

*Annual Quality Assurance Report
(AQAR)
of the IQAC*

(2016-17)

(15/07/2016 to 14/07/2017)

Submitted to



राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद्

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

An Autonomous Institution of the University Grants Commission
P. O. Box. No. 1075, Opp: NLSIU, Nagarbhavi, Bangalore - 560 072 India

Submitted by



Sinhgad Institutes

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Smt. Kashibai Navale College of Engineering, Pune**

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Sinhgad Institutes

Sinhgad Technical Education Society's
SMT. KASHIBAI NAVALE COLLEGE OF ENGINEERING

Approved by AICTE Vide. F. No. 740-89-004 (NDEGAPRET/2000) &

Affiliated to University of Pune ID No. PU/PN/ENGG/155/2001

[Accredited by NBA]

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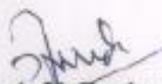
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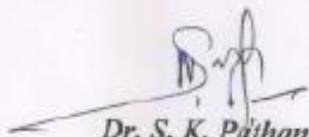
Date : 28/08/2017

Certificate

This is to certify that the Annual Quality Assurance Report (AQAR) for the academic year 2016-17 forwarded to the National assessment and accreditation council (NAAC) Bengaluru is compiled from the data collected from official records and it is true to best of my knowledge and belief.


Dr. A. V. Deshpande
Chairperson, IQAC




Dr. S. K. Paihan
Coordinator, IQAC

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VISION:

उत्तमपुरुषान् 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.

Goals and 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 programmes and to undertake research in focused areas from Electronics & Telecommunication Engineering, Information Technology and Mechanical Engineering.
- To develop strong Industry-Institute Interaction in order 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.

ANNUAL QUALITY ASSURANCE REPORT (AQAR) of the IQAC

PART – A

1. Details of the Institution:

1.1 Name of the Institution	:	Sinhgad Technical Education Society's, Smt. Kashibai Navale College of Engineering
1.2 Address Line 1	:	S.No.44/1, Vadgaon (Bk), Off Sinhgad Road, Vadgaon(Bk), Pune
Address Line 2	:	
City	:	Pune
State	:	Maharashtra
Pin Code	:	411041
Institution e-mail ID	:	principal.skncoe@sinhgad.edu
Name of the Head of the Institution	:	Dr. A.V.Deshpande
Tel. No. with STD Code	:	020-24354938
Mobile	:	9881000780
Name of the IQAC Co-ordinator	:	Dr. S. K. Pathan
Mobile	:	09822857658
1.3 IQAC e-mail address	:	iqac_skncoe@sinhgad.edu
NAAC TRACK ID	:	MHCOGN26171
1.4 NAAC Executive Committee No. & Date	:	NAC/WR/GH/MHCOGN26171/IstCycle/2016-17 Date June24, 2016

1.5 Website address : http://cms.sinhgad.edu/sinhgad_engineering_institutes/skncoe_vadgaon/institute_details.aspx

Web-link of the AQAR : http://cms.sinhgad.edu/sinhgad_engineering_institutes/skncoe_vadgaon/institute_details.aspx/iqac_skncoe.aspx

1.6 Accreditation Details :

Sr. No	Cycle	Grade	CGPA	Year of accreditation	Validity period
1	1 st	B+	2.67	2016	2016-2021

1.7 Date of Establishment of IQAC : 26th December 2016

1.8 AQAR for the year : 2016-17

1.9 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and accreditation by NAAC

NAAC PEER TEAM VISIT : 19th to 21st September, 2016.

1.10 Institutional Status :

University :	Central		State	√	Deemed		Private	
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Affiliated College:	YES	√	NO	
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Constituent College:	YES	√	NO	
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Autonomous college of UGC	YES		NO	√
Regulatory Agency approved Institution:	YES	√	NO	

Type of Institution:					
Coeducation	√	Men		Women	
Urban	√	Rural		Tribal	

Financial Status:			
Grant in aid		self- financing	√
Government		Any other	

1.11 Type of Faculty/Programme:

Arts		Science		Commerce	
LAW		PEI (Phys Edu)		TEI (Edu)	
Engineering	√	Health Science		Management	
Others (Specify)					

1.12 Name of the Affiliating University	:	Savitribai Phule Pune University, Pune, Maharashtra
--	----------	--

1.13 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc.

Autonomy by State/Central Govt. / University	NO
University with Potential for Excellence	NO
UGC-CPE	NO
UGC-Special Assistance Programme	NO
DST-FIST	NO

2. IQAC Composition and Activities:

2.1 No. of teaching faculty members	:	09
2.2 No. of Administrative/Technical staff	:	02
2.3 No. of students	:	02
2.4 No. of Management Representatives	:	01
2.5 No. of Alumni	:	01
2. 6 No. of any other stakeholder And community representatives	:	01
2.7 No. of Employers/ Industrialists	:	02
2.8 No. of other External Experts	:	02
2.9 Total No. of members	:	20

2.10 No. of IQAC meetings held : 02

2.11 No. of meetings with various Stakeholders:

Faculty	02	Non-Teaching Staff	00	Students	02
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Alumni	02	Others	02		
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2.12 Has IQAC received any funding from UGC during the year?

