

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

(2016-17)

(15/06/2016 to 14/06/2017)

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 Technical Education Society's

Sinhgad Institute of Technology & Science

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

Narhe, Off Westerly Bypass, Pune – Mumbai Expressway, Narhe, Pune – 41



SINHGAD TECHNICAL EDUCATION SOCIETY'S
SINHGAD INSTITUTE OF TECHNOLOGY & SCIENCE, PUNE

(Approved by AICTE & Affiliated to University of Pune)

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SITS/IQAC/NAAC/2017-18/ 029

Date: 30th June 2017

CERTIFICATE

This is certified that the Annual Quality Assurance Report (AQAR) for the Academic Year 2016-17 forwarded to the National Assessment and Accreditation Council (NAAC), Bangalore is compiled from the data collected from official records and it is true to the best of our knowledge and belief.

Prof. Dr. Suresh N. Mali
Chairperson, IQAC

Dr. Sandip V. Kamat
Coordinator, IQAC



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Vision

उत्तमपुरुषान् उत्तमाभियंतृन् निर्मातुं कटीबद्धाः वयम्।

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

Mission

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

Goals and objectives of the Institution

- To achieve quality academic performance of the students at university examinations by implementing adaptive and effective T-L-P
- To ensure all-round development of students by providing STPs and VAPs
- To motivate students to participate in various technical, sports, co-curricular and extra-curricular activities
- To inculcate research culture in faculty and students and encourage them by providing state-of-the-art research facilities and Industry Institute Interaction I-I-I
- To motivate faculty and staff to improve their qualification and make themselves suitable in the new era of education
- To update the knowledge of the faculty by giving them consistent up-to-date awareness of new technologies through FDP and Train the Trainer (TTT) Program
- To inculcate moral integrity in students and make them socially responsible and good human beings

ANNUAL QUALITY ASSURANCE REPORT (AQAR) of the IQAC

PART – A

1. Details of the Institution:

1.1 Name of the Institution	:	STES's, Sinhgad Institute of Technology & Science.
1.2 Address Line 1	:	Off. Westerly Bypass,
Address Line 2	:	Near Pune-Mumbai Expressway, Narhe,
City	:	PUNE
State	:	Maharashtra
Pin Code	:	411041
Institution e-mail ID	:	principal_sits@sinhgad.edu
Name of the Head of the Institution	:	Prof. Dr. Suresh N. Mali
Tel. No. with STD Code	:	(020) 66831702
Mobile	:	08550990118, 08007022300
Name of the IQAC Co-ordinator	:	Prof. Dr. Sandip V. Kamat
Mobile	:	09923950419
1.3 IQAC e-mail address	:	iqac_sits@sinhgad.edu
NAAC TRACK ID	:	MHCOGN26096
1.4 NAAC Executive Committee No. & Date	:	EC (SC)/17/A&A/131.1 Date September 16, 2016

1.5 Website address : http://cms.sinhgad.edu/sinhgad_engineering_institute/s/sits_narhetechnicalcampus/iqac_sits.aspx

Web-link of the AQAR : http://cms.sinhgad.edu/sinhgad_engineering_institute/s/sits_narhetechnicalcampus/iqac_sits.aspx

1.6 Accreditation Details :

Sr. No	Cycle	Grade	CGPA	Year of accreditation	Validity period
1	1 st	3 star	2.38	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 : 29th to 31st August, 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
----------------------	-----	---	----

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	:	14
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	:	01
2.8 No. of other External Experts	:	02
2.9 Total No. of members	:	24

2.10 No. of IQAC meetings held : 02

2.11 No. of meetings with various Stakeholders:

Faculty	02	Non-Teaching Staff	00	Students	00
Alumni	00	Others	00		

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, student feedbacks were conducted on 20/07/2016 and 24/01/2017. Further, the necessary training of the faculty has been suggested 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.
- ❖ 25 faculties 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. 14 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	03			
3	UG	06			
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	
-----------------------------	----------	---	-----------	--

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.

