst. Prof.	0.8
47	Ms. K. M. Jadhav	M. Tech Info. Tech.	Asst. Prof.	0.2
48	Mrs. P. H. Jagtap	Pursuing ME Comp	Asst. Prof.	0.3
49	Ms. P. V. Adate	Pursuing ME Comp	Asst. Prof.	0.3
50	Ms. A. R. Chemate	ME. Comp.	Asst. Prof.	2.8
51	Mr. V. R. Redekar	ME. Comp.	Asst. Prof.	2.8
52	Mr. S. S. Mahamure	Pursuing ME Comp	Asst. Prof.	0.6
53	Mr. A. J. Dande	Pursuing ME Comp	Asst. Prof.	0.7
54	Ms. V. V. More	Pursuing ME Comp	Asst. Prof.	0.9
55	Mr. A. A. Patil	Pursuing ME Comp	Asst. Prof.	0.7
56	Ms. A. A. Anasane	Pursuing ME Comp	Asst. Prof.	0.6
57	Mr. S. G. Nirne	Pursuing ME Comp	Asst. Prof.	0.9
58	Mr. S. U. Mali	Pursuing ME Comp	Asst. Prof.	1.3
59	Ms. P. S. Jadhav	Pursuing ME Comp	Asst. Prof.	0.7
60	Mr. S. L. Mane	Pursuing ME Comp	Asst. Prof.	0.6
61	Mr. O. K. Haldankar	Pursuing ME Comp	Asst. Prof.	0.6

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) :**

Sr.No	Programme	Specilization	Student-Teacher Ratio			
			2015-16	**2014-15**	**2013-14**	**2012-13**
1	Computer Engineering	Computer Engineering	16.13:1	17.28:1	15:1	15:1

14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled**

Academic Support Staff	Sanctioned	Filled
Technical Staff	-	7
Admin Staff	-	0

15. **Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.**

Sr.No	Qualification	No. of Teaching Faculty
1	PhD Completed	04
2	PhD Registered	12
3	ME/M Tech Completed	57
4	M Phil/ M. Sc	NA

16. **Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:**

Sr. No.	Title of Project	Sponsoring Agency	Name of Researcher	Period for Project	Grant Sanctioned/ Received	Status
1	HMM Based enhanced security system for ATM payment.	AICTE	Prof. V.V Jog Prof.A.A.Deshmukh	2011-2013 2 years	3,50,000	Completed

17. **Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received**

Sr. No.	Name of Research Project	Name of Principal Investigator/Coordinator	Funding Agency	Amount as Seed Money Rs.	Duration of Project
1	Public key Cryptography Cross – Authentication in Kerberos	Prof. S.K.Pathan Prof. N.A.Mhetre	BCUD University of Pune	2,00,000	2 years
2	IS-IS Routing Protocol – A better approach for routing mechanism	Prof. A.A.Deshmukh Prof. S.P.Pingat	BCUD University of Pune	1,75,0000	2 years
3	Idea generation Algorithm	Prof. S.P.Pingat Prof.U.A.Joglekar	BCUD University of Pune	75000	2 years
4	Future Architecture for security of IoT	Dr. P.N.Mahalle Prof. P.N.Railkar	BCUD	170000/-	2 years
5	Lightweight group Authentication for IoT	Prof. G.R.Shinde Dr. P.N.Mahalle	BCUD	90000/-	2 years
6	Performance & energy efficient routing protocol for WSN	Prof. S.P.Pingat Prof. S.P.Dugam	BCUD	65000/-	2 years

18. **Research Centre /facility recognized by the University:**

No. of PhD students registered:13

Research Center Information

Sr.No	Name of the department	Affiliating University	Year of Affiliation	Letter No. with date
1	Computer Department	Savitribai Phule Pune University	2012	CA/4126 Dated: 6/12/2012

Publications:

Academic Year	Journals (National / International)	Conferences (National / International)	Chapter in Books	Books Edited	Citation	h - Index
2015 – 16	30	1	-	6		7
2014 – 15	98	11	-	2		7
2013 – 14	83	14	3	2		7
2012 – 13	74	12	-	3		7

Sr. No	Name of Faculty	No of papers published in peer reviewed journals by Faculty/Student	No of publicatio	Chapters in books	Books edited	Books with ISBN/ISSN	Citation index	Impact factor	H index
1	Dr. P.N. Mahalle	44	44	1	3	978-95-7081-915-8, 978-81-929699-3-0,978-87-97102-90-3,798-87-7152-031-6			7
2	Dr. K. N. Honwadkar	9	9						
3	Dr. S.K. Pathan	11	11	1					
4	Mrs. M.R. Patil	7	7						
5	Mr. S.P. Pingat	14	14						
6	Mr. S.P. Kosbatwar	5	5	1					
7	Mrs. D.H. Kulkarni	12	12						
8	Mr. P.B. Mali	5	5						
9	Ms. N.A. Mhetre	13	13						

10	Mrs. R.A. Satao	15	15						
11	Mrs. V.S. Deshmukh	11	11						
12	Mrs. U.A. Jogalekar	6	6		2	978-93-5077-421-2, 978-93-5077-520-2, 978-93-5077-818-0, 978-93-5224-096-2			
13	Mr. S.A. Shinde	1	1						
14	Mr. V.V. Kimbahune	10	10						
15	Mrs. S.V. Dabhade	6	6						
16	Mrs. Jyoti Nandimath	7	7						
17	Mr. Vivek Jog	8	8		4	978-93-5077-815-9, 978-93-5077-946-0, 978-95-7081-915-8, 978-81-929699-3-0			
18	Mrs. S.Y. Kulkarni	5	5			978-93-85665-11-0			
19	Ms. A.A. Deshmukh	19	19						
20	Mrs. R.A. Kudale	10	10			978-93-85665-11-0			
21	Mrs. G.R.Shinde	7	7						
22	Mr. V.R. Ghule	2	2						

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23	Mrs.T.H.Gurav	4	4						
24	Mrs. P. S. Desai	6	6						
25	Mrs.P.N.Railkar	13	13		1	978-87-97102-90-3			
26	Mrs.P.S.Raskar	2	2						
27	Mr.A.M.Wade	4	4						
28	Mr.S.S.Barde	3	3						
29	Ms.P.D.Takalkar	4	4		1	978-81-929699-3-0			
30	Ms.S.P.Dugam	2	2						
31	Ms.S.S.Utpat	2	2						
32	Mrs.P.M.Kakade	2	2						
33	Mrs.N.K.Godbole	1	1						
34	Ms.V.K.Takalkar	2	2						
35	Mrs.A.ABhawarthi	2	2						
36	Ms.M.M.Dharanguttikar	5	5						
37	Miss.R.S.Patil	2	2						
38	Mr.S. V. Dhande	1	1						
39	Mr.V.V. Dakhode	2	2						
40	Mr.Raghib Nasari	1	1		2	978-93-5077-414-4, 978-93-5077-818-0, 978-93-5224-094-4			
41	Mr. Piyush Sonewar	2	2						
42	Mr. V.S. Phad	2	2						
43	Mr. S. S. Bhong	1	1						

| 44 | Mrs. A N. Ainapure | 2 | 2 | | | | | | |

20. Areas of consultancy and income generated: NIL

21. Faculty as members in

a) **National committees b) International Committees c) Editorial Boards….**

Sr.No	Name of Faculty	Member
1.	Dr. A.V.Deshpande	Session Chair – CPGCON 2015
2.	Dr. P. N .Mahalle	Session Chair – CPGCON 2015,2014,2013
3.	Dr. K.N.Honwadkar	Session Chair – CPGCON 2015
4.	Dr. S.K.Pathan	Session Chair – CPGCON 2015
5.	Dr. S.K.Pathan	Session Chair – National conference at DYPCE , Ambi,2015
6.	Prof. S.P. Kosbatwar	Session Chair – National conference at DYPCE , Ambi,2015
7.	Prof. S.P. Kosbatwar	Session Chair – National conference at DYPCE , Ambi,2016
8.	Prof. A.A.Deshmukh	Session Chair – CPGCON 2013
9.	Prof. A.A.Deshmukh	Session chair – RACE 2015
10.	Dr. P. N .Mahalle	Member of Editorial Team for Journal of Global Research In Computer Science
11.	Dr. P. N .Mahalle	Journal reviewer for 1. Springer journal of Wireless Personal Communications 2. Elsevier journal of Applied Computing and Informatics 3. IGI Global – International Journal of Ambient Computing and Intelligence (IJACI) 4. Journal of Global Research in Computer Science 5. IGI Global – International Journal of Ambient Computing and Intelligence (IJACI) 6. Inderscience International Journal of Grid and Utility Computing (IJGUC)
7.	Dr. P. N .Mahalle	Program committee member for International conferences

		and symposium like 1. IEEE ICC – 2014, 2. IEEE ICACCI 2013, 3. IEEE ICC 2015 – SAC-Communication for Smart Grid, 4. IEEE ICC 2015 – SAC-Social Networking, 5. IEEE ICC 2014 – Selected Areas in Communication Symposium, 6. IEEE INDICON 2014, CSI ACC 2014, 7. IEEE GCWSN 2014, 8. GWS 2015, 9. GLOBECOMM 2015 10. ICCUBEA 2015 & 2016
8.	Dr. P. N .Mahalle	Journal Reviewer for – Wireless Personal Communication
9.	Dr. K.N. Honwadkar	Member of Editorial Team for Journal of Global Research In Computer Science
10.	Dr. S. K. Pathan	Journal Reviewer for – Wireless Personal Communication (WPC)
11.	Dr. S. K. Pathan	IEEE International Conference Lonawala.
12.	Prof. A.A.Deshmukh	Journal Reviewer for – Wireless Personal Communication (WPC)
13.	Prof. A.A.Deshmukh	Reviewer for – Women In Computing (WCI-2013,2014,2015)
14.	Prof. A.A.Deshmukh	Reviewer for – International Conference for Advance Computing and Communication (ICACCI).
15.	Prof. A.A.Deshmukh	Reviewer for International Symposium for Wireless Personal Multimedia Communication (WPMC) 2015.
16.	Prof. A.A.Deshmukh	Book Reviewer – Cloud Computing (special issue) in IAENG.
17.	Prof. A.A.Deshmukh	Reviewer for International conference on Communication and Multimedia Research. NCM – 2016, Seoul , Korea
18.	Prof. A.A.Deshmukh	Journal Reviewer for - IJCA, IJCSNS, IJERT, IJAIT, VITAE-2014.
19.	Prof. A.A.Deshmukh	Technical Program Chair – WCI, ICACCI,

22. **Student projects**

a) **Percentage of students who have done in-house projects including inter departmental/programme**

Sr. No	Project Year	No of Projects	% In-house Project
1	2013-14	43	74.41%
2	2014-15	61	88.52%
3	2015-16	78	87.17%

b) **Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies**

Sr.No	Project Year	No of Projects	% Sponsored Project
1	2013-14	43	25.58%
2	2014-15	61	11.47%
3	2015-16	78	11.53%

23. **Awards / Recognitions received by faculty and students**

a) **Faculty**

Sr no	Name of faculty	Year of Achievement	Achievement/recoginition
1	Prof S P Pingat	2014-15	South West India Asia-Pacific Social Award : Special Mention Manthon Award for eDHYAS
2	Prof. M.M.Dharaguttikar	2014-15	Result Performance in SPPU Exam
3	Prof. S.S.Barde	2014-15	Result Performance in SPPU Exam
4	Prof.U.A.Joglekar	2014-15	Result Performance in SPPU Exam
5	Prof.S.A.Kulkarni	2014-15	Result Performance in SPPU Exam
6	Prof.P.D.Takalkar	2014-15	Result Performance in SPPU Exam

7	Prof.P.S.Raskar	2014-15	Result Performance in SPPU Exam
8	Prof.S.V.Dabhade	2014-15	Result Performance in SPPU Exam
9	Prof.G.R.Shinde	2014-15	Result Performance in SPPU Exam
10	Prof.P.M.Kakade	2014-15	Result Performance in SPPU Exam
11	Prof.R.ASatao	2014-15	Result Performance in SPPU Exam
12	Prof.S.V.Dhande	2014-15	Result Performance in SPPU Exam
13	Prof.V.S.Deshmukh	2014-15	Result Performance in SPPU Exam
14	Prof.D.H.Kulkarni	2014-15	Result Performance in SPPU Exam

b) **Student**

Sr. No.	Year	Activity	National/State/University Level No of Prizes won
1	2015-16	State Level	SymbosisKarandak 15, First Rank
2	2015-16	National Level	APPIN 24*7, Second Rank
3	2014-15	National Level	ICICI VIRTUAL STOCK'S TRADING COMPETATION 2k15, First Rank
4	2014-15	National Level	ZEST 15 BEST ATHLETE(W), First Rank
5	2014-15	National Level	ZEST 15 400M(W) , First Rank
6	2014-15	National Level	ZEST 15 800M(W) , First Rank
7	2014-15	National Level	ZEST 15 200M(W) , Second Rank
8	2014-15	National Level	ZEST 15 100M(W) , Second Rank
9	2014-15	National Level	ZEST 15 400M(HURDLES) , Second Rank
10	2014-15	National Level	Technokriti , FOURTH POSITION OUT OF 158 GROUP
11	2013-14	SIMC,Pune	Fashion Show, , First Rank
12	2013-14	SKNCOE and IIT Delhi	National Network Security Championship ZONAL winner
13	2013-14	E-Cell IIT Bombay	Pre-Summit workshop "Envoyage 13",First Rank
14	2013-14	UoP, University Board of Sports	Basketball, Runner up
15	2013-14	Walchand college of engineering sangali	"elan-WEST-13" A state level sport competition "Basketball" 1stRank
16	2013-14	SITS Narhe	Techno Evolution 2k13 " C-Quiz" 3rdRank

17	2013-14	University board of sport	University of Pune Pune district zone inter-collegiate sport Runner-up
18	2015-16	Shreyasomani	TECHNIKALAH-16, First Rank
19	2015-16	RoshanKhichi	TECHNIKALAH-16, First Rank
20	2015-16	AishwaryaWani	TECHNIKALAH-16, First Rank
21	2015-16	Shreya Somani	SILHOUETTES and AIIMBT 2016, Second Rank
22	2015-16	Roshan Khichi	SILHOUETTES and AIIMBT 2016, Second Rank
23	2015-16	Aishwarya Wani	SILHOUETTES and AIIMBT 2016, Second Rank

20. List of eminent academicians and scientists / visitors to the department

Sr. No	Name of Visitor	Organization	Purpose of Visit
1.	Dr. Neeli Prasad	Associate Professor , Aalborg University, Denmark	Intermingle Congregation
2.	Dr. Nilanjan Dey	Research Scientist, Laboratory of Applied Mathematical Modeling in Human Physiology (LAMMHP), Territorial Organization Of-Scientific And Engineering Unions, BULGARIA.	Expert Lecture
3.	Dr. Ashok Chandra	Telecommunication Advisor, Government of India	Expert Lecture
4.	Dr. Vilas Kharat	H.O.D., Computer	Expert Lecture

		Engineering, SPPU	
5.	Dr. T Kishore Kumar	Professor , NIT,Warangal	Expert Lecture
6.	Dr. Sunil Vadera	Professor , University of Salford,UK	Expert Lecture
7.	Prof. Prashant Dhotre	Professor, SITS Narhe	Expert Lecture
8.	Mr. Sushrut Apshankar	Professionals, Career Kundali	Expert Lecture
9.	Mr. S. M.Trinath	Professor, Vani Institute	Expert Lecture
10.	Ms. Sarita Sinha	Professor, IMFS	Expert Lecture
11.	Mrs. Prerna Gupta	Professionals , SawanKirpalRuhani Mission	Expert Lecture

25. Seminars/ Conferences/Workshops organized & the source of funding

Name of the Event Organized	2015 –16	2014 - 15	2013 -14	2012 - 13	Source of Funding
International Conference	1	1			SPPU
National Workshop	3	4	9	5	SPPU/Institute
Seminar	3	5	4	2	Institute
FDP / SDP	2	1	3	2	SPPU/Institute
Guest Lectures	4	8	11	2	Institute
Industrial Visits	2	1	1	1	

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a) Conferences

Sr.No.	Conference Organized	Date	National/International	Source of Funding
1.	International Conference on IoT, Next Generation Networks & Cloud Computing	26th-28th Feb 2016	International	Savitribai Phule Pune University (SPPU)
2.	International Conference on Advances in Engineering and Technology - 2014 (ICAET 2014)	1 -3 September , 2014	International	SPJ Centre for Multi-disciplinary Research (SCMR)

b) Workshops

Sr. No.	Workshop Organized	Date	Source of Funding
1.	Open canvas and photography	28th Jan 2013 (workshop)	Self- Sponsored
2.	Talent Hunt	28th Jan 2013	Self- Sponsored
3.	Android workshop	10th March 2013 (workshop)	Self- Sponsored
4.	Latex & its Application for Manuscript preparation	10 March 2013 (Workshop)	Self- Sponsored
5.	F-Param Futurism with Parallel algorithm rambi function	22, 23rd march 2013 (Workshop)	Self- Sponsored
6.	Self Defense for women	11th July 2013 (Workshop)	Self- Sponsored
7.	Advance White Hat Hacking	3rd Aug 2013 (Workshop)	Self- Sponsored
8.	National Network Security Championship-2013 "CISCO	17th to 18th Aug 2013 (Workshop)	Self- Sponsored

	Training"		
9.	Research Methodology and Intellectual Property Right	21st Aug 2013 (Workshop)	Self- Sponsored
10.	VB Project Competition	21st Sep 2013 (Workshop)	Self- Sponsored
11.	National Network Security Championship-2014 " Ethical Hacking"	4 & 5th Jan 2014 (Workshop)	Self- Sponsored
12.	Latex	5 & 6th Feb 2014 (Workshop)	Self- Sponsored
13.	Cyber Crime	6th Feb 2014 (Workshop)	Self- Sponsored
14.	Android Application Development	15th – 16th Feb 2014 (Workshop)	Self- Sponsored
15.	Big Data and Hadoop by IBM	6-7th June 2014 (Workshop)	Self- Sponsored
16.	Techothon	5 July 2014 (Workshop)	Self- Sponsored
17.	NNSC Workshop	3 Jan 2015 (Workshop)	Self- Sponsored
18.	Big Data Hadoop Workshop	7 Feb 2015 (Workshop)	Self- Sponsored
19.	Ethical Hacking	7th - 9th Sept 2015 (Workshop)	Self- Sponsored
20.	Web Development	7th - 9th Sept 2015 (Workshop)	Self- Sponsored

21.	E-Conclave	12th Sept. 2015 (Workshop)	Self- Sponsored
22.	Hacktrack	14th - 15th Sept 2015 (Workshop)	Self- Sponsored
23.	Most Advanced Ethical Hacking	15th Sept 2016	Self- Sponsored

c) Seminar

Sr. No.	Seminars Organized	Date	National/International	Source of Funding
1.	Introduction to Microsoft student Partners	28/7/2012	National	Self- Sponsored
2.	Self Defence	11/7/2013	National	Self- Sponsored
3	Hadoop& Big Data	27/7/13	National	Self- Sponsored
4	White Hat Hacking	3/8/2013	National	Self- Sponsored
4.	How to crack the GRE & GMAT	3/8/13	National	Self- Sponsored
5.	GRE	27/12/2013	National	Self- Sponsored
6.	Research and the art of doing what you want	4/01/14	National	Self- Sponsored
7.	Career Opportunities and industry perspectives	4/1/14	National	Self- Sponsored
8.	Hadoop	4/4/14	National	Self- Sponsored
9.	Cyber law, IT Act 2000, Forensic& Investigation	12/6/14	National	Self- Sponsored
10.	Career guidance	5/7/14	National	Self- Sponsored
11	Hardware & Software Codesign	16/1/2015	National	Self- Sponsored
12	Video Conferencing	12/2/2015	National	Self- Sponsored

13	Stress Management	14/8/2015	National	Self- Sponsored
14	Cognizant Placement drive	3/9/2015	National	Self- Sponsored
15	Advance computer projects	6/1/2016	National	Self- Sponsored
16	Engineering Education- A project based approach	20/1/2016	National	Self- Sponsored
17	Academic Excellence through Meditation	6/2/2016	National	Self- Sponsored
18	How to write a research paper	20/2/2016	National	Self- Sponsored
19	Graph Algorithm for Network Theory	10/3/2016	National	Self- Sponsored

d) Faculty Development Program

Sr. No.	Expert Lectures Organized	Date	National/International	Source of Funding
1.	"ANDROID Application development"	1st to 10 April 2013 (FDP)	National	Self- Sponsored
2.	" Research Trends in Communication Networks & Future Internet	1st To 9th April 2013 (FDP)	National	Self- Sponsored
3.	"TE Syllabus Revision for Operating System Design"	6th Dec 2013 (FDP)	National	Self- Sponsored
4.	"TE Syllabus Revision for Forensic and Cyber Application"	6th Dec 2013 (FDP)	National	Self- Sponsored
5.	Embedded operating	29th Dec	National	Self-

	Systems	2013 (FDP)		Sponsored
6.	Wireless Sensor Networks: Modeling and Simulation	7th Aug 2014 to 9th Aug 2014 (FDP)	National	Self-Sponsored
7.	IoT in Real Life : Applications and Project Development	7th-11th Dec 2015 (FDP)	National	Self-Sponsored
8.	Data Science and R Programming	7th-11th Dec 2015 (FDP)	National	Self-Sponsored

e) **Guest Lectures**

Sr.	Guest Lectures Organized	Date	National/International	Source of Funding
1.	Principles of project Planning and IT Management	1/9/2012	National	Self- Sponsored
2.	Opportunities in higher studies	23/1/2013	National	Self- Sponsored
3.	Java Programming	31/1/2013	National	Self- Sponsored
4.	DBMS	5/7/2013,	National	Self- Sponsored
5.	Basics of Operating Systems	17/8/2013	National	Self- Sponsored
6.	Programming Techniques	16/8/2013	National	Self- Sponsored
7.	Programming Techniques	17/8/2013	National	Self- Sponsored
8.	Core Java	11/3/2014	National	Self- Sponsored

9.	.Net Technology	11/3/2014	National	Self- Sponsored
10.	Advanced Java	12/3/2014	National	Self- Sponsored
11.	Communication Skills	23/7/2014 2/8/2014	National	Self- Sponsored
12.	Programming & Embedded Linux	9/8/2014	National	Self- Sponsored
13.	Advance Java	23/8/2014	National	Self- Sponsored
14.	Advance Java	13/9/2014	National	Self- Sponsored
15.	Research Areas in Data Mining	12/2/2015	National	Self- Sponsored
16.	Move up in life after B.E	18/2/2015	National	Self- Sponsored
17.	Overseas Opportunities	26/2/2015	National	Self- Sponsored
18.	Python Programming	4/3/2015 5/3/2015	National	Self- Sponsored
19.	Java Breakthrough series	27/6/2015	National	Self- Sponsored
20.	Introduction to java	7/8/2015	National	Self- Sponsored
21.	Career Guidance	3/9/2015	National	Self- Sponsored
22.	Computational problems	15/9/2015	National	Self- Sponsored
23.	Business Intelligence	29/9/2015	National	Self- Sponsored
24	Advanced java	21/1/2016	National	Self- Sponsored
25	Digital signal processing	23/1/2016	National	Self- Sponsored
26	Personalised Mentoring for higher studies in USA	2/2/2016	National	Self- Sponsored
27	Competative exams	9/2/2016	National	Self- Sponsored
28	Introduction to java	6/2/2016	National	Self- Sponsored

26. Student profile programme/course wise:

UG course

Name of the Course/programme (refer question no. 4)	Academic Year (Graduation)	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
Computer Engineering / UG	2012-2013	As the admission process is governed by DTE. The rules and regulations of DTE are followed in the admission process.	240	172	68	85%
Computer Engineering / UG	2013-2014		312	208	104	78%
Computer Engineering / UG	2014-2015		313	222	91	90%
Computer Engineering / UG	2015-2016		313	223	90	NA

*M = Male   *F = Female

PG course (Computer Engineering) –

Name of the Course/programme (refer question no. 4)	Academic Year	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
Computer Engineering / PG	2013-2014	As the admission process is governed by DTE. The rules and regulations of DTE are followed in the admission process.	46	13	33	91.66
Computer Engineering / PG	2014-2015		44	19	25	87.5
Computer Engineering / PG	2015-2016		47	12	35	NA