YES		NO	√
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If yes, mention the amount:

-

2.13 Significant activities and contributions made by IQAC:

- ❖ “Academic Audit Committee” composing the principal, IQAC co-ordinator, HODs, Parents, Exerts for industries and students has been constituted. The academic audit was held for AY 2016-17.
- ❖ As per guidelines of IQAC, studentfeedbacks were conducted. Further, the necessary training and corrective measures has been suggested to the faculties for the AY 2017-18.
- ❖ Publication in peer reviewed International journals was suggested. Motivating sessions on research methodology are suggested to conduct in every department.
- ❖ 56faculties have been enrolled for Ph.D. in different reputed universities (as on date) as per the guidelines suggested by IQAC.
- ❖ Regular Parent-Teacher meetings are conducted in every department to take feedback from parents regarding teaching learning process and other facilities in the institute.

2.14 Plan of Action by IQAC/Outcome:

Plan	Outcome
To motivate student to utilize library resources	The utilization of the library resources has been increased for the Academic Year 2016-17.
To motivate the teachers for PhD	Number of PhD registrations has been increased this year and few faculties are about to complete and submit their PhD thesis.

To conduct an Academic Audit of Departments	Academic Audit was conducted. 12 different meetings were held to facilitate interaction between IQAC, Departments and various stakeholders.
To cater to the needs of slow learners through remedial classes	Remedial classes were conducted to help the slow learners improve their academic performance.

2.15 Whether the AQAR was placed in statutory body: Yes

Management	√	Syndicate		Any other body	
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Part – B

Criterion – I

1. Curricular Aspects:

1.1 Details about Academic Programmes

Sr. No	Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
1	PhD				
2	PG	07			
3	UG	04			
4	PG Diploma				
5	Advanced Diploma				
6	Diploma				
7	Certificate				
8	Any other				

2 (i) Flexibility of the Curriculum: CBCS/Core/Elective option / Open options

(ii) Pattern of programmes:	Semester	√	Trimester	
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1.3 Feedback from stakeholders*(On all aspects):

Alumni	√	Parents	√	Employers	√
Students	√				
Mode of feedback:		Online	√	Off-line	
Co-operating schools (for PEI)					

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects:

Revision of University syllabi is based on new technological concepts in order to bridge the gap between Industry and Academics the syllabus changed from marking sheme to grading scheme.

UG course is revised from TE 2012 to TE 2015. And PG Syllabus is revised from 2015 to 2017 Course for ME Computer Engineering and Computer Network.

1.5 Any new Department/Centre introduced during the year. If yes, give details.

<i>NVIDIA GPU GRANT PROGRAM</i> <i>Computer Engineering</i>
<p>Description</p> <p>Research Lab with 20 gpu which we purchased for academic practical for 3rd year students for the subject Parallel Computing and Distributed Programming. Also we have gpu of cost 1 to 1.5 lakh which was provided by Nvidia for students to do research in parallel computing. Many students of final year have selected their domain as parallel computing and taking facility of gpu n also Nvidia gave tutorial n manuals related to gpu. NVIDIA GTX TitanX</p> <p>Cost: Rs. 1,50,000</p>

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of Permanent Faculty:

Total	Asst. Professors	Associate Professors	Professors	Cadre Ratio
259	246	3	11	11:03:246

2.2 No. of permanent faculty with Ph.D.:14

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

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 <i>Recruited</i>	8	3	2	1	95	60	NA	NA	NA	NA
<i>Yet to recruit</i>	15	12	44	19	26*	12*	NA	NA	NA	NA
Sanctioned by the Management/ society or other authorized bodies <i>Recruited</i>	0	0	0	0	55	35				
<i>Yet to recruit</i>										

* Additional faculty Recruited.

2.4 No. of Guest and Visiting faculty and Temporary faculty: 62

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Presented papers	170	06	01
Attended Seminars/ Workshops	01	58	46
Resource Persons	02	04	07

Guest LECTURE conducted in department by Industry expert :55

Industrial Visits for Live demonstration. : 11

2.6 Innovative processes adopted by the institution in Teaching and Learning:

- ❖ **55 Guest Lectures were conducted in various departments from Industry experts.**
- ❖ **NPTEL Videos for faculty for improving their knowledge & skill.**
- ❖ **Research Methodology Sessions conducted.**
- ❖ **Intercollegiate Event TECHTONIC FOR technical Competitions.**
- ❖ **Industry and Alumni interaction with current students.**
- ❖ **Value Addition Program as part of Student's Training Program (STP).**
- ❖ **Train the Trainers (TTT) programme has been executed wherein 83 faculties from different departments participated.**

2.7 Total No. of actual teaching days during this academic year: 145

2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions):

Continuous Evaluation Process, Mock Submission, Mock PR/OR Examination, Mid Term Submission.