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

<i>MODELX-3D CENTER OF EXCELLENCE LAB</i> Department of Mechanical Engineering
This lab is in association with industry, VM-Intellect. Lab consists of 21 computers and simulation software in addition to SCILAB and Autodex. This lab is useful for all the UG and PG students of Mechanical Engineering while preparing a prototype mechanical design. More than 108 students are utilizing this lab for their projects.
<i>SOFTWARE DEFINED NETWORK LAB</i> Department of Computer Engineering
This lab provides training of <i>Software Defined Network</i> , where one can adaptively define his/her network configurations as per their need. 13 students and 02 teaching Industry, “E-code Network,” London, UK is helping us through Skype. Unlike the Cisco and Juniper proprietary management systems, this lab creates an open ecosystem amongst multi-vendor platforms, by abstraction of network services and helping us to deploy and manage an end to end service.

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of Permanent Faculty:

Total	Asst. Professors	Associate Professors	Professors	Cadre Ratio
153	144	05	04	04:05:144

2.2 No. of permanent faculty with Ph.D. 09

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	4	0	1	4	60	22	NA	NA	NA	NA
<i>Recruited</i>										
<i>Yet to recruit</i>	7	4	18	7	4	2	NA	NA	NA	NA
Sanctioned by the Management/ society or other authorized bodies	0	0	0	0	34	28	57	23	12	4
<i>Recruited</i>										
<i>Yet to recruit</i>	7	4	18	7	0	0	2	5	3	3

2.4 No. of Guest and Visiting faculty and Temporary faculty: 34

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended Seminars/ Workshops	10	07	06
Presented papers	18	01	---
Resource Persons	---	01	---

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

- ❖ 56 Guest Lectures were conducted in various departments from Industry experts.
- ❖ NPTEL Videos for faculty for improving their knowledge & skill.
- ❖ Different department conducted 40 Industrial Visits for Live demonstration.
- ❖ Remedial and revision lectures before the SPPU online examination.
- ❖ e-books on SITS Portal for free access to all faculties from their department.
- ❖ 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: 180

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, On-line & In-Sem Examinations

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/ Curriculum Development workshop:
28

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)	128	70.31	28.13	1.56	0	0
BE (Comp)	148	61.49	30.41	6.75	1.31	0
B.E. (Mech)	208	59.13	39.42	1.44	0	0
BE (IT)	79	60.76	37.97	1.26	0	0
BE (Civil)	143	59.44	35.66	4.2	0.7	0

2.11 Course/Programme wise Distribution of pass percentage: 2016-17* (SEM-I)

Title of the Programme	Total no. of students appeared	Division				
		Distinction %	I %	II %	III %	Pass %
BE(E&TC)	144	44.75	14.68	2.09	0	38.46
BE (Comp)	151	71.52	11.25	1.32	0	15.89
B.E. (Mech)	207	29.95	26.08	4.83	0	39.13
BE (IT)	77	51.94	32.46	2.59	1.29	11.68
BE (Civil)	150	26.86	24.62	6.71	0.74	41

*** Final Result of AY 2016-17 (SEM-I + Sem-II) is yet to be declared.**

2.12 Initiatives undertaken towards faculty development:

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
Orientation programmes	32
Staff training conducted by other institutions	40
8Summer / Winter schools, Workshops, etc.	73
Any Other / Industrial Training etc.	03
Faculty perusing Ph.D.	24

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	57	--	08	--
Technical Staff	16	--	--	--

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	--	04	03	03
Outlay in Rs. Lakhs	--	3.9	3.4	3.4

3.4 Details regarding projects:

Sr. No	Faculty	Title of the project	Status
1	Mr. S. M. Chitalkar	Association between various clouds and client using proxy framework	Ongoing
2	Mrs. P. U. Thakare	An Availability Strategy for Multiprocessor Database Machines	Completed
3	Mr. P. S. Dhotre	Location and Identity Privacy in IoT	Completed
4	Mr. S. A. Darade	Critical National Infrastructure Protection Using Location Based Services (Geo-Encryption	Completed