*M = Male   *F = Female

PG Course (Computer Networks)

Name of the Course/programme (refer question no. 4)	Academic Year	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
Computer Network / PG	2013-2014	As the admission process is governed by DTE. The rules and regulations of DTE are followed in the admission process.	24	11	13	66.67
Computer Network / PG	2014-2015		10	4	6	83.33
Computer Network / PG	2015-2016		14	2	12	NA

27. Diversity of Students (UG & PG)

Name of the/ Programme Course	Academic Year	% of students from the same state	% of students from other States	% of students from abroad
Computer Engineering / UG	2012-2013	204	36	Nil
Computer Engineering / UG	2013-2014	254	44	Nil
Computer Engineering / UG	2014-2015	237	63	Nil
Computer Engineering / UG	2015-2016	224	76	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Exam	2012-13	2013-14	2014-15	2015-16
GATE	NIL	NIL	7	7
Civil Services	NIL	NIL	NIL	2

Defense Services	NIL	NIL	NIL	1
GRE	1	4	8	11
TOFEL	1	4	8	9

29. Student progression

Student progression	Against % enrolled			
	2015-16	2014-15	2013-14	2012-13
UG to PG	2	4	4	2
PG to M.Phil.	NA			
PG to PhD	NIL		3	
PhD to Post-Doctoral				
Employed Campus selection	47.45	49.54	42.33	48.17
Employed Other than campus recruitment	4	14	13	10
Entrepreneurship/Self-employment	9 (All students passed out before 2012 – 13)			

30. Details of Infrastructural facilities

a) **Library: Central Library**

Library holding	Titles
Text Books	2730
Reference Books	48
Journals/Periodical	121
e-resources	10e-resources
Any other(specify)	14

b) **Internet facilities for Staff & Students**

Internet VSNL 64 Mbps Internet connection for all Laboratories. Department is facilitated with 3 servers, 314 desktop computers, 11 Laser Jet Printers, 35 Dot matrix printer, 11 LCDs, 3 scanners, 5 OHP for staffs and students.

c) **Class rooms with ICT facility**

Particulars	Room No	Available Area in Sq. Mtrs.	ICT Facilities
Class Room – 01	7	67.7	Projector, OHP, LAN Availability
Class Room – 02	8	67.7	Projector, OHP, LAN Availability
Class Room – 03	9	66	Projector, OHP, LAN Availability
Class Room – 04	10	66	Projector, OHP, LAN Availability
Class Room – 05	11	66	Projector, OHP, LAN Availability
Class Room – 06	12	110.5	Projector, OHP, LAN Availability
Class Room – 07	13	110.5	Projector, OHP, LAN Availability
Class Room – 08	14	67.7	Projector, OHP, LAN Availability
Class Room – 09	15	67.7	Projector, OHP, LAN Availability
Class Room – 10	16	67.7	Projector, OHP, LAN Availability
Class Room - 11	17	70	Projector, OHP, LAN Availability
Class Room – 12	18	70	Projector, OHP, LAN Availability
Class Room – 13	19	70	Projector, OHP, LAN Availability
Class Room – 14	20	70	Projector, OHP, LAN Availability
Total	14		

d) Laboratories

Particulars	Name of Laboratory	Available Areain Sq. Mtrs.
Laboratory – 01	Programming Lab I	80
Laboratory – 02	Project Development Lab I	40
Laboratory – 03	Hardware Lab	117
Laboratory – 04	Software Engineering Lab	66
Laboratory – 05	Signal Processing Lab	80
Laboratory – 06	Database management System	66
Laboratory – 07	Computer Network Lab	108
Laboratory – 08	System Software Lab	117
Laboratory – 09	Research Lab	70
Laboratory – 10	Programming Lab II	70
Laboratory – 11	Project Development Lab II	70
Laboratory – 12	Digital Electronics Lab	66
Laboratory – 13	Data structure Lab	91
Laboratory – 14	Microprocessor Interfacing Lab	117
Laboratory – 15	HPN LAB	36.47
Laboratory – 16	CG&G Lab	66
Laboratory – 17	Operating System Lab	66
Laboratory – 18	PG II	80
Laboratory - 19	PG III	80
Total	19 Laboratory	

31.   Number of students receiving financial assistance from college, university, government or other agencies

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2014-15		
	Free ship	Minority
F.E.	57	
S.E.	97	
T.E.	94	
B.E.	73	
2013-14		
	Free ship	Minority
F.E.	89	1
S.E.	118	2
T.E.	85	2
B.E.	47	2
2012-13		
	Free ship	Minority
F.E.	82	2
S.E.	91	2
T.E.	49	2
B.E.	47	1

32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts

	Title	Resource Person Details	Category	Date		No. of Participants
1.	Linux	Mr. Sourabh Kulkarni, CMS Institute	Value Addition Program	07/01/2013	20/03/2013	43

2.	Soft skills	Bulls eye	Value Addition Program	08/07/2013	23/09/2013	253
3.	White Hat Hacking	Chouhan C. K., IBNC	Workshop	17/08/2013	18/08/2013	84
4.	Android development	Mr. RajnishVishwakarma Technopilia	Workshop	15/02/2014	15/02/2014	33
5.	Techo-thon	Mr. VarunPathak, Network Bulls	Workshop	18/07/2014	18/07/2014	38
6.	Ethical Hacking	Mr. VarunPathak, Aditya Mukherjee Network Bulls	Workshop	04/01/2014	04/01/2014	97
7.	NNSC – Network Security	Mr. VarunPathak, Network Bulls	Workshop	17/08/2013	17/08/2013	82
8.	NNSC – Network Security	Mr. Sunil Sonawane NNSC, IIT Bombay	Workshop	03/01/2015	04/01/2015	48
9.	Big data &Haddop	Mr. Himalaya Lekha, IBNC	Workshop	07/02/2015	09/02/2015	57
10.	Ethical Hacking	Mr. SainathVolam, Dr. K. R. Patil, IBNC	Workshop	07/09/2015	09/09/2015	85
11.	Website Development	Mr. Manish Tyagi, DelFlip , Edusense	Workshop	07/09/2015	09/09/2015	20
12.	Most Advanced Ethical Hacking	Vikash Choudhari, Mayur Chavan, Hackers_Era	Workshops	07/03/2016	09/03/2016	17

33. Teaching methods adopted to improve student learning

1. White board teaching
2. LCD / Power point presentation
3. Use of multimedia
4. Quiz / Contests
5. Guest Lecture
6. Seminar
7. Collaborative Learning

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Following social activities done by department

1. Food distribution to poor people, every year.
2. Donation of used drawing sheets to blind school
3. Donation of new clothes to old peoples of MatoshriVrudhashram
4. Career guidance using mobile phone, Website and SMS.
5. Orphange Visit at Hingane
6. Blood Donattion camp at SKNCOE
7. "Bharat SwachhaAbhiyan" at SKNCOE
8. NSS Residential Camp at Khopi, Tal Bhor, Dist Pune.

35. SWOC analysis of the department and Future plans

Strengths:
- Experienced faculty in adequate number with good retention ratio
- The faculty is well qualified with good teaching and communication skills.
- A curriculum designed to meet both national and international standards, with strong engineering science component, soft skills component, a well-structured laboratory experience and a strong professional component.
- Well-equipped laboratory, library and IT Facilities
- Culture of Research

Weaknesses:
- Number of faculty with PhD qualification
- Design real world applications
- Consultancy needs to be improved.

Opportunities:
- Strong Support from the Institute
- Sufficient funding for attending FDPs/STTPs
- Support for organizing Conferences/ Workshops
- Development of e-resources

Challenges
- Sustainability in global competition
- Updated curriculum in order to meet industry requirements

Future plans:
- Planning to apply for major/minor research projects to research and government institute like DRDO, DST, and AICTE.
- To offer consultancy services.
- To enhance R&D activities
- To promote entrepreneurship activities

6.2 Department of Information Technology

1.   **Name of the department: Department of Information Technology**

2.   **Year of Establishment: 2001-02**

3.   **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**

Name of the course	Year of Establishment
First Shift in UG of Information Technology (Intake of 60)	2001
First Shift in UG of Information Technology (Intake of 90)	2003
First Shift in UG of Information Technology (Intake of 120)	2006
PG in Information Technology (Intake of 18)	2011

4.   **Names of Interdisciplinary courses and the departments/units involved**

Sr. No.	Interdisciplinary courses	Department involved
1	Engineering Mathematics (UG)	Engineering Sciences
2	Mathematical Foundation for Information Technology (PG)	Engineering Sciences

5.   **Annual/ semester/choice based credit system (programme wise)**
   UG: FE semester credit system and SE,TE , BE Semester System
          Final year students can select any Elective Subjects depending on his/her
          own interest from the list of offered electives by the SPPU.
   PG: Semester based credit System.

6.   **Participation of the department in the courses offered by other departments**

Sr. No.	Courses	Department Involved
1	Fundamentals of Programming Languages - I	First Year
2	Fundamentals of Programming Languages - II	First Year

7. Courses in collaboration with other Universities, Industries, Foreign Institutions etc.

Sr. No.	Certificate Course	Academic Year	Participating Institution/ Industry
1.	Spoken Tutorial based software course on "C Programming"	2013-14	IIT Mumbai and MHRD Government of India
2.	Mozilla Web Tool	2013-14	Mozilla Firefox Club
3.	Mozilla Web Toolkit	2013-14	Mozilla Firefox Club
4	Spoken tutorial based software course on "CPP Programming"	2014-15	IIT Mumbai and MHRD Government of India
6.	Spoken tutorial based software course on "Java Programming"	2014-15	IIT Mumbai and MHRD Government of India
7.	Spoken tutorial based software course on "Linux"	2014-15	IIT Mumbai and MHRD Government of India
8.	NNSC, Project Based Industrial Training on live CISCO Routers & Switches	2014-15	In Association with Network Bulls Delhi
9.	NNSC, Security Training Program	2015-16	In Association with NNSC and IIT Kanpur

8. Details of courses/programmes discontinued (if any) with reasons: NIL

9. Number of Teaching Posts:

Teaching posts	Sanctioned	Filled
Professors	3	0
Associate Professors	6	1
Asst. Professors	17	24

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Sr. No.	Name of Faculty	Qualification	Designation	Experience
1	Prof. R. H. Borhade	M.E. E&TC Pursuing Ph.D.	Asst. Prof. & HOD	14

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2	Dr. L. V. Patil	M.E. Comp Ph.D.	Asso. Prof.	12
3	Prof. T. A. Chavan	M.Tech. Comp Pursuing Ph.D.	Asst. Prof.	16
4	Prof. M. L. Bangare	M.Tech. Comp Pursuing Ph.D.	Asst. Prof.	11
5	Prof. N. P. Kulkarni	M.Tech. Electronics Pursuing Ph.D.	Asst. Prof.	15
6	Mrs.V. S. Khandekar	M.E. Comp	Asst. Prof.	14
7	Mrs. M. R. Mishra	M. Tech IT	Asst. Prof.	10.8
8	Mr. R. S. Apare	M.E. CSE	Asst. Prof.	12
9	Mrs.S. A. Nagtilak	M.E. CSE	Asst. Prof.	11
10	Mrs.S. N. Uke	M.Tech. I.T. Pursuing Ph.D.	Asst. Prof.	11
11	Mrs.J. R. Yemul	M.E. I.T.	Asst. Prof.	11
12	Mrs.S. S. Koul	M.E. I.T.	Asst. Prof.	10.6
13	Mrs.A. S. Narote	M.E. Electronics Pursuing Ph.D.	Asst. Prof.	9
14	Mrs.N. S. Deshmukh	M. E. Comp.	Asst. Prof.	8
15	Mrs.S. M. Shukla Patel	M.E. Comp. Pursuing Ph.D.	Asst. Prof.	10
16	Mrs. Y. V. Wagh	ME Comp	Asst. Prof.	8.8
17	Mr.V. S. Bidve	ME Comp Pursing Ph.D	Asst. Prof.	11
18	Mr.P. M. Pawar	ME Comp Pursing Ph.D	Asst. Prof.	8
19	Mr.N. S. More	M.E. I.T. Pursuing Ph.D.	Asst. Prof.	7.6
20	Mr. A. M. Jagtap	M.E. I.T. Pursuing Ph.D.	Asst. Prof.	7.6
21	Mr.S. N. Gujar	M.E. CSE Pursuing Ph.D.	Asst. Prof.	12
22	Mrs. G. G. Bilaye	ME Comp	Asst. Prof.	5.8
23	Mr. S. Y. Bobade	M.E. I.T.	Asst. Prof.	6
24	Ms. S. A. Sapkal	M.E. I.T.	Asst. Prof.	2.8
25	Ms. P. P. Doke	Pursuing ME IT	Asst. Prof.	0.8

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)**: 15:1

Sr. No.	Programme	Specialization	Teacher – Student Ratio			
			2015-2016	2014-2015	2013-2014	2012-2013
1	Information Technology	Information Technology	15.84:1	15.84:1	15:1	15:1

14. **Number of academic supporting staff (technical) and administrative staff; sanctioned and filled**

Academic Supporting Staff	Sanctioned	Filled
Technical Staff	---	6
Admin Staff	---	0

15. **Qualifications of teaching faculty with D Sc/ D.Litt/ Ph.D/ MPhil / PG.**

Sr. No.	Qualification	No of Teaching Faculty
1.	Ph. D. Completed	01
2.	Ph. D. Registered	13
3.	M. E. / M. Tech Completed	24
4.	M. Phil . M. Sc.	NA

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:**

Sr. No.	Name of The Research Project	Name of The Principal Investigator/ Coordinator	Funding Agency	Amount as seed money Rs.	Duration of the Project

1	Next Generation Intelligent Transportation System based on Internet of Things for Indian Traffic Scenario.	Mr. R. H. Borhade	Savitribai Phule Pune University	1,30,000/-	2 Yrs
2	Optimized Node Deployment using EPSO using WSN.	Mr. A. M. Jagtap	Savitribai Phule Pune University	80,000/-	2 Yrs
4	Energy Efficient Protocol For Adhoc / NSN	Mr. Pawar P. M Mrs. S. Shukla-Patel	Savitribai Phule Pune University	1,65,000/-	2 Yrs
5	Simulation of 2ACK Scheme	Mrs. S. A. Nagtilak	Savitribai Phule Pune University	60,000/-	2 Yrs

18. **Research Centre /facility recognized by the University**: Nil

19. **Publications:**

Sr. no	Name of the faculty	No of papers published by in peer reviewed journals	No of publications listed in international DB	chapters in books	Books edited	Books with ISBN/ISSN	citation index	Impact factor	H index Average
1	Mr. R. H. Borhade	6	6	--	1	--	--	2	--
2	Mr. T. A. Chavan	10	10	--	1	--	--	3	--
3	Dr. L. V. Patil	12	12	--	--	--	--	2	--
4	Mr. N. P. Kulkarni	10	11	--	--	--	--	3	--
5	Mrs. M. R. Mishra	3	3	--	--	--	--	--	--

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6	Mr. M. L. Bangare	6	6	--	1	--	--	3	--
7	Mrs. V. S. Khandekar	6	6	--	--	--	--	--	--
8	Mr. R. S. Apare	7	7	--	--	--	--	--	--
9	Mrs. S. A. Nagtilak	6	6	--	--	--	--	--	--
10	Mrs. S. N. Uke	1	1	--	1	--	--	2	--
11	Mrs. J. R. Yemul	5	5	--	--	--	--	1	--
12	Mrs. A. S. Narote	10	10	--	--	--	--	3	--
13	Mrs. N. S. Deshmukh	3	3	--	--	--	--	--	--
14	Mrs. S. S. Koul	5	5	--	--	--	--	--	--
15	Mrs. S Shukla-Patel	5	5	--	--	--	--	--	--
16	Mr. V. S. Bidve	9	9	--	--	--	--	3	--
17	Mrs. Y. V. Wagh	2	2	--	--	--	--	--	--
18	Mr. P. M. Pawar	12	13	--	--	--	--	4	--
19	Mr. N. S. More	2	2	--	--	--	--	3	--
20	Mr. A. M. Jagtap	2	2	--	--	--	--	2	--
21	Mr. S. N. Gujar	5	5	--	--	--	--	2	--
22	Mrs. G. G. Bilaye	2	2	--	--	--	--	--	--
23	Mr. S. Y. Bobade	2	2	--	--	--	--	2	--

24	Ms. S. A. Sapkal	2	2	--	--	--	--	--	--

20.   Areas of consultancy and income generated: NIL

21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards….

Sr. No.	Name of The Faculty	International Committee
1	Mr. R. H. Borhade	ISTE Life Member LM 49530
2	Mr. T. A. Chavan	ISTE Life Member LM 29813
3	Dr. L. V. Patil	ISTE Life Member LM 41260
4	Mr. N. P. Kulkarni	IEEE 92805828
5	Mr. M. L. Bangare	ISTE Life Member LM 49558
6	Mr. R. S. Apare	ISTE Life Member LM 46882
7	Mrs. S. A. Nagtilak	ISTE Life Member LM 49555
8	Mrs. S. N. Uke	ISTE Life Member LM 49581
9	Mrs. J. R. Yemul	ISTE Life Member LM 49578
10	Mr. S. N. Gujar	ISTE Life Member LM 63347 IETE Life Member 55331 CSI LM 017531
11	Mr. P. M. Pawar	Reviewer of ICC 2013, 2014, 2015
12	Mr. P. M. Pawar	IEEE 93097171
13	Mr. P. M. Pawar	Reviewer of Elseviers Journal of System and Software
14	Mr. P. M. Pawar	Reviwer of Elseviers Journal of Simulation Modelling Practices and Theory
15	Mr. P. M. Pawar	Reviewer of WPMC 2013, 2014, 2015
16	Mr. P. M. Pawar	Reviewer of GCWCN 2015
17	Mr. P. M. Pawar	Reviewer of Wireless VITAE 2013, 2014, 2015
18	Mr. N. P. Kulkarni	Reviewer of ICINC 2016
19	Mr. N. P. Kulkarni	Reviewer of GCWCN 2015
20	Mr. N. P. Kulkarni	Reviewer of Wireless Vitae 2015
21	Mr. N. P. Kulkarni	Reviewer of WPC Journal of Springer
22	Mrs. S. S. Koul	ISTE Life Member LM 49580

22.   **Student projects**

a) Percentage of students who have done in-house projects including inter departmental/programme

Sr. No	Project Year	No of In House Projects	% In-House Project
1	2012-13	27	72.33
2	2013-14	20	55.66
3	2014-15	21	58.33
4	2015-16	39	96.98

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

Sr. No	Project Year	No of Projects in Collaboration	% Sponsored Project
1	2012-13	09	27.77
2	2013-14	16	44.44
3	2014-15	15	41.67
4	2015-16	32	3.02

23.   **Awards / Recognitions received by faculty and students Student**

Faculty awards:

Sr no	Academic year	Name of faculty	Award
1	2013-2014	Prof P. M. Pawar	Paper is Nominated In Best 5 Papers in the World

Students awards:

Sr. No.	Year	Activity	National/ State/University Level No. of Prizes Won
1.	2015-2016	National Level Project Competition	CONVENE – 2K16 WINNER
2.	2015-2016	E- Conclave	Winner
3.	2015-2016	National Level Project Competition	CONVENE – 2K16 RUNNER UP
4.	2015-2016	SQAY	Runner Up
5.	2015-2016	Table Tennis	Runner Up

6.	2015-2016	Table Tennis	Winner
7.	2015-2016	Table Tennis	Winner
8.	2015-2016	Fashion Show	Winner at Cultural Event held by Armed Force Medical College
9.	2014-2015	Fashion Show	Winner at National Level Cultural Event Symbhav
10.	2014-2015	Fashion Show	Winner in Fashion Show at Symbiosis Lavale, National Level Cultural Event
11.	2014-2015	Fashion Show	Winner in Fashion Show at Cimcinemas, National Level Cultural Event
12.	2014-2015	Fashion Show	Winner in Fashion Show at NICMAR, National Level Cultural Event
13.	2014-2015	Fashion Show	First
14.	2014-2015	WEBSTER	Runner
15.	2014-2015	Table Tennis	Runner Up
16.	2014-2015	Table Tennis	Winner
17.	2014-2015	Table Tennis	Winner
18.	2013-2014	Design-O-Mania	Winner
19.	2012-2013	State Level Sports Karandak	Sinhgad Karandak 2013 Cricket Tournament- Runner Up
20.	2012-2013	IT Quiz-	Winner & Runner Up At State Level IT Quiz
21.	2013-2014	Ethical Hacking Computer Security Exam	Topper In All India Ethical Hacking Computer Security Exam Conducted By Reliance World
22.	2013-2014	Techtonic 2014	2nd Prize In Techtonic-2014 Paper Presentation Competition Held By SKNCOE
23.	2013-2014	Sinhgad Karandak	Winner Of BASKETBALL Competition At Walchand College Of Engineering, PICT, STES Sinhgad Karandak
24.	2013-2014	National Level Paper Presentation Competition	2nd Prize In Paper Presentation Competition Held By Modern College Of Engineering
25.	2012-2013	ORACLE - 119	Winner
26.	2012-2013	CCNA	Winner

24. **List of eminent academicians and scientists / visitors to the department (Remove date/time. And Keep eminent only like Doctors and senior persons)**

Sr. No	Name of Visitor	Name of the Organization	Purpose of Visit
1	Dr. Aditya Abhyankar	SPPU	Expert Lecture

2	Mr. Rashu Singla	Accenture	Guest Lecture
3	Mr. Shreesh Basatwar	John Deere, Pune.	Guest Lecture
4	Mr. Sameer Joshi	CISCOM, Pune	Expert Lecture
5	Mr. Sunil Sonawane	Skill Factory Business, Pune.	Expert Lecture
6	Mr. Y. R. Patel	Synerzip Lab Pvt. Ltd., Pune.	Expert Lecture
7	Mr. Prakash Janawade	Secwall Technologies, Pune	Expert Lecture

25.   Seminars/ Conferences/Workshops Organized & the Source of Funding

a) Conferences:

Sr. No.	Conferences Organized	Date	National/ International	Source of Funding
1.	iPGCON 2014	04/04/2014 To 05/04/2014	National	SKNCOE, Pune
2.	ICAET-2014	01/09/2014 To 03/09/2014	International	SCMR

b) Workshops:

Sr. No.	Workshop Organized	Dates	Source of Funding
1	Advanced Java- Spring & Hibernate	27/01/2016 To 30/01/2016	BCUD, SPPU
2	Installation & Develop of Eucallaptus Open Stack & Open Nebulla Ubiquitas Cloud	28/02/2015 to 05/03/2015	BCUD, SPPU
3	NNSC, Project Based Industrial Training on live CISCO Routers & Switches	15/06/2015 to 29/06/2015	NNSC & SKNCOE, Pune
4	NNSC, Security Training Program	14/12/2015 To 29/12/2015	NNSC & SKNCOE, Pune
5	Train The Trainer Workshop for TE IT	4/12/2014 to 6/12/2014	SKNCOE, Pune
6	Mozilla Firefox Webtool	28/02/2014	Mozilla Firefox

7	Train the Trainers Workshop for SE IT	09/12/2013 To 13/12/2013	SKNCOE, Pune
8	Teacher Advancement Programe	09/10/2013 to 11/10/2013	SKNCOE, Pune
9	Mozilla Web Toolkit for TE IT	31/08/2013	Mozilla Firefox
10	OMNET & OMNET ++	04/02/2014 to 05/02/2014	SKNCOE, Pune
11	Web Security	14/01/2016	SKNCOE, Pune

c) Seminars

Sr. No.	Seminar Organized	Date	Source of Funding
1	Emerging Trends of Information Technology in Industry	24/07/2014	SKNCOE, Pune
2	Hands on Wikipedia	22/02/2014	SKNCOE, Pune
3	Mathematical Modelling	21/01/2015	SKNCOE, Pune
4	Hadoop	15/01/2016	SKNCOE, Pune
5	GATE Awareness	14/03/2016	SKNCOE, Pune

d) FDP

Sr. No.	FDP Organized	Date	Source of Funding
1	Teacher Advancement Programe	09/10/2013 to 11/10/2013	SKNCOE, Pune
2	Train The Trainer for SE IT	4/12/2014 to 6/12/2014	SKNCOE, Pune
3	Train The Trainer for TE IT	4/12/2014 to 6/12/2014	SKNCOE, Pune

