

**Internal Quality Assurance Cell (IQAC)
and Submission of Annual Quality
Assurance Report (AQAR) 2017-18 of
Saraswati College of Engineering(SCOE),
Kharghar, Navi Mumbai**



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

NAAC

VISION

To make quality the defining element of higher education in India through a combination of self and external quality evaluation, promotion and sustenance initiatives.

MISSION

- ☞ To arrange for periodic assessment and accreditation of institutions of higher education or units thereof, or specific academic programmes or projects;*
- ☞ To stimulate the academic environment for promotion of quality of teaching-learning and research in higher education institutions;*
- ☞ To encourage self-evaluation, accountability, autonomy and innovations in higher education;*
- ☞ To undertake quality-related research studies, consultancy and training programmes, and*
- ☞ To collaborate with other stakeholders of higher education for quality evaluation, promotion and sustenance.*

Value Framework

To promote the following core values among the HEIs of the country:

- Contributing to National Development*
- Fostering Global Competencies among Students*
- Inculcating a Value System among Students*
- Promoting the Use of Technology*
- Quest for Excellence*

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The Annual Quality Assurance Report (AQAR) of the IQAC
(For Affiliated/Constituent Colleges)

Part – A

Data of the Institution

1. Name of the Institution :Saraswati College of Engineering

- Name of the Head of the institution : **Dr. Manjusha Pradip Deshmukh**
- Designation : **Principal**
- Does the institution function from own campus: **Yes**
- Phone no./Alternate phone no. : **022-27743706**
- Mobile no : **7738677011**
- Registered e-mail : **iqac.scoe@sce.edu.in**
- Alternate e-mail : **principal.scoe@gmail.com**
- Address : **Plot-46, Sector-5, Kharghar,
Navi Mumbai**
- City/Town : **Kharghar**
- State/UT : **Maharashtra**
- Pin Code : **410210**

2. Institutional status:

- Affiliated / Constituent : **Affiliated**
- Type of Institution: Co-education/Men/Women : **Co-education**
- Location : Rural/Semi-urban/Urban : **Urban**
- Financial Status: Grants-in aid/ UGC 2f and 12 (B)/ Self financing (please specify) :) : **Self financing**
- Name of the Affiliating University : **University of Mumbai**
- Name of the IQAC Co-Ordinator : **Dr. Sunil M. Rangari**
- Phone no. : **9594776192**

- Alternate phone no. : 7738677011
- IQAC e-mail address : iqac.scoe@sce.edu.in
- Alternate Email address : principal.scoe@gmail.com

3. Website address: <http://engineering.saraswatikharghar.edu.in>

Web-link of the AQAR: (Previous Academic Year): NA

For ex. <http://www.ladykeanecollege.edu.in/AQAR2012-13.doc>

4. Whether Academic Calendar prepared during the year? **YES**
 Yes/No....., if yes, whether it is uploaded in the Institutional website:

Weblink:

- i. For year 2017-18 (ODD SEM):
http://engineering.saraswatikharghar.edu.in/wp-content/uploads/sites/6/2018/12/academic_calender_2017_ODD_SEM.pdf
- ii. For year 2018-19 (ODD SEM):
<http://engineering.saraswatikharghar.edu.in/wp-content/uploads/sites/6/2018/12/academic-calender-2018-odd-sem.pdf>
- iii. For year 2017-18 (EVEN SEM):
http://engineering.saraswatikharghar.edu.in/wp-content/uploads/sites/6/2018/12/academic_calender_2017_even_SEM.pdf

5. Accreditation Details:

Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1 st	B	2.34	2017	From: 2 nd May-2017 To: 1 st May-2022
2 nd	---	---	---	---
3 rd	---	---	---	---
4 th	---	---	---	---
5 th	---	---	---	---

6. Date of Establishment of IQAC: DD/MM/YYYY: 17/07/2015

7. Internal Quality Assurance System

7.1 Quality initiatives by IQAC during the year for promoting quality culture		
Item /Title of the quality initiative by IQAC	Date & duration	Number of Participants/beneficiaries
1. Participation in NIRF	4 th December 2017	01
2. Academic Administrative Audit (AAA) conducted and its follow up action	3 rd July 2017 9:00am to 5:00pm	250
3. Preparation for upgradation of ISO certificate	3 rd January 2018	01

4. Application for Various awards and Rewards	02/01/2018	150
5. Faculty development programme on “Retrospection of Revised IS Codes (IS 1893: Part I, IS 13920 and IS 383) and Retrofitting”.	2 nd Jan. to 6 th Jan. 2018 9:00 am to 5:00pm	120
6. “Training on PYTHON”	28 th June 17 9.00 am to 5.00 pm	43
7. “Pratidhwani- An Interaction of Alumnus with Students”	19 th January 2018 10:00am to 2:00pm	150
8. Workshop on Advance Python Under Institute Student Companion Program by IIT Bombay	7 th August 2018 9.00 am to 5.00 pm	34
9. CADTECH Competition	17 th Sept.2017 9.00 am to 5.00 pm	89
10. “Autoinventia 2018” Students Project Competition	24 th Oct. 2018 9:00 am to 5:00pm	31 Groups of students (Auto)

Note: Some Quality Assurance initiatives of the institution are:

(Indicative list)

Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback from all stakeholders collected, analysed and used for improvements

Academic Administrative Audit (AAA) conducted and its follow up action

Participation in NIRF

ISO Certification

NBA etc.

Any other Quality Audit

8. Provide the list of funds by Central/ State Government- UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/ Department/Faculty	Scheme	Funding agency	Year of award with duration	Amount (Rs.)
i. SCOE/EXTC & Comp/ Dr. Manjusha Deshmukh & Dr. Deepa Parashar	Major Research Grant	BARC, Mumbai	2017-2018	16,93,300
ii. SCOE/MECH/Mr.Sachin G. Solanke	Minor Research Grant	INAE, New Delhi	2017-2018	42,750

iii. SCOE/MECH/Dr. Fauzia Siddiqui & Mr.Sachin G. Solanke	Minor Research Grant	University of Mumbai	2017-2018	30,000
iv. SCOE/EXTC/Mrs. Mandeep Kaur & Mr. Umesh Pinjarkar	Minor Research Grant	University of Mumbai	2017-2018	25,000
v. SCOE/EXTC/Mrs. Rajashri Narwade & Mrs.Sarita Kale	Minor Research Grant	University of Mumbai	2017-2018	20,000
vi.SCOE/CIVIL/Dr.Priyanka Jadhav	Minor Research Grant	University of Mumbai	2017-2018	60,000
vii.SCOE/CIVIL/Mrs. Shweta Motharkar & Mrs. Vaishali Kisan	Minor Research Grant	University of Mumbai	2017-2018	20,000
viii.SCOE/CIVIL/Mrs. Asmita Lakhote & Dr. Sunil M. Rangari	Minor Research Grant	University of Mumbai	2017-2018	20,000

9. Whether composition of IQAC as per latest NAAC guidelines: Yes/No: **YES**

*upload latest notification of formation of IQAC:

Weblink: <http://engineering.saraswatikharghar.edu.in/wp-content/uploads/sites/6/2018/12/Composition-of-IQAC.pdf>

10. No. of IQAC meetings held during the year: **02**

The minutes of IQAC meeting and compliance to the decisions have been uploaded on the institutional website..... **YES**

Yes/No

Weblink: <http://engineering.saraswatikharghar.edu.in/wp-content/uploads/sites/6/2018/12/Minutes-of-Meeting-and-action-taken-report-New.pdf>

11. Whether IQAC received funding from any of the funding agency to support its activities during the year? Yes/No: **NO**

If yes, mention the amount:

12. Significant contributions made by IQAC during the current year (maximum five bullets)

- i. Increase the number of participation of students and faculty in various Conferences, Seminars, Symposiums, Workshops, Faculty Development Programs, training, research and extension activities to enhance the quality of teaching and learning.
- ii. Developing creativity, social and environmental ethics among the students through exhibitions, group discussions, study tours. presentations (oral/ poster) in seminars and conferences for the Holistic Development of the students.

- iii. Academic audit of faculty members through teaching plans, daily dairies and feedback from students and self-appraisal forms.
- iv. Through the activities of NSS and Cleanliness drives for enrichment of the eco-aesthetic concerns and to prevent the rate of environmental degradation through maintenance of campus discipline.
- v. Organization of on/ off campus recruitment drives through placement cell and established the Entrepreneurship cell to originate an idea in the students to be an Entrepreneur.

13. Plan of action chalked out by the IQAC in the beginning of the Academic year towards

Quality Enhancement and the outcome achieved by the end of the Academic year

Plan of Action	Achievements/Outcomes
Improving the industry institute interaction	Interaction of students and industry expert initiate and lectures of experts from the industry were arranged.
Encourage students to participate in technical events	National awards won by students in area of E-Swaccha, E – Agriculture
Faculties are motivated to write research proposal for funded project	Number of proposal submitted from the departments for Funded project is increased. Submitted funded project sanctioned is also notable.
Motivating students to participate in National/International level curriculum and extra curriculum activities	Students participated in various activities at national and International level, National Level Kick Boxing Championship 2018, Bhartiya Chhatra Sansad, MIT Pune, Formula Student Italy, 2017 (18 th July to 22 th July, 2017), Jamboree-5 by ISHRAE
Motivation to faculties and students to enroll for courses conducted by IIT/NPTEL	Participation of students and faculties are found satisfactory
Student mentoring	Every faculty is associated with mentoring. Faculty members mentor the students and communicate the details to the parents
Software of Plagiarism	Purchased for scrutiny the papers submitted for the conferences to achieve the quality and originality of papers

14. Whether the AQAR was placed before statutory body? Yes /No: **YES**

Name of the Statutory body:

Date of meeting(s):

Management: LMC

Syndicate:

Any other body : NAAC

15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning?

Yes/No: **YES**

Date:

16. Whether institutional data submitted to AISHE: Yes/No: **YES**

Year: 2017-18

Date of Submission:20/02/2018

17. Does the Institution have Management Information System? **YES**

Yes

No

If yes, give a brief description and a list of modules currently operational.

(Maximum 500 words)

Yes, Saraswati College of Engineering (SCOE), have an online data cum resource management software used to maintain student, staff and resource records for various academic and administrative purposes such as feedback about faculties, course exit, Programme exit, book transaction and online access to library resources.

A brief discussion of its usage with respect to the above points is given below:

- i. **Administrative procedures including finance:** includes student and staff profiles, fee management, accounting, issue of certificates (bonafide, transfer certificate, etc.).
- ii. **Student admission:** The college has complete transparency in its admission process. Selection of students is done purely on merit basis declared by DTE, Maharashtra and reservation policy as per the state Government is strictly followed. Counselling of the students and parents were undertaken before and during the processes of admission. Fee structure of the college is in tune with the Vision and Mission of the college, which is highly economical for all social and economic category of students.
- iii. **Student records:** apart from personal profiles, this includes student registration records, marks and grades, student progression data, progress reports, information, etc.
- iv. **Evaluation & Examination procedures:** Internal assessment examinations are being conducted transparently in the college. The regulations of the university about Internal Assessment is strictly followed. The Examination cell of the college convenes results in time as per the schedule of University. The entire gamut of activities from registration through results, including attendance and other data are captured and maintained with appropriate access levels to students, faculty, management, administrative personnel, parents, and other stakeholders. The wide range of extra-curricular and cocurricular activities is provided/conducted for students to get an exposure to number of Non-academic opportunities as well. Various committees are enthusiastically working in this regard. The Placement Cell takes the responsibility of maintaining the cordial relationships with various corporates and arranges recruitment drives for the students. And ensures that the maximum of the students is placed and the end

of the academic year. With respect to the Improvement in the teaching-learning process, the college collects the feedback and suggestions from the students and other concerned stakeholders and initiates the valuable one.

- v. **Research administration:** The college has a research committee. This committee encourages the faculties and students to take up research projects, participate in paper presentations, write a research proposal. It helps in increasing the number of publications by the faculty member. In the staff profile, there is a provision for faculty members to maintain records of research publications, conferences attended, research grants received, etc.
- vi. **Others:** E-learning module – this provides an excellent suite of tools for the teaching-learning process, including the provision to set up question banks, conduct online exams, share teaching materials & resources, host discussion forums, conduct surveys & polls, generate course-related performance-reports, etc.

Part-B**CRITERION I – CURRICULAR ASPECTS****1.1 Curriculum Planning and Implementation**

1.1.1 Institution has the mechanism for well-planned curriculum delivery and documentation. Explain in 500 words

The Institute is ISO certified under ISO 9001:2008. Being the affiliated institute, the institute implements the curriculum prescribed by University of Mumbai (MU). All Academic processes are well established and implemented. Institute has a structured academic plan. For effective implementation of the curriculum, the following process is developed and deployed as per the following documented process:

At the beginning of every academic year, the program objectives and outcomes are designed. Along with the same the course objectives and outcomes are defined. The academic calendar and activities are planned to define the time frame. The institution follows the academic calendar which is released before commencement of the semesters and is circulated to all departments. The College encourages its faculty members to participate in Orientation/ Refresher Courses/ Workshops/ Seminars organized by the University to update their knowledge and to improve the teaching practices. The college provides ample books and other teaching and reference materials like journals, magazines, teaching models and software to enable its teachers to ensure effective delivery of curriculum. Teachers are trained for modern techniques to be used in teaching. FDP's are arranged to upgrade knowledge of teachers in their areas.

Subject distribution is done w.r.t. the subject choice and expertise available in the faculty. Course files, including notes from reference books, text books are prepared and maintained by respective faculty members, for the effective delivery of the curriculum. Assignments and question banks are prepared to support the evaluation activity. As per the QMS, the objectives are defined for good academic success, Faculties prepare lecture plans. The observation of the lectures is done by regular monitoring through HOD, Academic Coordinator, Class Teachers, Academic Coordinating committee and Dean Academics. Lecture monitoring format is followed strictly by them.

Students' attendance and academic progress for individual course is continuously monitored through teaching plan along with continuous monitoring. The students are classified as slow learners and advance learners by proper observation or by conducting a test. This helps faculties to decide their strategy for personal attention to be provided to slow learners and advanced learners. Remedial lectures are arranged for failure students and academically weak student. Procter system helps for increasing the interaction in faculty and students for positive changes in performance of students. Interactive methods are used to make learning comfortable and interesting for students. Methods like PPT, NPTEL videos, role plays, demonstrations, models, and questioners are used for involving students into the studies. Seminars, group discussions are also used in that methods.

Teaching learning is well supported by state of art equipment and infrastructural learning facilities like Central Computing Facility with Internet connectivity, Classrooms, LCD projectors, Over Head Projector, Wi-Fi, Library, department student chapters, Language lab, separate department library etc. Regular conduction of Industrial visits to get industrial exposure for the students. Twice in a semester teacher's feedback is obtained from students and corrective measures are taken accordingly. Parents also give their feedback in PTM's which adds to more improvement in teaching and learning activity. Feedback from industry and alumni is given due importance in defining graduate attributes and design of course outcomes. Views of experts from industry, academia and alumni on curriculum are taken for improving teaching learning process and academics.

1.1.2 Certificate/ Diploma Courses introduced during the Academic year

Name of the Certificate Course	Name of the Diploma Courses	Date of introduction and duration	focus on employability/ entrepreneurship	Skill development
Bright Business Beginning (B Cube)	-	18/01/2018 to 20/01/2018 (9:30AM to 4:00PM)	Entrepreneurship	Different activities conducted regarding collaboration and communication in EN.