5	Prof. J. B. Karande & Prof. S. G.	Design of IoT based mechanism to monitor and control LPG gas regulator including gas leakage	Ongoing
6	Mrs. P. R. Thakare &	Relevance Feedback mechanism incorporating semantic features for improving Multimedia	Completed
7	Dr. A. P. Adsul & Mrs. V. S. Rajput	Smart Home system for Senior Citizen using Wireless Sensor Network.	Completed

3.5 Details on research publications

Type of Journal	International	National	Others
Peer Review Journals	20	-----	-----
Non-Peer Review Journals	19	-----	-----
e-Journals	05	-----	-----
Conference proceedings	05	01	-----

3.6 Details on Impact factor of publications:

Range	0.9-3.85	Average	2.97	h-index	04	Nos. in SCOPUS	03
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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	-----	-----	-----	-----
Industry sponsored	-----	-----	-----	-----
Projects sponsored by the University/ College	2 years	BCUD SPPU	2,44,000/-	1,88,000/-
	2 years	BCUD SPPU	3,05,000/-	2,00,750/-
	2 years	BCUD SPPU	2.40,000/-	2.40,000/-
Students research projects	-----	-----	-----	-----

<i>(other than compulsory by the University)</i>				
Any other(Specify)	-----	-----	-----	-----
Total			7,89,000/-	6,28,750/-

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

Sr. No	Name of the faculty	Title of the project	Status
01	Mrs. P. V. Nimbolkar	Effect of size, shape and texture of aggregate on fracture properties of concrete	Pursuing (5 progress completed)
02	Mr. I. M. Jain	Parametric studies of tall buildings under lateral load	Pursuing (7 progress completed)
03	Mr. A. K. Kanase	Thermal Stress Analysis of laminated composite plates using first order shear deformation theory	Thesis Submitted
04	Mr. P. S. Dhotre	Location and Identity Privacy in IoT	Completed
05	Mr. D.E. Upasani	Development of a system for monitoring & automated Diagnosis of ECG Signal	Pre Synopsis submission awaited
06	Mrs. N.G. Shahare	Early Stage Detection of clustered Micro-calcification in Mammograms	Topic approved
07	Mr.M. D. Patil	Design of low power processor for Digital Image Processing	1 Progress report submitted
08	Mr. R. R. Kubde	Very large scale integration Design	Admitted on 10/04/2017
09	Mr. V. P. Niwane	Modeling of active solid state devices for futuristic applications.	Course work completed
10	Mr. H. B. Mali	Vision Based System for Driver Drowsiness Detection with Security	10 Progress reports submitted

		issues	
11	Mrs. A.B. Kanwade	Analysis of SMM in chronic obstructive pulmonary disease	1 Progress report submitted
12	S. R. Deshpande	Smart Vehicle Monitoring System using Fuzzy and Neural Approach	Thesis submitted
13	Mrs.V. S. Patil	Synthesis and Characterization of TeO ₂ thin films	10 progress reports submitted
14	Mr. S. S. Jalkote	Protection technologies for micro grid	Course work completed
15	Mrs. P.S. Badave	Synthesis and Characterization of Quinine based polymers	Title Approved
16	M. N. Chougule	Voltage stability investigation of connected power system	Course work completed
17	G. S. Waghmare	Performance Modeling, Analysis and FEA based Simulation of Surface Dimple Cold Rolled Components	Course work completed
18	Mr. D.N. Korade	Effect of Heat treatments on tribological behavior of Hot Work tool steel	Course work completed
19	Mr. A.H. Kekan	Detection of crack location and crack depth of rotating shaft using artificial Neural Network	Course work completed
20	Mr. V.D. Patil	Development and experimental investigation of diesel Particulate filter using ecofriendly materials	Thesis submitted
21	Mr. J. B. Karande	Design of reliable and secure big data management in IoT	Course work completed
22	Mr. T. D. Khadtare	Analysis and Prediction of time series	Course work completed
23	Mrs. P. R.	Motion Tolerant PPG based system	Title Approved

	Thakare	for Heart Rate monitoring	
24	Mr. P. D. Darade	Optimal vibration control of structural element	Thesis submitted
25	Mrs. G. S. Nawale	Privacy Enhancement algorithm in association rule by adoptive reversible information ID	4 progress reports submitted