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/ Curriculum Development workshop:

37

2.10 Average percentage of attendance of students: 76.18%

2.11 Course/Programme wise Distribution of pass percentage: AY 2015-16

Title of the Programme	Total no. of students appeared	Division				
		Distinction %	I %	II %	III %	Pass %
BE(E&TC)	338	55.91	33.43	5.0	0.05	0.005

BE (Comp)	294	71.76	25.51	2.38	00	00
B.E. (Mech)	326	50.30	27.60	7.05	0.6	00
BE (IT)	153	37.25	22.87	3.92	1.30	00
MBA	55	05	14	22	10	3

2.11 Course/Programme wise Distribution of pass percentage: 2016-17

Title of the Programme	Total no. of students appeared	Division				
		Distinction %	I %	II %	III %	Pass %
BE(E&TC)	342	61.98	28.07	4.09	0.29	00
BE (Comp)	335	68.35	29.55	19.70	00	00
B.E. (Mech)	395	61.26	26.32	6.32	0.5	00
BE (IT)	131	67.17	7.63	1.52	00	00
MBA	53	02	15	22	12	03

2.12 Initiatives undertaken towards faculty development:

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
Orientation programmes	259
Staff training conducted by other institutions	--
Summer / Winter schools, Workshops, etc.	87
Any Other / Industrial Training etc.	00
Faculty perusing Ph.D.	40

2.13 Details of Administrative and Technical staff:

Category	Number of permanent Employees	Number of vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	25	-	08	-
Technical Staff	39	-	-	-

Criterion – III

3.1. Research, Consultancy and Extension:

3.2 Initiatives of the IQAC in Sensitizing / Promoting Research Climate in the institution.

- ❖ Research is a significant activity of the institution, the main role of the IQAC to motivate the faculty members for research contribution. As a result 21 faculty members had been enrolled for the PhD.
- ❖ IQAC explained the importance of need based interdisciplinary projects.
- ❖ IQAC motivated the faculty members to register for copyright and patents.
- ❖ The importance of consultancy is explained to the faculty members.
- ❖ Research collaboration is important for the improvement of the research; IQAC motivated the faculty members to start MOU, for research collaboration.
- ❖ The research should be useful for the society, so the major stand of IQAC to motivate to start consultancy.

3.3 Details regarding projects:

Details of project	Completed	Ongoing	Sanctioned	Submitted
Number	09	07	-	02
Outlay in Rs. Lakhs	4.42	14.95	-	0.8

3.4 Details regarding projects:

Sr. No	Faculty	Title of the project	Status Ongoing/ Completed
1	Dr. Mrs. S. K. Shah Prof. P. S. Kokare	Implementation of HDL Communication Controller using DALI Protocol	Completed December 2016
2	Prof. Mrs. R. P. Patil Prof. Mrs. S. C. Sawant-Patil	FPGA Implementation of AMBA AHB BUS For Interfacing of IP Cores of Image & Videos	Completed December 2016
4	Dr. P.N.Mahalle Prof. P.N.Railkar	Future Architecture for security of IoT	Ongoing
5	Prof. G.R.Shinde Dr. P.N.Mahalle	Lightweight group Authentication for IoT	Ongoing
6	Prof. S.P.Pingat Prof. S.P.Dugam	Performance & energy efficient routing protocol for WSN	Ongoing
7	Prof.V.V.Kimbahune	Context aware intelligence and adaptive approach for future Internet	Ongoing
8	Dr. K.R.Borole	Experimental and mathematical modeling , Analysis and simulation of a passive / Active	Completed
9	Dr. A.P. Pandhare	Study of smoke emission parameter of diesel engine using biodiesel as fuel.	Completed
10	Prof. K.C. Zende	Noise Reduction of Centrifugal Fans by use of Resonators and Active Noise Cancellation	Completed
11	Prof. V.H. Bansode	Simulation & Analysis of Thermal Energy Storage system using phase change material.	Completed
12	Prof. G.A. Jagdale	Performance Evaluation of Liquid column Ball Damper for Controlling the vibrations of Huge	Completed
13	Prof. N.P.Sherje	Experimental Evaluation of semi active Magnetorheological Damper.	Completed
14	Dr. A. P. Pandhare	An experimental approach to the investigation of combustion in CI Engine to formulate set of	Ongoing
15	Dr. A. P. Pandhare	Skill and Personal Development Programme Centre for SC/ST students	Ongoing

16	Dr. T. A. Chavan	Multimedia & Nonmultimedia Traffic Delivering over Next-Generation Mobile Communication	Completed
17	Mr. N. S. More	Algorithms & Techniques for Power Aware Cloud Computing	Ongoing
18	Mr. M. L. Bangare	Vulnerability Assessment in Ubiquitous Cloud for Portable Storage Device	Ongoing

3.5 Details on research publications

Type of Journal	International	National	Others
Peer Review Journals	209	00	00
Non-Peer Review Journals	14	00	00
e-Journals	223	00	00
Conference proceedings	217	04	00

3.6 Details on Impact factor of publications:

Range	1.112 – 5.61	Average	3.92	h-index	4.5	Nos. in SCOPUS	14
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3.7 Research Projects:

(a) Details of ongoing and completed research projects.

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned	Received
Interdisciplinary Projects	2016-17	0	0	0
Industry sponsored	-	-	-	-
Projects sponsored by the University/ College	2016-17	BCUD	9,70,000	3,88,000
	2016-17	BCUD	3,75,000	1,50,000
	2016-17	BCUD	4,25,000	1,70,000
	2016-17	BCUD	2,58,000	1,32,000

Students research projects <i>(other than compulsory by the University)</i>	-	-	-	--
Any other(Specify)	-	-	-	-
Total in Rs			20,28000	8,45000

(b) Ongoing and completed Ph.D. projects during the period.