E-Week orientation (IIT Bombay)	-	19/01/2018	Entrepreneurship	Startup ideas and from where to get funding for start up	
Corporate Chanakya	-	06/04/2018 (9:30AM to 4:00PM)	Entrepreneurship	Speakers from TED-Ex for motivating the students	
Computer Dept.- Python	-	28/07/17	Yes	Yes	
IT Dept.-Python Workshop	-	22 nd -24 th Aug. 2017	focus on employability	Programing	
IT dept.-Virtual Reality	-	22 nd -23 rd Feb. 2018	focus on employability	Managing different software on same platform	
E&TC Dept.- Workshop on Robotronics	-	30th -31st January 2017	Focus on Employability	Robotronics based programming	
E&TC Dept.- Workshop on Solar System Design	-	21st July 2017	Focus on Employability	Solar system-based circuit design	
E&TC Dept.- Workshop on Arduino and Raspberry Programming	-	31st July to 2nd August 2017	Focus on Employability	Arduino and Raspberry Programming	
E&TC Dept.-PCB Designing Workshop	-	4th August 2017	Focus on Employability	Circuit design	
E&TC Dept.-IOT workshop	-	2nd & 3rd February 2018	Employability	IOT based Programming	
1.2 Academic Flexibility					
1.2.1 New programmes/courses introduced during the Academic year					
Programme with Code	Date of Introduction	Course with Code	Date of Introduction		
-	-	-	-		
1.2.2 Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the Academic year.					
Name of Programmes adopting CBCS	UG	PG	Date of implementation of CBCS / Elective Course System	UG	PG

IT	SE	-		10 th Jul. 2017	
Civil	SE	Second year		11 July 2017	Aug 2017
E & TC	SE	-		10th July 2017	
Automobile	SE		10-07-2017	10-07- 2017	
Mechanical	SE	Second year	10-07-2017	10-07- 2017	Aug 2017
Already adopted (mention the year) FE from AY 2016-17 , SE from AY 2017-18, PG Civil from AY 2016-17					
1.2.3 Students enrolled in Certificate/ Diploma Courses introduced during the year					
	Certificate		Diploma Courses		
No of Students	E&TC-175 IT-75 Computer-43 Civil-95		-		
1.3 Curriculum Enrichment					
1.3.1 Value-added courses imparting transferable and life skills offered during the year					
	Date of introduction		Number of students enrolled		
Civil department					
Soft skill training	15/10/2017		45		
Nurture	25/09/2017		90		
Pratiswara Career Development	5/10/2017		50		
Computer Department					
Aptitude	23-01-18 To 01-02-18		50		
Seminar on Higher Studies	07-02-18		43		
Utsav-2k18	23-02-18		100		
Technitia-2018	8-03-18 To 09-03-18		70		
Bring it Up (Under Technitia)	12-03-18		50		
Foreign Study & Internship	13-3-18		55		

Farewell-2018	27-04-18	60
IT department		
Nurture	29 th Jan.2018 – 1 st Feb. 2018	76
Campus to Corporate	24 th July- 28 th July 2017 23 rd Jan.-31 st Jan. 2018	34 62
E&TC Department		
Nurture	22 nd Jan.2018 – 26 th Jan. 2018	72
Campus to Corporate	23 rd Jan.-31 st Jan. 2018	29
Automobile Department		
Nurture	6/2/2017 to 10/2/2017	70
Optistruct	24/2/2017	30
Mechanical Department		
Nurture	19/9/16 to 7/10/16	150
A Course on Personality Development	3/10/16 to 5/10/16	40
Electronics for photovoltaics for grid tied system	22/01/2017	100
. Expert Lecture on Future of Mechanical Sector	10/10/2016	70
Expert Lecture on Project Guidance	27/07/2016	90
Expert Lecture on New Product Development & Project Execution in ME Industry	22/07/2016	82
FE Department		
Nurture- Skill development Program (Soft skill, Personality development.)		
SE Computer	05/02/2018 – 08/02/2018	72
SE IT	31/01/2018 – 03/02/2018	76
SE Mech I	12/03/2018 - 15/03/2018	75
SE Mech II	12/02/2018 – 15/02/2018	71
FE All branches	22/01/2018 - 22/03/2018	507
1.3.2 Field Projects / Internships under taken during the year		
Project/Programme Title	No. of students enrolled for Field Projects / Internships	
Computer Dept.		
Internship	11	
IT Dept.		
Internship	8	
Industrial Project	3	
Automobile Department	34	

Internship	
EMU carshed, Kurla	05
Western Railway, Repair Workshop. Parel	03
Jsw works	01
BEST, EET TRAINING	02
Central railway loco workshop, Parel	19
DSA ELECTRO CONTROLS	01
Central railway loco workshop, Parel	05
Ritu Hyundai, Bhiwandi	02
Kalwa workshop, kalwa(w)	01
Best, Eet Training	01
Angel Auto wheels, palghar	01
Automotive Manufacturers Pvt.Ltd, Nerul	01
E&TC Dept.-	
Doordarshan	03
Dynalog India Ltd	01
Ashida electronics Pvt Ltd	04
Bharat Electronics Ltd Navi Mumbai	03
EGS Survey Pvt. Ltd	01
Sponsored Projects	
IOT based weighbridge (Sonhira Sahakari Sakhar Karkhana Sangli)	04
3-Wheeler commercial E-vehicle (Basanti Automobile Pvt. Ltd)	04
Ardino Based Platform Height Adaption For Train (Indian railway S&T Branch of Mumbai Division)	03
Water Cleaning Robot (Saitronics Pvt. Ltd Karad)	04
Civil Dept.-	
Internship /CIDCO	59
Internship/L & T	2
Internship/Data Construction	1

Internship/Kasmas Developers	1
Internship/BG Shirke	3
Internship/Central Railway	5
Internship/Sai World Empire	2
Internship/Amrudh Corporation	1
Internship/SMC Infra Pvt Ltd	2
Internship/Speco Infrastructure	1
Internship/Sundarland Developers	1
Internship/Konark Nirman Pvt. Ltd	1
Internship/Spectrum	1
Internship/Bhagwati Group	3
Internship/Paradise Group	3
Internship/ Runwal Group	2
Internship/Pylon Projects	4
Internship/J Kumar	1
Mechanical department	
Productivity improvement in luggage industry by increasing the reliability of bush material	4
Increase in OEE of Lathe Machine TS670 X 1500 using TPM	4
Study and development of eco-friendly toilet	8
Designing Of 3-Wheeler Electric Vehicle	7

1.4 Feedback System				
1.4.1 Whether structured feedback received from all the stakeholders.				
1) Students	2) Teachers	3) Employers	4) Alumni	5) Parents
Yes	Yes	Yes	Yes	Yes
1.4.2 How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)				

Effective feedback has benefits for the giver, the receiver, and the wider organization. Here are five reasons why feedback is so important.

Feedback is always there

Feedback is effective listening

Feedback can motivate

Feedback can improve performance

Feedback is a tool for continued learning

Continued learning is the key to improving

Institute has formulated a mechanism to obtain feedback from students and stakeholders, employers/industries and experts from academician.

- **Students:** Feedback for teaching and learning activity is taken twice a semester. It is an online system. The feedbacks are analyzed and conveyed to faculty members. If the feedback is less for any of the faculty member then he or she is made aware about the lacunas if any and guided by authorities for improvement. A student council is formed in the institute and they are a part of decision-making process in each program. Students' council members represent their program and conveys their academic issues to the head of the dept. And these are communicated to the university through senior faculty and taken into consideration at the time of syllabus revision
- **Alumni:** Alumni meet is arranged in the institute every year and their views, suggestion are noted. Based on alumni student's suggestion various add on courses are organized in the dept. to meet the industry requirement and making our students employable
- **Parents:** A Parents teacher meet is organized in each semester and issues related to the curriculum are discussed and their feedback is taken for improvement in teaching activity and facilities in the campus.
- **Employers/ Industries:** Training and placement cell regularly interacts with the HR of various industries and their feedback is forwarded to the programs heads and corrective action and courses are design to make the student employable
- **Academician/ experts:** The views expressed by the experts who visit the institute during STTP programs, conferences, add on courses, seminar, guest lecture on the current scenario and requirement of industry are also incorporated.

CRITERION II -TEACHING-LEARNING AND EVALUATION

2.1 Student Enrolment and Profile

2.1. 1 Demand Ratio during the year

Name of the Programme	Number of seats available	Number of applications received	Students Enrolled
Civil I(UG)	120	98	98
Civil II(UG)	60	43	43
Computer	60	59	59
IT	60	47	47
E&TC	120	74	74
Auto Mobile	60	44	44
Mech I shift(UG)	120	104	104
Mech II shift(UG)	60	38	38
Total	660	507	507
ME -Civil Structural(PG)	18	18	18
ME-Mech Manufacturing(PG)	18	07	07
Total	36	25	25

2.2 Catering to Student Diversity

2.2.1. Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of full-time teachers available in the institution teaching only UG courses	Number of full-time teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
FE-2017-18	507	25	173	06	03
SE-2017-18	691				
TE-2017-18	528				
BE-2017-18	704				

2.3 Teaching - Learning Process					
2.3.1 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)					
Number of teachers on roll	Number of teachers using ICT (LMS, e-Resources)	ICT tools and resources available	Number of ICT enabled classrooms	Number of smart classrooms	E-resources and techniques used
Mechanical Det.-36	36	Yes	03	02	NPTEL, Smart Board
FE Dept.-40	30	Yes	03	1	NPTEL Lecture
E&TC Dept.-24	24	Yes	02	01	Video Lectures NPTEL videos
Civil-36	36	Yes	03	01	NPTEL lectures Video lectures CPWD e manual AUTOCAD
IT Dept.-14	10	Yes	02	01	Video Lectures NPTEL videos
Computer Dept.-17	11	Yes	02	1	NPTEL n YOUTUBE
Automobile Dept.-12	9	Yes	1	1	E- Books E- journals Video Lectures

<p>2.3.2 Students mentoring system available in the institution? Give details. (maximum 500 words)</p> <p>Need Assessment: Guidance and counselling are needed to help the students for optimum achievement and adequate adjustment in the varied life situations. Need analysis of the students in the colleges shows the need of guidance and counselling services, in the education, profession, vocation, social, health, moral and personal areas. Counselling is the service offered to the individual who is undergoing a problem and needs professional help to overcome it. Counselling is an integral part of an over-all programme of guidance. This means the Counselling situation arises when a needy person is face to face with and expert who makes available his assistance to the needy individual to fulfil his needs. The Counselling service in the college was introduced to meet the following needs of the students:</p> <ol style="list-style-type: none"> 1. To help new students to get conversant with the college environment. 2. To help in the proper choices of courses. 3. To help the students in vocational development. 4. To minimize the mismatching between education and employment. 5. To identify and help students in need of special help. 6. To differently abled students who need special attention and opportunities.
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7. To ensure the proper utilization of time spent outside the classrooms.

Counselling is also required when:

1. The student requires not only reliable information but also an interesting introspection of those information which can solve his personal difficulties.
2. The student needs intelligent listener who has more experience than the pupil to whom he can recite his difficulties, and through which can seek suggestions for his working plan.
3. The student has some problem, but he is unaware of that problem and his development.

Some students lack a sense of direction, purpose and fulfilment and thus include in destructive activities which lead to social damage and loss. Adequate guidance and counselling facilities is the only answer to help and guide the youth to worthwhile channels and help them to realize the goals of optimum academic, personal and social development. Problems and needs in society are nothing new, but today they seen to be proliferating at unprecedented rate. The unique problems in the changing family, conflicts in values, attitudes and moral, the new criticism about politics, economic factors, the changing role of work, new pressure and demands in curriculum and the problems of the youth all points out the needs for the counselling services.

Different types of Counselling are:

- Guidance and career counselling.
- Mental health counselling.
- Educational Counselling.

At Saraswati College of Engineering we understand that the students want to gain as much from their time as possible, both academically and socially. The Counselling Service strives to ensure the welfare of the students by providing them emotional and academic assistance. By looking after their well-being, the Service tries to ensure that College is not just an institute, but a home away from home for them. The academic advice provision is a self-governing, free and personal service that is available to all students. We have a Mentoring (Proctor) system in which around twenty-five students are allocated to individual faculty, who are responsible for all accomplishments carried out by the student. Every semester two to three meetings are conducted by Proctor-in-charge to know and solve the difficulties of students, which are finally seen by Proctor of the department and communicated to the Head of the Department. The action taken report and improvements found in the students after counselling is communicated to the Principal through the Proctor Head of the Institute.

Benefits of Proctor System:

It was seen that through regular counselling and mentoring the following benefits were observed:

1 Students academic performance was improved. 2. Their confidence was enhanced. 3. Their communication skills were improved. 4. Behavioral changes were observed in students 5. Participation in Social, sports as well as in Technical event was increased. 6. Their concentration was increased.		
Number of students enrolled in the institution	Number of fulltime teachers	Mentor: Mentee Ratio
2430	179	1:14

2.4 Teacher Profile and Quality				
2.4.1 Number of full-time teachers appointed during the year				
No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D.
182	167	15	14	20
2.4.2 Honours and recognitions received by teachers <i>(received awards, recognition, fellowships at State, National, International level from Government, recognized bodies during the year)</i>				
Year of award	Name of full-time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies	
2017-18	Dr. Manjusha Deshmukh	Principal and Professor	1.Award of “Best principal of the year” by Computer society of India ,at CSI Tech Next India 2018-Awards to academia ,on February 10,2018 2. Received award of “Principal of the Year-2017” by Institute for exploring advances in sciences & Engineering (IEAE),in August 2017	
2017-18	Dr.Sanjay Jadhav	Professor	1.Award from chief minister of Maharashtra 2.Best TPO of the Year by CSI 3.100 Top Global Training and Development Minds by World HRD Congress 4.Best TPO –Pool Campus by ERUDITE 5.Career Guru- Young Achiever by Aspiring Minds	

2017	Dr. Fauzia Siddiqui	Professor and HOD	CSI-HOD of the year 2017
2018	Prof. Alka Purohit	Asst. Prof.	Best faculty award by computer society of India

2.5 Evaluation Process and Reforms

2.5.1 Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year- end examination	Date of declaration of results of semester-end/ year- end examination
FE Dept.	FEC(101-106)	Sem I(CBCGS)	30/12/17	17/02/18
FE	FEC(201-206)	Sem II(CBCGS)	20/12/17	03/03/18
FE	FEC(101-106)	Sem I(CBCGS)	11/06/18	19/07/18
FE	FEC(201-206)	Sem II(CBCGS)	12/06/18	19/07/18
E&TC Dept.	BE	1 st half (July2017- dec2017) 2 nd half (Jan-2018- June2018)	30/12/2017 12/06/2018	23 rd February 2018 11 th July 2018
IT Dept.	SE	1 st half(Jan-2018- June2018) 2 nd half(July2017- dec2017)	12/06/2018 30/12/2018	17/07/2018 26/02/2018
Odd Semester 2017-18				
Computer Engineering	SE	SE- III	26/12/2017	18/01/2018
Computer Engineering	TE	TE-V	14/12/2017	18/01/2018
Computer Engineering	BE	BE-VII	18/12/2017	23/02/2018
Even Semester 2017-18				
Computer Engineering	SE	SE- IV	8/06/2018	19/07/2018
Computer Engineering	TE	TE-VI	11/06/2018	19/07/2018
Computer Engineering	BE	BE-VIII	25/05/2018	06/07/2018
Automobile Engineering	AU	IV / S.E	4-6-2018	24-7-2018
		VI / T.E.	11-6-2018	24-7-2018

		VIII/ BE.	2-6-2018(Term End 21-4-2018)	1-8-2018
Odd Semester 2017-18				
Mechanical Engineering	SE	SE- III	13/12/2017	25/01/2018
Mechanical Engineering	TE	TE-V	14/12/2017	25/01/2018
Mechanical Engineering	BE	BE-VII	18/12/2017	08/03/2018
Even Semester 2017-18				
Mechanical Engineering	SE	SE- IV	8/06/2018	25/07/2018
Mechanical Engineering	TE	TE-VI	11/06/2018	25/07/2018
Mechanical Engineering	BE	BE-VIII	28/05/2018	26/07/2018

2.5.2 Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

Students admitted are new to the college environment, hence they take time to cope with new syllabus. It is difficult to give extra time for the revision, so for testing the knowledge of the student's conduction of class test is useful.

Class Test also helps to determine whether students have learned what they were expected to learn or to level or degree of their understanding of the specific subject. Class test is an important tool that is used to measure learning progress and achievement, and to evaluate the effectiveness of relevant subjects. Tests may also measure student progress towards stated improvement goals.

Every test is for 10 marks for theory and for Practical exam. Division of marks is as follows: -

Attendance – 2 Marks

Performance - 5 Marks

Oral - 3 Marks

Through the test teacher can guess the knowledge level of students and their understanding on the relevant topic. Based on the Class test performance, the teacher can check the difficulty level of any topic and based on this, they can decide which topic, they must revise in the class. This also helps the students to improve their performance in final evaluation.

This class test helps in the better analysis of the students' grade and their performance, thus helping us to know and find the slow learner as well as the advance learner. Based on this test, Teachers can further work towards better performance of the students and their learning capabilities.

2.5.3 Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)

The Institution strongly believes in the concept of holistic education and strives to achieve its goal of preparing students to meet challenges that we face in 21st century. We believe it is important to provide education that focusses on the overall development of human personality guided by principal. We prepare our students not only for academic success but also to face challenges of their life. All department values continuous evaluation system and encourages the department to organize conferences seminars and workshops and guest lectures thus it creates opportunities to students and faculties to develop themselves professionally and to disseminate knowledge.

The first-year department has started its session with induction programme on 1st august 2017 where students get knowledge about the different courses and schedule for the entire semester, rules and regulations and various activities along with academic calendar. All the events in the semester were conducted according to the dates mentioned in academic calendar prepared by each department.

Regular meetings of academic forum, anti-ragging and student grievance cell were conducted according to the need.

Study group activities like technical event was organized in the month of August 2017, social activity was done in last week of august followed by feedback and first defaulter list in sept 2017.

Guest lecture was organized in the month of September 2017

Internal assessment was conducted on the dates mentioned in the calendar followed by PTM

All the activities like defaulter list, feedbacks from students, syllabus compliance, and second internal assessment along with term work submission with orals and practical's done according to the date mentioned in academic calendar similarly in even semester all activities are conducted according to the dates mentioned in academic calendar.