- One of the students Mrs. Archana Chougule has been awarded PhD under the guidance of Prof. Dr. S. N. Mali on 16/02/2017. Her research topic was “Quantification and Classification of Seeds using Digital Image Processing and Feature Extraction”

3.8 Consultancies:

Sr. No	Name of the department	Consultancy type	Type of Work done	Revenue Generated
01	Civil engineering	Environmental Engineering	Sewage water and fresh water analysis	-----

3.9 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number	-----	-----	-----	-----	-----
Sponsoring agencies	-----	-----	-----	-----	-----

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

3.11 No. of collaborations, Moue's: 38

International	03	National	18	Any other	04
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3.12 Total budget for research for current year in Rs. lakhs:

From funding agency	0.64
From Management of University/College	5.46
Total [Rs. Lakhs]	6.10

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

Type of Patent	Status	Number
National	Applied	01
	Granted	03

(b) No. of copyrights received this year:

Type of copyright	Status	Number
National	Applied	02
	Granted	05

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
08	02	--	--	01	--	05	--

3.15 No. of students Participated in NSS events:

University Level	25	State level	30
National level	06	International level	00

3.16 No. of awards in NSS: Nil

3.17 No. of Extension Activities Organized:

University forum	01	College forum	37
NCC	02	NSS	13
Any Other	03		

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

Sr. No	Name of the program
1	Visit to Old Age Home – Food donation
2	Visit to Orphanage – Food Donation
3	Traffic Awareness
4	One week workshop on Industry automation
5	TECHTONIC 2017 (192 Competitions with 10 Theme Events)
6	Blood Donation Camp
7	Common National Anthem singing by SITS
8	STES UGC Activity Coordination
9	SPPU one day workshop on “Evaluation of Answer sheets”
10	Disaster Management
11	Personality Development
12	Awareness programme on Sexual harassment at work place
13	Workshop on Angular JS
14	One week workshop on Industry Automation
15	Research Methodology
16	SPPU Sponsored workshop on Cognitive Radio

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 (\geq 1-0 lakh) during the current year.	15	0	0	15
Value of the equipment purchased during the year (Rs. In Lakhs)	30.32	0	0	30.32
Others – (Software etc.)	05	Software Defined Laboratory	Ecode Networks, London	07

4.2 Technology up gradation (overall):

Title	Total Computers	Computer Labs	Internet	Browsing Centers	Computer Centers	Office	Departments	Others
Existing	487	22	Yes	01	02	02	01	
Added	-							1
Total	487	22	Yes	01	02	02	01	1

4.3 Library services:

Title	Existing		Newly added		Total	
	No.	Value(Rs)	No.	Value(Rs)	No.	Value(Rs)
Text Books	399	11,74,153/-	14	8,317/-	410	12,534,70/-
Reference Books	787	5,74,445/-	21	5,845/-	392	2,73050/-

e-Books	20	-	245	free	265	free
Journals	4	4000/-	8	12000	12	16000
e-Journals	-	-	169(IEEE E) 277 (Science Direct)	19,97852/-	169(IEEE) 275(Science Direct)+ 02	29,97,852/ -
Digital Database	-	-	-	-	-	-
CD & Video	380 8 NPTEL	-	NPTEL: 100 NPTEL: 500+ video courses 20000+ video lectures 400+ web courses	-	NPTEL:100 NPTEL:500+ video courses 20000+ video lectures 400+ web courses	-
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	02 (SDN-Pre OCSA Training, Ethical Hacking)
Industrial Training	03
Industrial Visits	37
Student Internships	22
Projects	109
Guest Lectures	56
Workshops	04 (Android, Java, Animation, Latex)
Value Added Program	02 (Advanced Java, Hadoop & Big Data)
Webinars	05
Spoken Tutorials	06

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 e-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.

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.
- ❖ 14 QALR tests are conducted to test aptitude ability.
- ❖ Conducted 2 personality development programmes.

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

- ❖ 01 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

- ❖ 02 guest lectures are conducted to promote entrepreneurial skill sets amongst the students.
- ❖ 11 MOU's signed with industries.