Sr. No	Name of the faculty	Title of the project	Status
1	Mrs. S. A. Panwar	Design and Development of Intelligent Decision Support System for Thyroid Diseases	Submitted
2	Mrs. P.S. Deshpande	Prosody in Speech Synthesis	Submitted
3	Mr..A.S.Shirsat	Throughput improvement of bluetooth on Heterogeneous Wireless Network	Pursuing
4	Mr. P. G. Chilveri	"Identity Establishment for Heterogeneous Ad-Hoc Network : Information Theoretic Based Approach	Pursuing
5	Mrs.S.S.Vasekar	Video Processing	Pursuing
6	Mr.M.S.Navale	Analysis & Enhancement of Parameters in 4G LTE.	Pursuing
7	Mrs.R.P.Patil	Video Processing	Pursuing
8	Mr.P.S.Kokare	Image and Signal Processing	Pursuing
9	Mr.P.D.Garje	Video Processing	Pursuing
10	Mr.A.B.Deshmukh	Multi view face video super resolution	Pursuing
11	Mr.N.R.Bamne	Methodology and Estimation of Software reliability for safety critical systems in nuclear power plants	Pursuing
12	Mrs.S.D.Deshmukh	Modification of TW3 RUS for BAA for Indian Children using Digital Image Processing	Pursuing
13	Mr.D.B. Pawar	Natural Prosody Generation in Marathi TTS Synthesis	Pursuing
14	Prof. Samrudhi Navale	Job Satisfaction of IT Employee	Pursuing
15	Prof. Harsha Gandhi	Demat Account	Pursuing
16	Prof. Sanket Charkha	Money Management of Hostel Students	Pursuing
17	Prof. V.V. Jog	Profile based multilevel self adaptive security for data and devices in IOT	Pursuing

18	Prof. R.A.Satao	Adaptive Green routing algorithm for wireless multimedia sensor network	Pursuing
19	Prof. V.V.Kimbahune	Algorithm for context aware clustering and adaptive addressing for next generation internet	Pursuing
20	Prof. P.P.Patil	Detection and Diagnosis of early stage microcalcification in mamograph-machine learning approach	Pursuing
21	Prof. G.R.Shinde	Clustering Framework for internet of people, things, services	Pursuing
22	Prof. P.B.Mali	Real Time Handwrittendeonagari text recognitiuonnad digitization	Pursuing
23	Prof. N.A.Mhetre	Context aware authorization and access control algorithm in ubiquitous computing using learning methods	Pursuing
24	Prof. M. R. Patil	Adapative multilevel and context aware clustering in distributed envirenment	Pursuing
25	Prof. V. S. Deshmukh	Fault resilient event localization algoritm for binary wireless sensor network	Pursuing
26	Prof. A. A. Deshmukh	Green cloud computing - balancing load for deployment of SaaS	Pursuing
27	Prof. S.P. Kosbatwar	Printed character recognision using back propogation neural network technique	Pursuing

PhD guides and completed students : 06 / 01

3.8 Consultancies:

Sr. No	Name of the department	Consultancy type	Type of Work done	Revenue Generated
	--	--	--	-

3.9 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number	02	-	01	-	-
Sponsoring agencies	BCUD SPPU	--	BCUD SPPU	-	--

3.10. No of faculty served as experts, chairpersons or resource persons: 57

3.11 No. of collaborations, Moue's:

International	2	National	11	Any other	01
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3.12 Total budget for research for current year in Rs. lakhs:

From funding agency	0
From Management of University/College	12.70
Total [Rs. Lakhs]	12.70

3.13 (a)No. of patents received this year:

Type of Patent	Status	Number
National	Applied	00
	Granted	04

(b) No. of copyrights received this year:

Type of copyright	Status	Number
National	Applied	00
	Granted	00

3.14 No. of awards/ recognitions received by faculty and research fellows of the Institute in the year:

Total	International	National	State	University	Dist	College	Any other
15	01	11	01	01	00	00	00

3.15 No. of students Participated in NSS events:

University Level	100	State level	00
National level	00	International level	00

3.16 No. of awards in NSS:01**3.17 No. of Extension Activities Organized:**

University forum	05	College forum	36
NCC	00	NSS	12
Any Other	05		

3.18 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility:

Sr. No	Name of the program
01	Blood Donation Camp
02	Village Donje Camp
03	Voters Awareness
04	Swatch Bharat Abhiyan
05	Tree Plantation
06	International Yoga Day
07	Teachers Dayceleberation
08	Swami Vivekanand Jayanti
09	Surya Namaskar Day
10	Traffic Day
11	Visit to old age home
12	Cleaness drive
13	Awarness of cashless economy in Village

Criterion – IV

4. Infrastructure and Learning Resources:

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
No. of important equipments purchased (≥ 1 -0 lakh) during the current year.	10	01	Self	11
Value of the equipment purchased during the year (Rs. In Lakhs)	138.72 (Comp only)	1.75	self	
Others – (Software etc.)				

4.2 Technology up gradation (overall):

Title	Total Computers	Computer Labs	Internet	Browsing Centers	Computer Centers	Office	Departments	Others
Existing	1003	-	Yes	-	135	03	865	-
Added	62	-	-	-	-	-	-	-
Total	1065	-	-	-	-	-	-	-

4.3 Library services:

Title	Existing		Newly added		Total	
	No.	Value(Rs)	No.	Value(Rs)	No.	Value(Rs)
Text Books	20553	7937949	154	91178	20707	8029127
Reference Books	13702	5291965.9	104	60785	13806	5352752.9
e-Books	-	-	-	-	-	-

Journals	131	244358.00			131	16000
e-Journals	-	-	-	-	-	29,97,852/ -
Digital Database	1	73600.00	-	-	1	-
CD & Video	1179	-	-	-	1179	-
Others (specify)	2 CD e-books	-	-	-	-	-

4.3 Computer, Internet access, training to teachers and students and any other

Programme for technology up gradation (Networking, e-Governance etc.)