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution

Weblink:
 E & TC: <http://engineering.saraswathkharghar.edu.in/electronics-and-telecommunication-engineering/>
 Computer Engg: <http://engineering.saraswathkharghar.edu.in/computer-engineering/>
 Civil Engg: <http://engineering.saraswathkharghar.edu.in/civil-engineering/>
 IT Engg.: <http://engineering.saraswathkharghar.edu.in/information-technology/>
 Mechanical Engg.: <http://engineering.saraswathkharghar.edu.in/mechanical-engineering/>
 Automobile Engg: <http://engineering.saraswathkharghar.edu.in/automobile-engineering/>
 FE Dept: : <http://engineering.saraswathkharghar.edu.in/humanities-engineering-sciences/>

2.6.2 Pass percentage of students

Programme Code	Programme Code	Number of students appeared in the final year examination	Number of students passed in final semester/year examination	Pass Percentage
Electronics and Telecommunication engineering	E & TC (BE)	114	111	97.36%
Mechanical BE (17-18) MAY 18	52407203 - 52408203	211	188	89.09
Mechanical BE(16-17) MAY 17	52407203 - 52408203	203	177	87.19
BE CIVIL (I shift)	Civil MAY 2017	137	121	88.32
IT Department	INFORMATION OF TECHNOLOGY ENGG	49	46	94%

Computer Dept.		71	63	88.73(VII)
Computer Dept.		71	68	96%(VIII)
Computer Dept.		71	67	94.3(Overall)
Automobile Dept.	Automobile	74	73	98.65

2.7.1 Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink) :

<http://engineering.saraswathikharghar.edu.in/student-satisfactory-survey/>

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION				
3.1 Resource Mobilization for Research				
3.1.1 Research funds sanctioned and received from various agencies, industry and other organizations				
Nature of the Project	Duration	Duration	Total grant sanctioned	Amount received during the Academic year
Major projects BRNS	2017	2018	3022950	1693300
Minor Projects				
Civil Department				
Minor research grant of Mumbai University: Development of iron based SMA Reinforcement for evincing performance and safety of civil Infrastructure	1year	2017-18	60000	60000
Minor research grant of Mumbai University: Self-Curing Concrete	1year	2017-18	20000	20000
Minor research grant of Mumbai University: Design of Water Filter for Rural Area	1year	2017-18	20000	20000
Mechanical Department				
Minor Project-Theoretical and experimental investigation of notched specimen by fatigue testing jects	1year	2017-18	RS 30,000	Rs 30,000

Development of metal matrix composite with the help of Sic and graphene nanostructure.	1year	2017-18	Rs 42,950	Rs 42,950
E&TC Department				
Minor Projects				
Development of PCB Boards Using CNC Machine (sanctioned by Mumbai University)	June 2017	April 2018	25000/-	25000/-
Online Handwritten script recognition using hidden markov model(HMM) (sanctioned by Mumbai University)	June 2017	April 2018	20000/-	20000/-
Interdisciplinary Projects				
Interdisciplinary Projects-Computer Department	Supplier selection of manufacturing industry using ANN and GA	July 2017	April 2018	25000
Interdisciplinary Projects-Computer Department	Delamination effect of abrasive Water gel	July 2017	April 2018	25000
Interdisciplinary Projects - Mechanical Department	Design and fabrication of 3 wheeler	1 year	30000	30000
Interdisciplinary Projects (E & TC and Mechanical Dept.)	July2017	June 2018	1,00,000/-	70,000/-

3-Wheeler commercial E-vehicle (Basanti Automobile Pvt. Ltd)				
Industry sponsored Projects E&TC Department IOT based weighbridge (Sonhira Sahakari Sakhar Karkhana Sangli)	July2017	June 2018	20,000/-	20,000/-
3-Wheeler commercial E-vehicle (Basanti Automobile Pvt. Ltd)	July2017	June 2018	1,00,000/-	70,000/-
Arduino Based Platform Height Adaption For Train (Indian railway S&T Branch of Mumbai Division)	July2017	June 2018	19,000/-	19,000/-
Student Research Project -Computer Department Bluetooth based health Monitoring System	May 2017	July 2017		25000
Any other(Specify)				
Total				

3.2 Innovation Ecosystem

Innovation Ecosystem 3.2.1 Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of Workshop/Seminar	Name of the Dept.	Date(s)
AUTO INVENTIA 2018	AUTOMOBILE	24/10/2018

3.2.2 Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of the Awardee	Awarding Agency	Date of Award	Category
Civil Department				

Best Paper Award	Priyanka Jadhav and Suhail Ahmed Shaikh	Proceedings of 74th IRF International Conference, 17 th June 2018, Pune, India. Pp(9-13).	17 th June	
IT Department				
Solar Powered Arduino Controlled Agribot	Rabeena Panda Ankit Parit Supriya Borule	A P Shah Institute of Technology	21-April-2018	Student
Automobile Department				
Zero degree turning forklift for warehouse	Jadhav Rahul Shinde Sanket Pujari Sagar Trailokya Rajendra	SCOE kharghar	4/4/2018	Student Avishkar Project Competition
GMB Hybrid	Sharma Vipul Mirkute Devendra Dhone Akshay Jadhav Pratik Babare Tejas More Anup	SCOE kharghar	4/4/2018	Student Avishkar Project Competition
E&TC Department				
A project titled "E-Swaccha"	Kunal Pawar Mitesh Patel Aniket More Abhishek Rane	Avishkar-Project competition by SCOE	04/04/2018	Students Project competition
A project titled "E – Agriculture"	Manish Shripuram Saili Sawant Minakshee Power"	Avishkar-Project competition by SCOE	04/04/2018	Students Project competition

3.2.3 No. of Incubation center created, start-ups incubated on campus during the year

Incubation Centre Name	Name	Sponsored by
Sponsored by		

SCOE Innovators Club	Website Development http://wisdomcareereducation.org/	Wisdom Career Education
SCOE Innovators Club	Website Development http://www.seaeaglenavigators.com/	Seaeagle Navigators Private Limited.
SCOE Innovators Club	The website for Job Fair http://ekajobfair.in/ The website for Events http://ekaevents.in/	Eka Training
Name of the Start-up	Nature of Start-up	Date of commencement
Engigenius	Home tutoring and classes	June, 2018
Marketinc.in	Digital Marketing agency	June, 2018
Growerskart	Online grocery store	March, 2018
Knowitplus.com	News Network on Trending Topics	Feb, 2018
Technobyte Solutions	Web designing and Development, Business hosting	August, 2017
Nikhil Arts	Manufacturing Trophies , Medals , designing, printing, Banners, Posters and visiting cards	September, 2017

3.3 Research Publications and Awards

3.3.1 Incentive to the teachers who receive recognition/awards

The institute follows a unique point based incentive scheme to reward the research work carried out by faculty in the respective year. This is a one of its kind scheme initiated with the patronage of our Executive Director and serves as an effective motivation for faculty, to undertake research in their chosen areas of interest

State	National	International
01	02	03

3.3.2 Ph. Ds awarded during the year (*applicable for PG College, Research Center*)

-Not Applicable

Name of the Department	No. of Ph. Ds Awarded
------------------------	-----------------------

3.3.3 Research Publications in the Journals notified on UGC website during the year

	Department	No. of Publication	Average Impact Factor, if any			
National	Civil Department	13	2.6			
International	Department of Sciences and humanities	15	.5			
International	Automobile Department	10	3.3			
International	Computer Department	4	3.5			
International	Mechanical Department	26	1.68			
3.3.4 Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year						
Department		No. of publication				
Mechanical-Department		03				
Civil Department		13				
IT Department		02				
Automobile Department		08				
E&TC department		05				
3.3.5 Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or Pub Med/ Indian Citation Index						
Title of the paper	Name of the author	Title of the journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self-citations
IT Department						
Study on web DDOS attacks detection using multinomial classifier	Prof. Vaishali Jadhav	IEEE ICCICR	2016	2	Mumbai University	2

E&TC Department						
Omnidirectional and Directional Fractal Uwb Monopole Antenna	Sheetal Bukkawar		2017	1	Assistant Professor	1
A Survey of Image registration	Manjusha Deshmukh	International Journal of Image Processing	2011	97	Principal	97
Image fusion and image Quality assessment of fused image	Manjusha Deshmukh	International Journal of Image Processing	2010	71	Principal	71
Digital Image Watermaking In DCT Domain	Manjusha Deshmukh	International Journal of Emerging Technology and Advanced ISSN	2013	5	Principal	5
Iris Recognition a Review	Manjusha Deshmukh Pallavi Kharat	International Journal of Advanced Trends in Computer Science and Engineering	2013	5	Principal	5
Comparative Study of Image registration methods	Manjusha Deshmukh	International Journal of Image Processing	2014	4	Principal	4
Defending Against Attacks in MANETs Using Cooperative Bait Detection Approach	Manjusha Deshmukh	Cooperative Bait detection scheme (CBDS) To avoid the Collaborative Attacks	2014	4	Principal	4
Multimodal Image Registration	Manjusha Deshmukh	International Journal of Advanced Research in	2014	2	Principal	2

Using Contourlet transform		Computer and Communication				
Wavelet transform based image registration and image fusion	Manjusha Deshmukh	Information Technology and Mobile communication	2011	2	Principal	2
Video Compression Using H 264-A Review	Manjusha Deshmukh	International Journal of Advanced Trends in Computer Science and Engineering	2011	2	Principal	2
To Explore Radon, Transform for image Registration and Image Fusion	Manjusha Deshmukh	International Journal of Emerging Technologies and Applications in Engg	2010	1	Principal	1
DGS based microstrip phase shifters	Sheetal Bhujade	Sensing Technology (ICST), 2012 Sixth International Conference on, 723-728	2012	07	Assistant Professor	07
Design and evaluation of high gain microstrip patch antenna using double layer with air gap	Sheetal Bhujade	International Journal on Recent and Innovation Trends in Computing and ...	2015	05	Assistant Professor	05
Efficient high gain circularly polarized microstrip antenna using	Sheetal Bhujade,	Microwave, Optical and Communication Engineering	2015	01	Assistant Professor	01

asymmetrical RIS surface		(ICMOCE), 2015 ...				
Computer Department						
Seeded region growing segmentation on ultrasound image using particle swarm optimization	Deepa Parasar	IEEE XPLORE	2015	02	Associate Professor	2
Reversible color transmission of compressed fragment- visible mosaic image	Deepa Parasar	IEEE XPLORE	2015	01	Associate Professor	1
Notice of Retraction Ultrasound image enhancement using improved Fixed Point Independent Component Analysis	Deepa Parasar	IEEE XPLORE	2015	01	Associate Professor	1
Content based Medical Image Retrieval with SVM Classification and Relevance Feedback	Prof. Sujata Bhairnallyk ar	International Journal of Applied Information Systems (IJ AIS) – ISSN : 2249- 0868	2013	05	Associate Professor	5

Multifactor Authentication Using Android Mobile	Prof. Rina Bora	International Journal of Computer Applications (0975 – 8887)	2015	01	Associate Professor	1
Automobile Department						
Lubricating oil analysis-A review	Sagar Khatavkar	International Journal on Recent Technologies in Mechanical and Electrical	2015	1	Assistant professor	1
Ultrasonic cavitation induced degradation of Congo red in aqueous solution	P.D.Ingle	Chemical engineering research bulletin	2010	16	Associate professor	16
An overview of clearance optimization in sheet metal blanking	T.Z. Quazi	International journal of emerging technologies	2012	17	Associate professor	17
A case study of taguchi method in the optimization of turning parameters	T.Z. Quazi	International journal of emerging technologies	2013	16	Associate professor	16
An overview of factors	T.Z. Quazi	International journal of	2013	11	Associate professor	11

affecting in metal blanking		emerging technologies				
An overview of the methodologies used in the optimization processes in the sheet metal blanking	T.Z. Quazi	International journal of mechanics and robotics	2013	9	Associate professor	9
Optimization of turning parameters such as speed rate, feed rate, depth of cut for surface roughness by taguchi method	T.Z. Quazi	Asian journal for engineering and technology innovation	2014	6	Associate professor	6
Modal analysis of truck chassis frame	C. Vishnudas	IJSER	2017	1	Assistant professor	1
Civil Department						
Computations of Seismic Passive Resistance and Uplift Capacity of Horizontal Strip Anchors in Sand	S M Rangari	Geotechnical & Geological Engineering	2013	03	Associate Professor	3
Seismic uplift capacity of shallow horizontal strip anchor under	S M Rangari	Soils and Foundations	2013	4	Associate Professor	4

oblique load using pseudo-dynamic approach						
Estimation of seismic uplift capacity of horizontal strip anchors using pseudo-dynamic approach	S M Rangari	Geotechnical Engineering (KSCE Journal of Civil)	2013	02	Associate Professor	2
Effects of pullout direction and anchor inclination on computation of pseudo-static uplift capacity for strip anchors in sand	S M Rangari	Disaster Advances	2012	1	Associate Professor	1
Pseudo-Static Uplift Capacity of Obliquely Loaded Horizontal Strip Anchor in Cohesionless Soil	Sunil M. Rangari	Geo Congress 2012: State of the Art and Practice in Geotechnical Engineering	June 20,2012	1	Associate Professor	1
Pseudo-Static Uplift Capacity of Horizontal Strip Anchors	Sunil M. Rangari	Geo Frontiers 2011	2011	1	Associate Professor	1

Effect of replacement of natural sand by manufactured sand on the properties of cement mortar	Priyanka A. Jadhav	Civil & Structural Engineering	2013	1	Associate Professor	11
An experimental investigation on the properties of concrete containing manufactured sand	Priyanka A. Jadhav	Advanced Engineering Technology	2012	11	Associate Professor	11
Free and forced vibration control of piezoelectric FGM plate subjected to electro-mechanical loading	Priyanka A. Jadhav	Smart materials and structures	2013	8	Associate Professor	8
Buckling of piezoelectric functionally graded plate subjected to electro-mechanical loading	Priyanka A. Jadhav	Smart materials and structures	27 July 2012	3	Associate Professor	3
Stability Analysis of Piezoelectric FGM Plate Subjected to	Priyanka Jadhav	Applied Science & Engineering	2013	2	Associate Professor	2

Electro-mechanical Loading Using Finite Element Method						
Fatigue damage assessment under multi-axial nonproportional cyclic loading	P. A. Jadhav	Creep, fatigue and creep-fatigue interaction	2016	1	Associate Professor	1
Mechanical Department						
Optimization of welding parameters using Taguchi method for submerged arc welding on spiral pipes	Pradeep Deshmukh, MB Sorte	International Journal of Recent Technology and Engineering	2013	10	Assistant Professor	1
Unmanned Aerial Vehicle For Surveillance	Madan Jagtap	International Journal of Scientific & Technology Research	2014	4	Assistant Professor	1
Microturbine: Fabrication For efficient Power Generation	Madan Jagtap	International Journal of Scientific & Technology Research	2011	4	Assistant Professor	1
Optimization of Cutting parameters for Surface roughness in CNC turning of P20 steel	Arshad Qureshi, Madhukar Sorte	International Journal of Scientific & Engineering Research	2015	10	Assistant Professor	2
3.3.6 h-index of the Institutional Publications during the year. (based on Scopus/ Web of science)						
Title of the paper	Name of the author	Title of the journal	Year of publication	h-index	Number of citations excluding	Institutional affiliation as

					self-citations	mentioned in the publication
Automobile Department						
Title of the paper	Name of the author	Title of Journal	Year of publication	h-Index	Number of citation including self-citation	Institutional affiliation mentioned in publications
Lubricating oil analysis-A review	Sagar Khatavkar	International Journal on Recent Technologies in Mechanical and Electrical	2015	1	1	Assistant professor
Ultrasonic cavitation induced degradation of Congo red in aqueous solution	P.D.Ingle	Chemical engineering research bulletin	2010	2	16	Associate professor
An overview of clearance optimization in sheet metal blanking	T.Z. Quazi	International journal of emerging technologies	2012	5	17	Associate professor
A case study of taguchi method in the optimization of turning parameters	T.Z. Quazi	International journal of emerging technologies	2013	5	16	Associate professor

An overview of factors affecting in metal blanking	T.Z. Quazi	International journal of emerging technologies	2013	5	11	Associate professor
An overview of the methodologies used in the optimization processes in the sheet metal blanking	T.Z. Quazi	International journal of mechanics and robotics	2013	5	9	Associate professor
Optimization of turning parameters such as speed rete, feed rate, depth of cut for surface roughness by taguchi method	T.Z. Quazi	Asian journal for engineering and technology innovation	2014	5	6	Associate professor
Modal analysis of truch chassis frame	C. Vishnudas	IJSER	2017	1	1	Assistant professor
Mechanical department						
Optimization of Cutting parameters for Surface roughness in CNC turning of P20 steel	Arshad Qureshi, Madhukar Sorte	International Journal of Scientific & Engineering Research	2015	2	2	Associate professor
Optimization of welding parameters using Taguchi method for submerged arc	Pradeep Deshmukh, MB Sorte	International Journal of Recent Technology and Engineering	2013	2	6	Associate professor

welding on spiral pipes						
Plate Type Electrostatic Precipitator Essentials & Issues For Optimizing Overall Efficiency	Madan Jagtap	International Journal On Recent Technologies In Mechanical And Electrical Engineering	2015	1	2	Associate professor
E&TC Department						
Omnidirectional And Directional Fractal Uwb Monopole Antenna	Sheetal Bukkawar	IEEE Explorer	2017	1	1	Assistant Professor
A Survey of Image registration	Manjusha Deshmukh	International Journal of Image Processing	2011	4	97	Principal
Image fusion and image Quality assessment of fused image	Manjusha Deshmukh	International Journal of Image Processing	2010	4	71	Principal
Digital Image Watermaking In DCT Domain	Manjusha Deshmukh	International Journal of Emerging Technology and Advanced ISSN	2013	4	5	Principal
Iris Recognition a Review	Manjusha Deshmukh	International Journal of Advanced Trends in Computer Science and Engineering	2013	4	5	Principal
Comparative Study of Image registration methods	Manjusha Deshmukh	International Journal of Image Processing	2014	4	4	Principal

Defending Against Attacks in MANETs Using Cooperative Bait Detection Approach	Manjusha Deshmukh	Cooperative Bait detection scheme (CBDS) To avoid the Collaborative Attacks	2014	4	4	Principal
Multimodal Image Registration Using Contour let transform	Manjusha Deshmukh	International Journal of Advanced Research in Computer and Communication	2014	4	2	Principal
Wavelet transform based image registration and image fusion	Manjusha Deshmukh	Information Technology and Mobile communication	2011	4	2	Principal
Video Compression Using H 264-A Review	Manjusha Deshmukh	International Journal of Advanced Trends in Computer Science and Engineering	2011	4	2	Principal
To Explore Radon, Transform for image Registration and Image Fusion	Manjusha Deshmukh	International Journal of Emerging Technologies and Applications in Engg	2010	4	1	Principal
Multisensory Image Fusion Techniques and Evaluation of Fused Image	Manjusha Deshmukh	International Journal of Computer Science and Software Engineering	2009	4	1	Principal
To Explore Radon, Transform for image Registration	Manjusha Deshmukh	International Journal of Image Processing	2011	4	1	Principal

and Image Fusion						
DGS based microstrip phase shifters	Sheetal Bhujade	Sensing Technology (ICST), 2012 Sixth International Conference on, 723-728	2012	02	07	Assistant Professor
Design and evaluation of high gain microstrip patch antenna using double layer with air gap	Sheetal Bhujade	International Journal on Recent and Innovation Trends in Computing and ...	2015	02	07	Assistant Professor
Efficient high gain circularly polarized microstrip antenna using asymmetrical RIS surface	Sheetal Bhujade,	Microwave, Optical and Communication Engineering (ICMOCE), 2015 ...	2015	02	01	Assistant Professor
Design and analysis of monopole antenna for single and multiband applications	Sheetal Bhujade	2017 International Conference on Intelligent Sustainable Systems (ICISS ...	2017	02	-	Assistant Professor
Design and optimization of microstrip patch and monopole antenna with Defected Ground Structure (DGS)	Sheetal Bhujade	2017 International Conference on Inventive Computing and Informatics (ICICI ...	2017	02	-	Assistant Professor
Computer Department						