5.3 No. of students qualified in these examinations.

GATE	State PSC	UPSC	GRE	Others
04	02	02	09	05

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
117	275	109	1

5.5 Students Activities.

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

State/university Level	621	National level	02	International level	00
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No. of students participated in cultural events:

State/university Level	08	National level	490	International level	00
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5.6 No. of social initiatives undertaken by the students: 27

Criterion – VI

6. Governance, Leadership and Management

6.1 Activities and support from the Alumni Association:

- ❖ 6 sessions were conducted by Alumni on different topics such as Project work & Higher Studies, Career Opportunities in Web Development, Android.
- ❖ 6 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 TTECHTONIC-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.
- ❖ TCT 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

- ❖ Instead of the Paper based Appraisals conducted sofar, there will be a link and respective login credentials provided to the Faculties and staff of all departments, to access and complete their Self-Evaluation (Performance Appraisal) online. Training of the GEMS portal has been given.
- ❖ 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.
- ❖ The Department of Engineering Science organized a program and exhibition on Electrical Safety with the help of Electrical Inspectors from PWD, Govt. of Maharashtra.

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**
- ❖ **NPTEL Video Lectures & e- journals**
- ❖ **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)**
- ❖ **Training of LATEX to students made TE & BE students to submit their Mini project report in LATEX.**
- ❖ **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.**

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

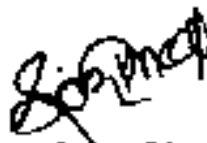
- ❖ **Industry collaborations are promoted by signing 11 MOU's with industry.**
- ❖ **Alumni interaction by inviting Alumni during TECHTONIC, Guest lectures, workshops, cultural events.etc.**
- ❖ **Alumni Interaction is strengthened by inviting Alumni during "TECHTONIC", Guest Lectures, Workshops.**
- ❖ **Interdisciplinary activity is promoted by organizing SPPU sponsored National Conference, workshop for PG students.**
- ❖ **According to Academic Sheldude 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. Suresh N. Mali
Chairperson, IQAC



Dr. Sandip V. Kamat
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 Assessement 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
SITS	Sinhgad Institute of Technology and Science
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)



SINHGAD INSTITUTE OF TECHNOLOGY AND SCIENCE, NARHE

N.S.S. ACTIVITY REPORT – CLOTH AND STATIONARY DONATION CAMP AT GADCHIROLI

Date : 27th Oct. 2016
Time : 9:00 am to 5:00 pm
Venue : At. Damrancha, Dist. Gadchiroli, Maharashtra.

The three basic needs of human beings are food, clothes and shelter. The human cannot survive without these things. Imagine about that poor peoples or the peoples who don't have proper clothes to wear and to cover their body, and some peoples have many clothes that their clothes are just to keep in cupboard. So the main objective of 'Cloth Donation Camp' was to donate the clothes to the needy ones.

This initiative was taken by us the National Service Scheme (NSS) students collaborating with 'The District Commissioner Of Police Gadchiroli District'.

All cloths are given to the poor people of Gadchiroli District by hand of our NSS co-ordinator of our college Karan Khade and Omkar Jadhav. He was visited Gadchiroli District in very dangerous situation.

For the program chief guest was S.P of Gadchiroli Dist. Dr. Abhinav Deshmukh, and Additional S.P Maheshwar Reddi.

Under the SDPO Annasaheb Jadhav and API Vilas More sir the whole police dept. did best work for this event. It is very great achievement for us.



Guest Welcome At Daramancha



Falicitation Of Program By Chief Guest



NSS Coordinator Faliciated by Guest



Cloth donated to AADIVASI



Distributing School bags to Students



Clothes given to the people



Distributing Clothes to the AADIVASI



Distributing Clothes to the AADIVASI



Respond to program by villagers



Meeting with Dr. Prakash Amte



SINHGAD TECHNICAL EDUCATION SOCIETY'S
**STUDENT TRAINING PROGRAM
 HISTORY CARD**

Paste Student's Photo

Name of The Student _____
 College _____ Branch _____ PRNo _____ Category _____ Yr. of Admn. _____
 Permanent Address _____
 Name of Guardian _____
 Student Contact Details _____ Email ID _____
 Guardian Contact Details _____ Email ID _____