26. Student Profile Programme/Course Wise:

UG course

Academic Year	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
2012 - 13		109	76	53	**99.21**%

2013– 14	As the admission process is governed by DTE. The rules and regulations of DTE are followed in the admission process.	131	74	57	**99.20** %
2014 - 15		141	82	59	**100** %
2015 - 16		154	84	70	NA

*M = Male   *F = Female

PG course

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
2012-2013	As the admission process is governed by DTE. The rules and regulations of DTE are followed in the admission process.	18	7	11	**83.33%**
2013-2014		16	7	9	**66.66%**
2014-2015		18	6	12	NA
2015-2016		17	4	13	NA

*M = Male   *F = Female

27.   Diversity of Students

UG course

Name of the Course / Programme	Academic Year	% of students from the same state	% of students from other States	% of students from abroad
Information Technology/ UG	2015-2016	76	24	NIL
Information Technology/ UG	2014-2015	78	22	NIL
Information Technology/ UG	2013-2014	80	20	NIL
Information Technology/ UG	2012-2013	79	21	NIL

PG course

Name of the Course / Programme	Academic Year	% of students from the same state	% of students from other States	% of students from abroad
Information Technology/ PG	2015-2016	99	01	NIL

Information Technology/ PG	2014-2015	100	NIL	NIL
Information Technology/ PG	2013-2014	100	NIL	NIL
Information Technology/ PG	2012-2013	100	NIL	NIL

28.   How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil Services, Defense Services, etc.?

Exam	No of Students			
	2012-13	**2013-14**	**2014-15**	**2015-16**
GATE	06	08	10	NA
Defense	NIL	NIL	NIL	NIL
CAT	NIL	NIL	NIL	NIL
SLET	NIL	NIL	NIL	NIL
MBA-CET	NIL	NIL	NIL	NIL
GRE	7	10	12	14
Civil Services	NIL	1	NIL	NIL

29.   Student Progression

Student progression	Against % enrolled			
	2012-13	2013-14	2014-15	2015-16
UG to PG	08	09	10	12
PG to M.Phil.	NIL	NIL	NIL	NIL
PG to Ph.D.	NIL	NIL	NIL	NIL
Ph.D. to Post-Doctoral	NIL	NIL	NIL	NIL
Employed • Campus selection • Other than Campus Recruitment	58 12	53 18	43 15	65 NA
Entrepreneurship/Self-employment	5			
Government Sector	NIL	1	NIL	NIL

30   Details of Infrastructural Facilities

a) Library:

Particulars	Titles	Volumes
Books		
U.G.	761	4564
P.G.	107	626
On line journal		
ASME On line	4239	4239
Science Direct		
Printed journal		
Printed journal U.G.	170	170
Printed journal P.G.	NIL	NIL

b) Internet Facilities for Staff & Students:

All laboratories have a facility of wired LAN and Wi-Fi with high speed 64 Mbps line.

a) Classrooms with ICT facility:

Class Room No.	Usage	Shared/ Exclusive	Capacity	Room Equipped with
1	Teaching Learning	Exclusive	80	LCD, Internet, PA System
2	Teaching Learning	Exclusive	80	LCD, Internet, PA System
3	Teaching Learning	Exclusive	80	LCD, Internet, PA System
4	Teaching Learning	Exclusive	80	LCD, Internet, PA System
5	Teaching Learning	Exclusive	80	LCD, Internet, PA System
6	Teaching Learning	Exclusive	80	LCD, Internet, PA System

b) **Laboratories :**

Sr.No.	Name of Laboratory	Exclusive Use/ Shared	Utilization	Laboratory Manuals
1	Programming Lab	Exclusive	90.40	Y
2	Digital Lab	Exclusive	88.45	Y
3	Microprocessor Lab	Exclusive	95.50	Y
4	Operating System Lab	Exclusive	87.23	Y
5	ASDT Lab	Exclusive	89.70	Y
6	Network Lab	Exclusive	88.88	Y
7	Multimedia Lab	Exclusive	90.50	Y
8	DBMS Lab	Exclusive	87.70	Y
9	ISL Lab	Exclusive	85.50	Y
10	PG Lab	Exclusive	80.00	Y
11	Project Lab	Exclusive	88.88	Y

31.   Number of students receiving financial assistance from college, university, government or other agencies

Sr. No.	Type of Assistance	Agency Providing Financial Assistance	Academic Year			
			2011-12	2012-13	2013-14	2014-15
1	GOI PM Scholarship	Social welfare Dept. & Tribal Development Dept.	192	213	227	227
2	GOI PM Freeship					
3	EBC Concession	Jt. Director of Tech. Edu.	50	60	69	64
4	Minority Scholarship	Dept. of Minority Welfare	--	08	06	06
5	Central Sector Scholarship	Jt. Director of Higher Edu.	02	08	12	13
6	STC/PTC	Zillha Parishad	03	06	06	06
7	J & K Special	AICTE	--	01	01	01

	Scholarship					
8	Pvt. Scholarship	Trust, NGO, Companies	00	00	00	00

32. **Details on student enrichment programmes (special lectures / workshops /seminar) with external experts**

Sr. No.	Title	Resource Person Details	Category	Date		No. of Participants
				From	To	
1	How to choose a problem statement & project for final year	Mr.Shreesh W. Basatwar John Deere India Pvt. Ltd,Pune	Expert Lecture	07/07 /2012	07/07/ 2012	80
2	Service Oriented Architecture	Ms.Sharanya Palavalli Accenture, Hyderabad	Expert Lecture	13/08 /2012	13/08/ 2012	85
3	Emerging Trends in Networking	Rahul Shedge NIIT,Pune.	Expert Lecture	23/08 /2012	23/08/ 2012	100
4	Post Graduation Opportunities	Mr.K.P.Singh IMFS,Pune.	Expert Lecture	05/03 /2013	05/03/ 2013	85
5	Advance Java Programming	Mr. Rajesh Yemul Globant Software Solutions	Seminar	08/03 /2013	08/03/ 2013	80
6	Hands on Wikipedia	Mr. Abhinav Garule Xercs Tech. Pvt. Ltd.	Workshop	22/02 /2014	22/02/ 2014	100
7	NNSC – Project Based Industrial Training on live cisco routers and switches	Mr. Damanpreet Singh Network Bulls	Worskhop	15/06 /2015	30/06/ 2015	82
8	NNSC- Security Training Program	Mr.Pratap Jantuva Network Bulls	Expert Lecture	14/12 /2015	29/12/ 2015	60

9	How to Face Campus Interview	Mr. Punit Bawal Accenture	Expert Lecture	28/8/ 2015	28/8/2 015	100
10	Advance Java Spring & Hibernate	Mr. Milind Diwane Mr. Amar Mane Nihilant Technologies	Worskhop	27/01 /2016	29/01/ 2016	41

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33.   Teaching methods adopted to improve student learning
1. White board teaching
2. LCD / Power point presentation
3. Use of multimedia
4. Quiz / Contests
5. Guest Lecture
6. Seminar
7. Collaborative Learning
8. Project based learning

34.   Participation in Institutional Social Responsibility (ISR) and Extension activities

Following social activities done by department

Sr. No.	Activity	Venue of Event	Date of Activity	No. of Students
1	PRAYAS'2013	Takali Haji	08/02/2013 to 16/02/2013	17
2	Tree Plantation	Takali Haji	08/02/2013 to 16/02/2013	17
3	Blood Donation	Takali Haji	08/02/2013 to 16/02/2013	17
4	Men and Woman Empowerment	Takali Haji	08/02/2013 to 16/02/2013	17
5	Dental Checkup	Takali Haji	08/02/2013 to 16/02/2013	17
6	Computer Literacy to village students	Takali Haji	08/02/2013 to 16/02/2013	17
7	Carriar Counselling	Takali Haji	08/02/2013 to 16/02/2013	17

8	Vaidik Mathematics	Takali Haji	08/02/2013 to 16/02/2013	17
9	PRAYAS'2014	Vadgaon Rasai Tal- Shirur, Pune	08/02/2014 to 16/02/2014	14
10	Tree Plantation	Vadgaon Rasai Tal- Shirur, Pune	08/02/2014 to 16/02/2014	14
11	Blood Donation	Vadgaon Rasai Tal- Shirur, Pune	08/02/2014 to 16/02/2014	14
12	Men and Woman Empowerment	Vadgaon Rasai Tal- Shirur, Pune	08/02/2014 to 16/02/2014	14
13	Dental Checkup	Vadgaon Rasai Tal- Shirur, Pune	08/02/2014 to 16/02/2014	14
14	Computer Literecy to village students	Vadgaon Rasai Tal- Shirur, Pune	08/02/2014 to 16/02/2014	14
15	Carriar Counselling	Vadgaon Rasai Tal- Shirur, Pune	08/02/2014 to 16/02/2014	14
16	Vaidik Mathematics	Vadgaon Rasai Tal- Shirur, Pune	08/02/2014 to 16/02/2014	14
17	PRAYAS-15	Bori Tal- Indapur, Pune	14/02/2014 to 22/02/2014	11
18	Tree Plantation	Bori Tal- Indapur, Pune	14/02/2014 to 22/02/2014	11
19	Blood Donation	Bori Tal- Indapur, Pune	14/02/2014 to 22/02/2014	11
20	Men and Woman Empowerment	Bori Tal- Indapur, Pune	14/02/2014 to 22/02/2014	11

21	Dental Checkup	Bori Tal-Indapur, Pune	14/02/2014 to 22/02/2014	11
22	Computer Literecy to village students	Bori Tal-Indapur, Pune	14/02/2014 to 22/02/2014	11
23	Carriar Counselling	Bori Tal-Indapur, Pune	14/02/2014 to 22/02/2014	11
24	Vaidik Mathematics	Bori Tal-Indapur, Pune	14/02/2014 to 22/02/2014	11
25	PRAYAS'16	Nira Wagas , Baramati , Pune	10/02/2015 to 15/02/2015	16
26	Tree Plantation	Nira Wagas , Baramati , Pune	10/02/2015 to 15/02/2015	16
27	Blood Donation	Nira Wagas , Baramati , Pune	10/02/2015 to 15/02/2015	16
28	Men and Woman Empowerment	Nira Wagas , Baramati , Pune	10/02/2015 to 15/02/2015	16
29	Dental Checkup	Nira Wagas , Baramati , Pune	10/02/2015 to 15/02/2015	16
30	Computer Literecy to village students	Nira Wagas , Baramati , Pune	10/02/2015 to 15/02/2015	16
31	Carriar Counselling	Nira Wagas , Baramati , Pune	10/02/2015 to 15/02/2015	16
32	Vaidik Mathematics	Nira Wagas , Baramati , Pune	10/02/2015 to 15/02/2015	16
33	Computer Literecy	Kolewadi, Tal-Mulshi, Pune	18/03/2016 to 19/03/2016	20

35. SWOC analysis of the department and Future plans
- ➤ **Strengths:**
- Experienced faculty in adequate number.
- The faculty is well qualified with good teaching and communication skills.
- A curriculum designed to meet both national and international standards, with strong engineering science component, soft skills component, a well-structured laboratory experience and a strong professional component.
- Well-equipped laboratory, library and IT Facilities
- Culture of Research

➢ **Weaknesses:**
- Inadeqaute number of faculty with PhD qualification.
- Consultancy needs to be improved.
- Inadequate training in critical or analytical thinking

➢ **Opportunities**:
- Strong Support from the Institute
- Sufficient funding for attending FDPs/STTPs
- Support for organizing Conferences/ Workshops Challenges
- Competitiveness

➢ **Future plans**:
- Planning to apply for major/minor research projects to research and government institute like DRDO, DST, and AICTE.
- To offer consultancy services.
- To enhance R&D activities.
- To enhance contribution to society

6.3 Department of Electronics and Telecommunication Engineering

1. **Name of the department:-**Electronics & Telecommunication Engineering.

2. **Year of Establishment:-** 2001-02
3. **Names of Programmes /Courses offered**

   UG:-Electronics & Telecommunication Engineering.
   PG :- 1) VLSI & Embedded systems
        2) Signal Processing

Name of Program	Year of Establishment
First Shift in UG of E&TC (Intake of 60)	2001
First Shift in UG of E&TC (Intake of 120)	2007
Second Shift in UG of E&TC (Intake of 60)	2010
First Shift in PG of E&TC (SP) (Intake of 18)	2010
First Shift in UG of E&TC (Intake of 180)	2011
First Shift in PG of E&TC (VLSI) (Intake of 18)	2011
First Shift in UG of E&TC (Intake of 240)	2012
Second Shift PG of E&TC (VLSI) (Intake of 24)	2013

4. **Names of Interdisciplinary courses and the departments/units involved**

Sr.No.	Names of Interdisciplinary courses	Department
1.	Engineering Mathematics –III	Engineering Science

5. **Annual/semester/choice based credit system (programmewise)**
   UG: - Semester Based Credit System
   PG: - Semester Based Credit System

6. **Participation of the department in the courses offered by other departments**

Sr.No.	Courses offered	Department
1	Basic Electronics Engineering	FE
2	Elements of Electrical and Electronics Engineeirng	SE Mechanical Engg.

7. **Courses in collaboration with other universities, industries, foreign institutions, etc.**

Sr.No.	Certificate Courses	Participating Institute/ Industry
1	MSP 430 F5529 & MSP 430 Launch Pad 2013 - 2014	Trident Tech labs Pvt. Ltd.
2	Intel FICE Certification Program on INTEL ATOM boards 2014 - 2015	FICE

8. **Details of courses/programmes discontinued (if any)with reasons:-** Nil

9. **Number of Teaching posts**

	Sanctioned	Filled
Professors	08	02
Associate Professors	14	03
Asst. Professors	46	49

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil.etc.,)**

Sr. No.	Name of Faculty	Qualification	Designation	Experience
1	Dr. S. K. Shah	M.E. E&TC Ph.D.	Professor & HOD PG	28
2	Dr. S. K. Jagtap	M.E. E&Tc Ph.D.	Asso. Prof. & HOD UG	16
3	Dr. A. D. Kumbhar	M.E. Electronics Ph.D.	Professor	23
4	Dr. S. S. Agrawal	M.E. Electronics Ph.D.	Asso. Prof.	22
5	Dr. S. M. Koli	M. Tech E&TC Ph.D.	Asso. Prof.	18
6	Ms. S. M. Ingawale	M.E. Electrical	Asst. Prof.	29
7	Mr. A. S. Shirsat	M.E. Electronics Pursuing Ph.D.	Asst. Prof.	22
8	Ms.S. A. Panwar	M.Tech. E&TC Pursuing Ph.D.	Asst. Prof.	13
9	Ms. P. S. Deshpande	M. Tech E&TC Pursuing Ph.D.	Asst. Prof.	15
10	Ms. S. K. Sahasrabudhe	M.E. E&TC	Asst. Prof.	16
11	Mr. P. G. Chilveri	M.Tech. E&TC Pursuing Ph.D.	Asst. Prof.	15
12	Ms. R. K. Kulkarni	ME E&TC	Asst. Prof.	11

13	Ms. A. A. Yadav	ME E&TC	Asst. Prof.	10
14	Ms. S. S. Vasekar	M. E. Electronics Pursuing Ph.D.	Asst. Prof.	09
15	Mr. R. G. Kulkarni	M.E. E&TC	Asst. Prof.	07
16	Ms. S. M. Mali	M. E. Electronics	Asst. Prof.	07
17	Mr. M. S. Navale	M. E. Electronics Pursuing Ph.D.	Asst. Prof.	16
18	Ms. K. R. Kasture	ME E&TC	Asst. Prof.	10
19	Ms. V. S. Kulkarni	M.E Electronics	Asst. Prof.	10
20	Ms. P. S. Ingole	M. E. E&TC	Asst. Prof.	5.6
21	Ms. R. P. Patil	M. Tech E&TC	Asst. Prof.	11
22	Mr. S. A. Patil	M. E. E&TC	Asst. Prof.	3.6
23	Ms. S. M. Borawake	M. E. E&TC	Asst. Prof.	05
24	Mr. P. S. Kokare	M. E. E&TC Pursuing Ph.D.	Asst. Prof.	04
25	Mrs. D. A. Newaskar	M. E. E&TC	Asst. Prof.	6.6
26	Mr. P. D. Garje	M. E. E&TC	Asst. Prof.	4.8
27	Mrs. A. B. Wagh	ME Eletronics	Asst. Prof.	05
28	Ms. M. K. Badgujar	ME Eletronics	Asst. Prof.	2.8
29	Ms. U. A. Walke	M. Tech E&TC	Asst. Prof.	6
30	Ms. T. R. Kulkarni-Patil	M. E. E&TC	Asst. Prof.	2.8
31	Ms. V. T. Thite	M. E. E&TC	Asst. Prof.	4
32	Ms. M. R. Phegade	ME E&TC	Asst. Prof.	2.8
33	Mr. S. S. Padmawar	M.E. E&TC	Asst. Prof.	4.8
34	Ms. S. C. Sawant	M.E. E&TC	Asst. Prof.	4
35	Ms. K. S. Math	M. Tech VLSI	Asst. Prof.	3.8
36	Mr. N. R. Bamane	M.E. E&TC Pursuing Ph.D.	Asst. Prof.	06

37	Mr. S. V. Moholkar	M. E. E&TC	Asst. Prof.	2.6
38	Mrs. A. R. Jadhav	ME E&TC	Asst. Prof.	6.6
39	Mrs. P. V. Suryavanshi	ME Electronics	Asst. Prof.	03
40	Ms. K. P. Naik	ME E&TC	Asst. Prof.	06
41	Mr. N. M. Wagdarikar	M. E. Electronics	Asst. Prof.	14
42	Ms. S. P. Deshmukh	M. E. Digital Systems	Asst. Prof.	9
43	Ms. S. A. Ghive	ME E&TC	Asst. Prof.	12
44	Mr. A. V. Padgavhankar	ME E&TC Pursuing Ph.D.	Asst. Prof.	12
45	Mrs. J. A. Nanajkar	M. E&TC Microwave	Asst. Prof.	09
46	Mr. A. B. Deshmukh	M. E. Electronics Pursuing Ph.D.	Asst. Prof.	08
47	Mr. S. K. Patil	M. E. E&TC	Asst. Prof.	10
48	Mr. P. S. Varude	M. E. Signal Processing	Asst. Prof.	0.2
49	Mrs. P. Y. Surkutwar	Pursuing ME E&TC	Asst. Prof.	2.6
50	Mrs. S. U. Sadekar	Pursuing ME E&TC	Asst. Prof.	0.3
51	Ms. S. S. Mali	Pursuing ME E&TC	Asst. Prof.	0.3
52	Mrs. T. S. Ghamande	B. E. Electronics	Asst. Prof.	3.7
53	Mrs. S. S. Jadhav	Pursuing ME E&TC	Asst. Prof.	0.6
54	Ms. S. L. Verma	Pursuing ME E&TC	Asst. Prof.	0.6

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) :**

Sr.No.	Programme	2015-16	2014-15	2013-14	2012-13
1	UG	18.88:1	18.5:1	15:1	15:1

14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled:**

Academic support staff	**Sanctioned**	**Filled**
Number of academic Support staff (technical)	---	6
Number of administrative staff	---	0

15. **Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.**

Sr.No	Qualification	No. of Teaching Faculty
1	PhD Completed	05
2	PhD. Registered	10
3	ME / M.Tech Completed	49
4	M Phil / M Sc	NA

16. **Number of faculty with ongoing projects from a)National b)International funding agencies and grants received**
    a) National:- Nil
    b) International:- Nil

17. **Departmental projects funded by DST-FIST; UGC, DBT, ICSSR , etc .and total grants received.**

Sr.No	Name of Research project	Name of Principal Investigator /Coordinator	Funding Agency	Amount as seed money Rs.	Duration of the Project
1	Implementation of structural Health monitoring system using WSN on FPGA	Prof. P. G. Chilveri	BCUD, SPPU	2,15,000/-	2 Yrs
2	Car Security and automation using speaker and Speech recognition	Prof. R. G. Kulkarni	BCUD, SPPU	2,30,000/-	2 Yrs
3	Implementation of HDL communication controller using DALI protocol	Dr. S. K. Shah	BCUD, SPPU	65,000/-	2 Yrs
4	FPGA Implementation of AMBA AHB BUS	Prof. R. P. Patil	BCUD, SPPU	65,000/-	2 Yrs

	for OF Image AND Video IP Cores				

18.   Research Centre/facility recognized by the University:- NIL

19.   Publications:

Sr. No.	Name of the faculty	No. of Papers Published in Peer Reviewed Journals	No. of Publications listed in International DB	Chapter in books	Impact Factor
1	Dr.S.K.Shah	29	29	-	5.06
2	Dr. S. K. Jagtap	45	45	-	5.06
3	Dr.A.D.Kumbhar	7	7	-	-
4	Dr.S.M.Koli	6	6	-	0.56
5	Dr.S.S.Agrawal	11	11	-	5.06
6	Prof.A.S.Shirsat	2	2	-	-
7	Prof. P.S.Deshpande	1	1	-	3.04
8	Prof.S.A.Panwar	5	5	--	2.00
9	Prof.P.G.Chilveri	1	1	-	-
10	Prof.A.A.Yadav	3	3	-	5.01
11	Prof.S.S.Vasekar	1	1	-	-
12	Prof.R.G.Kulkarni	1	1	-	-
13	Prof.M.S.Navale	2	2	-	-
14	Prof.V.S.Kulkarni	5	5	-	1.686
15	Prof.R.P.Patil	2	2	-	6.03
16	Prof.S.M. Borawake	2	2	-	1.08
17	Prof.D.A. Newaskar	2	2	-	-
18	Prof.M.K. Badgujar	1	1	-	1.01
19	Prof.U.A.Walke	1	1	-	
20	Prof.V.T.Thite	1	1	-	-
21	Prof.M.R.Phegade	1	1	-	-
22	Prof.S.C.Sawant	1	1	-	-
23	Prof.S.V.Mohalkar	4	4	-	-
24	Prof.P.V.Surywanshi	1	1	-	-
25	Prof.K.P.Naik	1	1	-	-
26	Prof.N.M.Wagdarikar	1	1	-	
27	Prof.S.A.Ghive	1	1	-	-
28	Prof.A.V.Padghavnkar	1	1	-	-

20.   Areas of consultancy and income generated:- Nil

21.   Faculty as members in
a) National committees :- Nil
b) International Committees:- Nil
c) Editorial Board :- Nil

22.   Student projects

a) Percentage of students placed for projects in organizations intside the institution

Sr.No.	Academic Year	No. of In-House Projects	Percentage of students who have done in-house projects
1	2012-13	29	59.18%
2	2013-14	50	78.12%
3	2014-15	56	62.92%
4	2015-16	106	93.33%

b) Percentage of students placed for projects in organizations outside the institution

Sr.No	Academic Year	No. of Projects in Collaboration	Percentage of projects done in Collaboration
1	2012-13	20	40.81%
2	2013-14	14	21.87%
3	2014-15	33	37.07%
4	2015-16	8	7%

23.   Awards/Recognitions received by faculty and students

Faculty:

Sr.No.	Faculty	Year of achievement	Achievement
1	Dr. S.K. Shah	2012	Institute of engineers, Nawab Jain Yarjung Bahadur Memorial Prize

Students:

Sr.No.	Year	Activity	Student	National / State / University level no. prizes won
1	2014	ALACRITY,AISSM	BhagyashreeNagarkar RutujaBhusari TruptiMahimkar	2[nd]Prize
2	2014	ALACRITY,AIS	TruptiMahimkar	2[nd]Prize

		SM	RutujaBhusari	
3	2014	Vision -2014 WCE, Sangali	AmeyaChikodia SanketDeshpande DipakChavare	2ndPrize
4	2014	Convene-2014 Smt. Kashibai Navale College of Engineering	AmeyaChikodia SanketDeshpande DipakChavare	1st Prize
5	2014	NCRAIT Solapur University,Solapur	PriyankaDangare	Best Paper
6	2014	Technovision, SITES Narhe 1st International Conference	RavirajShelke PriyankaDangare	Best Paper
7	2015	Fasion Show REBERB	Shruti Tapdiya	1st Prize
8	2015	Winner in Transend SIBM Pune	Shruti Tapdiya	Winner
9	2015	FEST COMM	Shruti Tapdiya	1st Prize
10	2015	Dog Fight in MINDS PARK at COE Pune	Annesh Thakur	1st Prize
11	2015	Robo Race	Priyanka Katre	Runner up
12	2015	MAULER at National Student's Space Challenge at IIT Kharagpur	Arpit Jaiswal	2nd Rank
13	2015	Escapade at National Student's Space Challenge at IIT Kharagpur	Arpit Jaiswal	2nd Rank
14	2015	Rosetta at National Student's Space Challenge at IIT Kharagpur	Arpit Jaiswal	1st Rank
15	2015	International ROBOTICS Challenge Compitition TECHFEST	Vinay Thorat	1st Prize
16	2016	Sinhgad Idol Duet Neon 2k16	Praful Jadhav,Yashraj Mukhate	1st Prize