Seeded region growing segmentation on ultrasound image using particle swarm optimization	Deepa Parasar	IEEE XPLORE	2015	02	5	Associate professor
Automatic Wi-Fi based Push Notification in College Campus using Cloud	Prof. Rina Bora	International Journal of Computer Applications (0975 – 8887)	2014	01	3	Assistant professor
Content based Medical Image Retrieval with SVM	Prof. Sujata Bhairallykar	International Journal of Applied Information Systems (JAIS) – ISSN : 2249-0868	2013	01	5	Assistant professor
Civil Engineering						
Computations of Seismic Passive Resistance and Uplift Capacity of Horizontal Strip Anchors in Sand	S M Rangari	Geotechnical & Geological Engineering	2013	4	3	Associate professor
Seismic uplift capacity of shallow horizontal strip anchor under oblique load using pseudo-dynamic approach	S M Rangari	Soils and Foundations	2013	4	4	Associate professor

Estimation of seismic uplift capacity of horizontal strip anchors using pseudo-dynamic approach	S M Rangari	Geotechnical Engineering (KSCE Journal of Civil)	2013	4	2	Associate professor
Effects of pullout direction and anchor inclination on computation of pseudo-static uplift capacity for strip anchors in sand	S M Rangari	Disaster Advances	2012	4	1	Associate professor
Pseudo-Static Uplift Capacity of Obliquely Loaded Horizontal Strip Anchor in Cohesionless Soil	Sunil M. Rangari	Geo Congress 2012: State of the Art and Practice in Geotechnical Engineering	June 20,2012	4	1	Associate professor
Pseudo-Static Uplift Capacity of Horizontal Strip Anchor	Sunil Rangari	Geo Frontiers 2011	2011	4	1	Associate professor
Effect of replacement of natural sand by manufactured sand on the properties of cement mortar	Priyanka A. Jadhav	Civil & Structural Engineering	2013	5	19	Associate professor

An experimental investigation on the properties of concrete containing manufactured sand	Priyanka A. Jadhav	Advanced Engineering Technology	2012	5	11	Associate professor
Free and forced vibration control of piezoelectric FGM plate subjected to electro-mechanical loading	Priyanka A. Jadhav	Smart materials and structures	2013	5	8	Associate professor
Buckling of piezoelectric functionally graded plate subjected to electro-mechanical loading	Priyanka A. Jadhav	Smart materials and structures	27July 2012	5	3	Associate professor
Stability Analysis of Piezoelectric FGM Plate Subjected to Electro-mechanical Loading Using Finite Element Method	Priyanka Jadhav	Applied Science &Engineering	2013	5	2	Associate professor
Fatigue damage assessment under multi-axial on proportional cyclic loading	P. A. Jadhav	Creep, fatigue and creep-fatigue interaction	2016	5	1	Associate professor

3.3.7 Faculty participation in Seminars/Conferences and Symposia during the year :				
No. of Faculty	International level	National level	State level	Local level
Attended Seminars/ Workshops	E&TC Dept.--04 FE Dept.--15 IT Dept.--07 Computer Dept.-- Seminar-12	E&TC Dept.--08 FE Dept.--01 Civil Dept.-01 Computer Dept.-workshop-1, STTP-04	Computer Dept.- Seminar-12	Civil Dept.--22
Presented papers	E&TC Dept.--06 FE Dept.--05 Computer Dept.-- Journals-03	E&TC Dept.-01		
Resource Persons				Civil Dept.--01 Computer Dept.-- Workshop-01

3.4 Extension Activities			
3.4.1 Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year			
Title of the Activities	Organizing unit/ agency/ collaborating agency	Number of teachers coordinated such activities	Number of students participated in such activity
Civil Department Construction Of Ferrocement Tank In Borimalpada, Khalapur	NSS	5	20
Automobile department			
Women empowerment	Young inspirator network	1	300
Seminar on civil services	Young inspirator network	1	350

Youth exodus	Young inspirator network	1	300
Yin sanvad	Young inspirator network	1	280
Yin talk	Young inspirator network	1	450

3.4.2 Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the Activity	Award/recognition	Awarding bodies	No. of Students benefited
Clean and green campus award	Top 91	AICTE	All
Swachha Bharat Abhiyaan	Swachhata Doot	Panvel Muncipal Corporation	ALL
Construction of water tank in Shirsonpada and installation of Solar Pumps ,Kasar,Nasik	Special appreciation	Palghar Muncipal Corporation	100(NSS)

3.4.3 Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Automobile Department

Swachh Bharat	Young inspirator network	Taloja survey	1	5
Social awareness	Young inspirator network	Youth exodus	1	300
Gender issue	Young inspirator network	Women empowerment	1	300

3.5 Collaborations

3.5.1 Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of Activity	Participant	Source of financial support	Duration
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BRNS Project (Objective Assessment of Autonomic Nervous System using Artificial Neural Network)	Principal Investigator- Dr. Manjusha Deshmukh Co-PI- Dr. Deepa Parasar	BARC Amount sanctioned for year 2017-18- Rs. 1693300	2017-18	
Civil dept.- research on concrete	Riya J. Athanikar	ACC Cement	July 2017- May 2018	
Civil dept.- RESEARCH ON CONCRETE	Karthik Mohan Nair	ACC Cement	July 2017- May 2018	
3.5.2 Linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the year				
Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration (From-To)	participant
Civil Department				
Internship	Raft foundation roof slab	CIDCO	18/6/18- 7/7/18	57
Internship	Green building	L &T	15/6/18- 7/7/18	2
Internship	Light weight concrete	Data Construction	13/6/18 – 8/7/18	1
Internship	Pervious concrete	Kasmas Developers	13/6/18 – 8/7/18	1
Internship	Column jacketing	BG Shirke	15/6/18 b- 7/7/18	3
Internship	Concrete sleeper	Central Railway	15/6/18 b- 7/7/18	5
Internship	QSEV and understanding RCC layout	Sai World Empire	22/6/18- 8/7/18	2

Internship	GIS	Amrudh Corporation	22/6/18-8/7/18	1
Internship	Pavement	SMC Infra Pvt Ltd	18/6/18-6/7/18	2
Internship	Alternate materials	Speco Infrastrucutre	20/6/18 – 8/7/18	1
Internship	Light weight concrete	Sundarland Developers	20/6/18 – 5/7/18	1
Internship	Roof slab	Konark Nirman Pvt. Ltd	20/6/18-5/7/18	1
Project work	GIS	Spectrum	1/8/18-31/3/19	1
Internship	Cracks and repair methods	Runwal Group	22/6/18-8/7/18	2
Internship	QSEV and understanding RCC layout	Pylon Projects	22/6/18-8/7/18	3
Project work	GIS and hydrogeological study	J Kumar	1/8/18-31/3/19	1
IT Department				
Internship	Extraction of the geometrical characteristics of the impact craters located on Mars	Technical University of Sophia, Bulgaria	June 15 th 2017 July 30 th 2017	Anjal Afghan
Internship	Web development using HTML,CSS,Bootstrap	Dezignolics	June 20 2018 July 25 2018	Neha Barhate Shraddha Patil Nutan Patil Aishwarya Devrukhkar Shamali Dawarung
Internship	Web Developer	Qleverlabs Technologies	February 2018-ongoing	Ketan Shivaji Desai

Internship	Web Development using PHP,MySQL,HTML	Centrail Railway	20 June-2017 To 5 July 2017	Rabeena Panda Apurva Nayak
Internship	Data analysis using dashboard	Tor Vergata University Roma, Itely	18 June 2018 to 30 July 2018	Samrutti Patil
Internship	Networking & database management	JNPT	23 June 2017 to 07 July 2017	Archana Patil
Internship	Networking	Javaharlal Nehru,Port Trust, Uran 400702	8 June 2018 to 22 June 2018	Ketan Tandel
Automobile Department				
Internship	Maintenance of Railway	Western Railway , Repair Workshop. Parel	25-09-2017 to 24-10-2017	Anirudha Thorat Tahikar nihal Siddesh pawaskar
Internship	Manufacturing of steel sheets and rods	Jsw works	16-12-2017 to 16-01-2018	Omkar p patil
Internship	Repair and maintenance of locomotives	Central railway loco workshop, Parel	15-12-2017 TO 30-12-2017	Ganesh bhujbal
Internship	Repair and maintenance of locomotives	Central railway loco workshop, Parel	18-12-2018 to 07-01-2018	Tejas Budke Harshad Prabhu Abhishek Shete Omkar Thorat Ajit kudekar Vinayak mugurdekar Sumit kulkarni Jha soham Sunny gupta Vignesh sonawane

				Alankar kadam
Internship	Control system engineering	DSA ELECTRO CONTROLS	18-12-2018 to 07-01-2018	Gavit Dinesh
Internship	Production of automobile spare parts	Automotive Manufacturers Pvt.Ltd, Nerul	05-02-2018 to 5-05-2018	Nikhil abraham
Internship	Repair and maintenance of locomotives	Central railway loco workshop, Parel	20-06-2018 to 8-07-2018	Satish baikar Vipul yamgar Ajit kudekar Abhishek shete Tejas budke Harshad prabhu Vikas wankhade
Internship	Bus maintenance and transport management	BEST, EET TRAINING	12-06-2018 TO 8-07-2018	Krishna kashid Mayor kashid
Internship	Automobile sales and service	RITU HYUNDAI, BHIWANDI	12-06-2018 TO 8-17-2018	Himanshu Thakkar
Internship	fabrication	Kalwa workshop, kalwa(w)	25-06-2018 TO 7-07-2018	Ganesh bhujbal
Internship	Bus maintenance and transport management	BEST, EET TRAINING	25-06-2018 TO 14-07- 2018	SAHIL ANSARI
Internship	Automobile tires and wheels	Angel Auto wheels, palghar	13-06-2018 to 08-07-2018	Dinesh Gavit
Internship	Production of automobile spare parts	Automotive Manufacturers Pvt.Ltd, Nerul	12-06-2018 to 08-07-2018	Aniket Jaltare
Internship	Repair and maintenance of electric locomotives	EMU car shed , Kurla	18-09-2017 to 24-09-2017	Dhananjay Kamble Jayessh Malekar Kunal Koli Amol Pawar Akash Chavan

E&TC Department					
Internship	Communication Engineering	Doordarshan	02/07/2018 to 07/07/2018	Vinay R. Revankar Ramshilochan Pal Namit Singh	
Internship	Microprocessor and Microcontroller applications	Dynalog India Ltd	27/6/18 to 8/7/18	Poorti Kulkarni	
Internship	Analog Communication	Ashida electronics Pvt Ltd	18/6/18 to 5/7/18	Deepak Dharve	
Internship	Analog and Digital Communication	Bharat Electronics Ltd Navi Mumbai	15/6/18 to 3/7/18	Nitesh Mhatre Siddhant Patil Vivek Patil	
Internship	Antenna designing	EGS Survey Pvt. Ltd	25/6/18 to 5/7/18	Prathamesh Mhatre	
Mechanical Department					
Internship	Compulsory Internship as per Syllabus of Mumbai University	Amod engineering works	17/6/2017	8/7/2017	AGARHARI INDRAJIT
		C.R. Loco Workshop, Parel	23/06/2017	8/7/2017	ANAP RUSHIKESH
		BARC	13/06/2017	8/7/2017	BAIS ANKITA K
		C.R. Workshop, Matunga	16/06/2017	30/6/2017	BOBADE AVINASH A
		MSRTC, Thane	11/7/2017	9/8/2017	CHAUHAN POOJA S
		RC & F Ltd, Chembur	20/6/2017	5/7/2017	CHAVAN PRIYANKA S
		JSW STEEL (SALAV) LIMITED	19/6/2017	24/6/2017	CHERU SHUBHAM D
		MSRTC, Thane	28/6/2017	6/7/2017	CHOUDHARY DINESH N
		Gaura Frabicrators	22/6/2017	22/07/2017	CHOUGULE ABHISHEK
		C.R. Workshop, Matunga	1/7/2017	15/7/2017	DHAWALE KALPESH K
		C.R. Loco Workshop, Parel	23/06/2017	8/7/2017	DHURYE AKSHAY G
		Malhar Engineering	1/7/2017	15/7/2017	DOLTADE ANKUS
		C.R. Workshop, Matunga	1/7/2017	15/7/2017	GADE AMOL S
		Gaura Frabicrators	22/6/2017	22/07/2017	GADGE HRUSHIKESH S
		C.R. Loco Workshop, Parel	28/06/2017	12/7/2017	GAWALE SAKET V

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		JNPT, Uran	20/6/2017	19/07/2017	GAWDE SHUBHAM H
		JNPT, Uran	20/6/2017	19/07/2017	GHADIGAONKAR SANKET
		JNPT, Uran	20/6/2017	19/07/2017	GHARTI PRAKASH P
		JNPT, Uran	20/6/2017	19/07/2017	GHULE SAMARTH N
		JNPT, Uran	20/6/2017	19/07/2017	GOLE SWAPNIL N
		JNPT, Uran	20/6/2017	19/07/2017	HANDE VRUSHABH S
		JNPT, Uran	20/6/2017	19/07/2017	JADHAV AKSHAY S
		C.R. Loco Workshop, Parel	28/06/2017	12/7/2017	JADHAV PRASAD A
		Gaura Frabicrators	22/6/2017	22/07/2017	KADAM NIKHIL N
		MSRTC, Thane	28/6/2017	6/7/2017	KAKADE KULDIP S
		C.R. Workshop, Matunga	1/7/2017	15/7/2017	KAKAR MAHESH A
		MSRTC, Thane	28/6/2017	6/7/2017	KAMBLE PRAVIN A
		C.R. Loco Workshop, Parel	23/06/2017	8/7/2017	KAMBLE RAHUL P
		RC & F Ltd, Chembur	20/6/2017	5/7/2017	KAMBLE VIDEET V
		C.R. Loco Workshop, Parel	30/06/2017	12/7/2017	KAMBLI MRUGEN N
		CADI (LTCOE)	27/06/2017	4/7/2017	KARMARKAR NIKHIL J
		C.R. Loco Workshop, Parel	23/06/2017	8/7/2017	KHOLGADGE SATYAM M
		MSRTC, Thane	28/6/2017	6/7/2017	KONDULE SANTOSH S
		C.R. Workshop, Matunga	1/7/2017	15/7/2017	KURHADE ANKUSH A
		Gaura Frabicrators	22/6/2017	22/07/2017	LADE ROHIT
		MSRTC, Thane	28/6/2017	6/7/2017	LUTE AAKASH S
		C.R. Loco Workshop, Parel	23/06/2017	8/7/2017	MANE GANESH M
		C.R. Loco Workshop, Parel	23/06/2017	8/7/2017	MEHTA MUKESH D
		C.R. Workshop, Matunga	1/7/2017	15/7/2017	MESTRY AJINKYA A

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		Ambiance Engineering	22/6/2017	22/07/2017	MHASKAR OMKAR S
		JNPT, Uran	20/6/2017	19/07/2017	PALSHETKAR PRAVESH S
		H.M Engineering	3/7/2017	11/7/2017	PANDIT ADITI
		MKD & R Committee	1/2/2017	1/4/2017	GAJARE DURGESH A.
		C.R. Workshop, Matunga	2/1/2017	16/1/2017	NITIN BAMBALE
		C.R. Loco Workshop, Parel	16/06/2017	6/7/2017	CHOUGULE SHRADDHA
		C.R. Workshop, Matunga	1/7/2017	15/7/2017	MANDHARE ABHISHEK
		C.R. Loco Workshop, Parel	16/06/2017	31/6/2017	MORE AKASH S
		C.R. Loco Workshop, Parel	16/06/2017	31/6/2017	MORE RAHUL C
		C.R. Loco Workshop, Parel	16/06/2017	31/6/2017	MOTE VIVEKKUMAR B
		Indian Railway, kalyan	3/7/2017	8/7/2017	NADAR BALAJI S
		CEAT Ltd , Bhandup	17/7/2017	28/7/2017	NARAYANKAR JAIDEEP
		L&T Heavy Engineering	26/6/2017	19/7/2017	NIMBALE MAHADEV S
		C.R. Workshop, Matunga	16/6/2017	30/6/2017	PADALE AKASH P
		RC & F Ltd, Chembur	1/7/2017	15/7/2017	PADWAL PANKAJ S
		C.R. Workshop, Matunga	16/6/2017	30/6/2017	PANDIRE SANKET S
		C.R. Workshop, Matunga	19/6/2017	30/6/2017	PANSARE SHEKHAR B
		Savita Oil Technology	15/6/2017	2/7/2017	PARAB RUDRAKSH P
		C.R. Loco Workshop, Parel	16/06/2017	31/6/2017	PATIL DEEPAK V
		C.R. Loco Workshop, Parel	16/06/2017	31/6/2017	PATIL HITESH H
		MSRTC, Thane	2/1/2017	9/1/2017	PATIL PRANIT A
		C.R. Workshop, Matunga	1/7/2017	15/7/2017	PATIL PRATIK S
		MSRTC, Thane	2/1/2017	9/1/2017	PATIL ROHAN G
		Karkas Frabrication	20/6/2017	8/7/2017	PATIL VIGHNESH V
		Divine Services, Koparkhairane	16/06/2017	30/6/2017	PAVANE RANJIT B