- ❖ NPTEL Video Lectures, e- Journal and e-books
- ❖ One Faculty Development Programme for the teachers and four Workshops for the students
- ❖ 56 Guest Lectures on various topics are arranged
- ❖ Train the Trainer for Newly joined Faculty as per the newly updated syllabus
- ❖ Wireless Network Security through firewall and end user authentications
- ❖ e-Governance through GEMS and EPR software
- ❖ Up gradation of Accounting Software and its training to staff
- ❖ Students' training for new technologies through Value Added Programs (VAP)
- ❖ Student's Training Program (STP) for soft skill development

Criterion – V

5.Student Support and Progression

5.1 Curriculum Enrichment Programmes - (Courses, Industrial Training, Visits, Projects, Guest lecturers etc.)

Courses	03
Industrial Training	05
Industrial Visits	12
Student Internships	1805
Projects	68
Guest Lectures	55

Workshops	15
Value Added Program	13
Webinars	00
Spoken Tutorials	19

5.2 Efforts made by the Institution for tracking the progression - (Vertical movement of Students Counseling and Career Guidance)

- ❖ **TG& CT:** Teacher Guardians (TGs), Class Teachers (CTs) alongwith HOD are continuously monitoring the students' performance. The term work marks are assigned with proper weightages to overall attendance, unit tests conducted in the class, TG evaluation based on extra-curricular activities, practical performance, and timely submission of journals, assignments, and tutorials. The criterion are notified to the students well at the beginning semester.
- ❖ **History Card:** Preparation of History Card (looked after by TG) of the students from FE to BE consisting of academic records, activity participation certificates, information of training programs, publications etc.
- ❖ **AMCAT:** Conduction of Aspiring Minds Computer Adaptive Test (AMCAT) examinations and its results gives an opportunity for the students to do their Strengths-Weaknesses-Opportunities-Threats (S-W-O-T) analysis and allow them to think on areas to be improved upon. These examinations are conducted in every semester.
- ❖ **QALR& ET:** Quantitative Aptitude and Logical Reasoning (QALR) tests conducted every semester for all the students. Students are exposed to QALR test and Employability Test (ET) multiple times before they actually appear for an actual aptitude test of any industry. These tests are useful in understanding the students' progression.
- ❖ **Survey Paper Publication with research approach and Seminar:** STP-IV 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. This gives an opportunity to understand the research attitude of the students.
- ❖ **Participation in C-PG and m-PG conference:** Students' progression in research can also be understood by performance of the students in PG conferences.

- ❖ **Students Counseling and Career Guidance through CPC:** Institute has a structured mechanism for Students Counseling and Career Guidance through Centralized Placement Cell (CPC). Under the guidance of the Principal, CPC officer in coordination with departmental CPC coordinators carry out structured activities related to both career guidance and placement of the students.

Efforts made by the department for tracking the progression-For improvement in Results

- ❖ **Unit Tests, Prelim, Mock oral practical examinations:** Two Unit Tests during the semester and the end of the semester, Prelim and internal mock practical/oral examination are conducted to understand the preparation of the students for university practical/oral examination. The remedial practice sessions are conducted for proper understanding of experiments by the students.
- ❖ **Mock examinations:** Conduction of mock online examinations, tutorials, prelim examination and mock practical/oral examinations are useful in preparing and tracking the students' progression throughout the semester. The performances of all such examinations are considered while giving the Term Work (TW) marks. Institute also conducts project competitions, AMCAT, ET, QALR, quiz and soft skill development activities for the students to prepare them for the placement.
- ❖ **Remedial classes are conducted:** After analyzing the result of in-semester examinations, faculty identifies slow learners from the class and takes additional remedial sessions for effective transformation of subject matter to them.
- ❖ **Guest Lectures:** Guest Lectures on Different topics were conducted in Department for Various Classes.

To Improve Employability of the student following efforts have been made:

- ❖ 4 days aptitude training, 39 aptitude tests, Group Discussion, Extempore are conducted and 2 NPTEL videos on Group Discussion are shown to third year students.
- ❖ 6 sessions to introduce current technologies such as Java, PHP, HTML are conducted for third year students.
- ❖ 10 aptitude tests, 2 quizzes on C are conducted and 2 NPTEL videos on Group Discussion are shown to second year students.
- ❖ 15 aptitude tests, one personal interview and one technical interview are conducted to final year students.

- ❖ Conducted STP I to enhance communication skills.
- ❖ Conducted STP II to improve reading, listening, writing and speaking abilities.
- ❖ Revision of basic fundamentals of core subjects in STP III.
- ❖ Introduction to current technologies such as Advanced Java & Hadoop under STP.
- ❖ GDPI is conducted to improve the communication skill of student for placement.
- ❖ 14 QALR tests are conducted to test aptitude ability.
- ❖ Conducted 2 personality development programmes.

Coaching and Guidance for Higher studies / Competitive Exam.etc.