17	2016	Sinhgad Stage Play Neon 2k16	Shubham Jangle, Diggaj Aphale	1st Prize
18	2016	PINACHE AFMC SILHOUETTES & AIIMBT	Ishita Ranjan,Prachita Wankhede,Srushti Dongare	2nd Rank
19	2016	Techno culchural Fest at NICMAR Pune Technikalah	Ishita Ranjan,Prachita Wankhede,Srushti Dongare	Runner-up
20	2016	Dr. Babasaheb Ambedkar Research & Training Institue(BARTI), Pune (Skill Development Programme)	Vidyasagar Gaikwad	Gold,Silver,Platinum Certification
21	2016	SATEJ KARANDAK 2K16 (Cricket)	Vishal Badhe	1st Prize
22	2016	SYMBIOSIS Karandak	Diggaj Aphale	Runner-up

24. List of eminent academicians and scientists/visitors to the department

Sr. No.	Name of Visitors	Organization	Purpose of Visit
1.	Dr. S. A. Pardeshi	RIT, Islampure	Faculty Development Programme
2	Mr. G. B. Kumbhar	Wipro, Pune	Faculty Development Programme
3	Dr. S. N. Sangale	KBP College, Satara	Expert Lecture
4	Dr. S. N. Talbar	SGGS, Nanded	Expert Lecture
5	Parag Joshi	VLSI Logic, Pune	Expert Lecture
6	A. J. Patil	S D Jain COE, Jalgaon	Expert Lecture
7	Mr. Krisna Kutty	KPIT Cummins, Pune	Expert Lecture
8	Dr. Prema M. Daigavane	SD COE,Vardha	Expert Lecture

9	Dr. M. D. Uplane	Department Of Electronics, Shivaji University, Kolhapur	Expert Lecture
10	Dr.Milind Khanapurkar	GH Raisoni COE, Nagpur	Expert Lecture
11	Mr. Kishor Jagtap	Indion Tech	Expert Lecture
12	ShivrajAlure	Velocity.cc	Expert Lecture
13	Mr. S. R. Madkar	BharatiVidyapith, Pune	Expert Lecture
14	Mr. KawaleVaibhav	Shro System Pvt. Ltd	Expert Lecture
15	Dr. Manoj D. Daigavane	SD COE ,Vardha	Evaluation of BE Projects
16	Dr. Rajkumar	DIAT, Pune	Evaluation of BE Projects
17	Mr. P. S. Malage	WIT, Solapur	Evaluation of BE Projects
18	Dr. Sachin Gengeje	WIT, Solapur	Evaluation of BE Projects

25.   Seminars/Conferences/Workshops organized & the source of funding

a)   **Conferances- Nil**

b)   **Workshops-**

Sr No.	Workshop organized	Date	Sources of funding
1	Workshop on Hands on Training Program on "LaTeX"	7/09/2013	Self Sponsored
2	Workshop on Design And Verification Methodologies Using System-VeriLog	03-08/03/2014	Self Sponsored
3	Workshop on Embedded systems and wireless sensor network	07/02/2014	Self Sponsored
4	Workshop on Hands on EDA Tools on VLSI Technology	05/08/2014	Self Sponsored
5	Workshop on Embedded Linux (UG)	09/09/2014	Self Sponsored
6	Workshop One week FDP on Recent Trends in Virtual instrumentation using Labview	19-23/08/2014	Self Sponsored

7	Workshop on Recent trends in virtual Instrumentation using Lab View	19-20/01/2015	Self Sponsored
8	Hands on Real time device driver development	05-6/02/2015	Self Sponsored
9	Workshop on Intel FICE Certification Program on INTEL ATOM boards	19-21/02/2015	Self Sponsored
10	Workshop on LNA Topologies and Power Estimation	28/03/2015	Self Sponsored
11	Faculty orientation workshop on BE (E&Tc/ELX) Revised Syllabus 2012 Course under the aegis of BoS , SPPU on Embedded System Design	10-13/06/2015	SPPU
12	Faculty orientation workshop on BE (E&Tc/ELX) Revised Syllabus 2012 Course under the aegis of BoS , SPPU on Broadband Communication Systems	09/01/2016	SPPU

C) Seminars

Sr.No	Expert Lecture Organized	Date	National/International	Source Of Funding
1	Seminar on Embedded C Programming on Linux Platform	10-02-2015	National	Self sponsored
2	Seminar on Embedded Linux and Kernal Construction	11-02-2016	National	Self sponsored
3	One day Workshop on Latex	5-09-2015	National	Self sponsored

D) Faculty Development Program –

Sr.No	Seminar organized	Date	National/international	Source of funding
1	Seminar on IET Present Around The World	8-03-2015	National	Self sponsored
2	Seminar on Internet of Things	5-02-2015	National	Self sponsored
3	Seminar on System Implementation in VLSI & Embedded Design(PG Students)	07-08-2014	National	Self sponsored
4	Seminar on Embedded Linux (PG Students)	09-09-2014	National	Self sponsored
5	Seminar on Android Applications and Security	05-08-2014	National	Self sponsored
6	Seminar on VLSI Design and Chip Verification	11-03-2015	National	Self sponsored

26.   **Student profile programme/coursewise:-**

Name of the Course/programme	Academic Year (Graduation)	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
E&TC Engineering /UG	2015-16	As per the admission process of DTE, Mumbai, Govt. of Magarashtra	300	230	84	86.58
E&TC Engineering /UG	2014-15		298	432	209	99.28
E&TC Engineering /UG	2013-14		292	552	275	80.74
E&TC Engineering /UG	2012-13		300	611	321	96.9

*M=Male *F=Female

27. Diversity of Students

Name of the Course/ Programme	Academic Year	%of students from the same state	%of students from other States	%of students from abroad
E&TC Engineering /UG	2015-16	88%	12%	NIL
E&TC Engineering /UG	2014-15	84.43%	15.56%	NIL
E&TC Engineering /UG	2013-14	85.71%	14.28%	NIL
E&TC Engineering /UG	2012-13	81.60%	18.39%	NIL

28.   How many students have cleared national and state competitive examinations such as NET,SLET, GATE, Civil services, Defense services, etc.?

Exam	No.of Student			
	2012-13	**2013-14**	**2014-15**	**2015-16**
GATE	1	1	4	-
Defence	-	-	-	-
CAT	-	-	-	-
SLET	-	-	-	-
MBA- CET	-	-	-	-
GRE	1	14	8	1
TOFEL	1	14	8	-

29.   Student progression

Branch: E&TC				
Student Progression	**Year (Value in %)**			
	2012-13	**2013-14**	**2014-15**	**2015-16**
UG to PG	0.72	4.2	1.93	Nil
PG to PhD	12.5	Nil	Nil	Nil
Employed 1)Campus Selection	34.30	29.4	40	135
2)Other than Campus recruitments	Nil	Nil	Nil	Nil

30. Details of Infrastructural facilities

a) **Library :**

Particular	Titles	Volumes
Books		
U.G.	1066	7378
P.G.	251	1726
On line journal		
IEEE Journal	193	193
Printed journal		
Printed journal U.G.	52	52
Printed journal P.G.	NA	NA

b) **Internet facilities for Staff & Students** :-
   Wi fi Netwok in College Premises and Laboratories and Classrooms.LAN in every lab.

c) **Class rooms with ICT facility** :-

Class Room No.	Usage	Shared/ Exclusive	Capacity	Room Equipped with	Available Area in Sq. Mtrs.
1.	Teaching Learning	Exclusive	80	LCD Projector, OHP	85
2.	Teaching Learning	Exclusive	80	LCD Projector, OHP	85
3.	Teaching Learning	Exclusive	80	LCD Projector, OHP	85
4.	Teaching Learning	Exclusive	80	LCD Projector, OHP	85
5.	Teaching Learning	Exclusive	80	LCD Projector, OHP	85
6.	Teaching Learning	Exclusive	80	LCD Projector, OHP	85
7.	Teaching Learning	Exclusive	80	LCD Projector, OHP	85

Class Room No.	Usage	Shared/ Exclusive	Capacity	Room Equipped with	Available Area in Sq. Mtrs.
8.	Teaching Learning	Exclusive	80	LCD Projector, OHP	85
9.	Teaching Learning	Exclusive	80	LCD Projector, OHP	85
10.	Teaching Learning	Exclusive	80	LCD Projector, OHP	85
11.	Teaching Learning	Exclusive	80	LCD Projector, OHP	85
12.	Teaching Learning	Exclusive	80	LCD Projector, OHP	85
13.	Teaching Learning	Exclusive	40	LCD Projector, OHP	85
14.	Teaching Learning	Exclusive	40	LCD Projector, OHP	85

d) **Laboratories**

Sr. No.	Name of the Laboratory	Exclusive use/share	Utilization percentage	Laboratory manuals	Available Area in Sq. Mtrs.
1	Electronics Devices Circuits Lab I	Exclusive use	83.14	Y	85
2	Electronics Devices Circuits Lab II	Exclusive use	82.33	Y	85
3	Communication Engineering Lab I	Exclusive use	83.14	Y	85
4	Communication Engineering Lab II	Exclusive use	82.33	Y	85
5	Electronic Design Lab	Exclusive use	90.14	Y	85
6	Projects Lab	Exclusive use	88.33	Y	85

Sr. No.	Name of the Laboratory	Exclusive use/share	Utilization percentage	Laboratory manuals	Available Area in Sq. Mtrs.
7	Signal Processing Lab	Exclusive use	93.14	Y	85
8	Power Electronics Lab	Exclusive use	82.33	Y	85
9	Microwave Antenna Lab	Exclusive use	83.14	Y	85
10	Instrumentation Lab	Exclusive use	86.33	Y	85
11	Programming Lab	Exclusive use	93.14	Y	170
12	Embedded System Design Lab I	Exclusive use	85.00	Y	85
13	Embedded System Design Lab II	Exclusive use	82.33	Y	85
14	Software Lab I	Exclusive use	83.14	Y	85
15	Software LabII	Exclusive use	82.33	Y	85
16	Digital Electronics Lab	Exclusive use	83.14	Y	85
17	VLSI Design Lab I	Exclusive use	82.33	Y	85
18	PG-Lab 1	Exclusive use	83.14	Y	85
19	PG-Lab2	Exclusive use	82.33	Y	85

31.   Number of students receiving financial assistance from college,university, Government or other agencies

Sr.No.	Type of Assistant	Agency Providing Financial Assistant	Academic Year			
			2011-12	2012-13	2013-14	2015-16
1	GOI PM Scholarship	Social Welfare Dept. & Tribal Development Dept.	275	380	463	463
2	GOI PM Free ship		-	-	-	-
3	EBC Concession	Jt.Director of	64	86	110	135

		Tech.Edu.				
4	Minority Scholarship	Dept.of Monority Welfare	15	05	07	07
5	Central Sector Scholarship	Jt.Director of Higher Edu.	23	15	06	15
6	STC/PTC	Zilha Parishad	03	08	05	04
7	J&K Special Scholarship	AICTE	-	01	02	-
8	Pvt. Scholarship	Trust , NGO,Companies	-	-	-	-

32. Details on student enrichment programmes (special lectures/workshops/ seminars) with external experts

Special lectures / workshop	Topic	Date		Attendrs
		From	**To**	
Lecture	Stress Management	16/ 2/2013	16/ 2/2013	SE-A
Lecture	Front End Methodologies in Chip Design (VLSI Seminar)	1/3/2013	1/3/2013	B.E.
Lecture	Role of engineers in industry ndustry	6/7/2013	6/7/2013	S.E.
Lecture	Microcontroller and application	6/7/2013	6/7/2013	T.E.
Lecture	Microcontroller and application	6/7/2013	6/7/2013	T.E.
Lecture	Automotive Electronics	20/7/2013	20/7/2013	T.E.
Lecture	PLC and Scada	3/8/2013	3/8/2013	T.E.
Lecture	Advance VLSI Design	6/8/2013	6/8/2013	B.E.
Lecture	Interview Techniques	10/8/2013	10/8/2013	S.E.T.E. B.E.
Lecture	VLSI Design and Chip Verification	26/9/2013	26/9/2013	PG
Lecture	Object oriented programming	15/3/2014	15/3/2014	S.E.
Lecture	Front End Methodologies in Chip Design (VLSI Seminar)	1/3/2013	1/3/2013	B.E.
Lecture	Role of engineers in industry ndustry	6/7/2013	6/7/2013	S.E.
Lecture	Microcontroller and application	6/7/2013	6/7/2013	T.E.
Lecture	Microcontroller and application	6/7/2013	6/7/2013	T.E.
Lecture	Automotive Electronics	20/7/2013	20/7/2013	T.E.
workshop	PLC and Scada	3/8/2013	3/8/2013	T.E.

Lecture	Advance VLSI Design	6/8/2013	6/8/2013	B.E.
Lecture	Interview Techniques	10/8/2013	10/8/2013	S.E.T.E. B.E.
Lecture	VLSI Design and Chip Verification	26/9/2013	26/9/2013	PG
Lecture	Object oriented programming	15/3/2014	15/3/2014	S.E.
Lecture	Goal Setting (Buls Eye)	28/6/ 2014	28/6/ 2014	SE
Lecture	Applications of Embedded Systems	25/7/ 2014	25/7/ 2014	TE
Lecture	Scope of E & TC Engg.In Industry in FE induction	2/8/2014	2/8/2014	FE
Lecture	Higher Studies & Competitive Exam after Engg. Degree in FE induction	2/8/ 2014	2/8/ 2014	FE
Lecture	Industrial Automation	6/8/ 2014	6/8/ 2014	TE
Lecture	Recent Trends in VLSI Technology	9/8/2014	9/8/2014	SE
workshop	Embedded Linux	9/8/ 2014	9/8/ 2014	BE
Lecture	C Programming	23/8/2014	23/8/2014	SE
Lecture	Ciber Security	3/9/2014	3/9/2014	TE
Lecture	Guest lecture on Higher Education Opportunities	6/9/2014	6/9/2014	TE
Lecture	Electronics Devices & Circuits	6/9/2014	6/9/2014	SE
Lecture	Importance of GAP membership	6/8/2014	6/8/2014	BE
Lecture	Automotive Electronics	7/1/2015	7/1/2015	BE
Lecture	Awareness for GATE 2016	18/2/2015	18/2/2015	TE
Lecture	Career opportunities in Engineering services	8/1/2015	8/1/2015	TE
workshop	Workshop on PLC	4/7/2015	4/7/2015	B.E.
Lecture	ICE, Gate Examination	25/8/2015	25/8/2015	T.E.
Lecture	A Case study :Automotive application	5/9/2015	5/9/2015	T.E.
workshop	Personality Development	7/9/2015	7/9/2015	S.E.
workshop	Personality Development	7/9/2015	7/9/2015	T.E.
Lecture	Opportunities after graduation	22/12/2015	22/12/2015	BE
Lecture	Importance of QALR in placement activity	28/12/15	28/12/15	T.E.-C
Lecture	Importance of QALR in placement activity	28/12/15	28/12/15	T.E.-D
Lecture	Orientation on PIC and ARM Microcontrollers	30/12/15	30/12/15	T.E. – A & B

Lecture	Orientation on PIC and ARM Microcontrollers	30/12/15	30/12/15	T.E. – C & E
Lecture	Orientation on PIC and ARM Microcontrollers	30/12/15	30/12/15	T.E. –B
Lecture	Importance of QALR in placement activity	31/12/15	31/12/15	S.E.-A
Lecture	Importance of QALR in placement activity	31/12/15	31/12/15	S.E.-B
Lecture	Post BE Opportunities in Embedded Systems	27/1/2016	27/1/2016	BE-C
Lecture	Introduction to Manufacturing IT	9/2/2016	9/2/2016	TE-A
Lecture	Introduction to Manufacturing IT	9/2/2016	9/2/2016	TE-B
Lecture	Interview Techniques	9/2/2016	9/2/2016	TE-C
Lecture	Interview Techniques	9/2/2016	9/2/2016	TE-D
Lecture	Interview Techniques	9/2/2016	9/2/2016	TE-E
Lecture	Cyber Security	9/2/2016	9/2/2016	SE-A
Lecture	Cyber Security	9/2/2016	9/2/2016	SE-B
Lecture	Cyber Security	9/2/2016	9/2/2016	SE-C
Lecture	Cyber Security	9/2/2016	9/2/2016	SE-D
Lecture	Cyber Security	9/2/2016	9/2/2016	SE-E
Lecture	Engineering Problem Solving in MATLAB	8/2/2016	8/2/2016	SE-A
Lecture	Engineering Problem Solving in MATLAB	8/2/2016	8/2/2016	SE-B
Lecture	Engineering Problem Solving in MATLAB	8/2/2016	8/2/2016	SE-C
Lecture	Engineering Problem Solving in MATLAB	8/2/2016	8/2/2016	SE-D

Lecture	Engineering Problem Solving in MATLAB	8/2/2016	8/2/2016	SE-E
Seminar	Microsoft Cyber Security	8/2/2016	8/2/2016	TE-E
Seminar	Orientation on Cyber Security	8/2/2016	8/2/2016	TE-A
Seminar	Orientation on Cyber Security	8/2/2016	8/2/2016	TE-B
Seminar	Orientation on Cyber Security	8/2/2016	8/2/2016	TE-C
Seminar	Orientation on Cyber Security	8/2/2016	8/2/2016	TE-D
Seminar	Orientation onAndroid Application Development	2/2/2016	2/2/2016	TE-E
Seminar	Orientation onAndroid Application Development	2/2/2016	2/2/2016	SE-E
Seminar	Orientation onAndroid Application Development	2/2/2016	2/2/2016	TE-C
Seminar	Orientation onAndroid Application Development	2/2/2016	2/2/2016	TE-D
Seminar	Awareness about Industrial Automation	5/2/2016	5/2/2016	SE-C
Lecture	Awareness about Industrial Automation	5/2/2016	5/2/2016	SE-B
Lecture	OLYMPIAD	15/3/2016	15/3/2016	BE-TE
Lecture	SEED IT Idol	15/3/2016	15/3/2016	BE-TE
Lecture	Entrepreneurship development	16/3/2016	16/3/2016	TE
Lecture	Digital Control System	17/3/2015	17/3/2015	SE

33.   Teaching methods adopted to improve student learning

- Overhead projections, Power Point Presentations
- NPTEL Video Lectures

- Tutorials, Assignments, Quiz.
- Group discussions

34.   Participation in Institutional Social Responsibility (ISR) and Extension activities

Sr. No.	Activity	Venue of Event	Date of Activity	No of students participants
1	NSS (Social activity at Khed shivapur	SKNCOE E & TC Dept	7/03/2016 to 15/03/2016	09
2	PRAYAS (Computer Literacy Programme at Nira wagaj)	SKNCOE E & TC Dept	6/02/2016 to 15/02/2016	24
3	PRAYAS (Computer Literacy Programme at Kolewadi and Kondewadi)	SKNCOE E & TC Dept	18/03/2016 to 19/03/2016	24
4	Blood Donation Camp	Student Activity Center ,STES	19/01/2016	300
5	PRAYAS (Computer Literacy Programme)	Bori , Tal - Indapur	20/01/2014 to 29/01/2014	12
6	PRAYAS (Computer Literacy Programme)	Takalihaji Tal - Shirur	2/02/2013 to 10/02/2013	5
7	Team Building & stress Management	E & TC Dept	11/02/2012	30

35.   SWOC analysis of the department and Future plans
   Strengths:-
- Good infrastructure.
- Well equipped laboratories.
- Well experienced teaching faculty.
- Strong administrative and financial support.
- Supporting working environment among department members.

   Weaknesses:-
- Lagging in consultancy.
- Lack of Funded Projects

   Opportunity:-
- To get national and international grants for research project

   Future Plans:-
- Signing MOU with core companies
- Strengthening of Research & Development laboratory and Department Library
- Modernization of Laboratories.
- To establish Research Centre for Doctoral Programs.

6.4 Department of Mechanical Engineering

1. **Name of the department**: **Mechanical Engineering**

2. **Year of Establishment** :**2006-07**

3. **Names of Programs / Courses offered** – UG

Names of Programs	Year of establishment
First Shift in Mechanical Engineering (Intake 60)	2006
First Shift in Mechanical Engineering (Intake 120)	2011
First Shift in Mechanical Engineering (Intake 180)	2012
First Shift in Mechanical Engineering (Intake 240)	2013
Second Shift in Mechanical Engineering (Intake 60)	2010
Second Shift in Mechanical Engineering (Intake 120)	2013

4. Names of Interdisciplinary courses and the departments/units involved-

Sr. No.	Interdisciplinary courses	Department involved
1	M-III	Engineering Sciences
2	Electronics and Electrical Engineering	Engineering Sciences

5. **Annual/ semester/choice based credit system (Programme wise)-**

   UG: FE-Semester credit system & SE/TE/BE- Semester System

6. **Participation of the department in the courses offered by other departments**-**Basic Sciences Departments.**

Sr. No.	Courses	Offered to Department
1	Engineering Graphics-I	First Year
2	Basic Mechanical Engineering	First Year
3	Engineering Graphics- II	First Year

7. Courses in collaboration with other universities, industries, foreign institutions-

Sr. No.	Name of the Course	Academic Year	Name of Collaboration
1.	Spoken tutorial Scilab	2013 – 2014	IIT Mumbai and MHRD Government of India
2.	Automotive Internships	Dec 2014 – June 2016	ExpertsHub ISDC
3.	Spoken tutorial Scilab	2014 – 2015	IIT Mumbai and MHRD Government of India
4.	Workshop on software training on Hypermesh	09 July 2015	Design Tech. Systems Ltd. Pune
5.	Training for Siemens CAD/CAE Courses	27 August 2015	3M Solutions and Siemens PVT. LTD
6.	Spoken tutorial Scilab	2015 – 2016	IIT Mumbai and MHRD Government of India
7.	Workshop on Ansys	March 2016	Design Tech. Systems Ltd. Pune
8.	Industrial Automation	1st April 2016 to 31st March 2015	EDUCATE TO AUTOMATE Pune

8. Details of courses/programs discontinued (if any) with reasons-NIL

9. Number of Teaching posts

Posts	2015-16	
	Sanctioned	Filled
Professors	6	1
Associate Professors	14	1
Asst. Professors	44	49

10. Faculty profile with name, qualifications, designation, specialization, (DSc/ D.Litt/ Ph.D/ MPhil/PG. etc.)

Sr. No.	Name of Faculty	Qualification	Designation	Experience
1.	Dr. K. R. Borole	M.E. Design Ph.D.	Vice Principal & Prof.	23

Department of Mechanical Engineering

Sr. No.	Name of Faculty	Qualification	Designation	Experience
2.	Dr. A. P. Pandhare	M.E. Heat Power Ph.D.	Asso. Prof. & HOD	13.6
3.	Prof. A. S. Joglekar	M. Tech Mech	Asst. Prof.	24
4.	Prof. S. S. Yevale	M.E. Heat Power	Asst. Prof.	21
5.	Mr. G. A. Jagdale	ME Mech Pursuing Ph.D.	Asst. Prof.	14
6.	Mr. S. N. Shinde	M.Tech. Mech. Pursuing Ph.D.	Asst. Prof.	17
7.	Prof. M. M. Kulkarni	ME Mech	Asst. Prof.	24
8.	Mr.V. L. Bhanavse	M.E. Design Pursuing PhD	Asst. Prof.	14
9.	Mr.D. V. Burande	M.E. Mech.	Asst. Prof.	13
10.	Mrs. K. P. Agte	ME Mech	Asst. Prof.	7
11.	Mr. T. B. Patil	ME Mech	Asst. Prof.	6.8
12.	Mr. V. H. Bansode	M.Tech. Mech.	Asst. Prof.	5.8
13.	Mr. T. S. Sargar	M.Tech. Mech.	Asst. Prof.	07
14.	Mrs. S.K. Brar	M. Tech Mech	Asst. Prof.	5
15.	Mr. A. J. Patil	B.E. Prod. Pursuing ME	Asst. Prof.	08
16.	Mr. V. P. Sawant	M. Tech Mech	Asst. Prof.	05
17.	Mr. S. P. Shinde	M. Tech Mech	Asst. Prof.	4
18.	Mr. S. K. Malave	ME Mech.	Asst. Prof.	6.7
19.	Mr. V. V. Ugle	M. Tech (Thermal)	Asst. Prof.	2.8
20.	Mr. S. Y. Sonaye	M. Tech Mech	Asst. Prof.	5
21.	Mr. S. A. Agrawal	M. Tech Mech	Asst. Prof.	2.8
22.	Mr. G. B. Firame	M. Tech Mech	Asst. Prof.	2.8
23.	Mr. M. R. Ramteke	M. Tech Mech	Asst. Prof.	2.8
24.	Mr. A. M. Umbarkar	M. Tech (Thermal)	Asst. Prof.	2.8