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	Savita Oil Technology	15/6/2017	2/7/2017	PAWAR SAURABH S
	C.R. Workshop, Matunga	15/6/2017	30/6/2017	PHADTARE ADITYA T
	C.R. Workshop, Matunga	16/6/2017	30/6/2017	RAJPUT SACHIN M
	C.R. Workshop, Matunga	1/7/2017	15/7/2017	RASAL GAYATRI S
	C.R. Loco Workshop, Parel	19/06/2017	28/6/2017	RATHOD MAHESH S
	C.R. Loco Workshop, Parel	15/06/2017	30/6/2017	SABLE SANKESH S
	C.R. Workshop, Matunga	3/7/2017	8/7/2017	SAHANI AVINASH R
	C.R. Loco Workshop, Parel	15/06/2017	30/6/2017	SALUNKE PRAJWAL S
	C.R. Workshop, Matunga	16/6/2017	30/6/2017	SANAP PANKAJ S
	C.R. Workshop, Matunga	1/7/2017	15/7/2017	SAPKALE DEEPAK D
	C.R. Workshop, Matunga	1/7/2017	15/7/2017	SASTE TUSHAR V
	C.R. Workshop, Matunga	3/7/2017	8/7/2017	SATPUTE TUKARAM M
	L&T Heavy Engineering	15/6/2017	15/7/2017	SAWANT SHUBHAM H
	C.R. Workshop, Matunga	3/7/2017	8/7/2017	SHAIKH MOHAMMAD
	MSRTC, Thane	1/7/2017	9/7/2017	SHINDE PRATIKSHA N
	C.R. Workshop, Matunga	15/1/2017	31/1/2017	SHIRKE ANURAG V
	C.R. Workshop, Matunga	3/7/2017	8/7/2017	SHUKLA KRISHNA N
	C.R. Workshop, Matunga	1/7/2017	15/7/2017	SINGH VINAYAK A.
	C.R. Loco Workshop, Parel	15/06/2017	30/6/2017	SOLSE ROSHAN J
	C.R. Workshop, Matunga	16/6/2017	30/6/2017	SONAWANE AKSHAY K
	C.R. Workshop, Matunga	16/6/2017	30/6/2017	SONAWANE ANJALI H
	C.R. Loco Workshop, Parel	15/06/2017	30/6/2017	SULE RAHUL P
	C.R. Loco Workshop, Parel	19/06/2017	25/6/2017	SURYAWANSHI DIVYESH
	Industrial Boiler Techno Services	20/6/2017	8/7/2017	TAMBE NIKHIL P

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	Wartsila India Ltd	23/6/2017	8/7/2017	TAMBE SANKET D
	C.R. Loco Workshop, Parel	15/06/2017	30/6/2017	TEMGHARE SURAJ D
	C.R. Workshop, Matunga	16/6/2017	30/6/2017	THOKALE PRAFUL S
	C.R. Workshop, Matunga	16/6/2017	30/6/2017	TOPALE SAGAR D
	C.R. Workshop, Matunga	1/7/2017	15/7/2017	TULE VICKY
	MSRTC, Thane	1/7/2017	10/7/2017	VIBHUTE SWATI Y
	MSRTC, Thane	2/1/2017	9/1/2017	WABLE AKASH U
	C.R. Workshop, Matunga	1/7/2017	15/7/2017	PARDESHI NIKHIL
	CEAT Ltd , Bhandup	17/7/2017	28/7/2017	
	Deepak Fertilizer	19/6/2017	3/7/2017	AGIVALE PRASAD S
	CEAT Ltd , Bhandup	14/6/2017	28/7/2017	ANSARI SHAMSHAD
	Kamal Hyundai	20/6/2017	19/07/2017	BAGDE NITESH S
	Mazgaon Dock	15/06/2017	30/6/2017	BANGAR RAHUL V
	C.R. Workshop, Matunga	21/6/2017	8/7/2017	BERDE SAIRAJ S
	C.R. Workshop, Matunga	20/12/2016	3/1/2017	BHINGARDEVE VINAYAK
	JNPT, Uran	15/06/2017	14/7/2017	BONDE SEJAL
	Bobmay Dyeing	16/6/2017	30/6/2017	CHAVAN SANDEEP S
	C.R. Loco Workshop, Parel	21/06/2017	8/7/2017	CHAVAN VAIBHAV C
	Deepak Fertilizer	19/6/2017	3/7/2017	DINKAR SACHIN A
	Automotive Manufacturers	15/06/2017	8/7/2017	DUBEY SHAILES M
	Deepak Fertilizer	19/6/2017	3/7/2017	GAONKAR SHIVRAM
	C.R. Workshop, Matunga	20/12/2016	3/1/2017	HALDIVE ANAND G
	Sainath Engineering Works	19/6/2017	8/7/2017	JADHAV KIRAN V
	G3 Motors Ltd	21/6/2017	8/7/2017	KADAM DEEPAK K
	Mazgaon Dock	15/06/2017	30/6/2017	KADU ANIKET A

	Sainath Engineering Works	19/6/2017	8/7/2017	KAKADE HRISHIKESH
	C.R. Workshop, Matunga	20/12/2016	3/1/2017	KAMBLE PRASHANT
	C.R. Workshop, Matunga	20/12/2016	3/1/2017	KAMBLE TUSHAR S
	Ninad Engineering Works	15/06/2017	30/6/2017	KARANDIKAR MUKUL
	Excel Industries Ltd	15/06/2017	30/6/2017	KASBALE SANMAY
	Kamal Hyundai	20/6/2017	19/07/2017	KHARPADE PRAYAG P
	ION Excahnge Ltd	26/6/2017	15/07/2017	KUMAR ASHISH A
	CEAT Ltd , Bhandup	14/6/2017	28/7/2017	MADHAVI NITIN
	Deepak Fertilizer	19/6/2017	3/7/2017	MANE PRATHMESH P
	Shinevel Industries	10/6/2017	26/7/2017	MAURYA SHYAM H
	C.R. Workshop, Matunga	20/12/2016	3/1/2017	MEHETRE AAVIRAJ B
	Automotive Manufacturers	15/06/2017	8/7/2017	MISHRA ASHUTOSH
	C.R. Workshop, Matunga	20/12/2016	3/1/2017	NANIWADEKAR CHINMAY
	C.R. Workshop, Matunga	22/12/2016	3/1/2017	NIKAM VINAY B
	C.R. Workshop, Matunga	20/12/2016	3/1/2017	PARDESHI SAGAR S
	Automotive Manufacturers	15/06/2017	8/7/2017	PATIL ROHAN V
	C.R. Workshop, Matunga	16/6/2017	30/6/2017	POOJARY ABHISHEK S
	Ninad Engineering Works	15/06/2017	30/6/2017	SHAH PARTH C
	Sainath Engineering Works	19/6/2017	8/7/2017	SHAIKH MUSTAQ AHMED
	Automotive Manufacturers	15/06/2017	8/7/2017	SHINDE SHUBHAM V
	Deepak Fertilizer	19/6/2017	3/7/2017	SHIRKE MAYURESH S
	Deepak Fertilizer	19/6/2017	3/7/2017	WADATE ROHIT P
	Sainath Engineering Works	19/6/2017	8/7/2017	YADAV PRAVIN M
Computer Department				

Internship	GNUKhata	Digital Freedom Foundation	1 sept 2017 till finished	06
Internship	Doctor Daily Dairy	Technojack Infosolution	5 Nov 2017 to 4 th Jan 2018	04
Internship		Giftrack Technologies	1 July 2017 to (Project Completion)	01
On Job Training	E commerce	Zepo	5 March 2018 10 Aug 2018	01
3.5.3 MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year				
Organisation	Date of MoU signed	Purpose and Activities	Number of students/teachers participated under MoUs	
FE Department				
B. N Bhandarkar college of science.Thane	July 2016	Research and academic guidance	10	
CKT College of Science,Panvel	July 2016	Research and academic guidance	10	
Civil Department				
CAAD centre training services	10 May 2016 To 9 May 2019	Skill Development Training	180 Students	20 faculties
IT Department				
S B Infotech, Jalgaon	03/03/2016 To 28/02/2021	Seminar	35	
CMS IT services Pvt. Ltd.	01/03/2016 To 28/02/2021	Faculty Development Program	13	
Mechanical Department				
ISHRAE (Mumbai Chapter)	13/01/2018	Activities and expert talk	50 students and 2 faculties	
E&TC department				
Saitronics the universal solutions.	01/08/2017	Activity: Technical workshop on “Arduino Programming” Purpose: To make students	32 students	02 teachers

		learnt Arduino programming by developing various applications which will be beneficial for developing the projects		
Copper track Industry, Nashik	26/7/17	Activity: Industrial Visit Purpose: To bridge the gap between theoretical training and practical learning in a real-life environment.	35 students	03 teachers
Computer Department				
H.R. Software Solution, Jalgaon	1 Dec 2015	To bridge the gap between academic and industry	20	02
CMS IT Services, Kharghar	2 May 2016	To bridge the gap between academic and industry	25	01
E-Incarnation Recycling Pvt. Ltd.	14-02-2017	E Waste Collected From College	20	02

CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES		
4.1 Physical Facilities		
4.1.1 Budget allocation, excluding salary for infrastructure augmentation during the year		
Particulars	Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
Fixed Asset Block @ 100%		
infrastructure	900000.00	820104.00
Furniture & Fixture - College	1000000.00	850832.00
Computer	500000.00	474320.00
Computer Software	1600000.00	1507696.00
Air-Condition (Split)	100000.00	89000.00
Electrical Installation	300000.00	201654.00
Total	4400000.00	3943606.00
4.1.2 Details of augmentation in infrastructure facilities during the year		
Facilities	Existing	Newly added
Campus area	2.25 acres	-
Class rooms	38	-
Laboratories	58	-
Seminar Halls	6	-
Classrooms with LCD facilities	7	-
Classrooms with Wi-Fi/ LAN	10	5
Seminar halls with ICT facilities	7	-
Video Centre	0	1
No. of important equipments purchased (\geq 1-0 lakh) during the current year.	6	-

Value of the equipment purchased during the year (Rs. in Lakhs)	33,93,142/-	15,07,696
Others		

4.2 Library as a Learning Resource

4.2.1 Library is automated {Integrated Library Management System -ILMS}

Name of the ILMS software	Nature of automation (fully or partially)	Version	Year of automation
Biyane Technologies Library Management Systems.	Fully		2015-2016

4.2.1 Library Services:

	Existing		Newly added (2017-18)		Total	
	No.	Value	No.	Value	No.	Value
Text Books	21511	5314799	115	68449.00	21633	5246350
Reference Books	4927	1587340	57	33345.00	4977	1553995
e-Books						
Journals	98 (2016-17)	2158862	105 (2017-18)	254675.00	105	254675.00
Journals			106 (2018-19)	266775.00	106	266775.00
e-Journals						
Digital Database						
CD& Video	1880					
Library automation	YES					
Weeding (Hard & Soft)	NIL	NIL	42	9326.00	42	9326.00
Others (specify)						

4.3 IT Infrastructure

4.3.1 Technology Upgradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Available band width (MGBPS)	Others
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Existing	710	24	Yes	1	1	1	6	100	
Added	20	01	Yes	-	-	-	-	-	
Total	730	25	Yes	1	1	1	6	100	

4.3.2 Bandwidth available of internet connection in the Institution (Leased line) : **100 MBPS**

4.3.3 Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
--	--

<https://www.youtube.com/channel/UCM14Iw97mnCoNZCI8knb5Uw/featured>

4.3.4 E-content developed by teachers such as: e-PG-Pathshala, CEC (under e-PG-Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the teacher	Name of the module	Platform on which module is developed	Date of Launching E-Content
Prof. Rajashri Narwade	Single Phase AC circuits	LMS	Sep-2017
Prof. Neha Mahajan	Optical Sources	LMS	Sep-2017
Prof. Sheetal Bhujade	Root Locus (Control System)	LMS	Sep-2017
Prof. Sheetal Bhujade	Basics of analog Communication	LMS	Sep-2017
Prof. Megha Pande	Cellular Concepts- Mobile Communication	LMS	Sep-2017
Prof. Mandeep Kundhal	Transformers	LMS	Sep-2017
Prof. Mandeep Kundhal	Simplification of Boolean expressions using K-Map	LMS	Sep-2017
Prof. Bhoomi Patil	Dictionary Coding	LMS	Sep-2017
Prof. Vijay Kapure	Random Signal Analysis	LMS	Sep-2017
Prof. Sheetal Bukkawar	Fundamental concepts of Antennas	LMS	Sep-2017
Prof. Sheetal Bukkawar	Smith Chart	LMS	Sep-2017

Prof. Pallavi Kharat	Error Control system- Digital Communication	LMS	Sep-2017
Prof. Sarita Kale	Successive Approximation ADC	LMS	Sep-2017
Prof. Sarita Kale	IC 555 timer	LMS	Sep-2017
Prof. Snehal Barge	Microcontroller and Applications - timers	LMS	Sep-2017
Prof. Snehal Barge	Link state Routing	LMS	Sep-2017
Prof. Umesh Pinjarkar	Network Security	LMS	Sep-2017
Prof. Umesh Pinjarkar	Cryptography	LMS	Sep-2017
Prof. Sneha Burnase	Semiconductor Memories	LMS	Sep-2017
Prof. Sneha Burnase	Stick diagram and layout design- VLSI	LMS	Sep-2017
Prof. Vaishali Jadhav	OSI Model in computer network	LMS	Sep-2017
Prof. Anuradha Dandwate	Design of asynchronous counter using JK flipflop	LMS	Sep-2017
	Data Compression Techniques	LMS	Sep-2017
Prof. Pragati Pejlekar	Data Preprocessing in Database management system	LMS	Sep-2017
Prof. Vrushali Thakur	Single Server Queue in Simulation & modeling	LMS	Sep-2017
	Order level in Simulation & modeling	LMS	Sep-2017
Prof. Shraddha Subhedar	Process management in operating system	LMS	Sep-2017
	Process scheduling algorithms	LMS	Sep-2017
Prof. Praveen Shinde	Project networking diagrams	LMS	Sep-2017
	Boundary value analysis	LMS	Sep-2017
Prof. Kirti Mahamunkar	Agile Process in software engineering	LMS	Sep-2017
	Software configuration management	LMS	Sep-2017

Prof. Ragini Sharma	Polygon clipping in computer graphics	LMS	Sep-2017
	Bresenham's Line Drawing Algorithm	LMS	Sep-2017
Prof. Rashmi Choudhary	Intelligent Storage System	LMS	Sep-2017
Computer Dept.			
Dr. Bharti Joshi	IP addressing	LMS	10/07/17
Dr. Sanjay Jadhav	Artificial Intelligence	LMS	18/07/17
Deepa Parasar	Non-Preemptive Scheduling Algorithm	LMS	28/02/17
Deepa Parasar	Scheduling Algorithm	LMS	15/01/18
Madhuri Dalal	Image Compression	LMS	16/08/17
Arti Gore	Hamming Code	LMS	13/09/17
Arti Gore	Mobile IP	LMS	25/01/18
Sujata Bhairnallykar	Basic Cryptography	LMS	10/08/17
Monali Deshmukh	Fuzzy Set	LMS	06/10/17
Dhanraj Walunj	Constructor	LMS	20/09/17
Rina Bora	Hasse Diagram	LMS	10/08/17
Hemalata Gosavi	Pointers in C	LMS	16/01/18
Amit Gawade	Class Diagram	LMS	18/08/17
Amit Gawade	Introduction to Database	LMS	28/02/18
FE Dept.			
Prof. Rekha Jawale	1. Interference in thin film 2. Wedge shaped film 3. Miller indices 4. Ultrasonic 5. Piezoelectric Method 6. Fringe width 7. Newton's ring	LMS	Sep-2017

Dr. Suhas Sabnis	<ol style="list-style-type: none">1. Crystallography2. Diamond Structure3. Na Cl Structure4. Interference due to reflected light5. Interference due to transmitted light6. Wedge shaped film7. Newton's Rings	LMS	Sep-2017
Dr. Bhadane P.A.	<ol style="list-style-type: none">1. Quantum Mechanics2. Schrodinger wave equation3. HCP unit cell4. Single slit diffraction5. Double slit diffraction	LMS	Sep-2017
Dr. Sindhu Tayade	<ol style="list-style-type: none">1. Introduction to fuels2. Zeolite Method3. Liquid fuels4. Cracking of fuel5. Analysis of coal	LMS	Sep-2017
Dr. Deepika Patil	<ol style="list-style-type: none">1. Introduction to polymer2. Types and synthesis of polymer3. Cracking and mining of petroleum4. Analysis of coal5. Refining of petroleum	LMS	Sep-2017
Prof. Swapna Mamidwar	<ol style="list-style-type: none">1. Numerical on Combustion of fuel2. Ion exchange method3. Knocking4. Corrosion5. EDTA method6. Numerical on Combustion of Gaseous fuel	LMS	Sep-2017
Dr. Sayali D. Choudhari	<ol style="list-style-type: none">1. Homogeneous function2. Euler's theorem3. Non- Homogeneous linear equation4. Double integration – 15. Double integration – 2	LMS	Sep-2017
Dr. S.V. Lathkar	<ol style="list-style-type: none">1. Application & matrix coding & decoding2. Differential equation3. Higher order D.E.	LMS	Sep-2017
Prof. Farah Vanu	<ol style="list-style-type: none">1. Complex Variable2. Complex Integration3. Second order derivative of function4. Fourier series5. Eigen values & Eigen vector	LMS	Sep-2017

Prof. Harshada Pratham	1. Rank of a Matrix 2. Solution of Matrix 3. Vector differential operator	LMS	Sep-2017
Prof. Prashant Gawade	1. Fourier series – Even- Odd function 2. System of linear equation	LMS	Sep-2017
Prof. Reshma Chavan	1. Successive differentiation	LMS	Sep-2017
Dr. Ram Bhise	1. Channels of communication	LMS	Sep-2017
Dr. Rolly Sinha	1. Time Management – A Challenge 2. Developing effective communication skills		Sep-2017
Prof. Suman Sharma	1. Modes of Communication 2. Channels of communication 3. Methods of communication 4. Speaking is silver – listening is golden	LMS	Sep-2017
Civil Department			
Dr. Sunil Rangari	Design of floor systems, DDRCS	LMS	Sep-2017
Pooja Somani	Boundary Layer theory, FM	LMS	Sep-2017
Dr Suman Rawat	Dam Site selection, EG	LMS	Sep-2017
Molly Mathew	CPM Network	LMS	Sep-2017
Sujaya Wadekar	Properties of fresh concrete, CT	LMS	Sep-2017
Harshal Deshpande	Tension Members	LMS	Sep-2017
D.M Joshi	Unsymmetrical Bending	LMS	Sep-2017
Automobile Department			
Chetan Thakur	Module1(I.C. Engine- Air Standard Cycles)	LMS	31/1/2017
Sagar Khatavkar	Module 2(TOM II – Velocity of Mechanism)	LMS	30/1/2017
Amit Patil	Module 1(Mechanical Vibration- Newtons, Rayleighs, Energy Method)	LMS	31/1/2017