FE 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	C/M	
1	Subject Code											
College	2 Lectures											
	3 Practical											
	4 OL/InSem											
	5 OL2											
	6 Prelim											
	7 OL/InSem										QALR	
SPPU	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	

FE 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	C/M	
1	Subject Code											
College	2 Lectures											
	3 Practical											
	4 OL/InSem											
	5 OL2											
	6 Prelim											
	7 OL/InSem										QALR	
SPPU	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	

Participation in Extra/ Co- Curricular Activity: _____

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

TECHTONIC - 2016-17: LIST OF EVENTS

SR. NO.	NAME OF EVENT	DEPARTMENT	TYPE	PARTICIPATION
1.	Roborace	Mechanical	Competition	02
2.	Latholic	Mechanical	Competition	03
3.	Junkinator	Mechanical	Competition	16
4.	Poster Making	Mechanical	Competition	05
5.	KrazyTech	Mechanical	Competition	35
6.	Nirmaan	Civil	Competition	12
7.	Concube	Civil	Competition	03
8.	Geo-Castle	Civil	Competition	03
9.	Best from Waste	Civil	Competition	17
10.	Quizbate	Civil	Competition	05
11.	Civil Strike	Civil	Competition	02
12.	Just Shop it	ENTC	Competition	17
13.	Bits and Bytes	ENTC	Competition	07
14.	Circuit Hunt	ENTC	Competition	04
15.	Pirates of Circuits	ENTC	Competition	03
16.	Seventh Sense	ENTC	Competition	06
17.	Twin-o-Tech	IT	Competition	05
18.	Code Monopoly	IT	Competition	09
19.	Indentation	IT	Competition	12
20.	Bamboozled	Computer	Competition	16
21.	BugSmash	Computer	Competition	09
22.	Copy as much as u can	Computer	Competition	17
23.	Code Coordination	Computer	Competition	09
24.	Type-o-Mania	Computer	Competition	10
25.	Hidden Leaf	Computer	Competition	32
26.	Crack the Interview	Mechanical	Workshop	20
27.	AUTO-CAD	Civil	Workshop	47
28.	Angular JS	ENTC	Workshop	02
29.	Research Methodology	IT	Workshop	15
30.	Mini Militia	Mechanical	ChillZone	11
31.	Minute to win it	Mechanical	ChillZone	09
32.	MazeBall	Civil	ChillZone	12
33.	Shopping Bee	Civil	ChillZone	14
34.	Box Cricket	ENTC	ChillZone	08
35.	LATEX	ENTC	Workshop	12
36.	GRAPHICS ANIMATION	Mechanical	Competition	94
37.	Think	Computer	ChillZone	07
TOTAL participation				510

SPECIAL ACHIEVEMENT

Establishment of SDN Lab

इंटरनेट परिणामकारकपणे हाताळता येणार
देशातील पहिल्या सॉफ्टवेअर डिफाइन नेटवर्क लॅबचे उद्घाटन

पुणे, ता. २० : इंटरनेट असो वा लोकल एरिया नेटवर्क (लॅन) त्याचा विस्तार आणि माहितीची परिणामकारकपणे हाताळणी करता येईल, अशी देशातील पहिली सॉफ्टवेअर डिफाइन नेटवर्क लॅब सिंहगड संस्थेच्या नव्हे येबील संगणक अभियांत्रिकी विभागात उभारण्यात आली आहे. यामुळे विद्यार्थ्यांना शिक्षण घेतानाच प्रशिक्षण मिळण्याबरोबर रोजगाराच्या संधीदेखील मिळू शकतील.

लंडन येथील इकोड नेटवर्क या कंपनीच्या मदतीने ही प्रयोगशाळा उभारण्यात आली आहे. त्याचे उद्घाटन 'सकाळ'चे संचालक (तंत्रज्ञान) भाऊसाहेब पाटील यांच्या हस्ते नुकतेच झाले. प्राचार्य डॉ. एस. एन. माळी, 'इकोड'चे मुख्य कार्यकारी अधिकारी निमित्त शिसोदिया, प्राध्यापक परिक्षित महल्ले आणि गीता नवले आदी या वेळी उपस्थित होते.