Department of Mechanical Engineering

Sr. No.	Name of Faculty	Qualification	Designation	Experience
25.	Mr. A. D. Bugade	M. Tech Mech	Asst. Prof.	2.8
26.	Mr. R. A. Chothave	M. Tech Mech	Asst. Prof.	2.8
27.	Mr. A. D. Sathe	M. Tech Mech Pursuing Ph.D.	Asst. Prof.	13.6
28.	Mr. M. J. Naidu	M. E. Mech Pursuing Ph.D.	Asst. Prof.	14
29.	Mr. S. B. Mane-Deshmukh	M. E. Mech Pursuing Ph.D.	Asst. Prof.	7.6
30.	Mr. S. M. Jadhav	M. Tech Metallurgy	Asst. Prof.	8
31.	Mr. A. B. Jadhav	M. Tech Metallurgy Pursuing Ph.D.	Asst. Prof.	4.6
32.	Mr. N. P. Sherje	ME Design Pursuing PhD.	Asst. Prof.	12
33.	Mr. H. A. Deore	M. Tech Mech Metallurgy & Material Science	Asst. Prof.	10.5
34.	Mr. M. E. Nimgade	M. Tech Mech	Asst. Prof.	2
35.	Mr. P. P. Kharche	M. E. Design	Asst. Prof.	5.5
36.	Mr. H. A. Khande	M. E. Design	Asst. Prof.	6
37.	Mr. A. R. Attar	M. E. Heat Power	Asst. Prof.	5
38.	Mr. V. M. Chavan	M. Tech Metallurgy	Asst. Prof.	5.5
39.	Mr. S. B. Teli	M. Tech Machine Design	Asst. Prof.	0.9
40.	Mr. S. U. Deokar	M. Tech Mech	Asst. Prof.	0.8
41.	Ms. F. M. Pathan	M. E. Design	Asst. Prof.	1.5
42.	Prof. A. M.Umbrajkaar	ME Mech Pursuing Ph.D.	Asst. Prof.	5.7
43.	Mr. K. C. Zende	ME Mech	Asst. Prof.	7.7
44.	Ms. A. S. Mali	Pursuing ME Mech	Asst. Prof.	1.3
45.	Mr. I. K. Shaikh	M. A. Soft Skill	Asst. Prof.	1.3
46.	Mr. S. V. Navale	Pursuing ME Mech	Asst. Prof.	0.3

Sr. No.	Name of Faculty	Qualification	Designation	Experience
47.	Ms. R. M. Bhide	Pursuing ME	Asst. Prof.	0.6
48.	Ms. P. S. Patel	Pursuing ME	Asst. Prof.	0.7
49.	Ms. N. N. Khaparde	Pursuing ME	Asst. Prof.	0.7
50.	Ms. K. W. Sarate	Pursuing ME	Asst. Prof.	0.7
51.	Mr. M. M. Damakale	Pursuing ME	Asst. Prof.	4

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)

S.No	Programme	Specialization	Teacher – Student Ratio			
			2015-16	2014-15	2013-14	2012-13
1	Mechanical Engineering	Mechanical Engineering	18.82:1	19:1	17.42:1	15:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Supporting Staff	Sanctioned	Filled
Number of academic support staff (Tech. Staff)	--	09

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG

Qualification	No. of Teaching Faculty
PhD Completed	02
PhD Registered	10
M.E / M. Tech Completed	49
M. Phil / MSc	00

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.

Sr. No.	Name of the Research Project	Name of Principal Investigator	Funding Agency	Amount (Rs)	Duration of Project
1.	Simulation & Analysis of Thermal Energy Storage system using phase change material.	Prof. V.H. Bansode	University of Pune (BCUD)	60000	2 Yrs
2.	Performance Evaluation of Liquid column Ball Damper for Controlling the vibrations of Huge Structure.	Prof. G.A. Jagdale	University of Pune (BCUD)	140000	2 Yrs
3.	Experimental Evaluation of semi active Magnetorheological Damper.	Prof. N.P.Sherje	University of Pune (BCUD)	120000	2 Yrs

18. Research Centre /facility recognized by the University- Nil

19. Publications: A) Paper Publications:

Sr. No.	Name of the faculty	No of Papers published in peer reviewed Journals Faculty/ Students	Publications listed in International DB	Chapters in Books	Books Edited	Books with ISBN in International DB	Citation Index	Impact Factor	H- Index
1	Dr. K. R. Borole	02	02	Nil	Nil	Nil	5	3.5	Nil
2	Dr. A. P. Pandhare	24	24	Nil	Nil	Nil	4	2.3	15

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Sr. No.	Name of the faculty	No of Papers published in peer reviewed Journals Faculty/ Students	Publications listed in International DB	Chapters in Books	Books Edited	Books with ISBN in International DB	Citation Index	Impact Factor	H- Index
3	Prof. A. D. Sathe	8	8	Nil	Nil	Nil	Nil	Nil	Nil
4	Prof. A. S. Joglekar	2	2	Nil	Nil	Nil	Nil	0.672	Nil
5	Prof. K. C. Zende	2	2	Nil	Nil	Nil	Nil	0.672	Nil
6	Prof. V. H. Bansode	5	5	Nil	Nil	Nil	Nil	0.672	Nil
7	Prof. A. B. Jadhav	6	6	Nil	Nil	Nil	Nil	3.0	Nil
8	Prof. G. A. Jagdale	2	2	Nil	Nil	Nil	Nil	1.479	Nil
9	Prof. T. S. Sargar	3	3	Nil	Nil	Nil	Nil	0.685	Nil
10	Prof. M. J. Naidu	2	2	Nil	Nil	Nil	Nil	3.2	Nil
11	Prof. S.M. Jadhav	1	1	Nil	Nil	Nil	Nil	2.3	Nil
12	Prof. A. J. Patil	3	3	Nil	Nil	Nil	Nil	Nil	Nil
13	Prof. G. B. Firame	2	2	Nil	Nil	Nil	Nil	Nil	Nil
14	Prof. V. V. Ugle	1	1	Nil	Nil	Nil	Nil	Nil	Nil

Sr. No.	Name of the faculty	No of Papers published in peer reviewed Journals Faculty/ Students	Publications listed in International DB	Chapters in Books	Books Edited	Books with ISBN in International DB	Citation Index	Impact Factor	H- Index
15	Prof. S. P. Shinde	3	3	Nil	Nil	Nil	Nil	2.5	Nil
16	Prof. A. M. Umbarkar	2	2	Nil	Nil	Nil	Nil	2.3	Nil
17	Prof. M. M. Kulkarni	4	4	Nil	Nil	Nil	Nil	2.3	Nil
18	Prof. N. P. Sherje	5	5	Nil	Nil	Nil	Nil	3.5	Nil
19	Prof. T. B. Patil	2	2	Nil	Nil	Nil	Nil	2.3	Nil
20	Prof. K.P. Agate	2	2	Nil	Nil	Nil	Nil	0.9	Nil
21	Prof. S. B. Mane Deshmukh	5	5	Nil	Nil	Nil	Nil	2.0	Nil
22	Prof. S.K. Malave	2	2	Nil	Nil	Nil	Nil	2.8	Nil
23	Prof. S.Y. Sonaye	5	5	Nil	Nil	Nil	Nil	2.3	Nil
24	Prof. R. A. Chothave	1	1	Nil	Nil	Nil	Nil	2.3	Nil

Sr. No.	Name of the faculty	No of Papers published in peer reviewed Journals Faculty/ Students	Publications listed in International DB	Chapters in Books	Books Edited	Books with ISBN in International DB	Citation Index	Impact Factor	H- Index
25	Prof. Mrs. S.K. Brar	1	1	Nil	Nil	Nil	Nil	Nil	Nil
26	Prof.H.A. Khande	1	1	Nil	Nil	Nil	Nil	Nil	Nil
27	Prof. A.D. Bugade	1	1	Nil	Nil	Nil	Nil	Nil	Nil
28	Prof. P. P. kharche	1	1	Nil	Nil	Nil	Nil	Nil	Nil
29	Prof. H. A. Deore	1	1	Nil	Nil	Nil	Nil	Nil	Nil
30	Prof. V. M. Chavan	1	1	Nil	Nil	Nil	Nil	Nil	Nil
31	Prof. Ms. F. M. Pathan	1	1	Nil	Nil	Nil	Nil	Nil	Nil

20. Areas of consultancy and income generated –NIL

21. Faculty as members in
   a) **National committees b) International Committees c) Editorial Boards**
   a) **National committees :-**

Sr. No.	Name of Faculty Member	Name of Committee
1.	Dr. K. R. Borole	SAE India, Indian Society for Technical Education
2.	Dr. Pandhare Amar P.	SAE India
3.	Joglekar A.S.	Indian Society for Technical Education
4.	Sathe A.D.	Indian Society for Technical Education
5.	Naidu M.J.	Indian Society for Technical Education

6.	Shinde S.P.	Indian society of heating ,refrigeration and Air Conditioning
7.	Patil A.J.	Indian Society for Technical Education
8.	Bhanavase V.L.	Indian Society for Technical Education
9.	Sherje N. P.	Indian Society for Technical Education
10	Kulkarni M. M.	Indian Society for Technical Education

b) International Committee:-Nil
c) Editorial Boards….Nil

22. Student projects
a) Percentage of students who have done in-house projects including inter departmental/programme

Sr. No.	Year	No. of In house Projects	Percentage of in-house projects
1	2015-16	30	32.96
2	2014-15	23	35.93
3	2013-14	13	32.50
4	2012-13	07	26.92

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies

Sr. No.	Year	No. of Projects in collaboration	Percentage of projects in collaboration
1	2015-16	61	67.03
2	2014-15	41	64.06
3	2013-14	27	67.50
4	2012-13	19	70.07

23. Awards/ Recognitions received by faculty and students.
A. Awards/ Recognitions received by Faculties:

Sr. No.	Name of Faculty Member	Year of Achievement	Achievement / Recognition
1.	Prof. Dr. A. P. Pandhare	2011	Recipient of **"Dronacharya Award" for BEST FACULTY ADVISOR January 28-30, 2011** by Society of Automotive Engineers at National Level competition.
2.	Prof. Dr. A. P. Pandhare	2013	Worked as a faculty advisor for FSAE team in formula SAE event held at Lincoln, USA, 2013

3.	Prof. Dr. A. P. Pandhare	2014	Worked as a faculty advisor for FSAE team in formula SAE event held at Italy 2014.
4.	Prof. Dr. A. P. Pandhare	2014	Completed successfully PhD in Mechanical Engineering with thesis named "Experimental investigation and numerical simulation of diesel engine using nonedible [JATROPHA OIL] as fuel" from Savitribai Phule Pune university in 2014.
5.	Prof. Dr. A. P. Pandhare	2015	Best Paper Publication In International Journal of Mechanical Engg. (IJME) ISSN (Print) 2319-2240, ISSN (Online) 2319-2259 Impact factor 3.6234
6.	Prof. Dr. A. P. Pandhare	2015	Faculty adviser certificate for SUPRA SAE INDIA student formula 2015 held at Madras Race Track, Chennai from 16 to 19th July 2015
7.	Prof. Dr. K. R. Borole	2015	Certificate of participation in the virtual baja sarindia 2015 held at 10 to 11th Chitkara University, Punjab, July 2015
8.	Prof. Dr. A.P.Pandhare	2015	INDO GLOBAL ENGINEERING EXCELLENCE AWARD 2015
9.	Prof. Dr. A.P.Pandhare	2015	Certificate of Appreciation from ExpertsHub for excellent coordination and support for success of civil engineering industrial internship between 14 to 21th June 2015 at SKNCOE, Pune

10.	Prof. Dr. A.P.Pandhare	2015	Certificate of Appreciation from ExpertsHub for excellent coordination and support for success of Automative Styling Boot camp between 12 to 19th June 2015 at SKNCOE, Pune
11.	Prof. Dr. A. P. Pandhare	2015	Certificate of Appreciation from ExpertsHub for excellent coordination and support for success of Automative Industry Simulation Internship camp between 21 to 28th June 2015 at SKNCOE, Pune
12.	Prof. G. A. Jagdale	March 2012	1st prize for paper presentation
13.	Dr. K. R. Borole	2016	Keynote speaker and Delivered expert lecture on Recent trend in mechanical Engineering, at RTME 2016
14.	Dr. K. R. Borole	2016	Inuagrated Techcellence 2016 ; A technical research paper competition in Saint Gadgebaba College of Engineering, Bhusaval
15.	Prof. V. L. Bhanavse	2014-15	Selected on assessing body of advanced technical institute of central government undertaking project under the banner of skill India make in India for Pune region for year 2014 – 15.

B. Awards/ Recognitions received by Students:

Sr.No	Year	Activity	National / State/ University level No. of Prizes won
1.	2012-2013	VISION 2013 [Papier-(Novice) Electronics], WCE, Sangali	Winner
2.	2012-2013	VISION 2014 [Paper presentation(Expert)], WCE, Sangali	Winner
3.	2012-2013	VISION 2014 (Paper Presentation Expert), WCE, Sangali	Winner
4.	2012-2013	Technochill 2014(Paper Presentstion), Pune	III

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Sr.No	Year	Activity	National / State/ University level No. of Prizes won
5.	2012-2013	Technochill 2014(Paper Presentstion), Pune	III
6.	2012-2013	Melange 2014, (Table Tennis),VIT Pune	II
7.	2012-2013	VISION 2014 [Runner-up Spider instinct], WCE, Sangali	II
8.	2012-2013	VISION 2013 [Papier-(Novice), Civil], WCE, Sangali	II
9.	2012-2013	PENTACLE (Table Tennis), CCOE, Pune	I
10.	2012-2013	Pune District Zonal Sport Committee(Table Tennis)	I
11.	2012-2013	Zest'14, COEP,Pune	I
12.	2012-2013	Zest'14, COEP,Pune	I
13.	2013-2014	NEXUS'13, (ROBOBLITZ), TCOE&R, Pune	Winner
14.	2013-2014	Quiz competition	Ist Prize
15.	2013-2014	Paper presentation	II
16.	2013-2014	M-Pluse'13, ,(ROBO WAR)COEP, Pune	I
17.	2013-2014	INNOFEST 2013, SAOE, Pune	I
18.	2014-2015	ELESA' (Mock placement), SKNCOE, Pune	Winner
19.	2014-2015	Technovanza VRC	Winner
20.	2014-2015	Paper presentation 'PRODZINE-2'SCOE, Pune	III
21.	2014-2015	Paper presentation 'PRODZINE-2'SCOE, Pune	III
22.	2014-2015	Dexterity 2014, Robo-race	III
23.	2014-2015	Dexterity 2014, Robo-race	III
24.	2014-2015	Kho-kho	II
25.	2014-2015	MELANGE Propulsion, VIT, Pune	II
26.	2014-2015	MELANGE Propulsion, VIT, Pune	II
27.	2014-2015	Techfest 2015, Striker, IIT,Bombay	II
28.	2014-2015	Techfest 2015, Striker, IIT,Bombay	II
29.	2014-2015	Techcraft 14, Robo Mania	II

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Sr.No	Year	Activity	National / State/ University level No. of Prizes won
30.	2014-2015	Credenz 14,Roborace	II
31.	2014-2015	VRC	II
32.	2014-2015	VRC	II
33.	2014-2015	MELANGE Propulsion, VIT, Pune	I
34.	2014-2015	MELANGE Propulsion, VIT, Pune	I
35.	2014-2015	SHAASTRA,2014,(Sustainable City Scape) IIT, Madras	I
36.	2014-2015	SHAASTRA,2014,(Sustainable City Scape) IIT, Madras	I
37.	2014-2015	SHAASTRA,2014,(Sustainable City Scape) IIT, Madras	I
38.	2014-2015	SHAASTRA,2014,(Sustainable City Scape) IIT, Madras	I
39.	2014-2015	MECHXIMUS-14. KJCOE & Mgmt Research. Pune	I
40.	2014-2015	Bharatiyam 2015, BVP	I
41.	2014-2015	Automotive IC engine Design And Development	Excellence
42.	2015-2016	Crenovate	Winner
43.	2015-2016	Shaastra	Ist Prize
44.	2015-2016	Propulsion	III
45.	2015-2016	Propulsion	III
46.	2015-2016	B plan credenza 15	III
47.	2015-2016	B plan credenza 15	III
48.	2015-2016	B plan credenza 15	III
49.	2015-2016	TEXEPHYR, 15 ROBOTICA	II
50.	2015-2016	SILICON FUSION, ROBO COMPETATION	I
51.	2015-2016	Automotive industry simulation internship	Excellence
52.	2015-2016	Automotive industry simulation internship	Excellence
53.	2015-2016	Automotive industry simulation internship	Best Intern
54.	2015-2016	International Robotics Competition,IIT BOMBAY	1ST

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Sr.No	Year	Activity	National / State/ University level No. of Prizes won
55.	2015-2016	FLUXUS,IIT INDORE	3rd
56.	2015-2016	National Student's Space Challenge,IIT KHARAGPUR	2ND
57.	2015-2016	Technovision, JSPM NARHE	1ST
58.	2015-2016	MELANGE 16,VIT	2ND
59.	2015-2016	VISION 16,Walchand COE	2ND
60.	2015-2016	Techcraft 15, PVG	1ST
61.	2015-2016	Monster mash, Techtonic, STES	1ST
62.	2015-2016	Rosetta, National Student's Space Challenge,IIT KHARAGPUR	2ND
63.	2015-2016	Mauler, National Student's Space Challenge,IIT KHARAGPUR	2ND
64.	2015-2016	Escapade, National Student's Space Challenge,IIT KHARAGPUR	2ND
65.	2015-2016	Mauler, National Student's Space Challenge,IIT KHARAGPUR	2ND
66.	2015-2016	Escapade, National Student's Space Challenge,IIT KHARAGPUR	3rd
67.	2015-2016	Rosetta, National Student's Space Challenge,IIT KHARAGPUR	2ND
68.	2015-2016	Roborace Techtonic,SITES	2nd
69.	2015-2016	Robo Race, Techtonic,SITES	2ND
70.	2015-2016	Propulsion, Techtonic,STES	2nd
71.	2015-2016	Automotive industry simulation internship	Excellence
72.	2015-2016	Automotive industry simulation internship	Best Intern
73.	2015-2016	Automotive industry simulation internship	Excellence
74.	2015-2016	SILICON FUSION, ROBO COMPETATION	1st
75.	2015-2016	TEXEPHYR, 15 ROBOTICA	2nd
76.	2015-2016	Crenovate	Winner

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Sr.No	Year	Activity	National / State/ University level No. of Prizes won
77.	2015-2016	B plan credenza 15	Rank 3
78.	2015-2016	B plan credenza 15	Rank 3
79.	2015-2016	B plan credenza 15	Rank 3
80.	2015-2016	Shaastra	Ist Prize
81.	2015-2016	Spandan, Manthan, Symbiosis College of Arts and Commerce	Runner Up
82.	2015-2016	Automotive Styling Boot Camp	Runner Up
83.	2015-2016	Spectrum Shark Tank	Winner
84.	2015-2016	Vidhan MPower 2016	Winner
85.	2015-2016	Burning Cars Tantrotsav 2k16	III
86.	2015-2016	Burning Cars Tantrotsav 2k16	III
87.	2015-2016	Burning Cars Tantrotsav 2k16	III
88.	2015-2016	Burning Cars Tantrotsav 2k16	III
89.	2015-2016	Burning Cars Tantrotsav 2k16	III
90.	2015-2016	Technikalah 2016	I
91.	2015-2016	CREDENZ 15, B Plan	Rank 3
92.	2015-2016	Dare to Gear, IC Engine, VIT, Pune	Participation
93.	2015-2016	Spandan, Manthan, Symbiosis College of Arts and Commerce	Runner Up
94.	2015-2016	Vidhan, MPower 2016, MIT, Pune	Winner
95.	2015-2016	Pitchers, Technikalash, NICMAR, 2016	Winner
96.	2015-2016	Certification of Appreciation, Shark Tank, Spectrum, SKNOCE, Pune	Winner

Sr.No	Year	Activity	National / State/ University level No. of Prizes won
97.	2015-2016	Certification of Appreciation, Technical Ambassador, SKNOCE, Pune	Winner
98.	2015-2016	Propulsion	II
99.	2015-2016	Vision 2016	Runner Up

24. List of eminent academicians and scientists/ visitors to the Department

Sr. No.	Name of Visitor	Organization	Purpose of Visit
1	Dr. V. K. Bhojwani	JSCOE	Variable valve training
2	Mr. Anand Kulkarni	(Tata Motors)	Engine Performance Testing
3	Sandeep Rairikar	ARAI	Alternative Fuel Technology l
4	Dr. S. Juttu	(ARAI)	Advanced Combustion Technology HCCI
5	Mr. Mandar Joshi	(Force Motors)	Diesel Engine Technology
6	Mr. Mahadevan N.	(Cummins)	Pollution Reduction Techniques and Emission Norms
7	Dr. R.K. Patil	(MMCOE)	Biodiesel for Diesel Engines
8	Mr. Mandar Peshave	(Tata Motors)	Engine Materials
9	Mr. Yogesh Raybhoge	Educate To Automate, Applicant Engineer	ETA, Pune
10	Dr. Balasubramanian K.	DIAT, Pune	Innovations in Engineering Non Metallic materials for Defence applications
11	DevendraMandke	John Deere, Pune	Noise Vibration and Harshness
12	Sandeep Burali	John Deere, Pune	Noise Vibration and Harshness

13	Mr. Manikrao Patil (Vice President HR Manager)	Atlas Copco, Pune	Atlas Copco Day celebration
14	Mr. Walent (Genral Manager)	Atlas Copco, Pune	Atlas Copco Day celebration
15	Dr. C. M. Sewatkar	COEP	CFD, workshop
16	Nataji Shelke	CAD CAM Guru	CFD, workshop
17	Nataji Shelke	CAD CAM Guru	CFD, workshop
18	Dr. A. G. Thakur	Sanjivani Rural Education Societies, SCOE, Kopargaon	CAD CAM and automation
19	Dr. M J Rathod	Professor, College of Engg., Pune	Analysis of Friction Welding
20	Mr. YatinTambe	Friction Welding Technologies Pvt. Ltd. Warje	Manufacturing Process & Different Welding Techniques
21	Mr. N. Nalawade	Director, Perfect Consultant, Mumbai	Analysis of Practical cases with help of FFT
22	Dr. Deepak W. Pande	Dean R & D College of Engineering, Pune	Hands on FFT
23	Dr. S.P. Deshmukh	PG Coordinator SAE Kondhwa, Pune	Modern trends in Vibration & its application
24	Mr. Shirish Karnik		Education, Deeds and present Scenario and Engineers Day
25	Mr. Atul Patil	IK Bridge Knowledge Pvt. Ltd	Applications and case studies to CFD
26	Dr. Samir Das	Professor, DIAT, Pune	Governing equations in CFD
27	Dr. Atul Sharma	Professor, MED, IIT Bombay	Introduction to CFD and Grid generation

25. Seminars/ Conferences/Workshops organized & the source of funding
I-Conference

Year	Professional Society	Activity	Date/Duration	Resource person	Source of funding	National/ International
Nil						