Chodankar Vishnudas	Module1(Heat Transfer- Conduction)	LMS	30/01/17
	Module5(Heat Transfer-Bolilng)		28/11/17
	Module5(Heat Transfer-Forced Convection Boling)		
Mohd. Bargir	Module6(CAD/CAM/CAE-Part Programming)	LMS	28/11/17
	Module3(CAD/CAM/CAE-Canned Cycle)		30/01/17
Lalit Bhoje	Module 3(Autotronics-P-chart)	LMS	28/11/17
Mandar Jagtap	Module4(Engineering Drawing-Projection of solids)	LMS	24/01/17
Bhavana Patel	Module 2(Chassis- Chassis and body Engineering)	LMS	09/10/16
	Module 3(Formality factor Chassis and body Engineering)		
	Module 2(Punching- Production Process III)		
	Module 2(Sheet metal Forming- Production Process III)		
	Module 2(Stamping- Production Process III)		
	Module 6(Welding- Production Process I)		
	Module4(Uslab-Autotronics)	LMS	
Namarata Bhokare	Module 5(CAMD)	LMS	23/01/17
Mechanical Department			
Prof. Madhukar Sorte	Module 5 Transportation-I PPC	LMS	30/1/2017
Prof. Chanewar Nilesh	Module 2 Types of Failure -Analysis	LMS	5/2/2017
	Module 2 Types of Pattern, Role of Pattarn		

Prof. Jagtap Madan M.	Module 3 RAC - Air Refrigeration Cycle - I	LMS	17/2/2017
	Module 4 RAC - Air Refrigeration Cycle - II		
Prof. Ganesh Jadhav	Module 1 Properties of fluid	LMS	3/3/2017
	Module 2 Buoyancy and Stable Condition		
	Module 2 Fluid Mechanics for static stability		
	Module 3 Hydrostatic force on Body		
Prof. Sandeep Jadhav	Module 1 Dealembert's Principle	LMS	4/4/2017
	Module 2 Work Energy Principle		
	Module 4 Support Reactions in Beam		
	Module 2 Steady flow Energy Equation		
Prof. Prasanna Raut	Module 2 Weak form and non-weak form	LMS	8/4/2017
	Module 3 Principle of minimum potential energy		
Prof. Paramjit Thakur	Module 2 HT- Unsteady state	LMS	12/4/2017
	Module 2 HT- Critical thickness of insulation		
	Module 1 HT- Basics of conduction convection and radiation		
Prof. Mitali Mhatre	Module 1 Design of gauges (plug gauge)	LMS	20/4/2017
	Module 2 Design of gauges theory		
Prof. Yogesh Dumal	Module PPE –Introduction to ppe	LMS	25/4/2017
	Module 5 PPE - WORKING AT HPP		
Prof. Sachin Solanke	Module 1 SOM - Stress	LMS	30/4/2017
	Module 3 PP II - Metalcutting		

	Module 4 PP II - Metalcutting (merchant's Circle)		
Prof. Dinesh Pargunde	Module 1 Metal Casting	LMS	4/5/2017
	Module 2Welding	LMS	
Prof. Mugdha Dongre	Module 3 FEA - one dimensional Analysis	LMS	30/3/2017

4.4 Maintenance of Campus Infrastructure

4.4.1 Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Particulars	Assigned budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
Repairs & Maintainance-Vehicle	30000.00	259407.00		
Repairs & Maintainance-Building	100000.00	55666.00		
Repairs & Maintainance-Lab Equipments	1200000.00	1131250.00		
Repairs & Maintainance-Furnitures And Fixtures	20000.00	125867.00		
Repairs & Maintainance-Electrical	500000.00	422817.00		
Repairs & Maintainance-Computers	100000.00	57313.00		
Repairs & Maintainance-Genearl	900000.00	809779.00		
Computer Expenses	4000	3150.00		
Housekeeping Expenses	6000000	5600506.00		
Software Expenses	1600000	1507696.00		

Website Development	150000	137510.00		
Gardening, Plantation And Landscaping Charges	3500000	3354620.00		
Student Sport Exps.			300000	233171.25
Students Soft Skill Exp			1600000	1573500.00
Total	14104000.00	13465581.00	1900000.00	1806671.25

4.4.2 Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (*maximum 500 words*) (information to be available in institutional Website, provide link)

The institute has policy to create best infrastructure for holistic development of the students.

Following infrastructure facilities are available in the campus of SCOE:

- Well-equipped Laboratories , Library ,Well-furnished classrooms and tutorials
- Internet/WIFI
- Transportation
- Gymkhana
- Canteen
- Training , placement and carrier guidance cell
- IT resource
- Human Resource
- Well-furnished auditorium with 300 seating capacity
- Seminar halls
- Auditorium
- Research and development cell
- Entrepreneur Network cell

In view of syllabus, additional courses, students, admissions, etc. Principal, Dean of Academics, Dean of Administration and Head of departments identify requirements and

prepare budgets for laboratory and other requirements. Accordingly management upgrades facilities with the help of experts in the concerned areas.

There is an institutional mechanism for maintenance and upkeep of the infrastructure, facilities and equipment of the college.

The available infrastructure is utilized optimally in the following aspects. □ The college analyses the requirements of major facilities like building , furniture, computers ,lab equipment and consumables and other teaching facilities every year, accordingly budget is allocated for it's up keeping and maintenance. The maintenance contracts for computers, printers, lifts, water coolers, air conditioners, water purifiers, firefighting system, housekeeping etc. are renewed periodically.

- To enforce the action plan for implementation of quality policy, eight different processes are defined by institute, and those are as follows:
- Well defined academic processes for the effective conduction of all academic activities. Administrative policies for development of well-equipped infrastructure
- Examination processes for smooth conduction of examination and adherence to university rules and regulations.
- HR policies for selection and development of quality staff members including teaching and administrative.
- Library mechanisms to set up and maintain the state of the art library.
- To follow all ISO procedures running successfully and all timelines of audits are met positively.
- Student section processes for admission and enrollment, eligibility and scholarships of admitted students
- Training and Placement processes for ensure maximum in-campus recruitment

Details of the procedures and process are available on the institute website

Weblink: <http://engineering.saraswathikharghar.edu.in/wp-content/uploads/sites/6/2018/12/Procedures-and-Policies.pdf>

CRITERION V - STUDENT SUPPORT AND PROGRESSION			
5.1 Student Support			
5.1.1 Scholarships and Financial Support			
	Name /Title of the scheme	Number of Students	Amount in Rupees
Financial support from institution	Scholarship	560	38166762
Financial support from institution	Freeship	572	38738863
Financial support from other sources			
a) National	IT-Dept.- Economical Backward Scholarship IT-Dept.-Social Justice Post Matrix Scholarship Mech-Dept India Bulls	IT Dept. -01 IT Dept. -01 Mech Dept.-01	IT Dept -42000/- IT Dept -1900/- Mech Dept.- 53000/-
b) International	-	-	-
5.1.2 Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, ,Meditation, Personal Counselling and Mentoring etc.,			
Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
FE Department			
Proctor system	Sem I 1 st August 2017 Sem II 8 th January 2018	502 508	Institute
Nurture- Skill development Program (Soft skill, Personality development.) SE Computer	05/02/2018 – 08/02/2018	72	Institute

SE IT	31/01/2018 – 03/02/2018	76			
SE Mech I	12/03/2018 - 15/03/2018	75			
SE Mech II	12/02/2018 – 15/02/2018	71			
FE All branches	22/01/2018 - 22/03/2018	507			
Computer Department					
Soft skill development-NURTURE	5/2/2018 TO 8/2/2018	72	SCOE		
E&TC Department					
Proctor system	10 th July 2017	All (SE, TE, BE)	Institute		
Nurture	22 nd Jan.2018 – 26 th Jan. 2018	72	Institute		
Campus to Corporate	23 rd Jan.-31 st Jan. 2018	29			
IT Department					
Nurture	29th Jan.2018 – 1st Feb. 2018	76	Institution		
Proctor	21/08/2017	226	Institution		
Civil Department					
Nurture (Soft skill Development)	25/9/17	01	T&P		
Industry institute bridge course	5/10/17	17	Pratiswara		
Departmental proctor system(counselling mentoring)	14/5/2017	ALL	Departmental proctor system(counselling mentoring)		
Mechanical Department					
Nurture	S.E-A :12/03/2018 – 15/03/2018	75	Institution		
	S.E.-B :12/02/2018- 15/02/2018	71			
5.1.3 Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year NA					
Year	Name of the scheme	Number of benefited	Number of benefited	Number of students who	Number of students placed

		students by Guidance for Competitive examination	students by Career Counselling activities	have passed in the competitive exam	
Computer Department					
2017-18	Seminar on higher studies(by Gate Forum)	Attended students -43	65	03	62
E&TC Department					
2017-18	“GATE-Guidance” seminar	88	NA	01	-
2017-18	Seminar on “Higher education opportunities”	71	NA	01	-
2017-18	Seminar on “Civil Services”	25	NA	-	-
2017-18	Nurture	NA	72	-	13
2017-18	Campus to Corporate	NA	29	-	42
IT Department					
2017-18	Guidance for competitive examination	40	GATE-3	TOFEI-1 GATE-1 GMAT-1	37
Automobile Department					
2017-18	Civil service Program organized by Prof.Chetan Thakur	60	60	0	13
Mech Department					
2017-18	“GATE-Guidance” seminar	60	NA	GATE-02	63
Civil Department					
2017-18	TIME career guidance and counselling seminar	35	20	18	45

2017-18	Amity University counselling for PGDM	-	5	-	
5.1.4 Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year NIL					
Total grievances received		No. of grievances redressed		Average number of days for grievance redressal	
-		-		-	

5.2 Student Progression NA					
5.2.1 Details of campus placement during the year					
On campus			Off campus		
Name of Organizations Visited	Number of Students Participated	Number of Students Placed	Name of Organizations Visited	Number of Students Participated	Number of Students Placed
Aastha Cleanrooms	50	1	Accord Communication	230	1
Absolute Surveyor	35	7	Anirudh Civil Engineers and Contractors	45	1
Allerin	65	3	Automotive	66	2
Antraweb Tech	25	2	Caliber Point	78	1
Apex Services	56	1	Enkay Telecommunication	89	1
Ashida Electronics	29	1	Gurukrupa Interiors	46	1
Atidan	45	1	Hitech Engineering	62	2
Auto Vista	20	4	Hydroserve Technologies	43	1
Balmer Lawrie	57	4	IR Civil Engineers and Contractors	92	1
Bitwise	46	1	IT Sourse	86	1
Bridgelabs	56	3	Just Dial	84	1
Capgemini	79	1	Lodha	23	1
Carwale	46	2	Logixal	24	1

Direct I	87	7	Man Infra	45	1
DXC	45	3	New India Construction Company	32	1
Eclerx	78	4	Onycon Infrastructure	34	1
Ericsson	65	8	Orbital Systems	41	1
Fiction 2 Fact	79	4	Powertech	52	2
Franklin Electric	46	4	Progressive Civil Contractor	26	1
Glovve.com	68	4	Prototech	31	1
GVK	80	20	Smart Wireless Pvt.Ltd	41	1
Hexaware	78	7	Tata Motors	65	1
HGS	79	9	TCS	66	1
Hindustan Construction	50	2	Unity Telecom Infrastructure	45	1
Indus tower	46	2	Viral Engineers	71	1
Infogain	64	6	WEBLOGIC	33	1
Just Dial	78	1	WIPRO	56	1
Kolte Patil	65	2			
Magus India	23	4			
Majesco	36	3			
marathon	52	8			
Microland	45	5			
Midmark India	22	1			
MindCraft	60	13			
Mouthshout	41	1			
Neosoft	46	1			
Neptunus Power	65	2			
Net Magic	22	1			
Network 18	44	2			
Nucsoft	62	1			
Oriental Mechanical works	54	1			
Orignet	51	1			
OUSTFIRE	62	2			

Paramatrix	66	1			
Quinnox	57	4			
Rave Technology	22	2			
Reliance Communication	77	4			
Relince Jio	63	6			
Revigo	88	26			
Sanmar	82	2			
Selec Control	60	2			
Shirke Construction	24	3			
Shriram	23	2			
Spry Logic	45	1			
Sunday Mobility	46	2			
Sunny Real estate	61	1			
Sutherland	90	10			
Swabhav Tech	42	2			
Swan Solutions	36	3			
Syntel	46	7			
Systemics	47	2			
Tech Flow Engineers	74	1			
Tribotech	33	1			
Ugam Solutions	63	2			
V2S	52	4			
Venkatesh	550	7			
Weldcraft	78	3			
XL Dynamics	64	4			
Yash Industries	550	9			
Zeus Learning	79	6			
Yodlee	1500	2			
5.2.2 Student progression to higher education in percentage during the year					

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of Programme admitted t
E&TC Department					
2017-18	Raut Swapnil Sunil	BE-Technology Electronics and Telecommunication Engg.	Electronics and Telecommunication Engg.	Vidyalankar Institute of Technology	M.E
2017-18	Bhor Tejas Rajendra	BE-Technology Electronics and Telecommunication Engg.	Electronics and Telecommunication Engg.	Vivekanand Edu Society's Institute of Management studies and research,Chembur	MMS
2017-18	Lade Manali Shrikant	BE-Technology Electronics and Telecommunication Engg.	Electronics and Telecommunication Engg.	Bharati Vidyapeeth's Institute of Management Studies & Research,Belapur	MMS
2017-18	Rawle Tanvi A	BE-Technology Electronics and Telecommunication Engg.	Electronics and Telecommunication Engg.	VJTI,Mumbai	ME(E&TC)
2017-18	Patra Suvendu S.	BE-Technology Electronics and Telecommunication Engg.	Electronics and Telecommunication Engg.	Symbiosis Institute of Telecom management.	MBA (Telecom Management)
2017-18	Chaudhari Chaitali R	BE-Technology Electronics and Telecommunication Engg.	Electronics and Telecommunication Engg.		MS (Electronics and communication)
2017-18	Bansode Rushabh V	BE-Technology Electronics and Telecommunication Engg.	Electronics and Telecommunication Engg.	GD Pol Foundation, YMT College of Management	MMS

2017-18	Sampada Shashri	BE-Technology Electronics and Telecommunication Engg.	Electronics and Telecommunication Engg.	Welingkar's Postgraduate Diploma in Business Management.	MBA
Automobile Department					
2017-18	Rahul Salve,	BE-Technology Automobile Engineering	Automobile Engineering	State university of New York.	MS
2017-18	Bhavesh Pawar	BE-Technology Automobile Engineering	Automobile Engineering	State university of New York	MS
2017-18	Suyas.h K	BE-Technology Automobile Engineering	Automobile Engineering	State university of Germany	MS
Mechanical Department					
2017-18	Bukane Sameer	BE-Technology Mechanical Engineering	Mechanical Engineering	FR.CRCE, Bandra	M.E.
2017-18	Kulkarni Akshay	BE-Technology Mechanical Engineering	Mechanical Engineering	Ramprasad Chandelwal, Inst. Of Management and research Bandra	MMS
2017-18	Dhoble Apurva	BE-Technology Mechanical Engineering	Mechanical Engineering	Garware Institute of Edu. Kalina	PGDBM in mass media journalism
Civil Department					
2017-18	Akshay KUMar Bhat	BE Technology civil engineering	Civil Engineering	University Of Cincinnati	MS
2017-18	bhujbal sagar ram	BE Technology civil engineering	Civil Engineering	Yadavrao Tasgaonkar COE And MGMT	ME Water resource engg

2017-18	Mrinmayi Tamboskar	BE Technology civil engineering	Civil Engineering	Vjti	MTech Project Management
2017-18	Ghokate Darshana	BE Technology civil engineering	Civil Engineering	Sinhagad College Of Engg, Pune	ME Environmental engg
2017-18	Sare Jay Naresh	BE Technology civil engineering	Civil Engineering	GH Raisonni College Of Engg	ME Structural engg
2017-18	Matkar Viraj , Kadlay Sunil,sathanak umar Murugaiah, Ankita Bade	BE Technology civil engineering	Civil Engineering	Amity University, Noida	MBA
2017-18	Gupta Sawan Ashok	BE Technology civil engineering	Civil Engineering	Jspm Impeial Coe	ME Structural engg
2017-18	Patil Pratik	BE Technology civil engineering	Civil Engineering	Datta Meghe Coe	ME Strucutral engg
2017-18	Yadav Brajesh	BE Technology civil engineering	Civil Engineering	Nicmar , Pune Alkesh Dinesh Modi	ME Construction management
2017-18	Bhagyashree Panchpande	BE Technology	Civil Engineering	Institute For Financial And	MBA

		civil engineering		Managemnt Studies	
2017-18	Pragvansh Pati	BE Technology civil engineering	Civil Engineering	AUT University, New Zealand	MS
2017-18	Abhinav Paul	BE Technology civil engineering	Civil Engineering	Auburn University Garduate School	MS
5.2.3 Students qualifying in state/ national/ international level examinations during the year (eg: NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)					
Items		No. of Students selected/ qualifying		Registration number/roll number for the exam	
NET					
SET		10		ME17102090, ME18117307 ME18116814 ME18120038 ME18100056 ME17105331 ME17101324 ME171011019 ME17107841 ME17102033	
SLET					
GATE					
GATE		Computer dept.-- 3 E&TC Dept.--01 Mech Dept.--02 Civil Dept.-07		Computer- CS18S32073659,CS18S32074051 CS18S32073228 E&TC- EC 18S52064284 Mech – ME18S12073164 ME18S12059484 CE18S72072124 CE18S82069024	