- ❖ 03 orientation & guidance lectures are organized for GRE,GMAT, IELTS.
- ❖ 09 guidance sessions are organized for higher studies.
- ❖ 04 AMACT examinations are conducted for the students to do their SWOT analysis and understand need based training which is covered in VAP.

Entrepreneur Cell Report

- Internship to 10 students at BMS Solutions, Dubai.
- Developed a website codewall.in for the students.
- Deployed Moodle for mock online exam practice.
- Developed E-Notice portal for online notices.
- One student placed at BMS Solutions, Dubai.
- Organized various seminars on Entrepreneurship.
- Make students aware about E-Summits at IITs and also attend the same.
- 3 startups started by students
- More than 25 students attended interenship program

5.3 No. of students qualified in these examinations.

GATE	State PSC	UPSC	GRE	Others
56	01	01	50	00

5.4 Details of campus placement.

<i>On campus</i>			<i>Off Campus</i>
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
124	838	425	12

5.5 Students Activities.

No. of students participated in Sports, Games and other events and awards won:

State/university Level	172	National level	08	International level	00
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No. of students participated in cultural events:

State/university Level	110	National level	32	International level	00
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5.6 No. of social initiatives undertaken by the students:08

Criterion – VI

6. Governance, Leadership and Management

6.1 Activities and support from the Alumni Association:

- ❖ 42 sessions were conducted by Alumni on different topics such as Project work & Higher Studies, Career Opportunities in Web Development, Android.
- ❖ 7 alumni students from all departments were invited to interact with First Year Students in FE Induction Programme.
- ❖ Alumni students have contributed as a Judge in TECHTONIC-2017.
- ❖ The institute has a tradition and culture of social awareness percolated through alumni gives natural motivation to the current students and faculty to participate in various social activities.
- ❖ Motivation from faculty coordinators to the students and leadership shown by the enthusiastic students gives boost for various innovative ideas. These ideas are then converted into extension activities through NSS and students associations.
- ❖ Student association and college magazine also gives wide publicity and encouragement to the entire student community that ultimately resulted into massive participation and satisfaction of conduction of social work.

6.2 Activities and support from the Parent – Teacher Association:

- ❖ Induction program for parents and admitted students has been conducted at the beginning of First Year of Engineering during which all students and their parents were introduced.

Guardian teachers were also assigned during this program to understand background of all FE students.

- ❖ Teacher communicates ward's attendance and performance to parents through SMS. If required teacher calls ward's parent, if he/she remains absent frequently.
- ❖ Parent Teacher meet is conducted once in year also some of the parents come to visit the department during the academic.

6.3 Development programs for support staff

- ❖ Online Performance Appraisal System is initiated and training of the portal is given to supporting staff.
- ❖ We are in the process of implementing new Tally, based accounting & fee software. In effect, we will be replacing the existing Zoom Software and E- PATHSHALA which is being used at present in the administrative office, particularly account's and the students' sections. Demonstration and training of this new Tally-based software for supporting staff of the office to showcase the various features the software was arranged.
- ❖ Installation of various packages and basics of Ubuntu 14.04 & Fedora 17 was also conducted with lab support staff in department Computer Engineering.
- ❖ Supporting staff is deputed to attend industry oriented courses to enhance their technical expertise.

Criterion – VII

7. Innovations and Best Practices:

7.1 Innovations introduced during this academic year which have created a Positive impact on the functioning of the institution.

- ❖ K-point technology used in the institute is helping the students and faculty to take their lessons online. The K-point software can help the students to access the PPT of various subjects along with the audio explanation. K-point is the need of the age as it saves time and money of the learner. It also provides a multi-media archive that offers self-paced learning for every class. Teachers can use it to teach online or give presentations
- ❖ Second year students benefited by enrolment to one of the NPTEL course which was in line with one of the core subjects of Sem II (Engineering Geology)

- ❖ Project Based Learning introduced to the First Year Students in Basic Electronics Engineering subject. This is the effort made by the concerned staff to inculcate the culture of Project Based Learning starting from First Year.
- ❖ For Second year students practice sessions before online examination was conducted. In this session per day one subject is scheduled and according to that students are communicating with concern faculty members for discussion of MCQ's.
- ❖ Training and Placemnt Activity is done through online portal-GEMS which is the communication etween T & P Coordinator and Students.
- ❖ Online Appraisal system is introduced for all the teaching and non-teaching staff. Automatic Score points are generated and calculated for various curricular and extra-curricular activities of the staff which excludes the unnecessary descriptive part of offline appraisal system.

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year.

- ❖ Industry collaborations are promoted by signing 11 MOU's with industry.
- ❖ Alumni interaction by inviting Alumni during TECHTONIC, Guest lectures, workshops, cultural events.etc.
- ❖ Alumni Interaction is strengthened by inviting Alumni during "TECHTONIC", Guest Lectures, Workshops.
- ❖ Interdisciplinary activity is promoted by organizing SPPU sponsored National Conference, workshop for PG students.
- ❖ According to AcedemicSheldude workshops for faculty development as well as students were conducted.