II-Internship Programs

Year	Professional Society	Activity	Date/ Duration	Resource person	Source of funding	National/ International
2015	Experts Hub Skill Development Centre	Automotive Industry Simulation Internship (Winter 2015)	10 Dec -19 Dec 2015	Mr Ashish Borde- Mahindra and Mahindra, Mr Madhu Reddy- ARAI Mr Gitesh Mutha- IAV Mr Madhu - Hitesh – TATA Motors	Self	National
2015	Experts Hub Skill Development Centre	Automotive Styling Boot Camp (Winter 2015)	21 Dec -27 Dec 2015	Mr. Vimlesh Mallya – MIT Mr. Krubha Karan – Experts Hub	Self	National
2015	Experts Hub Skill Development Centre	Automotive Industry Simulation Internship (Summer 2015)	21st - 28th June 2015	Mr Ashish Borde- Mahindra and Mahindra, Mr Madhu Reddy- ARAI Mr Gitesh Mutha- IAV Mr Madhu - Hitesh – TATA Motors	Self	National

2015	Experts Hub Skill Development Centre	Automotive Styling Boot Camp (Summer 2015)	12th - 19th June 2015	Mr. Vimlesh Mallya – MIT Mr. Krubha Karan – Experts Hub	Self	National
2015	Experts Hub Skill Development Centre	Civil Engineering Industrial Internship (Summer 2015)	14th - 21th June 2015	Mr. Inam – Experts Hub	Self	National
2014	Experts Hub Skill Development Centre	Automotive Industry Simulation Internship (Winter 2014)	17th-24th Dec 2014	Mr Ashish Borde- Mahindra and Mahindra, Mr Madhu Reddy- ARAI Mr Gitesh Mutha- IAV	Self	National
2014	Experts Hub Skill Development Centre	Automotive Industry Simulation Internship (summer 2014)	6- 15 June 2014	Mr Ashish Borde- Mahindra and Mahindra, Mr Madhu Reddy- ARAI Mr Gitesh Mutha- IAV	Self	National
2013	Experts Hub Skill Development Centre	AISI Engine Technologies	03/10/2013 and 04/10/2013	Mr. Pankaj Lowande - ARAI, Mr. Ashish Borde- Experts Hub, Mr Anand Pati, MrVijay Mali	Self	State

| 2013 | Experts Hub Skill Development Centre | Automotive IC Engine Design and Development and Automotive Designing and Styling (Winter) | 9/12/2013 to 15/12/2013 | Mr Ashish Borde-ARAI Mr Madhu Reddy-ARAI, Mr Ashwin – ARAI, Mr Alen-Mahindra and Mahindra | Self | National |

II. Workshops

Sr. No.	Workshop Organized	Date	Source of funding
1.	Recent trends in IC engine design and development	12th Feb 2016 to 19th Feb 2016	SPPU
2.	Fundamentals of CFD	4th Feb 2016 to 5th Feb 2016	Self
3.	Olympaid on Project Management	28 January 2016	Self
4.	Workshop on "Scilab" conducted by IIT powai (Spoken tutorials)	28th Dec 2015	Self
5.	Syllabus implementation on Industrial Engineering	18th Dec 2015	SPPU
6.	Altair Hyper Mesh 12.0 Training	24 Aug - 24 Sept 2015	Self
7.	CAD / CAM & Automation Syllabus Implementation Review Meet	29 Sept 2015	UoP
8.	Scilab Workshop (T. E. Students)	15-19,Oct. 2014	Self
9.	Workshop on Teaching Methodology for Numerical Methods & Optimization	22 Dec-2014	UoP
10.	Workshop on Reliability Engineering	8 Mar 2015	UoP
11.	Workshop on Structural Analysis of Automotive Applications By Computational Techniques	06-07 Feb 15	UoP

12.	Two Days National Level Workshop on Fault Diagnosis And its Conditional Monitoring by Using Vibration Analysis by Using FFT and DWT Technique	21-23 October 2013	UoP
13.	Two Days Workshop on Thermal Analysis of Friction Welding	25-26 October 2013	UoP
14.	Scilab Workshop (T. E. Students)	6th To 9th Oct. 2013	Self
15.	Two Days National Level Workshop on Fundamentals of CFD	15-16 March 2013	UoP

IV Seminars

Sr. No.	Seminar Organized	Date	National / International	Source of funding
1	Noise, vibration and Harshness	19th March 2016	National	Self
2	Recent Trends in Engineering Metallurgy	17th March 2016	National	Self
3	Educate to Automate	10th March 2016	National	Self

26. Student profile Programme/Course wise:

Name of The Course/ Programme	Academic Year	Applications received		Selected	Enrolled		Pass Percentage
		*M	*F		*M	*F	
Mechanical Engg.	2015-16	Admission process done by DTE, Mumbai, Govt. of Maharashtra		1332	1151	181	78.50
	2014-15			993	858	135	85.80
	2013-14			699	602	97	78.72

27. Diversity of Students:

Name of the Course	Academic Year	% of students from the same state	% of students from other States	% of students from abroad
Mechanical Engineering	**2015-16**	93.95	6.05	NIL
	2014-15	86.06	13.94	NIL
	2013-14	83.72	16.28	NIL

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc?

Exam	No. of Students		
	2013-14	**2014-15**	**2015-16**
GATE	21	06	20
Defence	00	00	11
CAT	00	00	00
SLET	00	00	00
MBA-CET	00	01	00
GRE	01	12	09
TOFEL	03	06	07

29. Student progression

Student progression	Against % enrolled 2015-16	Against % enrolled 2014-15	Against % enrolled 2013-14	Against % enrolled 2012-13
UG to PG	NIL	NIL	NIL	NIL
PG to Ph.D.	NIL	NIL	NIL	NIL
Employed 1)Campus selection 2)Other than campus recruitment	35	27	23	13
	NIL	NIL	03	05
Entrepreneurship/Self-employment	NIL	NIL	5	NIL

30. Details of Infrastructural facilities

a) **Library**
I) **Central Library**

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Particulars	Titles	Volumes
Books		
U.G.	676	4766
On line journal	01	Nil
ASME On line	Nil	Nil
Science Direct	01	01
Printed journal	32	Nil

II) Departmental Library:

Year	Location & Area	Exclusive/ Shared	Contents		
			Books	**Ref. Books**	**Journals**
2015-16	3.675*5.48m (20.06sq-m)	Exclusive	67	30	2
2014-15	3.675*5.48m (20.06sq-m)	Exclusive	67	30	2
2013-14	3.675*5.48m (20.06sq-m)	Exclusive	67	30	2
2012-13	5.95*7.85m(41.93sq-m)	Exclusive	58	27	2
2011-12	5.95*7.85m(41.93sq-m)	Exclusive	50	24	2
2010-11	5.95*7.85m(41.93sq-m)	Exclusive	48	20	-

b) **Internet facilities for Staff & Students: 64 Mbps**
c) **Class rooms with ICT facility**

Room Description	Usage	Shared/ Exclusive	Capacity	Area in Sq. Mtr.	Rooms Equipped with
Class Room No. 21	Teaching Learning	Exclusive	80	70	Wi-Fi Internet facility, LCD,Podium,Fans, Tube Lights,Proper Ventilation
Class Room No. 22	Teaching Learning	Exclusive	80	78	Wi-Fi Internet facility, LCD,Podium,Fans, Tube Lights,Proper Ventilation
Class Room	Teaching	Exclusive	80	78	Wi-Fi Internet

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Room Description	Usage	Shared/ Exclusive	Capacity	Area in Sq. Mtr.	Rooms Equipped with
No. 23	Learning				facility, LCD,Podium,Fans, Tube Lights,Proper Ventilation
Class Room No. 24	Teaching Learning	Exclusive	80	70	Wi-Fi Internet facility, LCD,Podium,Fans, Tube Lights,Proper Ventilation
Class Room No. 25	Teaching Learning	Exclusive	80	78	Wi-Fi Internet facility, LCD,Podium,Fans, Tube Lights,Proper Ventilation
Class Room No. 27	Teaching Learning	Exclusive	80	67	Wi-Fi Internet facility, LCD,Podium,Fans, Tube Lights,Proper Ventilation
Class Room No. 28	Teaching Learning	Exclusive	80	67	Wi-Fi Internet facility, LCD,Podium,Fans, Tube Lights,Proper Ventilation
Class Room No. 29	Teaching Learning	Exclusive	140	108	Wi-Fi Internet facility, LCD,Podium,Fans, Tube Lights,Proper Ventilation
Class Room No. 30	Teaching Learning	Exclusive	80	67	Wi-Fi Internet facility, LCD,Podium,Fans, Tube Lights,Proper Ventilation
Class Room No. 31	Teaching Learning	Exclusive	50	67	Wi-Fi Internet facility, Podium,Fans, Tube Lights,Proper Ventilation
Class Room No. 32	Teaching Learning	Exclusive	140	92	Wi-Fi Internet facility, LCD,Podium,Fans, Tube Lights,Proper Ventilation
Class Room No. 33	Teaching Learning	Exclusive	80	66	Wi-Fi Internet facility, LCD,Podium,Fans,

Room Description	Usage	Shared/ Exclusive	Capacity	Area in Sq. Mtr.	Rooms Equipped with
					Tube Lights,Proper Ventilation
Class Room No. 34	Teaching Learning	Exclusive	70	59	Wi-Fi Internet facility, LCD,Podium,Fans, Tube Lights,Proper Ventilation
Class Room No. 35	Teaching Learning	Exclusive	84	70	Wi-Fi Internet facility, LCD,Podium,Fans, Tube Lights,Proper Ventilation
Class Room No. 36	Teaching Learning	Exclusive	80	78	Wi-Fi Internet facility, LCD,Podium,Fans, Tube Lights,Proper Ventilation
Tutorial Room No. I	Teaching Learning	Exclusive	25	39	Wi-Fi Internet facility, Fans, Tube Lights,Proper Ventilation
Tutorial Room No. II	Teaching Learning	Exclusive	25	39	Wi-Fi Internet facility, Fans, Tube Lights,Proper Ventilation
Tutorial Room No. III	Teaching Learning	Exclusive	25	39	Wi-Fi Internet facility, Fans, Tube Lights,Proper Ventilation
Tutorial Room No. IV	Teaching Learning	Exclusive	25	34	Wi-Fi Internet facility, Fans, Tube Lights,Proper Ventilation
Tutorial Room No. V	Teaching Learning	Exclusive	25	39	Wi-Fi Internet facility, Fans, Tube Lights,Proper Ventilation

c) Laboratories

Sr.No.	Name of Laboratory	Exclusive Use/ Shared	Utilization %	Laboratory Manuals	Area in Sq. Mtr
1.	Metallurgy	EXCLUSIVE USE	82.53%	Y	67

Department of Mechanical Engineering

Sr.No.	Name of Laboratory	Exclusive Use/ Shared	Utilization %	Laboratory Manuals	Area in Sq. Mtr
2.	Dyanamics Of Machine	EXCLUSIVE USE	81.73%	Y	67
3.	Applied Thermodynamics	EXCLUSIVE USE	85.53%	Y	67
4.	Fluid Mechanics	EXCLUSIVE USE	83.73%	Y	90
5.	Fluid Machinery	EXCLUSIVE USE	81.53%	Y	109
6.	Theory Of Machine	EXCLUSIVE USE	88.86%	Y	109
7.	Heat Transfer	EXCLUSIVE USE	86.73%	Y	67
8.	Refrigeration And Air Conditioner	EXCLUSIVE USE	82.43%	Y	67
9.	Mechatronics	EXCLUSIVE USE	89.86%	Y	67
10.	Metrology &Quality Control	EXCLUSIVE USE	88.73%	Y	78
11.	Internal Combustion Engine	EXCLUSIVE USE	84.53%	Y	67
12.	Hydraulics And Pneumatics	EXCLUSIVE USE	83.86%	Y	67
13.	Workshop	EXCLUSIVE USE	85.53%	Y	1010
14.	Strength Of Machines Lab	EXCLUSIVE USE	84.86%	Y	78
15.	Cad Lab-I	EXCLUSIVE USE	81.53%	Y	67
16.	Cad Lab-II	EXCLUSIVE USE	88.86%	Y	50
17.	Cad Lab-III	EXCLUSIVE USE	86.73%	Y	68
18.	Cad Lab-IV	EXCLUSIVE USE	85.53%	Y	68

31. Whether students get financial assistance from college, university, government or other agencies

UG Program	Categories	2015-16		2014-15		2013-14		2012-13	
		M	F	M	F	M	F	M	F
Mechanical	SC	100	17	32	4	38	8	34	2
	ST	28	17	5	0	15	1	10	1
	GENERAL	104	34	50	18	58	18	55	16
	OBC	72	112	35	12	69	8	52	5
	OTHERS	33	1	33	13	39	6	38	7

32. Details of student enrichment programmes (special lectures / workshops / seminar) with external experts

Sr. No	Title	Resource Person Details	Category	Date From	Date To	No. of Participants
1.	Noise Vibration and Harshness	Sandeep Burali Analyst John Deere, Pune	Expert Lecture	19/03/2016	19/03/2016	110
2.	Recent trends in engineering metallurgy	Dr. Balasubramanian	Expert Lecture	17/03/2016	17/03/2016	53
3.	Personality Skill Development	Mr. Rajesh Chavan, President JivanSanjivani	Expert Lecture	15/03/2016	15/03/2016	58
4.	Lecture on CAE	Mr. Apoorv Bapat, Founder, ELEATION Academy	Expert Lecture	11/03/2016	11/03/2016	30
5.	Fundamentals of CFD	Nikhil Tamhankar, CAE Engineer Equilibrium Solutions pvt. ltd		07/03/2016	07/03/2016	56
6.	GATE Exam	Mr. Paresh.S.Gugale, I2E Imperial Institute of Excellence	Expert Lecture	15/02/2016	15/02/2016	51
7.	Study in Abroad	Mr.Samudranil Chatterjee	Expert Lecture	05/02/2016	05/02/2016	117
8.	Mr. Kiran	Mr. Kiran Lalsangi	Expert	04/02/2016	04/02/2016	127

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Sr. No	Title	Resource Person Details	Category	Date From	Date To	No. of Participants
	Lalsangi	Director 11Dot Cadtech. Pune	Lecture			
9.	Olympiad Project Management	Mr. Manoj Waghmare	Expert Lecture	20/01/2016	20/01/2016	
10.	Opportunities for higher Education Abroad	Saima Dalwai	Expert Lecture	28/07/2015	28/07/2015	63
11.	Gate Exam	Jay Bhosale, Business Development ManagerI.C.E Gate Institute	Expert Lecture	23/07/2015	23/07/2015	78
12.	Guest Lecture on Hydraulics & Pneumatics	Mr.NiteenKardekar, Consultant & Designers HYDROCAD	Expert Lecture	09/07/2015	14/07/2015	83
13.	Guest lecture on PLM	Mr. Yashpal Bhoi, Application Engineer SIEMENS PLM (3M Software Solution)	Expert Lecture	07/07/2015	07/07/2015	73
14.	Importance of Drawing Reading	Mr. Kiran Lalsangi, Director, 11Dot Cadtech.	Expert Lecture	10/01/2015	10/01/2015	55
15.	GATE	Mr. Rakesh Ready VANI Institute	Expert Lecture	20/12/2014	20/12/2014	67
16.	GATE	Mr. Swanand Kulkarni, Career Counseling Manager, GATE Coaching	Expert Lecture	09/09/2014	09/09/2014	75
17.	Guest lecture on MQC Subject	Dr.D.G.Thakur Associate Prof DIAT Pune	Expert Lecture	23/07/2014	23/07/2014	63
18.	Opportunities for admission in MS	Mr. Dyanand Hirenath, Marketing Manager, The Chopras Shaping Lives & Careeres	Expert Lecture	11/08/2014	11/08/2014	57
19.	Orientation	Mr. Vishwas	Expert	02/08/2014	02/08/2014	55

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Sr. No	Title	Resource Person Details	Category	Date From	Date To	No. of Participants
	program for FE	Kajrekar. Former General Manager and Consultant, Divgi Warner pvt.ltd	Lecture			
20.	Orientation program for SE	Mr. Ajinkya Huddar Managing Director Pelf Infotech, pvt.ltd	Expert Lecture	05/07/2014	05/07/2014	65
21.	Hydraulics & Pneumatics	Mr. Vinod Bandge Manager, Global Supply Chain, Rexnord India Pvt. Ltd	Expert Lecture	21/06/2014	21/06/2014	109
22.	MATLAB & SIMULATION	Mr. R.B.Dhumale, SPARC Pune	Expert Lecture	17/03/2014	17/03/2014	51
23.	Fundamentals of Computational Fluid Dynamics	Mr. Swapnil Wadkar Asst. Prof MITCOE Pune	Expert Lecture	20/02/2014	20/02/2014	85
24.	Orientation program for SE	Mr. Rajesh Adhyapak, General Manager-Technical, Pelf Infotech pvt. ltd	Expert Lecture	20/02/2014	20/02/2014	73
25.	Fundamentals of Computational Fluid Dynamics	Dr.C.M.Sewatkar Associate Prof COEP, Pune	Expert Lecture	27/01/2014	27/01/2014	71
26.	MATLAB & SIMULINK	Mr. S.P Deshmukh SPARC Pune	Expert Lecture	12/01/2014	12/01/2014	63
27.	Hydraulics and Pneumatics	Mr. Vinod Bandge, Global Supply Chain, Rexnord India Pvt. Ltd	Expert Lecture	19/09/2013	19/09/2013	69
28.	Business English Certificate Course	Mr. Sanket Kurdukar SILC, Karve Road, pune	Expert Lecture	08/07/2013	08/07/2013	109
29.	Guidelines of Provision for Analysis and	Dr. N. Nalawade Director, Perfect Consultant	Expert Lecture	08/04/2013	08/04/2013	55

Sr. No	Title	Resource Person Details	Category	Date From	Date To	No. of Participants
	evaluation of vibration with various signal processing methods.					
30.	Certification of new and rebuilt equipment using Industrial Vibration Standard	Dr. Suhas P. Deshmukh PG Co-ordinator, SAE Kondhwa.	Expert Lecture	23/03/2013	23/03/2013	47
31.	Awareness of FFT and DWT Techniques in Investigations on Undetected Problms.	Dr. Deepak W.Pande Dean R&D College of Engg. Pune	Expert Lecture	04/02/2013	04/02/2013	55
32.	Thermal Analysis of Friction Welding	Dr. M.J.Thakur Professor, GCOEP	Expert Lecture	10/09/2012	10/09/2012	52
33.	Techniques of Friction Welding	Mr. Yatin Tambe Friction Welding Technology, Pvt. ltd	Expert Lecture	25/08/2012	25/08/2012	43
34.	Guidelines of Mathematics in CFD	Dr. A.T.Pise Professor, GCOE Karad	Expert Lecture	16/03/2012	16/03/2012	45
35.	Guidelines of Provision for Analysis and evaluation of vibration with various signal processing method	Dr. N. Nalawade, Director, Perfect Consultant	Expert Lecture	04/09/2013	04/09/2013	46

33. Teaching methods adopted to improve student learning

- Use of Power point presentation techniques.
- We use video lectures for different subjects, for more thorough understanding of concepts.
- Providing on-line study material to the students.
- Incorporated Teacher Guardian scheme to focus on each student & solve their problem individually regarding teaching learning process.

- Semester exams have been kept for the students to make them study regularly.
- Every month attendance report & Mid-term / end term exam marks are sent to the parents of the students. So that parents get aware about the progress of the students, & if required s we call the parents in critical issue. This helps to solve the problems related to teaching learning process.

34. Participation of students and faculty in Institutional Social Responsibility Activity

Sr. No.	Activity	Venue of the event	Date of Activity	No of students participants
2	Cleaning of Shivajinagar Bus Depot by students on 2nd October on account of Gandhi Jayanti	MESA	02/10/2015	50
3	Blood Donation	SKNCOE	10/03/2014	50
4	Tree Plantation on account of Teachers Day	MESA	09/02/2013	50
5	Blood Donation on account of Prof. M.N. Navale sir's birthday	SKNCOE	05/09/2012	50
6	Lecture by Mr. Dipen Ambalika author of 3 National Best sellers	SKNCOE	03/01/2012	100

35. SWOC Analysis & Future Plan

STRENGTHS:
The Mechanical Engineering Department is well recognized for its excellence in technological education and research with the following main attributes:

1. Futuristic visionary management to help achieve excellence in technical education.

2. An exceptionally dedicated and well trained faculty and committed staff that have a keen interest in the future of the Department.

3. An excellent, diverse and intelligent student body willing to acquire basic as well as advanced knowledge.

4. Progressive employers consistently interacting with the school to facilitate project and in-plant training exercises and thence help achieve excellent placement records.

5. Ongoing research in emerging areas of science and technology helping to shape the policies to meet up global challenges in technology.

6. Strong liaison with Industry.

7. Advisory board comprising of elite Industry and educational experts.

8. Having a good Infrastructure, classroom, well Equipped Lab.

WEAKNESS:

1. Lack of R & D and consultancy work
2. Number of faculties with PhD qualification

OPPORTUNITY:

1. There is an opportunity to increase the communication with other universities.
2. Due to nearby industrial area there is an opportunity to have interaction among student and industry.
3. More training and research opportunities are available.

CHALLENGES:

Though Mechanical Engineering Department has multidimensional strength, it must develop competencies in the following:

1. Sustained landmark contributions through a well regulated teaching learning process and research for solving real life problems.
2. Ensuring that the students are the main beneficiaries from the Department's teaching and research programme's.
3. Encourage graduates to think multi-dimensionally.
4. Develop competencies to establish advanced research facilities using low cost technologies. Strengthen our capabilities by undertaking challenging industrial projects.
5. To develop Centres of Excellence in Emerging Technologies.
6. Face future challenges of developing green and sustainable technologies.

Future Plans: - The Department has Very good lab facilities & Software for UG. We are planning to have following

1. To Establish Centre of Excellence
2. To Establish Research Center
3. MOU with R. & D Institutes

Future Plan:

To further intensify the Activities to reach every student of this College from the very First Year and securing a bright future and Career pathways for 100% of Students.

1. To initiate new Techniques in developing the students to face modern methods of Personality Tests and Interviews.
2. To further upgrade the Quality of Guest lecturers on current Topics and Emerging Trends, so as to prepare our Students as Entrepreneurs and Professionals for the Global Market.
3. To make the Department vibrant and a Hub for 'Entrepreneurship' and 'Placement'.
4. To contribute to the growth of the Institution as an eminent 'Resource Centre for providing True- Professionals' and thus meet the expectations of the Industries at International Level.