		CE18S82071037 CE18S72068016 CE18S72046517 CE18S72080035 CE18S82051081
CAT	E&TC-01	E&TC-7159411
GMAT	IT-01	IT-700081
GRE	Automobile-03	
TOFEL	IT-01 Automobile Dept.--03	IT-000829579
Civil Services	IT Dept.--UPSC-1	IT-0218AC0124573
State Government Services	Civil Dept.--01	PWD_JE_0038922
Any Other		
5.2.4 Sports and cultural activities / competitions organised at the institution level during the year		
Activity	Level	Participants
Sports Activities		
Sports FOOTBALL MIT sports summit (Pune)	Level- National	Participants- 16 Rank- Top 4 out of 64 teams
University tournament	University Level inter college	Participants- 16 Result- lost in the third round
Reliance foundation youth sports tournament	Level- inter collegiate	Participants- 16 Rank- played 2 matches. (First match- 6-0 win, second match 1-1 draw
RAIT sports tournament, Nerul	Level- inter collegiate	Participants- 16 Rank- Top 8
Sports KABADDI	University Level inter college	Participants:- 12 Rank :- lost in 3rd round
Sports BADMINTON*	University Level	Participants:- 6 Rank :- pre quarterfinals

	inter college	
Sports CRICKET	Club matches Level Regional	Participants :- 11
Sports SWIMMING*	University Level inter college	Participants:- 5 Rank : all top in 8
Sports Kho-Kho	University Level inter college	Participants:- 1
Sports Weight Lifting	University Level inter college	Participants:- 04
Sports Wrestling	University Level inter college	Participants:- 01
Cultural Activity		
Teachers day A celebration of gratitude towards the moulders of the world 5/09/18- 2.00 pm onwards 2.00-5.50pm	College Level Fun activities for teachers	Attendance: 452
Cultural club auditions Identifying the talents and forming the clubs 3,4/09/18- 2.00pm onwards	College Level	Attendance: 200+
Freshers auditions Identifying the new talent 6,7/09/18- 4.00pm onwards	College Level	Attendance: 250+
Ganpati Festival , Grand welcoming of the lord Ganesh 12/09/18- 2.00pm onwards 2.00-3.30pm :Banjo 3.30-4.30pm : Dhol tasha	College Level	Attendance : 1000+
Freshers party Welcoming and show casing talent of fresh- ers 28/09/18- 4.00pm onwards	College Level	Attendance: 800+
Garba night ,Celebrating the enchanting fes- tival 10/10/18 - 4.00pm onwards	College Level	Attendance: 1000+

5.3 Student Participation and Activities

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

Year	Name of the award/ medal	National/ International	Sports	Cultural	Student ID number	Name of the student
2017	Gold medal	National Level Thaiboxing	yes	-	S156028	Gurinder singh manan
2018	Gold/Bronze medal	International Indo -Ryu Karate	yes	-	FE Student ID is pending	Mr.Prathmesh Shirodkar

5.3.2 Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

The Student Council 2018-19 of Saraswati College of Engineering, Kharghar consists the hearts and souls of its 27 members. The general process of selection of council members primarily is carried out via the interested students first filling the application form and submitting their certificates to the assigned in charge faculty. Then, the students are shortlisted for the interview round which lasts for almost 2 days after which the qualified students are selected and finally the council is formed.

The Student Council is a body which represents the entire college. Each member of the student council also stands individually as a representative for the entire college. The posts in the Council are as follows: General Secretary, General Advisor, Cultural Secretary, Cultural Club Coordinator, Joint Cultural Secretary, Treasurer, Sponsorship Head, Technical Head, Joint Technical Head, Software Development Head, Documentation Head, Lady Representative, Academic secretary, Editor in Chief, Publicity Head, Security Head, Joint Security Head, Logistics Head, Joint Logistics Head, Head of Operations, Sports Secretary, Joint Sports Secretary, Creative Head, Joint Creative Head, Hospitality Head. The first mentioned posts are usually referred to as the core mains, however in this year's council no such difference is kept. 'All are equal, all should work equal and dedicate themselves equally,' this has been the motto.

Many events have been conducted by the Council at the college level, starting from Teacher's Day, then Ganpati Aagman, Fresher's Party and Garba Night. During all these events, there was a lot an involvement from the teachers as well as good response from the students and the first years as well. Events were conducted by keeping in mind uniqueness, non-repetitiveness and new themes

and 'state to the date' ideas. With every successful event and its grand execution, a new benchmark was set every time by the student council.

The Council and its members play a very profound role in the happenings of the college and to bring everyone together. By conducting these events, they serve all the students as well as the whole faculty of the college. They learn and imbibe themselves constantly with discipline, administrative skills and leadership skills and project the same. After every success they achieve, they can create an invincible aura all around for every other student to learn and get pumped up with the same. The council works with other committee as well which depicts how well they can create the harmony and enrich the ultimate unity the college possess. In the end, they all able to reflect upon themselves as well as make the teachers and the whole college proud for the teachings and the qualities they have learnt from them and become the best versions of themselves.

5.3 Alumni Engagement NA

5.3.1 Whether the institution has registered Alumni Association? Yes/No, if yes give details (maximum 500 words):

Not registered but we have alumni association

5.3.2 No. of registered enrolled Alumni: Nil

5.3.3 Alumni contribution during the year (in Rupees) : **50,000**

5.3.4 Meetings/activities organized by Alumni Association :

Computer Department.: Rohit Agre our alumni are supporting us in development and maintenance of website.

IT Department -Seminar on “Introduction to Oracle”

Civil department- 1). Career guidance given by Prathamesh Pawar, kunal Parmar (2016-17)

2). Pratiswara (bridge course, 1week training program)- Suraj Nair

3). SSTP for faculty by Abisht Kejriwal (CAAD centre)

E&TC department – “ **Pratidhwani**”, Alumni and present student’s interaction program was arranged on 19th January, 2018. Alumni students guided present students regarding higher education, present job scenarios etc.

Automobile Department- Shudhodan Sapre and Suyash karingwar is supporting in BAJA and Supra racing events, from design of car to final testing.

CRITERION VI –GOVERNANCE, LEADERSHIP AND MANAGEMENT**6.1 Institutional Vision and Leadership**

6.1.1 Mention two practices of decentralization and participative management during the last year (maximum 500 words) --

An organized method has been established by institute for work towards decentralized governance system

It is observed that decentralization of system improves work effectiveness and smooth functioning of Institute.

Working of governing body comprises problems conveyed by Local management committee

Principal monitors the academic processes through the head of the departments and academic coordinators and teachers

The Principal of the Institution conducts regular meetings with the staff with prior notification.

The Heads of Departments observe the functioning of their respective departments. The participative decision-making ensures total participation of all the faculty of the department. The Registrar is administration head of the institute, supported by office staff.

The participative management is promoted at various levels in the institute. Departmental meetings are conducted for discussing common issues. The Principal with the Heads of the Departments discusses the needs, problems and suggestions to improve the educational quality and infrastructural improvements to talk to the top management for further action. There are various Cells established to manage different institutional activities. The list of available Cells/committees is as follows:

- Governing body
- Local managing committee
- Academic Control Committee
- Staff selection committee
- Research and Development Cell
- Training , Placement and carrier guidance cell

- Student grievance Cell
- Student Welfare and Grievance Cell
- Examination Cell
- Library Cell
- Internal Quality Assurance Cell (IQAC)
- Entrepreneurship Cell
- Admission Cell
- Women development cell
- Women Grievance cell
- Anti-ragging cell
- Entrepreneurship Network cell
- Industry Institute Interaction cell
- Purchase committee
- NSS unit
- Time table committee

Faculty members can discuss their issues with the HOD's and the LMC committee, and provide suggestions for expected changes in processes, which are conveyed to top management in meetings. After receiving feedback from the stakeholder's management implements suggestions through the respective departments, which will further be communicated to the staff for improving the effectiveness and efficiency of the institutional processes. The management encourages and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes by: Provision of special leaves for higher studies. Faculty, members are encouraged for participating in training programs, , workshops, symposiums and refresher programs. Involvement of the staff members in decision making. Institute also motivates staff members for higher studies and gives increments after completion of higher studies. Motivating & honoring the staff for their successes in academic and research activities

The management had been very involved with the entire process of NAAC accreditation and its implementation. Requirements related to academics or administrative work were conveyed to the management through the IQAC team and Principal and necessary action were taken

6.1.2 Does the institution have a Management Information System (MIS)?

Yes/No/Partial:

YES

By optimum use of technology, Notices are conveyed through emails and SMS to the stakeholders. SMS and e-mails regarding defaulters are sent to parents. Results are uploaded on college website.

Online Feedback system and online aptitude test system is utilized for students' comfort. HRM-software is used for CL-leave approval and sanction process

Saraswati College of Engineering (SCOE), has an online data cum resource management software used to maintain student, staff and resource records for various academic and administrative purposes such as feedback about faculties, course exit, Programme exit, book transaction and online access to library resources.

6.2 Strategy Development and Deployment

6.2.1 Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

Curriculum Development

Our institute is affiliated to Mumbai University and bound by its curriculum. The university appoints senior faculty members as members of Board of Studies/Syllabus committee/Syllabus revision committee etc. The senior faculty members of our institute are part of syllabus revision committee of various programmes

As per the suggestions received from various stakeholders, faculties suggest the changes in the syllabus to be induced in the process of syllabus revision.

Analysis of prerequisites of every syllabus content, designing the course objectives and outcomes and program objectives and outcomes is done by concerned faculty of departments along with proper planning and implementation of curriculum. The institution has also adopted the concept of Quality circle wherein the suggestions given by members of quality circles are conveyed to the syllabus revision committee for inclusion. College has representation in BOS of various programs, which facilitates inclusion of views of faculties and advisory committee members of college at university level. Faculties of each department are deputed to participate in orientation/refresher course of revised syllabus.

A student council is formed in the institute and they are a part of decision making process in each program. Students' council members represent their program and conveys their academic issues to the head of the dept. And these are communicated to the university through senior faculty and taken into consideration at the time of syllabus revision

Alumni: Alumni meet is arranged in the institute every year and their views, suggestion are noted. Based on alumni student's suggestion various add on courses are organized in the dept. to meet the industry requirement and making our students employable

Parents: A Parents teacher meet is organized in each semester and issues related to the curriculum are discussed and their feedback is taken for improvement in teaching activity and facilities in the campus.

Employers/ Industries: Training and placement cell regularly interacts with the HR of various industries and their feedback is forwarded to the programs heads and corrective action and courses are design to make the student employable

Academician/ experts: The views expressed by the experts who visit the institute during STTP programs, conferences, add on courses, seminar, guest lecture on the current scenario and requirement of industry are also incorporated

Teaching and Learning

Institute is ISO certified under ISO 9001:2008. All Academic processes are well established and implemented. Quality objectives for academic processes are reviewed after every year and measures are taken to improve the quality in Academics.

- Appointment of faculty with subject experience- HR section takes care of appointing senior qualified and experienced faculties.
- Continuous monitoring on process- Academic monitoring committee reviews teaching learning process and teaching methods and proper suggestions are given for improvement if required.
- Continuous evaluation- Assignments, Tutorials and Practical's are assessed by faculty throughout the semester for continuous improvement in students.
- Specialized Training-Training need identification is done by HR and departments for deciding the type of training to be imparted to faculty.
- Review of teaching methods- Review of teaching methods skills, content and implementation are monitored on regular basis by analyzing progress reports and feedbacks from students.

- Feedback-Feedback is taken from students twice a semester and if not found adequate then counselling of faculty is done by principal for improvement in performance.
- Action for improvement- Counselling meetings are conducted for faculty with less feedback and suggestions are given in specific areas of improvement.
- Work load distribution- Work load for every semester is done well in advance based on faculty competency, teaching experience, expertise, result analysis and feedback of students.
- Proctor system- Proctors are assigned for a group of students who takes care of the difficulties of the students to improve academic performance and their overall wellbeing.
- Faculty Meetings- Departmental meetings are organized regularly to review the progress of teaching learning and to solve problems if any.
- Teaching aids- Modern teaching aids such as LCD/OHP/CD's/DVD's are utilized for an effective delivery of the subject to the students. Internet facility available across the campus to support teaching learning process.
- Laboratories:
- Laboratories are well equipped with advanced technology equipment and revised syllabus for better delivery of practical aspects of subject.
- Research:

Faculties from all departments are encouraged to submit research proposals to different research and funding organizations. They are also encouraged for doctorate programs.

Special attention to **slow learners** and **remedial classes** for failures and DSE students are also taken care of. Leased line of 100 MBPS internet facility is available for faculty and students.

- **Examination and Evaluation**

University Reforms adopted by the institute

Institute follows the Mumbai university guidelines for conduction of examination and evaluation of students and Result Preparation Process, moderation, Gazette, Internal Evaluation process.

Reforms initiated by the Institute Continuous assessment of practical is done by using academic diary. Maintenance of score records with respect to performance of students are awarded for final exam score. The faculty enters attendance and marks of the students periodically. Records of marks are finally sent to university. Institute conducts surprise tests per semester for every subject,

mock oral examination. The college calls external examiners for conduction of practical exams and vivavoce from the approved panel of examiners. The Institute has self-defined practice of masking and coding the papers for second and third year examinations which are conducted on behalf of university. Mini Projects and their presentations are assigned to second and third year students though they are not mentioned in the syllabus for better learning of students, which are evaluated and guided by teachers. Internship is made compulsory to all third year students to give them industrial exposure. Their reports are evaluated by teachers

- Security measure is enhanced in examination section to avoid any malpractices through CCTV camera and data retrieval capacity for 3 months
- Separate enhanced UPS facility in exam cell related to exam DEPDS work
- Results of second year and third year examinations are declared within a span of 35 days
- Revaluation result declared within 2 months

Research and Development

Saraswati College of Engineering has been recognized as a research oriented centre .The Research and development cell is formed to monitor and address the issues of research and its roles and objectives are well defined. Under the Research and development cell, the institution takes measures to facilitate smooth progress and implementation of research scheme and takes efforts in developing scientific temper and research culture and aptitude among students. Faculties involvement in active research projects and collaborative research activities are encouraged .Workshops, training programmes are organised by the institution with focus on building research culture among staff and students

One major project has been submitted to BRNS and a funding of 16 lakhs has been received

13 minor research projects have been submitted to university of Mumbai

34 MOU'S has been established till 2017-18

Library, ICT and Physical Infrastructure / Instrumentation

Library: Books are added as per department requirement. Adequate journals are provided to users. Library circulation work like Issue and Return of books are maintained using KOHA open source Library software.

In-house Printing of barcodes. Every class has library hour. For project work information ready reference service provided. One extra book issued to topper student of every class. Return notice

of books e-mail directly through software. Stock verification of library books done at the end of every year. Online feedback of user.

ICT facilities is continuously upgraded .to make more smart classrooms and provision of video lectures and NPTEL videos are made. Students and faculties are making use of digitized library Upgradation in physical infrastructure is also a continuous process wherein all the requirement needed for the smooth functioning of the college campus are provided

In the campus that is spread across 2.25 acres, in addition to 38 classrooms ,58 Laboratories ,6 seminar hall, 1 auditorium,1 video center has been newly added in 2017-18

5 Classrooms with Wi-Fi/ LAN has been newly developed. Around 15 lakhs rupees had been spending on the Purchase of lab equipment's in 2017-18 and continuous upgradation in the campus infrastructure is initiated

Human Resource Management

Institute has implemented new system to communicate or send notice interdepartmental via email or WhatsApp to reduce time and usage of paper.

Institute has introduced new software for applying leave.

Institute has encouraged faculty members to pursue PhD by providing sponsorship.

Institute has started various staff welfare scheme like one day out, seminar on Stress Management, Motivation, leadership, unity ,etc.

Institute has started soft skill program for non-teaching staff members for improvement of their skills.

Institute has started to teach basic MS-CIT course to all non-teaching staff.

Institute has arranged various social programs on Teachers Day, Women's Day, etc. for unity in staff.

Industry Interaction / Collaboration

When Industry and College work in tandem to push the frontiers of knowledge, they become a powerful engine for innovation and economic growth.

For improvement of quality the institute has conducted faculty interaction session with the staff and Industry delegates. Along with that Seminar were conducted from the industry personal for the students to make them aware about the latest trends in the industry. The Training and placement cell also conducted Industry visit for students along with staff members. also Technical conference (National / International) were arranged to initiate effective collaborative or independent research based on the policies on both the Institute and Industry. Over time, a

well-managed partnership had produced a growing number of professors and graduate students who can think and act across the cultural divide, connect with the key research interests of a company and work harmoniously to define big and common strategic goals.

Admission of Students

- The major and only sources of institutional receipts/funding is the fees of students, the college proposes the annual budget based on the admissions filled in for that academic year and as per requirements.
- To make the SCOE administration Student friendly for long term association and satisfactory admissions.
- Smooth functioning in Student section to handle processes for admission and enrollment, eligibility and scholarships of admitted students
- DTE approved Centralized admission center (ARC)
- Admission standards for distinctive categories (SC/ST, OBC, Women, differently abled, economically weaker and Minority sections) are all followed accurately

Support

Institute provides facilities and support in following aspects:

- Appreciation of Topper students in examination through attractive cash prizes and certificates. Book-bank schemes. Motivating students for publishing and presenting papers and competing in different conferences and technical festivals.
- Promoting organizational and leadership qualities by organizing programs through the student Councils and association.
- Guidance for referring available online journals, materials.
- IIT remote workshop center in process
- IIT library membership
- Financial support for participating in outside project competition.

6.2.2 : Implementation of e-governance in areas of operations:

Planning and Development

Department has planned to execute full-fledged Research and development cell for teachers and student.

Department has planned to organize various program for overall personality development of students and faculties.

Department is planning to expand the consultancy work.

Department is planning to start vocational courses for students.

Development

Special efforts for Skill development and add on courses offered to students.

Distinctive efforts for Personal & professional development of students

Ethical, stable, proactive & conducive environment for holistic development of the Institute.

Developing Incubation center under Entrepreneurship Development cell.