8. Plans of institution for the Academic Year – 2017-18:

- ❖ Administrative Reforms
- ❖ Increase utilization of e-resources & NPTEL video lectures
- ❖ Examination Reforms
- ❖ Enhance research activities
- ❖ Increase number of quality publications
- ❖ Enrich the students with Value Added Programme(VAP)
- ❖ Incorporate Project Based Learning (PBL)
- ❖ Motivate the faculty member to write a proposal for fetching research
- ❖ Reformation in “Alumni cell”, to increase the active participation of alumni
- ❖ Grants form funding agencies like AICTE/DST/CSIR/UGC etc.
- ❖ Introduction of more Innovative Teaching Methodologies (ITM)



Prof. Dr. A. V. Deshpande
Chairperson, IQAC



Dr. S. K. Pathan
Coordinator, IQAC

ABBREVIATIONS

AICTE	All India Council For Technical Education
AMCAT	Aspiring Minds Computer Adaptive Test
API	Assistant Police Inspector
ATR	Action Taken Report (ATR)
AQAR	ANNUAL QUALITY ASSURANCE REPORT
CBSE	Central Board of Secondary Education
CPC	Centralized Placement Cell
CT	Class Teachers
ET	Employability Test
GEMS	Governing Educational Management System
GMAT	Graduate Management Admission Test
GoM	Government of Maharashtra
GRE	Graduate Record Examinations
HOD	Head of Department
IEEE	Institute of Electrical and Electronics Engineers
IELTS	International English Language Testing System
IQAC	Internal Quality Assurance Cell
ITM	Innovative Teaching Methodologies
MCQ	Multiple Choice Questions
MOU	Memorandum of Understanding
NAAC	National Assesment and Accrediatation Council
NGKC	National Go-karting Championship
NPTEL	National Programme on Technology Enhanced Learning
NSS	National Service Scheme
PBL	Project Based Learning
PWD	Public Work Department
QALR	Quantitative Aptitude and Logical Reasoning
SDN	Software Defined Network
SDPO	Sub-Divisional Police Officer

SKNCOE	Smt. Kashibai Navale College of Engineering
SMS	Short Message Service
STES	Sinhgad Technical Education Society
STP	Student's Training Program (STP)
SWOT	Strengths, Weaknesses Opportunities and Threats
TG	Teacher Guardians
TTT	Train the Trainer
TW	Term Work
UGC	University Grants Commission
UPSC	Union Public Service Commission
VAP	Value Added Programs (VAP)



N.S.S. ACTIVITY REPORT

1. Blood Donation Camp

On the occasion of **National Youth Day**, we conducted a **Blood Donation Camp** in our college's Student Activity Center open for everyone. On the **12th of January** we started the camp at 9.00 am sharp. It was inaugurated by our Vice Principal Dr. K.R. Borolesir. Students gave a hearty response to the camp from all colleges on our campus and students from over 20 colleges donated blood. Over 200 units of blood were donated in 6 hours, i.e. from 9.00 am to 3.00 pm. We learned a lot regarding the process of blood donation and the instructions to follow while doing it or conducting such an exercise.

The doctors present at the location were from our very own Sinhgad Medical College and the blood donated was transferred to their Blood Bank which works alongside the college free of cost for everyone. This was a unique experience indeed.

2. Visit to nearby village

The aim of this camp was multifaceted and based on many varied factors which were decided based on the unit member's discussion and our teacher's inputs. Each and every event had some significance and it will be discussed adequately in this forthcoming report.

2. Village Visit

List of activities-

1. Prabhat Feri
2. Visit to Old age home
3. Teaching at the School
4. Bandhara

5. Survey
6. Street play performance
7. Cleanliness Drive

3. Suryanamaskar day

Suryanamaskar day was celebrated in the college by the NSS unit on **3rd February** from 7.00 am to 8.00 am in our college's Student Activity Center. The event was conducted by one of our own student volunteers. Students from over the campus attended this event. 12 rounds of the Suryanamaskar were performed by everyone present at the venue. The tutoring of each position was given to everyone present and they were also instructed on the knowhow of how to and how not to perform these exercises.

Students shared their knowledge about this ancient form of exercise and how it comprises of both physical and breathing exercises. Our program Co-Ordinator Prof. S.P. Pingat Sir had instructed us about the importance of these exercises on the occasion of this event. Students later made a decision to practice this exercise regularly for their physical well being.

4. Teachers Day

The birth anniversary of Dr. Sarvapalli Radhakrishnan was celebrated by NSS unit, SKNCOE. A teacher has greater influence in shaping the life of an individual even more than his/her parents. In our country's culture teachers have been given a place above the almighty god. To express the gratitude towards such teachers, the NSS unit of the SKNCOE organized the cultural programme which consisted of stage play, dance, and musical band.

The programme started at 4.00 pm in the cultural center with worship of goddess of wisdom, '*Sarasvati*' and 'Dr. Radhakrishnan' by Dr. K.R. Borole, viceprincipal, SKNCOE. The first performance was given by the musical team. The dance performances consisted of both classical and western styles which were performed by the different students. The script based on the life story of Dr. Radhakrishnan was enacted at the end of the programme. Dance, music and skit made the day explicable. Students took great efforts and ensured that teachers enjoy every minute of the programme.

After the cultural programme all the teachers were felicitated by giving the plant of '*Tulasi*'. The student co-ordinator Bhushan Shimpi discussed the life of Dr. Radhakrishnan and

Chanakya and what should we get from their life journey. The speech was the motivating part of the programme which enhanced the feeling of respect about the teaching profession in everyone's heart. The vote of thanks was given by VedantGhate to all the teachers for their courage and enthusiasm about the teachings. The programme was ended by singing 'VandeMataram'.