6.5 Department of Engineering Sciences

1. Name of the department: **Engineering Sciences**

2. Year of Establishment :**2001-02**

3. Names of Programmers / Courses offered – UG

Name of Program	Year of Establishment
UG	2001

4. Names of Interdisciplinary courses and the departments/units involved-

Sr. No.	Interdisciplinary courses	Department involved
1	Engineering Mathematics – III	Computer Engineering, Information Technology, Electronics & Telecommunication Engineering, Mechanical Engineering
2	Basic Electronics Engineering	E & TC
3	Fundamentals of Programming Languages - I	Comp, IT
4	Fundamentals of Programming Languages - II	Comp, IT
5	Engineering Graphics - I	Mech
6	Engineering Graphics – II	Mech
7	Basic Mechanical Engineering	Mech

5. Annual/ semester/choice based credit system (programme wise)-

   UG: FE-Semester credit system

6. Participation of the department in the courses offered by other departments-**Basic Sciences Departments.**

Sr. No.	Class	Courses	Departments Involved
1	SE	M-III	Computer Engineering

2	SE	M-III	IT
3	SE	M-III	E & TC
4	SE	M-III	Mechanical Engineering
5	SE	EEE	Mechanical Engineering
6	ME	Advanced Mathematics	ME (E & TC)

7. **Courses in collaboration with other universities, industries, foreign institutions-**

Sr. No.	Name of the Course	Academic Year	No. of Student	Name of Collaboration
1.	Microsoft Training	2014-15	145	Microsoft IT Academy Partner

8. **Details of courses/programmes discontinued (if any) with reasons-NIL**
9. **Number of Teaching posts**

Teaching Post	Sanctioned	Filled
Professors	07	00
Associate Professors	16	00
Asst. Professors	49	57

10. **Faculty profile with name, qualifications, designation, specialization, (D.Sc/ D.Litt/ Ph.D/ MPhil/PG. etc.)**

Sr. No	Name of Faculty	Qualification	Designation	Experience
1	Mrs. A. J. Kulkarni	M.Sc.	Asst. Prof.	27
2	Dr. Mrs.S. G. Wagholikar	M.Sc., SET, Ph.D., Post Doctorate.	Asst. Prof.	17
3	Mr.R. B. Jadhav	M.Sc., M. Phill, Pursing Ph.D	Asst. Prof.	14
4	Mr.A. N. Deshpande	M.Sc.	Asst. Prof.	11

5	Mr. S. S. Musale	M.Sc. Pursuing Ph.D.	Asst. Prof.	5
6	Mr. A. N. Purude	M.Sc.	Asst. Prof.	3.7
7	Mr. P. B. Kalekar	M.Sc.	Asst. Prof.	3.7
8	Mrs. R. A. Chourasia	M.Sc.	Asst. Prof.	3.7
9	Ms. Y. S. Bhachawat	M.Sc.	Asst. Prof.	0.4
10	Ms. K. S. Mali	M.Sc.	Asst. Prof.	7
11	Dr. S. D. Kate	M.Sc.	Asst. Prof.	4
12	Mrs. R.S. Mane	M.Sc.	Asst. Prof.	7
13	Mrs. A.F. Khan	M.Sc.	Asst. Prof.	8
14	Ms. S. A. Sawant	M.Sc Pursuing Ph. D	Asst. Prof.	24
15	Mr. D. A. Anarase	M. Sc	Asst. Prof.	6
16	Mr. G. M. Patil	M.Sc	Asst. Prof.	15
17	Mrs. V. P. Deshmukh	M.Sc	Asst. Prof.	3.7
18	Mrs. S. A. Khadakkar	M.Sc	Asst. Prof.	3.7
19	Ms. K. P. Kalhapure	M.Sc	Asst. Prof.	11
20	Ms. A. R. Pathade	M.Sc	Asst. Prof.	9
21	Ms. S. B. Kale	M.Sc	Asst. Prof.	1
22	Mrs. D. B. Gaikwad	M.Sc	Asst. Prof.	0.3
23	Mrs.A. M. Pendse	M.Sc. M. Phill	Asst. Prof.	18
24	Mr. H. R. Bhapkar	M.Sc. SET, Pursuing Ph. D	Asst. Prof.	13
25	Mr. G. R. Gandal	M.Sc.	Asst. Prof.	10
26	Mr.S. P. Bhilare	M.Sc. NET, Pursuing Ph.D	Asst. Prof.	10
27	Mr. M. L. Borse	M.Sc. SET	Asst. Prof.	5

28	Mr. B. S. Murkute	M.Sc.	Asst. Prof.	2.8
29	Ms. R. J. Kajale	M.Sc.	Asst. Prof.	0.2
30	Mr. G. S. Kadu	M.Sc. NET SET	Asst. Prof.	2.8
31	Mrs. P. K. Ambaji	M.Sc.	Asst. Prof.	0.8
32	Mrs. M. B. Gole	M.Sc.	Asst. Prof.	3.8
33	Mrs. B. Y. Bhattu	M.Sc.	Asst. Prof.	3.8
34	Mrs. J. S. Nale	M.Sc.	Asst. Prof.	3.8
35	Mr. V.S. Potdar	M.Sc.	Asst. Prof.	0.8
36	Mrs. M. P. Futane	M.E. Civil	Asst. Prof.	9
37	Mr. A. M. Holi	M. Tech Civil	Asst. Prof.	5
38	Ms. N. B. Patil	ME Civil	Asst. Prof.	3.8
39	Mr. S. D. Kurhade	ME Civil	Asst. Prof.	2.8
40	Mr. A. A. Kamble	M. Tech Civil	Asst. Prof.	2.2
41	Mr. K. R. Karambelkar	ME Civil	Asst. Prof.	1.7
42	Mr. A. R. Bansode	ME Civil	Asst. Prof.	3.8
43	Mr. U. T. Kulkarni	M. Tech Civil	Asst. Prof.	0.9
44	Mr.V. V. Sangamnerkar	B.E. Electrical	Asst. Prof.	28
45	Mr. M. S. Alandkar	ME Electrical	Asst. Prof.	13
46	Mrs. S. A. Phalke	ME Electrical	Asst. Prof.	5
47	Mrs. Y. V. Dhotre	ME Electrical	Asst. Prof.	3
48	Prof. Ms. K. H. Nanal	ME Electrical	Asst. Prof.	13.7
49	Mr. S. V. Mahajan	Pursuing ME	Asst. Prof.	0.7
50	Ms. S. S. Pulkurte	Pursuing ME	Asst. Prof.	0.8
51	Ms. S. L. Tupe	Pursuing ME	Asst. Prof.	7

52	Ms. G. A. Dhumal	Pursuing ME	Asst. Prof.	0.3
53	Mr. A. H. Mhasatkar	Pursuing ME	Asst. Prof.	0.3
54	Ms. R.R. Vibhute	Pursuing ME	Asst. Prof.	0.8
55	Ms. N. V. Mahajan	ME	Asst. Prof.	0.6
56	Mr. A. C. Dabre	Pursuing ME	Asst. Prof.	0.6
57	Ms. K. D. Gidwani	Pursuing ME	Asst. Prof.	15

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)

Sr. No	Programme	Specilization	Teacher – Student Ratio			
			2015-16	2014-15	2013-14	2012-13
1	Engineering Sciences	Engineering Sciences	18.94:1	17.42:1	18:1	15:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Supporting Staff	Sanctioned	Filled
Number of academic support staff (Tech. Staff)	--	03

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG

Qualification	No. of Teaching Faculty
Ph.D. Completed	01
Ph. D. Registered	06

M.E. / M. Tech. Completed	08
M. Phil. / M. Sc.	48

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 :

Sr. No.	Name of the Research Project	Name of Principal Investigator	Funding Agency	Amount (Rs)	Duration of Project
1	Adsorptive regeneration of heavy metals via nanoparticles and its reuse as a chemical vapour/gas sensor	Prof. Mrs. A. J. Kulkarni	BCUD University of Pune	Rs. 2,00,000	2011-2013 2 years
2	Layered Double Hydroxides as catalysts in Biodiesel Synthesis	Dr. Mrs. S. G. Wagholikar	BCUD University of Pune	Rs. 1,85,000	2011-2013 2 years
3	Rainfall-Runoff analysis using Nearofuzzy Inference system	Prof. Mrs. A. M. Pendse	BCUD University of Pune	Rs. 1,35,000	2011-2013 2 years

18. Research Centre /facility recognized by the University- NIL

19. Publications: A) Paper Publications:

Sr. No.	Name of the faculty	No. of Papers published in peer reviewed	No. of Publications listed in International DB	Chapter in book	Books with ISBN in international DB	Citation Index
1	Dr.S.G. Wagholikar	12	12	-	-	-
2	Prof H.R. Bhapkar	9	9	3	42	38
3	Prof. A.J. Kulkarni	1		3	3	
4	Prof. R.B. Jadhav	1		3	1	1
5	Prof .A.M. Pendse	1		3	2	
6	Prof. A.N. Deshpande	1				
7	Prof. S.S. Musale	1				
8	Prof. S.A. Sawant	5		2	5	5
9	Prof .N.B. Patil	2				
10	Prof. S. D. Kurhade	1				
11	Prof S. A. Phalke	2				
12	Prof. S. P. Bhilare				1	1

20. Areas of consultancy and income generated –NIL

21. Faculty as members in
   b) **National committees b) International Committees c) Editorial Boards**
   d) **National committees :-**

Sr. No.	Name of Faculty Member	Name of Committee

1	Mr. M. S. Alandkar	Indian Society for Technical Education
2	Mrs. A. J. Kulkarni	Indian Society for Technical Education
3	Dr. Mrs. S. G. Wagholikar	Indian Society for Technical Education
4	Mrs. S. A. Sawant	Indian Society for Technical Education
5	Mrs. A. M. Pendse	Indian Society for Technical Education
6	Mrs. M. P. Futane	Indian Society for Technical Education

e) International Committee:-NIL

f) Editorial Boards : NIL

22. Student projects : NA
   d) Percentage of students who have done in-house projects including inter departmental/programme

Academic Year	No. of In house Projects	Students In House Projects	Total No. of Students	Percentage of students who have done in-house projects

e) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies : **NA**

Academic Year	No. of In house Projects	Students Sponsor Projects	Total No. of Students	Percentage of students who have done Sponsor projects

   f) Internship Attended By Students : NIL

g) Courses Completed by Students :

Sr. No.	Name of Course	No. of students	Period
1	Microsoft Training	147	40 Hrs

23. Awards/ Recognitions received by faculty and students.
Awards/ Recognitions received by Faculties:

Sr. No.	Name of Faculty Member	Year of Achievement	Achivement	Place/ College of Event
1	Mrs. A.M. Pendse	1994	Gold Medal in Mathematics (B.Sc.) SPPU	Pune
2	Prof. G.S.Kadu	2013-14	Gold Medal in Mathematics (M.Sc.) SPPU	Pune

C. Awards/ Recognitions received by Students:

Sr. No.	Year	Activity	National / State/ University level No. of Prizes won
1	2015-16	Paper Presentation University level	won 1st prize in paper presentation in mech group Walchand College of Engg. Sangli
2	2015-16	Aqua Robotics University level	1 st prize Aqua Robotics Walchand College of Engg. Sangli
3	2015-16	IIT Indore for Robo Race National	3rd prize in IIT Indore for Robo Race.
4	2015-16	Firodiya Karandak University level	2nd prize in classical dance, Firodiya Karandak
5	2014-15	NKFI open international karate &	Gold medal

		kickboxing championship – 2015	
6	2014-15	NKFI open international karate & kickboxing 3championship - 2015	Gold medal
7	2014-15	State Level Swimming Competition	Gold medals
8	2014-15	State Level Swimming Competition	3 Gold medals
9	2014-15	TECHKRITI University level	4th prize
10	2014-15	VISION 2K15 University level	First Year Engineering student concile won overall championship
11	2014-15	Technical Event PVG. University level	1st prize
12	2013-14	Robotics Pick N Place University level	Runner Up
13	2013-14	PCCOE Technical Symposium University level	2nd Price Winner
14	2013-14	Brihaan Maharashtra College of Commerce (BMCC) University level	rapid chess title
15	2012-13	Shashtra2013 IIT Madras Robolagori	Participated
16	2012-13	Tantrotsav 2K13 Topic-4G Technology University level	Participated
17	2012-13	Vision 2013/ Topic- Global	Participated

		positioning systems University level	
18	2012-13	Vision 2013 Project Presentation University level	1st rank
19	2012-13	Vision 2013 University level	
20	2012-13	Sandip Foundation COE, Nashik, University level	2nd Price

24. List of eminent academicians and scientists/ visitors to the Department : NIL

25. Seminars/ Conferences/Workshops organized & the source of funding
I-Conference : NIL

II-Internship Programs : NA

III. Workshops & Seminars : NIL

IV) Faculty Development Programme : NIL

26. Student profile Programme/Course wise :

Name of the Course / Programme	Academic Year (Graduation)	Application received	Selected	Enrolled	
				*M	*F
First Year	2015-16	1126	1126	857	269
	2014-15	1124	1124	830	296
	2013-14	1122	1122	825	284
	2012-13	897	897	667	230

27. Diversity of Students:

Name of the Course	Academic Year	% of students from the same state	% of students from other States	% of students from abroad
FE	2012-2013	83.52	16.48	NIL
FE	2013-2014	87.52	12.48	NIL
FE	2014-2015	82.87	17.13	NIL
FE	2015-2016	83.79	16.21	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 : NIL

30. Details of Infrastructural facilities
    d) Library

Particulars	Titles	Volumes
Books		
U.G.	321	2085
P.G		
Online Journal		
IEEE Online	193	
Science Direct	275	
Printed Journal		
Printed Journal U. G.	01	-
Printed Journal P. G.	NA	-

  e) **Internet facilities for Staff & Students:** 64 Mbps Lease Line

  f) **Class rooms with ICT facility :**

Room Description	Usage	Shared/Exclusive	Capacity	Room Equipped With
Class Rooms (15)	100%	Exclusive	65 Each	LCD Projector (11)
Computer Lab. (3)	100%	Exclusive	2 lab(64each) 1 lab (32)	LCD Projector (03)

h) **Laboratories:**

Sr. No.	Name of Laboratory	Exclusive Use / Shared	Number of Experiments	Laboratory Manuals
1	Computer Centre –I	Exclusive	8	YES
2	Computer Centre-II	Exclusive	8	YES
3	Computer Centre-III	Exclusive	8	YES
4	Basic Electrical Engineering Lab I	Exclusive	8	YES
5	Basic Electrical Engineering Lab II	Exclusive	8	YES
6	Basic Civil and Environmental Engg. Lab I	Exclusive	8	YES
7	Basic Civil and Environmental Engg. Lab II	Exclusive	8	YES
8	Physics Lab I	Exclusive	8	YES
9	Physics Lab II	Exclusive	8	YES
10	Chemistry Lab I	Exclusive	8	YES

11	Chemistry Lab II	Exclusive	8	YES
12	Basic Electronics Lab I	Exclusive	8	YES
13	Basic Electronics Lab II	Exclusive	8	YES
14	BME Lab I	Exclusive	8	YES
15	BME Lab II	Exclusive	8	YES

31. Whether students get financial assistance from college, university, government or other agencies.

Sr. No.	Type of Assistance	Agency Providing Financial Assistance	Academic Year			
			2011-12	**2012-13**	**2013-14**	**2014-15**
1	GOI PM Scholarship	Social Welfare Dept. & Tribal Development Department	348	688	441	497
2	GOI PM Freeship		-	-	-	-
3	EBC Concession	Joint Director of Technical Education	58	52	59	66
4	Minority Scholarship	Department of Minority Welfare	-	5	3	3
5	Central Sector Scholarship	Joint Director of higher Education	27	23	13	48
6	STC/PTC	Zilha Parishad	11	15	18	14
7	J & K Spacial Scholarship	AICTE	-	1	2	1
8	Private Scholarship	Trust, NGO, Companies etc	-	-	-	-

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts : NIL

Academi c Year	Sr. No	Topic Name/Category	Resource Person/organize d by	Designation	Year

33. Teaching methods adopted to improve student learning

- Use of Power point presentation techniques.
- We use video lectures for different subjects, for more thorough understanding of concepts.
- Providing on-line study material to the students.
- Incorporated Teacher Guardian scheme to focus on each student & solve their problem individually regarding teaching learning process.
- Semester exams have been kept for the students to make them study regularly.
- Every month attendance report & Mid-term / end term exam marks are sent to the parents of the students. So that parents get aware about the progress of the students, & if required s we call the parents in critical issue. This helps to solve the problems related to teaching learning process.

34. Participation of students and faculty in Institutional Social Responsibility Activity
1. Food distribution to poor people, every year.
2. Donation of used drawing sheets to blind school
3. Donation of new clothes to old peoples of Matoshri Vrudhashram.

35. SWOC Analysis & Future Plan
STRENGTHS:
1. Futuristic visionary management to help achieve excellence in technical education.
2. An exceptionally dedicated and well trained faculty and committed staff with effective team work culture that have a keen interest in the future of the Department
3. An excellent, diverse and intelligent student body willing to acquire basic as well as advanced knowledge.
4. Ongoing research in emerging areas of science and technology helping to shape the policies to meet up global challenges in technology.
5. Have a good Infrastructure, classroom, well Equipped Lab.
6. Disciplined and conducive learning environment.

WEAKNESS:
1. Number of faculty with Ph.D. qualification
2. Lack of consultancy work

OPPORTUNITY:
- Strong Support from the Institute
- Sufficient funding for attending FDPs/STTPs
- Support for organizing Conferences/ Workshops Challenges
- Competitiveness

CHALLENGES:
2. Sustained landmark contributions through a well regulated teaching learning process and research for solving real life problems.

2. Ensuring that the students are the main beneficiaries from the Department's teaching and research programme's.

3. Encourage under-graduates to think multi-dimensionally.

4. Develop competencies to establish advanced research facilities using low cost technologies. Strengthen our capabilities by undertaking challenging industrial projects.

5. To develop Centres of Excellence in Emerging Technologies.

6. Face future challenges of developing green and sustainable technologies.

Future Plans: - The Department has Very good lab facilities & Software for UG. We are planning to have following

- Planning to apply for major/minor research projects to research and government institute like DRDO, DST, AICTE.
- To offer consultancy services.
- To enhance R&D activities.

6.6 Department of Master of Business Adminstration

1.   **Name of the department: Department of Master of Business Administration**

2.   **Year of Establishment: 2008-09**

3.   **Names of   Programmes / Courses offered PG**

Courses offered	Name of the course	Specialization
P.G.	M.B.A.	1) Marketing Management 2) Financial Management 3) Information Technology Management 4) Operations Management 5) Human Resource Management 6) International Business Management 7) Supply Chain Management 8) Rural and Agri - Business Management 9) Family Business Management and 10) Technology Management.

4.   **Names of Interdisciplinary courses and the departments/units involved**

Sr. No.	Interdisciplinary courses	Department involved
NA	NA	NA

5.   **Annual/ semester/choice based credit system (programme wise)**

   PG: Semester based credit System. Second Year students can select any elective subjects depending on his or her own interest from of the list of the offered electives by the SPPU.

6.   **Participation of the department in the courses offered by other departments**

Sr. No.	Courses	Offered to Department
1	NA	NA

7.   **Courses in collaboration with other universities, industries, foreign institutions, etc.**

Sr. No.	Name of the Course	Academic Year	Name of Collaboration
1.	Certification in Payroll	2014 – 2015	NAIP

2.	Certification in Securities Market	2015 – 2016	NISM

8.   Details of courses/programmes discontinued (if any) with reasons: NIL

9.   Number of teaching posts:

Teaching Posts	Sanctioned	Filled
Professors	01	01
Associate Professors	02	00
Asst. Professors	05	06

10.   Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M.Phil. etc,)

Sr. No.	Name of Faculty	Qualification	Designation	Experience
1	Dr. M. R.Shaikh	B.Sc. MBA Ph.D	H.O.D & Prof.	14
2	Ms. S. A. Navale	B.E. E&Tc MBA Pursuing Ph.D.	Asst. Prof.	6.8
3	Mrs. H. A. Gandhi	B.Tech. Electrical MMS Pursuing Ph.D.	Asst. Prof.	6.8
4	Mr. B. V. Raigonkar	M.Com MBA	Asst. Prof.	5.8
5	Mr. S. L. Charkha	M. Com MBA	Asst. Prof.	2.6
6	Ms. K. S. Borgave	B.Sc MPM	Asst. Prof.	1.3
7	Ms. S. S. Deodhar	Pursuing ME	Asst. Prof.	0.4

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):

SR. No.	Programme	Specialization	Teacher- Student Ratio			
			2015-16	2014-15	2013-14	2012-13
1	Management	Management	17.14:1	17.1:1	15:1	15:1

14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled**

Academic Support Staff	Sanctioned	Filled
No. of Academic Support Staff (Technical)	01	01
No. of Administrative staff	00	00

15. **Qualifications of teaching faculty with D.Sc/ D.Litt/ Ph.D/ MPhil / PG.**

Sr No	Qualification	No. of teaching faculty
1	Ph.D.Completed	1
2	Ph.D.Registered	2
3	MBA Completed	5
4	M.Phil	1

16. **Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:**

Sr. No.	Name of research Project	Funding Agency	Name of the principal Investigator/ Coordinator	Period for Project	Grant Sanctioned/ Received
1	Identification of skill gap among management graduates	BCUD	Dr.M.R.Shaikh	2015-17 2 Years	80000

17. **Departmental projects funded by DST-FIST, UGC, DBT ,ICSSR, etc. and total grant received:**

Sr. No.	Name of research Project	Funding Agency	Name of the principal Investigator/ Coordinator	Period for Project	Grant Sanctioned/ Received
1	Study of Trade Unions in Pune City	ICSSR	Dr.M.R.Shaikh	2013-15 2 Years	50000
2	Stress Management among Female Candidates in	BCUD	Mrs.S.A.Navale Dr.M.R.Shaikh	2012-14 2 Years	80000

3	Pune City				
	HRD in Basic Sciences	BCUD	Dr.M.R.Shaikh	2009-11 2 Years	50000/-

18.   **Research Centre /facility recognized by the University: NIL**

19.   **Publications:**

Sr. no	faculty Name	No of papers published by in peer reviewed journals	no of publications listed in international DB	chapters in books	Books edited	Books with ISBN/ISSN in international DB	citation index	Impact factor	H –index Average
1	Dr.M.R .Shaikh	25	02	6	6	6	15	2.0	Nil

20. **Areas of consultancy and income generated: NIL**

21. **Faculty as members in**

c) **National committees b) International Committees c) Editorial Boards….**

Sr. No,	Name of Faculty	Members
1	Dr. M .R. Shaikh	Chief Editor, CMRD Journal of Management Research, Pune (2006-09)
2	Dr. M .R. Shaikh	Editorial board member of International Journal of Information, Business & Management, Bangladesh.
3	Dr. M .R. Shaikh	Editorial board member of Kaveripakkam College Journal of Management Research, Vellore, T.N
4	Dr. M .R. Shaikh	Editorial board member of ETHOS – a research journal of KBP institute of management studies and research, Satara
5	Dr. M .R. Shaikh	Reviewer, International Journal of Business Research and Management (IJBRM), published by CSC Journals, Kaulalumpur, Malaysia.
6	Dr. M .R. Shaikh	Reviewer for African Journal of Business Management, South Africa.
7	Dr. M .R. Shaikh	Reviewer of internationally indexed open access online journal Indian Journal of

		Commerce and Management Studies, Malegaon
8	Dr. M .R. Shaikh	Member academic advisor committee of Poona institute of management sciences and entrepreneurship, Pune
9	Dr. M .R. Shaikh	Member syllabus committee for AICTE PGDM of Vishwakarma Global Business School, Pune
10	Dr. M .R. Shaikh	Member syllabus committee for AICTE PGDM of Jayawantrao Sawant Institute of Management and Research, Pune
11	Dr. M .R. Shaikh	Member syllabus committee for AICTE PGDM of Vishwakarma Global Business School, Pune
12	Dr. M .R. Shaikh	ISTD Life Member
13	Prof.S.A.Navale	ISTD Life Member
14	Prof.H.A.Gandhi	Indian Institute of Insurance ,Life Member

22. Student projects

   a) **Percentage of students who have done in-house projects including inter departmental/programme**

Sr. No	Project Year	No of In house Projects	% In-house Project
1	2012-13	60	100%
2	2013-14	60	100%
3	2014-15	58	100%
4	2015-16	53	100%

   b) **Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies**

Sr.No	Project Year	No of Groups	% Sponsored Project
1	2012-13	04	07.57%
2	2013-14	03	05.58%
3	2014-15	06	10.47%
4	2015-16	08	13.53%

23. Awards / Recognitions received by faculty and students

a) Faculty

Sr. No.	Name of Faculty	Year of achievement	Achievement/Recognition
1	Dr. M .R. Shaikh	2015-16	Session Chair for national level seminar on "Make In India" organised by Sinhgad Institute of Management, Pune on 18th February 2016.
2	Dr. M .R. Shaikh	2015-2016	Chief Guest for Inter collegiate Summer Internship Project competition organised by Sankalp Business School, Pune on 3rd October 2015.
3	Dr. M .R. Shaikh	2014-2015	Guest of Honour and judge for ORBIT - Summer Internship Project competition organised by Pravara Centre for Management Research & Development l, Pune on 6th October 2015
4	Dr. M .R. Shaikh	2014-2015	Judge for University level Research paper presentation organised by Department of Commerce & Research Centre, University of Pune on 24th March 2015.
5	Dr. M .R. Shaikh	2014-2015	Judge for "Present Around the World –PATW" presentation competition organised by The Institution of Engineering & Technology (IET),UK, Pune Chapter, Pune 8th March 2015.
6	Dr. M .R. Shaikh	2014-2015	Judge for Compsearch Inter collegiate Logo & Tagline competition organised by Department of Commerce & Research centre, Savitribai Phule Pune University, Pune on 6th February 2015.