प्रयोगशाळेबद्दल माहिती सांगताना प्राध्यापक संतोष दराडे म्हणाले, "सध्या लॅन असो की इंटरनेट त्यात बदल करायचा असेल, तर तुम्हाला 'सिस्टिम अॅडमिन'वर अवलंबून राहावे लागते; परंतु 'सॉफ्टवेअर डिफाइन नेटवर्क' प्रणालीमध्ये संगणक वापरणारा स्वतः स्क्रिप्टद्वारे सूचना देऊ शकतो. त्यानुसार एका ठिकाणी बसूनही इतर कोणत्याही राहणार या कुठेही कंपनीचे नेटवर्क असेल, तर त्यात बदल करता येतील."

विद्यार्थ्यांना फायदा
संगणक अभियांत्रिकीचे शिक्षण घेताना विद्यार्थी आणि प्राध्यापकांना सॉफ्टवेअर डिफाइन नेटवर्क हे नवीन तंत्रज्ञान शिकायला मिळेल.

त्यांना प्रशिक्षण मिळून कंपन्यांमध्ये नोकरी वा रोजगाराची संधी मिळेल, तसेच भारतीय संगणक अभियंत्यांना बाहेरच्या देशात जाऊन संचर्ष करवा लागतो; परंतु असे तंत्रज्ञान शिकल्यानंतर त्याला भारतातच रोजगाराची संधी उपलब्ध होतील," असे दराडे यांनी सांगितले.

भाऊसाहेब पाटील यांनी जगाभरातील लक्षांनी निर्माण केलेल्या तंत्रज्ञानाची माहिती देत नव्या युगातील तंत्रज्ञानाचे महत्त्व सांगितले. विद्यार्थ्यांना नवीन तंत्रज्ञान निर्मितमध्ये योगदान दिले पहिले, असे आवाहनही त्यांनी या वेळी केले.

शिसोदिया म्हणाले, "सॉफ्टवेअर डिफाइन नेटवर्कमुळे संगणक यंत्रणा हाताळण्यासाठी अनावश्यक मनुष्यबळ कमी लागण्याबरोबरच खर्चातही कपात होते. 'बॅंडविड्थ' आणि नेटवर्कची लवचिकता वाढू शकते. माहितीचा साठाही याद्वारे परिणामकारकपणे हाताळता येतो."

Establishment of Software Defined Network (SDN) Lab @ Department of Computer Engineering SITS. Great opportunities for students to handle their computer network with Advanced Technology

SPECIAL ACHIEVEMENT

Establishment of SDN Lab



Formula Kart Design Challenge, Organized by National Go-karting Championship (NGKC). SITS Team won 4 awards. Team Glycon 4.0 of SITS became “Overall Winner of the Event (Rank-1 with Rs. 1 Lac cash price), Endurance Winner, Skid-pad Winner, Auto-cross Runner-up”.

CULTURAL EVENTS- AY 2016-17

Parents-Teacher Meet at SITS Narhe



The admission process, examination reforms, structure and evaluation processes of SPPU/ DTE/ GoM/SITS are informed to the students and parents time to time. Regular Parents-Teacher Meets are conducted department level and institutional level.

CULTURAL EVENTS – AY 2016-17



SITS in Purshottam Karandak



Winner of singing competition (NEON-17)



Traditional Day celebrations AY 2016-17



Winner of Mr. Sinhgad (NEON-17)

CULTURAL EVENTS – AY 2016-17



Winner of Fashion Show (NEON-17)

SPORTS EVENTS – AY 2016-17



SITS Kabbaddi Team (Boys) [winner of kabbaddi competition]



SITS Holly ball Team (Boys) [winner of holly ball competition]

SPORTS EVENTS – AY 2016-17



SITS Cricket Team (Boys) [winner of intercollegiate cricket competition]



SITS Hockey Team (Boys & Girls)