The programme was well co-ordinated by BhushanShimpi and VedantGhate. The happiness on the face of the teachers really made the programme unforgettable for students also.

5. Traffic Day

6th October,2016 was observed as Traffic Management Day by the N.S.S. unit of SKNCOE.Traffic is managed at Sinhgad Road especially near DandekarChowk.The activity is conducted with the help of Pune Traffic Police Unit and also N.S.S. units of other colleges in Pune.The activity began at 10am.We arrived at Sinhgad Road by college bus.There were more than 50 NSS volunteers present.Head of Pune Traffic Police Inspector was present at the occasion and also prominent social workers were present.As it said the activity was mainly organized by Pune Traffic Police and to become part of this activity the NSS units of college all around pune were invited to help around and to make the activity worth.Traffic police helped NSS volunteers to manage traffic and to aware people who was not wearing Helmet.They cleared various doubts regarding traffic,safety while driving vehicles that people don't follow these days.

Driving Two-wheelers without Helmets and four wheelers without Seat belt actually comes under insensibility and ignorance and these things should strictly observed and implemented.As part of NSS Unit we successfully achieved to do that.We created **Human Chain** on the road to support activity.**Human Chain** was the enthusiastic initiative to draw attention of community,people who were not wearing helmets and those who were not following traffic rules. The **Human Chain** was upto1.5 kms.long on Sinhgad Road.Volunteers were motivation for community and everyone contributed their efforts.

6. International Yoga Day

UN declared 21st June to be celebrated as International Yoga Day. Yoga is a mental, physicaland spiritual practice that needs to be carried every day. This was a great opportunity

to imbibe the value of discipline. NSS Unit of SKNCOE took a note of this and planned to celebrate the day by arranging a yoga exercise session on The Cultural Centre of the college. The session began at 7 am. The session was inaugurated by Teacher coordinator Prof. Pingat Sir. Active participation of college staff, faculties and students was observed. Sir discussed the objectives of World Yoga Day. The session started with chanting mantras. After that some students from NSS unit took the stage to start yoga practice. They presented many of the different yoga postures like Vrikshasana, Uttarasana, Trikonasana, Bhadrasana, Bhujangasana, PawanMuktasana and also narrated the utility and benefits of the same and all the participants repeated after them. The session finally ended with Pranayam and Meditation. The yoga practice session lasted for One and half hour.



National Level Project and Poster Competition 6&7 April 2017



Blood Donation Camp



Cloth Donation 30/12/2016



Swachh Bharat Abhiyaan-10th August, 2016



International YOGA Day



Tree Plantation

BE Sem: I		A. Y.: 201 - 1		Roll No.:		Exam Seat No.		Teacher Guardian:		
	Subject	C/M	C/M	C/M	C/M	C/M	C/M	C/M	C/M	C/M
1	Subject Code									
2	Lectures									
3	Practical									
4	OL/InSem									
5	OL2									
6	Prelim									
7	OL/InSem									QALR
8	TH									
9	TW									
10	TO									
11	OR									
12	PR									
13	Total Credits									
14	GRD									
15	CRD									
16	GP									
SGPA		Result		Sign of Student		Sign of TG		Sign of HoD		

BE Sem: II		A. Y.: 201 - 1		Roll No.:		Exam Seat No.		Teacher Guardian:		
	Subject	C/M	C/M	C/M	C/M	C/M	C/M	C/M	C/M	C/M
1	Subject Code									
2	Lectures									
3	Practical									
4	OL/InSem									
5	OL2									
6	Prelim									
7	OL/InSem									
8	TH									
9	TW									
10	TO									
11	OR									
12	PR									
13	Total Credits									
14	GRD									
15	CRD									
16	GP									
SGPA		Result		Sign of Student		Sign of TG		Sign of HoD		

Value Added Program Attended

Title of the Project

Sponsoring Company (if any)

Guide Faculty

SPECIAL ACHIEVEMENT IN NEWS





INDUSTRIAL VISIT

INDUSTRIAL VISIT AT SONHIRA SAHKARI SAKHAR KHARKHANA LTD. & CHITALE DAIRY DATE: - 16th and 17th February 2017 Faculty Coordinator: Prof. Harsha Gandhi, Student Coordinator: Mr. Prasad Sonawane.



SONHIRA SAHKARI SAKHAR KHARKHANA LTD.



Students at Co generation Plant of Sonhira, (Steam Turbines behind)



- **CHITALE DAIRY**



SPORTS EVENTS – AY 2016-17

1. **Winner of Challenger’s Trophy** :Mr.ShreyasShinde , Student of MBA – I Batch 2016-18 was the winner in the Challengers Trophy held at Sinhgad Institute, Vadgaon Campus. Shreyas was also awarded as “ Man of The Match” in above Trophy.



Mr. Shreyas accepting the Award of Man of Match with the hands of Mr. Pargaonkar

Sinhgad Karandak Trophy : The student of MBA – I ; Mr. Shreyas Shinde participated in Sinhgad Karandak Trophy of Cricket . The Team of SKNCOE reached upto to Finals level in **cricket tournament Series and Won the series. Shreyas of MBA was awarded as Man of Series.** Event held between 04th to 15th January 2017.