7	Dr. M .R. Shaikh	2013-2014	Judge for *"Sanshodhan-Research competition"* organised by NBN School of management ,Ambegaon held on 7th November 2014
8	Dr. M .R. Shaikh	2013-2014	Guest of honour at the valedictory function of "Entrepreneurship Week" organised by Poona Institute, Pune, 23rd February 2013.
9	Dr. M .R. Shaikh	2012-2013	Judge & subject expert in management for evaluation of research projects at University level research festival "Avishkar-2012" at North Maharashtra University, Jalgaon, 13th &14th December 2012
10	Dr. M .R. Shaikh	2012-2013	Judge for case study competition during national conference on Strategic Management for Global Competitiveness organised by Department of Management Studies Sinhgad College of Engineering, Pune on 25th February 2012
11	Prof.Sanket L.Charkha	2015-2016	Awarded SET Certified from SPPU, Pune

d) **Students**

Sr. No.	Year	Activity	National/State/University Level No.of Prizes won
1	2014-2015	Run to Balance Event under Sinhgad Spectrum	Organizer and Participation
2	2014-2015	Chill Zone – under Sinhgad Spectrum	Organizer and Participation
3	2014-2015	B-Plan Competition	2nd prize
4	2014-2015	Avishkar – Poster Competition	Participation & 2nd Prize
5	2014-2015	Kaun Banega MP – Mock Elections	Participation
6	2014-2015	Blood Donation Drive – RMD Foundation	Participation
7	2013-2014	Conversation -2014 –	Participation

8	2013-2014	Dr.Vitthal Kamat , Mrs Chanchalatai Kodre , Mayor , PMC.	
8	2013-2014	Webinar – 2014 – by Ms Rita McGrath – STES.	Participation
9	2013-2014	TROIKA – BMCC , 2014 – Treasure hunt.	Participation
10	2013-2014	Manthan – 2014, MIT COE – Street Bazaar	Participation
11	2013-2014	Imperium – MITSOB , B Plan Competition	3rd Prize
12	2013-2014	Imperium – MITSOB , B Plan Competition	Participation
13	2013-2014	Battle Intellect 2013 , B Plan Competition	Participation
14	2013-2014	Shark Tank – Sinhgad Karandak (B Plan)	Participation
15	2013-2014	100 Rs Entrepreneur-Business Plan Sinhgad Karandak	Participation
16	2012-2013	OPEX – SIOM (A case study competition)	Participation
17	2012-2013	Dance Performance – Sinhgad Karandak	Participation
18	2012-2013	Dhruv – Chess Competition	Semi Finals
19	2012-2013	Dhruv – Chess Competition	Final Round
20	2012-2013	Entrepreneurial Week	Participation

24.   List of eminent academicians and scientists / visitors to the department

Sr. No	Name of the academician/Scientist/Visitors	Name of the Organization	Purpose of Visit
1.	Mr. Rajan Shrikhande	Advertising Professional, Model & Visiting Faculty at Mundra Institute of Communication, Ahmedabad	HBR Case Study Discussion with Real Scenario:The Saffola Journey
2	Mr. Ashish Gawde	CEO, Bottom of Pyramid Energy & Environmental Innovations Pvt. Ltd., Pune	HBR Case Study Discussion with Real Scenario: Biocon: Launching a New Cancer Drug in India
3	Mr. Shailendra Jha	CFO, Mathers & Platt, Pune	HBR Case Study Discu with Real Scenario: E

			Corporation-The Cost Capital
4	Mr. Shrikant Shirodkar	GM, Finance, Mathers & Platt, Pune	HBR Case Study Discussion with Real Scenario: New Heritage Doll Company
5	Mr. Hanif Shaikh	CFO, Talab Manufacturing Pvt. Ltd., Pune	HBR Case Study Discussion with Real Scenario: Lowe's Co. Inc.
6	Mr. Tayyab Shaikh	Ex-DGM, Personnel, Airport Authority of India, New Delhi	HBR Case Study Discussion with Real Scenario: Jet Airways (B): A Bumpy Landing
7	Mr. Shrikant Gholve	President, Thermax Employees' Union	HBR Case Study Discussion with Real Scenario: Jet Airways (B): A Bumpy Landing
8	Mr. Vinod Bidwai	Director-HR, DSM India Pvt. Ltd	HBR Case Study Discussion with Real Scenario: Blinds to Go Case
9	Mr. Gaikwad	GM-Operations, Cotton King, Pune	HBR Case Study Discussion with Real Scenario: Executive Shirt Co., Inc
10	Mr.Ashish Palande	CEO, Palande Couriers, Pune	HBR Case Study Discussion with Real Scenario: Scientific Glass Inc.
11	Mr. Rohit Kulkarni	Dy. Manager, The Indian Express	Expert Lecture
12	Mr. Tikam Shekhawat	1. Branch Manager of Central Bank of India	Expert Lecture
13	Mrs. Vaidya,	Sr.HR Manager, Magneti Marelli	Expert Lecture

14	Mr. Vinod Shastri	Master Trainer, National Entrepreneurship Network	Expert Lecture
15	Ms. Aarti Irani	Mall Manager Amanora Mall	Expert Lecture
16	Mr. Vishal Sukalikar,	Manager – Certifications, TUV Rhineland, Pune	Expert Lecture
17	Mr. Shrikant Shirodkar	General Manager – Finance Mather & Plant, Pune	Expert Lecture
18	Mr. Vinod Bidwaik	Business Analyst, Intercoms India Pvt. Ltd	Expert Lecture
19	Mr. Rohan Adhalakha	Director-HR DSM India Pvt. Ltd, Pune	Expert Lecture
20	Mr. Mateen Shaikh	Marketing Head, 1Mobility (India) Pvt. Ltd.	Expert Lecture
21	Mrs. Archana Bahulikar	Advertising Expert	Expert Lecture
22	Dr. Rajan Shrikhande	Manager, HR, Dharne Systems Pvt. Ltd	Expert Lecture
23	Mr. Harshad Bahulikar	Manager - Marketing & Business Development , KPIT Cummins (India) Ltd.	Expert Lecture
24	Ms. Priyanka Joshi	1. HR manager, Network Components Pvt. Ltd.	Expert Lecture

25.   Seminars/ Conferences/Workshops organized & the source of funding
a) Seminar

Sr. No.	Seminar	Date	National/International	Source of funding
1	Seminar How to choose your Specialization	28th February2	National	Self Sponsored

		013		
2	Seminar on Industrial Relations and Labour Laws	26 February 2015	National	Self Sponsored
3	Seminar on Corporate Communication and PR Practice	3rd March 2015	National	Self Sponsored
4	Seminar on Student centric Learning – UoP and SKNSSBM , Pune	14-15 February , 2014	National	Self Sponsored

b) Workshop

Sr. No.	Seminar	Date	National/International	Source of funding
1	workshop on Indian Capital Markets	2nd March 2013	National	Self Sponsored
2	Workshop on Business Simulations	4th to 6th July 2013	National	Self Sponsored
3	Workshop on Management of intellectual property through patents	26th September 2013	National	Self Sponsored
4	Awareness workshop on Intellectual Property	20th January 2014	National	Self Sponsored
5	faculty development programme (FDP) on "How to Write a Research Paper"	21st March 2013	National	Self Sponsored
6	Workshop Lean Practices in Supply Chain Management	21 February 2015	National	Self Sponsored
7	Workshop Labor practices and IR	26 February 2016	National	Self Sponsored
8	Workshop on A B C D of stock market	12 March 2016	National	Self Sponsored

c) Faculty Development Programs

Sr. No.	Faculty Development Program	Date	National/International	Source of funding
1	faculty development programme (FDP) on "How to Write a Research Paper"	21st March 2013	National	Self Sponsored

26. **Student profile programme/course wise:**

PG Course

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
2012-2013	65	61	43	18	79.31
2013-2014	68	61	43	18	79.2
2014-2015	52	52	29	23	91.3
2015-2016	66	61	37	24	82.75

*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 aborod
2012-2013	47.5	52.5	NIL
2013-2014	45.9	54.1	NIL
2014-2015	46.1	53.9	NIL
2015-2016	86.8	13.2	NIL

28. **How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?**

Exam	No. of students			
	2012-13	2013-14	2014-15	2015-16
GATE	NIL	NIL	NIL	NIL
Defense	NIL	NIL	NIL	NIL
CAT	NIL	NIL	NIL	NIL
SLET	NIL	NIL	NIL	NIL
MBA-CET	NIL	NIL	NIL	NIL
GRE	NIL	NIL	NIL	NIL
TOEFL	NIL	NIL	NIL	NIL

29.   Student progression

Student progression	Against % enrolled			
	2015-16	2014-15	2013-14	2012-13
UG to PG	NA	NA	NA	NA
PG to M. Phil.	00	00	00	00
PG to Ph.D.	0	0	0	0
Ph.D. to Post-Doctoral	0	0	0	0
Employed Campus selection	47.45	49.54	42.33	48.17
Employed Other than campus recruitment	9	12.45	5	15
Entrepreneurship/Self-employment	16			

30. Details of Infrastructural facilities
   a) Library :

Particulars	Titles	Volumes
Books		
U.G.	NA	NIL
P.G.	200	658
On Line Journal	NA	NA
Printed Journal U.G.	NA	NA
Printed Journal P.G.	15	45

   b) Internet facilities for Staff & Students
   Internet Line 64 Mbps dedicated for Computer Lab for staff and students

   Hardware Facility Details-

Sr.No	Description	Qty
1.	Server	0

2	Desktop Computers	5
3	Laptop	0
4	Laser Jet Printers	1
5	Dot matrix Printer	0
6	LCD Projectors	2
7	Scanners	1
8	OHP	0

c) Class rooms with ICT facility
Class Room Details:

Particulars	Room No	Available Areain Sq. Mtrs.	ICT Facilities
Class Room – 01	11	67.7	Projector, OHP, LAN Availability
Class Room – 02	26	67.7	Projector, OHP, LAN Availability
Total	02		

d) Laboratories

Sr. No.	Name of Laboratory	Available Area in Sq. Mtrs
1	Computer Lab	150

31. Number of students receiving financial assistance from college, university,government or other agencies

2014-15		
	Free ship	Minority
MBA	12	
2013-14		
	Free ship	Minority
MBA	10	
2012-13		
	Free ship	Minority
MBA	15	

32.   Details on student enrichment programmes (special lectures / workshops /seminar) with external experts

Sr. No	Name of the academician/Scientist/Visitors	Name of the Organization	Purpose of Visit
1.	Mr. Ashish Gawde	CEO, Bottom of Pyramid Energy & Environmental Innovations Pvt. Ltd., Pune	HBR Case Study Discussion with Real Scenario: Biocon: Launching a New Cancer Drug in India
2	Mr. Shailendra Jha	CFO, Mathers & Platt, Pune	HBR Case Study Discussion with Real Scenario: Encana Corporation-The Cost of Capital
3	Mr. Shrikant Shirodkar	GM, Finance, Mathers & Platt, Pune	HBR Case Study Discussion with Real Scenario: New Heritage Doll Company
4	Mr. Hanif Shaikh	CFO, Talab Manufacturing Pvt. Ltd., Pune	HBR Case Study Discussion with Real Scenario: Lowe's Co. Inc.
5	Mr. Tayyab Shaikh	Ex-DGM, Personnel, Airport Authority of India, New Delhi	HBR Case Study Discussion with Real Scenario: Jet Airways (B): A Bumpy Landing
6	Mr. Shrikant Gholve	President, Thermax Employees' Union	HBR Case Study Discussion with Real Scenario: Jet Airways (B): A Bumpy Landing
7	Mr. Vinod Bidwai	Director-HR, DSM India Pvt. Ltd	HBR Case Study Discussion with Real Scenario: Blinds to Go Case
8	Mr. Gaikwad	GM-Operations, Cotton King, Pune	HBR Case Study Discussion with Real Scenario: Executive Shirt Co., Inc
9	Mr.Ashish Palande	CEO, Palande Couriers, Pune	HBR Case Study Discussion with Real

			Scenario: Scientific Glass Inc.
10	Mr. Shrikant Shirodkar	General Manager – Finance Mather & Plant, Pune	Expert Lecture
11	Mr. Rohan Adhalakha	Director-HR DSM India Pvt. Ltd, Pune	Expert Lecture

33. Teaching methods adopted to improve student learning

1. Research based learning:

The focus while teaching is to deliver to the students what is factually right and recent. Thus the faulty adopts the method of research based teaching. Faculty refers to latest journals, articles and also participates in seminars to keep themselves updates with the latest developments in their respective fields of specialisation. Students are also expected to take up live projects where they acquire knowledge of working in industries.

2. Case Based Learning:
Students go through rigorous sessions of case study discussions. They discuss globally benchmarked cases in various management subjects in class after thoroughly studying them. The faculty conducts the session and often leads the class to the desired objectives.Case studies adopted for the programme are from world renowned institutions like Harvard Business School, London Business School, MIT Sloan, Indian Institute of Management.

3. Student Training Programme:

The student training programme makes the students placement ready or ready to take on entrepreneurship. Students either are job creators or job seekers and it is responsibility of the institute to assist them in development.It is one of the important objectives of the institute to develop the students such that they get placed in good companies in their field of specialisation. Thus the college carries on activities like practicing aptitude, group discussion, general knowledge, current affairs, mock interview etc.

4. Mentoring
Every student fails or succeeds depending on the guidance he or she gets from his reference group and most important the faculty members. Proper mentoring can enhance the chances of the student selecting a good academic and career path and doing well overall and being satisfied. The institution runs mentoring programme where the faculty member meets his mentees every month and talks to him about his academic, co-
curricular and extra-curricular progress.

34.   Participation in Institutional Social Responsibility (ISR) and Extension activities

Following social activities done by department

Sr. No.	Name of Activity	Organized by	Duration / Date of Activity	No. of Students
1	CSR	SKNCOE– Department of Management Studies	1 Day. February ,2014	20
2	Village Adoption Scheme	SKNCOE– Department of Management Studies	1 Day. February ,2014	10
3	Kaun Banega MP – Mock Elections	SKNCOE– Department of Management Studies	3 Day. February , 2014	22
4	Conversation 2014 – A talk with Dr. Vitthal Kamat Developing social and Entrepreneurial skills	Mrs Chanchalatai Kodre , Mayor, PMC and SKNCOE– Department of Management Studies	1 Day. February ,2014	35
5	Village Adoption Scheme	SKNCOE– Department of Management Studies	1 Day. February ,2015	20
6	Computer Literacy and Awareness program to school students. Khadakwasala	SKNCOE– Department of Management Studies	1 Day. February ,2015	40

35.   SWOC analysis of the department and Future plans

Strengths:
Experienced faculty in adequate number.
The faculty is well qualified with good teaching and communication skills.
A curriculum designed to meet both national and international standards, with strong engineering science component, soft skills component, a well-structured laboratory experience and a strong professional component.
Well-equipped laboratory, library and IT Facilities
Culture of Research

Weaknesses:
Design real world applications
Consultancy needs to be improved.
Inadequate training in critical or analytical thinking

Opportunities:
Strong Support from the Institute
Sufficient funding for attending FDPs/STTPs
Support for organizing Conferences/ Workshops Challenges
Competitiveness

Future plans:
Planning to apply for major/minor research projects to research and government institute like DRDO, DST, AICTE.
To offer consultancy services.
To enhance R&D activities.

I. **Practice I**
1.   **Title of the Practice:** Student Training Programme
        The student training programme makes the students placement ready or ready to take on entrepreneurship. Students either are job creators or job seekers and it is responsibility of the institute to assist them in development.
        It is one of the important objectives of the institute to develop the students such that they get placed in good companies in their field of specialisation. Thus the college carries on activities like practicing aptitude, group discussion, general knowledge, current affairs, mock interview etc.

II. **Practice II**
1.   **Title of the Practice: Harvard Case studies**
2.   **Goal:**
        Management students need to have a global perspective in when they enter the corporate world. Thus discussing with them real life cases give them a better understanding of the same. Logical thinking, critical analysis, emotional intelligence get a boost when students are involved in group discussions.

III. **Practice III**
1.   **Title of the Practice: Live Projects**:
2.   **Goal:** To expose student to working in the industry

IV. **Practice IV**
1.   **Title of the Practice: Hands on Experience with National Institute of Securities Market (NISM)**
2.   **Goal:** Make students aware of happenings in the securities market

V. **Practice V**
1.   **Title of the Practice: Foundation Course**
2.   **Goal:** To revise and clarify concepts previously learnt.
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7-DECLARATION BY THE HEAD OF THE INSTITUTION

Sinhgad Technical Education Society's

SMT. KASHIBAI NAVALE COLLEGE OF ENGINEERING®

Approved by AICTE Vide. F. No. 740-89-004 (NDEGAPR/ET/2000) &
Affiliated to University of Pune ID No. PU/PN/ENGG/155/2001

[Accredited by NBA]

S. No. 44/1, Vadgaon (Budruk), Off Sinhgad Road, Pune - 411 041.

● Tel.: +9120-24354938, 24100295 / 293 ● Fax : 020-24354938 ● E-mail : principal.skncoe@sinhgad.edu ● Website : www.sinhgad.edu

PROF. M. N. NAVALE	DR. (MRS.) SUNANDA M. NAVALE	DR. A. V. DESHPANDE
M.E. (Elect.) M.I.E., M.B.A.	B.A., M.P.M., Ph.D.	B.E., M.E. (Computer Engg.), Ph.D.
FOUNDER PRESIDENT	FOUNDER SECRETARY	PRINCIPAL

Ref.: SKNCOE/NAAC/2015-16/

Date: 23/03/2016

DECLARATION BY THE HEAD OF THE INSTITUTION

I certify that the data in the Self Study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions & no part thereof has been outsourced.

I am aware that the Peer Team will validate the information provided in this SSR during the Peer Team Visit.

Yours faithfully,

Place : Pune

Date : 23/03/2016

(Dr. A.V.Deshpande)
Principal
Smt. Kashibai Navale
College of Engineering
Vadgoan (Bk.), Pune - 41

8-APPROVAL OF COURSES OF AFFILIATING UNIVERSITY

सावित्रीबाई फुले पुणे विद्यापीठ
(पूर्वीचे पुणे विद्यापीठ)

शैक्षणिक विभाग
गणेशखिंड, पुणे-४११००७.

तेनिग्राफ : 'सुनिपुणे'
फॅक्स : ०२०-२५६९१२३३
वेबसाइट : www.unipune.ac.in
इ-मेल : dyracademic@unipune.ac.in

संदर्भ क्र.: २१।०१ ।२०२५

दि.: २९ ।०५ ।२०१५

प्रति,
मा. प्राचार्य,
सिंहगड टेकिनकल एजुकेशन सोसायटी श्रीमती
काशीबाई नवले कॉलेज ऑफ इंजिनियरिंग वडगाव पुणे
पता: स नं ४४ १ सिंहगड रोड वडगाव बु पुणे - ४१
ता.: पुणे (महानगर पालिका हद्द) जि: पुणे

विषय:- अटींच्या पूर्ततेच्या पडताळणी अहवालबाबत...

महोदय,
वरील विषयासंदर्भात विद्यापीठ अधिकार मंडळाने घेतलेल्या निर्णयानुसार आपणास कळविण्यात येते की, आपल्या महाविद्यालयास शैक्षणिक वर्ष २०१५-२०१६, 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.

अनु. क्र.	अभ्यासक्रमाचा तपशील	विद्यार्थी संख्या	प्रथमपाळी/व्दितीय पाळी	संलग्नीकरणाचा प्रकार
1	एम ई (ई अँड टी सी) सिग्नल प्रोसेससेंग	18	2015-2016 : - वर्ष प्रथम व व्दितिय- Div No.1,,	नूतनीकरण
2	एम. ई. (इ अँड टीसी) एम्बेडेड सिस्टम्स अँड व्ही. एल. एस. आय. डिझाइन	42	2015-2016 : - वर्ष प्रथम व व्दितिय- दुसरी पाळी Div No. 2,- वर्ष प्रथम व व्दितिय- Div No.1,,	नूतनीकरण
3	एम.इ. (इन्फर्मेशन टेक्नॉलॉजी)	18	2015-2016 : - वर्ष प्रथम व व्दितिय- Div No.1,,	नूतनीकरण
4	एम.इ. (कॉम्प्यूटर)	48	2015-2016 : - वर्ष प्रथम व व्दितिय- Div No.1,- वर्ष प्रथम व व्दितिय- दुसरी पाळी Div No. 2,,	नूतनीकरण
5	एम.इ. कॉम्प्यूटर (कंप्यूटर नेटवर्क)	24	2015-2016 : - वर्ष प्रथम व व्दितिय- Div No.1,,	नूतनीकरण
6	एम.बी.ए.	60	2015-2016 : - वर्ष प्रथम व व्दितिय- Div No.1,,	नूतनीकरण
7	बी.ई. (इन्फर्मेशन टेक्नॉलॉजी)	60	2015-2016 : - वर्ष पहिले ते चौथे- Div No.1,,	नूतनीकरण

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8	बी.ई. (इलेक्ट्रॉनिक्स अँड टेलिकम्युनिकेशन)	240	2015-2016 : - वर्ष पहिले ते चौथे- Div No.2, - वर्ष पहिले ते चौथे- दुसरी पाळी Div No. 3, - वर्ष नूतनीकरण पहिले ते तिसरे- Div No.4,- वर्ष पहिले ते चौथे- Div No.1,,	नूतनीकरण
9	बी.ई. (कॉम्प्युटर)	240	2015-2016 : - वर्ष प्रथम व व्दितिय- Div No.4, - वर्ष पहिले ते चौथे- Div No.2, - वर्ष पहिले ते तिसरे- दुसरी पाळी Div No. 3, - वर्ष पहिले ते चौथे- Div No.1,,	नूतनीकरण
10	बी.ई. (मेकॅनिकल)	360	2015-2016 : - वर्ष प्रथम व व्दितिय- Div No.5, - वर्ष प्रयम व व्दितिय- दुसरी पाळी Div No. 6, - वर्ष पहिले ते चौथे- Div No.3, - वर्ष पहिले ते चौथे- दुसरी पाळी Div No. 2, - वर्ष पहिले ते तिसरे- Div No.4,- वर्ष पहिले ते चौथे- Div No.1,,	नूतनीकरण
11	बी.ई. (इलेक्ट्रॉनिक्स अँड टेलिकम्युनिकेशन)	240	2015-2016 : - वर्ष चौथे- Div No. 4,,	नैसर्गिकवाढ
12	बी.ई. (कॉम्प्युटर)	240	2015-2016 : - वर्ष तिसरे- Div No. 4,- वर्ष चौथे- दुसरी पाळी Div No. 3,,	नैसर्गिकवाढ
13	बी.ई. (मेकॅनिकल)	360	2015-2016 : - वर्ष तिसरे- Div No. 5, - वर्ष तिसरे- दुसरी पाळी Div No. 6,- वर्ष चौथे- Div No. 4,,	नैसर्गिकवाढ

कळावे,

आपला,

उपकुलसचिव
शैक्षणिक विभाग

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9-NO OBJECTION CERTIFICATE

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/462

Date : 04/03/2016

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Sinhgad Technical Education Society's Smt. Kashibai Navale College of Engineering, S. No. 44/1, Vadgaon (Bk), off Sinhgad Road, Pune 411 041 is affiliated to the Savitribai Phule Pune University, since 2001 (PU/PN/Engg/155/2001) 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
Electronics & Telecommunication Engineering	04 Years	Permanent	From 2010-11
Computer Engineering	04 Years	Permanent	From 2010-11
Information Technology	04 Years	Permanent	From 2010-11
Computer Engineering	04 Years	Temporary	Upto 2015-16
Electronics & Telecommunication Engineering	04 Years	Temporary	Upto 2015-16
Information Technology	04 Years	Temporary	Upto 2015-16
Mechanical Engineering	04 Years	Temporary	Upto 2015-16

Courses Post Graduate	Duration of the Course	Affiliation (Permanent / Temporary)	Validity Period
M.B.A.	02 Years	Temporary	Upto 2015-16

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Courses **Post Graduate**	Duration of the Course	Affiliation (Permanent / Temporary)	Validity Period
Master of Engineering E & TC (Signal Processing)	02 Years	Temporary	Upto 2015-16
Master of Engineering E & TC (Embedded systems & VLSI Design)	02 Years	Temporary	Upto 2015-16
Master of Engineering (Information Technology)	02 Years	Temporary	Upto 2015-16
Master of Engineering (Computer Engineering)	02 Years	Temporary	Upto 2015-16
Master of Engineering Computer (Computer Network)	02 Years	Temporary	Upto 2015-16

The said certificate is issued as per the request application received from the Principal of the college Ref. No. SKNCOE/Patent/2015-16/882, dated 09.02.2016 so as to submit it to the National Assessment and Accreditation Council (NAAC), Banglore.

Dr. V. B. Gaikwad
Director, B.C.U.D.