Professional Development

Promote the proficient and academic growth of the staff by arranging FDP programs and promoting higher education

Dynamic participation in the selection, planning, and implementation of professional development activities for the staff.

Administration

- To perform realistic scientific analysis about the existing administrative load of every Administrative department throughout the academic year.
- Use of Orange HRM software for leave approval and sanctioned
- To interact with managements for purchase /up gradation of new equipment.
- To interact with the HODs about the availability of test equipment
- To prepare a detailed department wise budget report for every academic year regards provisions for laboratory and other purchases well in advance to start of the academic year.
- To prepare and facilitate the in-house co-curricular activities.
- To make the SCOE administration Student friendly for long term association and satisfactory admissions.
- To mentor students & faculty towards contribution towards social responsibilities.

Finance and Accounts

For improvement of Finance & Account, we adopted Cashless Accounting System in our institute and for that we tie-up with the Punjab National Bank as a Pay Fees System, and that help to Students as well as Parents. They can pay fees through Online by using our Institute website. They can see their balance fees as well as any other charges which is enforce by the college. Student can use all Cards as well online transaction for paying fees or any dues, which charges bear by the college. Students can analysis and see their own account and pay their fees according to that.

Student Admission and Support

- Saraswati College of Engineering ensures smooth execution regarding its admission procedure which is highlighted in the brochure published every year.
- Institute is involved in centralize admission process of DTE and Government of Maharashtra, all the rules, regulation and guidelines for merit admissions for CAP are strictly followed every year. Institute Level admission percentage is decided by DTE as per the DTE guidelines, Institute has framed its procedure for conduction of management admissions. As per the DTE Maharashtra rules the college admits 20% reservation seats in the management quota.
- The major and only sources of institutional receipts/funding is the fees of students, the college proposes the annual budget based on the admissions filled in for that academic year and as per requirements.
- To make the SCOE administration Student friendly for long term association and satisfactory admissions.
- Smooth functioning in Student section to handle processes for admission and enrollment, eligibility and scholarships of admitted students
- DTE approved Centralized admission center (ARC)
- Admission standards for distinctive categories (SC/ST, OBC, Women, differently abled, economically weaker and Minority sections) are all followed accurately

Examination

- Institute follows the Mumbai university guidelines for conduction of examination and evaluation of students and Result Preparation Process, moderation, Gazette, Internal Evaluation process
- To prepare gazette **Viva** software is used by the examination cell
- Most of the communication with the Mumbai university is via email
- Online Hall tickets for first year and final year students are provided on the college website for the students to download

6.3 Faculty Empowerment Strategies

6.3.1 Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
4/12/2017	T.Z.Quazi	Instructional Methodologies for outcome based education in mechanical Engineering	AICTE	1000/-
28 th and 29 th Dec 2017	Madan Jagtap Janak Suthar	11 th ISDSI (IIM,Trichy)	ISTE	1000/-
March 2018	Paramjit Thakur	STTP (Condition monitoring of equipment	ISTE	1000/-
4/12/2017	Madhukar Sorte	Instructional Methodologies for outcome based education in mechanical Engineering	AICTE	1000/-

4/12/2017-8/12/2017	22 All faculties of civil department	Faculty Intelligence Learning Module (FDP)	ISTE	1000/-
2/01/2017-6/01/2017	Deepa Parasar	STTP on machine learning	ISTE	1000/-
11/12/2017—15/12/2017	Vijay Kapure	Workshop on “Numerical Methods	ISTE	1000/-
5/12/2017-18/12/17	Nilesh Patil	STTP on “Ethics and Moral Values	ISTE	1000/-
3/01/2018-5/01/2018	09 Faculties of E&TC Dept.	Workshop on “Design and analysis of Antenna and microwave devices using HFSS”	ISTE	1000/- each
12/04/2018-21/04/2018	Nilesh Patil	STTP on “New Trends in Solid Work in Engineering”	ISTE	1000/

6.3.2 Number of professional development / administrative training programmes organized by the College for teaching and non-teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	Dates (from-to)	No. of participants (Teaching staff)	No. of participants (Non-teaching staff)
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Automobile Department

2017-18	Industry Need Based customized training programs in the field of CAD/CAM/CAE	PUC training	2 nd to 6 th January 2018	30 participants	3
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E&TC Department

2017-18		Advance training on Excel	4 th -5 th January 2018	-	02
IT Department					
2017-18		Excel Workshop	14/1/2018 to 15/1/2018	-	39
Civil Department					
2017-18	STTP			30	-
	Orientation program	Jan 18		10	-
	syllabus revision			05	-
Mechanical Department					
2017	Hands free on ANSYS	-	26-30 th June 2017	33 participants	
6.3.3 No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year					
Title of the professional development programme		Number of teachers who attended		Date and Duration (from – to)	
Automobile Department					
Orientation Programme- Automotive System		1(Heeranand Vangde)		12 th July 2018	
Orientation Programme- Heat Transfer		1(Chodankar Vishnudas)		12 th July 2018	
Orientation Programme- Fluid Mechanics		1(Sagar Khatavkar)		12 th January 2018	
Instructional Methodologies for outcome based education in mechanical Engineering		1(T.Z.Quazi)		4 th December to 15 th December 2017	
Computer Department					
Orientation Program for AOA and AOA lab		1		8 th Jan 2017	
Orientation Program for OS and OS lab		2		10 th Jan 2017	
STTP on Machine Learning		1		2 nd Jan to 6 th Jan 2017	
Orientation Program for OS and OS lab		1		12 th Jan 2017	

Orientation Program for CG and CG lab	1	12 th July 2017
Orientation Program for Discrete Mathematics	1	21 st July 2017
E&TC Department		
Workshop on “Arduino and Raspberry Pi Programming”	02	14 th -16 th September 2017
Workshop on “Design of Solar System”	03	21 st July 2017
Workshop on “Numerical Methods”	01	11 th -15 th December 2017
STTP on “Ethics and Moral Values”	01	5 th -18 th December 2017
Workshop on “Design and analysis of Antenna and microwave devices using HFSS”	09	3 rd – 5 th January 2018
NPTEL course on “Fiber optic communication system and techniques”	01	July 2018
NPTEL course on” Principles of signal estimation for MIMO/OFDM”	01	July 2018
STTP on “New Trends in Solid Work in Engineering”	01	12 th -21 st April 2018
IT Department		
Digital Design Lab Orientation	1	20/7/2017 3hrs
DBMS Orientation	1	24/7/2017 3hrs
POC Orientation	1	20/7/2017 3hrs
DSA Orientation	1	25/7/2017 3hrs
Java programming Lab Orientation	1	13/7/2017 3hrs
Avishkar Research Convention Workshop	1	9/11/2017 3hrs
Python Orientation	1	04/01/18 3hrs
Unix Lab Orientation	1	12/1/2018 3hrs
COA Orientation	1	10/1/2018 3hrs
CN Lab Orientation	1	3/1/2018 3hrs
MPL Orientation	1	10/1/2018 3hrs
AT Orientation	1	1/1/2018 3hrs
Civil Department		
Faculty Intelligence Learning Module (FDP)	22	4/12/2017 - 8/12/2017
Mechanical Department		
Orientation Programme-MMC	1(Monish Tarhekar)	21 st July 2018

Orientation Programme- MSTD	1(Sachin Solanke) 2 (Yogesh Dhumal)	12 th July 2018	
11 th ISDSI (IIM,Trichy)	1(Madan Jagtap) 2 (Janak Suthar)	28 th and 29 th Dec 2017	
Instructional Methodologies for outcome based education in mechanical Engineering	1(M.B.Sorte)	4 th December to 15 th December 2107	
STTP (Condition monitoring of equipment)	1(Paramjit Thakur)	March 2018	
6.3.4 Faculty and Staff recruitment (no. for permanent/fulltime recruitment):			
Teaching		Non-teaching	
Permanent	Fulltime	Permanent	Fulltime/temporary
53	112	87	66
6.3.5 Welfare schemes for			
Teaching			
<ul style="list-style-type: none"> • Urgent provision of financial help to staff in case of medical emergency. • Provision of maternity leave to female faculty members. • Provision of uniforms to attendants. • Faculty is provided financial assistance and on duty leave for publishing the technical papers in National/International reputed Journals & conferences. • E P F – Paid as per P F Act to all the employees. • Gratuity – Paid as per Gratuity Act. • Group insurance policy for teaching staff 			
Non -teaching			
<ul style="list-style-type: none"> • Provision of maternity leave to female non- teaching ladies' staff. • Provision of uniforms to attendants. □ Faculty is provided financial assistance and on duty leave for publishing the technical papers in National/International reputed Journals & conferences. • E P F – Paid as per P F Act to all the employees. • Gratuity – Paid as per Gratuity Act. • Group insurance policy for nonteaching staff 			

Students

- Institute is organizing number of events under NSS and students from all programs are part of the NSS team. Prof. Ram Bhise is the in-charge faculty of NSS. Elocution competition during Vigilance awareness week was conducted on 13/10/2015. The event was organized to spread awareness and sensitizing the youth about ill effects of corruption on our society. A program on Swachyata Abhiyaan (initiated by PM) was organized on the eve of Mahatma Gandhi Jayanti 2nd October 2015. Personality development workshop was organized under NSS. A seven day Residential camp at the adopted village was planned under NSS Sr. No Name Post Contact 1 Mrs. Shilpa Kolte Member 8108188055 2 Mrs. P. Selvam Member 9821996170 3 Mr. Ram Bhise Member 9960569238 4 Mr. Madan Jagtap Member 9689613318 5 Mrs. Monali Deshmukh Member 7738376828 6 Mrs. Bhoomi Patil Member 9987042411 7 Mr. Sagar Khataavkar Member 9561305001 Self-Study Report SARASWATI Criteria-V College of Engineering.
- Health service -An MOU is signed with the Yerala Medical Trust to take care of medical emergency. □ GIC group insurance of students have been initiated from the academic year 2015-2016. □ Rotract club of Saraswati college of Engineering is active in arranging different types of students activities like blood donation, illiteracy removal program, sports activity, marathon, social awareness program, women's safety, paper presentation in association with IIT, clean up drives like Vashi station, Kharghar, Nirbhaya campaign, Ecofriendly Ganesha making □ Student's council is formed in the institute to contribute in the academic development, to provide encouragement for participation in extracurricular activities. Ganesha utsav, sports activities, annual culture programme "Nakshtra", paper presentation, expert lectures, workshops and seminar. Add on courses are organized in consultation with the student council. Academic calendar of the institute is also formed by taking the views of student council into consideration. Relief fund for drought areas of Maharashtra activity was initiated by the student's council.
- Transportation facilities are provided to the students to travel between kharghar railway station and the institute in subsidized cost.
- Hygienic and full-fledged Canteen facility is available in the campus.

- The institution helps to receive scholarship to SC/ST, OBC and economically weaker students from Government of Maharashtra/DTE/Samaj kalyan office/Adivasi vikas karyala as per the policies.
- Grievance redressal cell- Grievances Redressal Cell is formed in order to keep the healthy working atmosphere among the staff, students & parents. This Cell helps Staff, Students & Parents to record their complaints and solve their Problems related to academics, resources and personal grievances. Ragging Complaints will be handled as per ragging rules available on University Website. Women's development cell and Women anti-harassment cell is constituted in the institute to resolve issues of women harassment.
- Placement and Counseling cell - A Career Guidance and training & placement Cell takes care of arranging various programs and experts from industry and academics are invited to guide the students in relation to higher studies and also career options. Special soft skill training program which includes aptitude test, group discussion, personality development is conducted by the institute on a regular basis by Training and placement department. □ Games and Sports & gymnasium- A gymnasium facility is provided in the campus .Sports activities are conducted during annual social event "Nakshtra". One week is reserved for sports activity after the term ends to intensify the sports participation

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly (with in 100 words each)

Institute conducts Internal Audit System as well as Statutory Audit System which is conducted after 6 months once in year. In Internal Audit System we adopt the policy for internal check as well as internal controlling system. In daily transaction vouchers prepared through online and online sanctioned by our Higher Authority. After voucher sanctioned by Higher Authority voucher is paid. Our transactions approved by three different authorities. Physical stock of Stationery and other material taking once in year.

We conduct Statutory Audit as per Statutory and Accounting standard. Statutory Auditors come on place and done the audit as per Statutory norms and Accounting Standard.

6.4.2 Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year (not covered in Criterion III)		
Name of the non-government funding agencies/ individuals	Funds/ Grants received in Rs.	Purpose
Management	1,75,000	Seminar , Workshop
Management	1,00,000	NSS Camp
Management	4,50,000	Annual Function “Nakshatra”
Management	50,000	Students Club
6.4.2 Total corpus fund generated -Rs 50,00000/-		

6.5 Internal Quality Assurance System				
6.5.1 Whether Academic and Administrative Audit (AAA) has been done?				
Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	ISOQAR	Yes	IQAC
Administrative	Yes	ISOQAR	Yes	IQAC
6.5.2 Activities and support from the Parent – Teacher Association (at least three)				
<ul style="list-style-type: none"> • Feedback Collected from PTA organized were effectively used for Quality improvement in all aspects • As discussed in PTA meeting the number of MOCK aptitude test were increased and Personality development courses were conducted • Members of PTA working in industry helped in training and placement activities and in arranging Industrial visits 				
<ul style="list-style-type: none"> • Development programmes for support staff (at least three) 				
<ul style="list-style-type: none"> • IT department -Excel Workshop • E & TC department – Workshop on “Design and analysis of Antenna & Microwave devices using HFSS” on 3rd to 5th January 2018. 				

<ul style="list-style-type: none"> • Automobile Dept.-FDP on “Industry Need Based customized training programs in the field of CAD/CAM/CAE” on 2nd to 6th January 2018 				
<ul style="list-style-type: none"> • Post Accreditation initiative(s) (mention at least three) <ul style="list-style-type: none"> • Application to NIRF ranking • Preparation for NBA • Development of 4-I Model 				
6.5.5 a. Submission of Data for AISHE portal : Yes b. Participation in NIRF : Yes c. ISO Certification : Yes d. NBA or any other quality audit : Yes				
6.5.6 Number of Quality Initiatives undertaken during the year				
Year	Name of quality initiative by IQAC	Date of conducting activity	Duration (from-----to---- --)	Number of participants
2017-18	1. Participation in NIRF	4 th December 2017		01
2017-18	2. Academic Administrative Audit (AAA) conducted and its follow up action	3 rd July 2017	9:00am to 5:00pm	250
2017-18	3. Preparation for upgradation of ISO certificate	3 rd January 2018	--	01
2017-18	4. Application for Various awards and Rewards	02/01/2018	--	150
2017-18	5. Faculty development programme on “Retrospection of Revised IS Codes (IS 1893: Part I, IS 13920 and IS 383) and Retrofitting”.	2 nd Jan. to 6 th Jan. 2018	9:00 am to 5:00pm	120
2017-18	6. “Training on PYTHON”	28 th June 17	9.00 am to 5.00 pm	43
2017-18	7. “ Pratidhwani-An Interaction	19 th January 2018	9:00am to 1:00pm	150

	of Alumnus With Students”			
2017-18	8. Workshop on Advance Python Under Institute Student Companion Program by IIT Bombay	7 th August 2018	9.00 am to 5.00 pm	34
2017-18	9. CADTECH Competition	17 th Sept.2017	9.00 am to 5.00 pm	89
2017-18	10. “Autoinventia 2018” Students Project Competition	24 th Oct. 2018	9:00 am to 5:00pm	31 Groups of students (Auto)

CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES**7.1 - Institutional Values and Social Responsibilities**

7.1.1 Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period (from-to)	Participants	
		Female	Male
Women's Day Program	Nakshatra – Annual Event in March	200	-
Fashion Show of Students on Theme of gender equality	Showcased in various colleges in Mumbai	10	5

7.1.2 Environmental Consciousness and Sustainability/Alternate Energy initiatives such as: Percentage of power requirement of the College met by the renewable energy sources

IT Department

1. E-waste like electronic items are picked from entire office, and given for proper waste management through authorized vendors.
2. Desktops have been bought with LCD screen to save on energy.

E&TC Department

1. Electronics and telecommunication department has one green laboratory which runs completely on Solar energy.
2. To promote the environmental consciousness among students, various energy saving projects were carried out such as E- Rikshaw, E-Swachcha etc.
3. Tree Plantation by NSS with all departments
4. Carpool , Bikepool
5. Cleanliness Drive in different areas

Computer Department

E-Waste: Saraswati College of Engineering has taken initiative towards E waste management. College has signed MoU with E-Incarnation Recycling Private limited which process recycles destroys and displace the received material in efficient manner accordance with local and government rules. It will help to protect the environment. Agreement signed between Saraswati college of Engineering, Kharghar and E-Incarnation Recycling Pvt Ltd.

Civil Department						
Students from CESA(Civil Engineering Student Association) and IWWA (Indian Water Works Association) participated in installation of solar panels in Borimalpada. (2017-18)						
2. Students from CESA and IWWA constructed water tanks in Shirsonicha Pada in Palghar district (2016-17)						
7.1.3 Differently abled (Divyangjan) friendliness						
Items Facilities	Yes/No		No. of Beneficiaries			
Physical facilities	Yes		02			
Provision for lift	Yes		All			
Ramp/ Rails	Ramp		All			
Braille Software/facilities	YES					
Rest Rooms	Yes		07			
Scribes for examination	-		01			
Special skill development for differently abled students	-yes		66(No. of students). Our final year students have project work in both semester. We invited Mr. Krishnakant Mane Sir, founder Digital freedom foundation, to give path and select proper topic which will be useful for society. He has also given chance for internship.			
Any other similar facility	-					
7.1.4 Inclusion and Situatedness						
Taloja City Development, NSS Rotary Club Activities, Pool Campus, Kharghar cleanness Drive, Samaj Kalyan Nidhi,						
Enlist most important initiatives taken to address locational advantages and disadvantages during the year						
Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date and duration of the initiative	Name of the initiative	Issues addressed	Number of participating students and staff
Computer Department						
2017-18	4		OCT 2017	Survey of Taloja Village	1.Economic conditions 2. Male Female participation and ration	No. of students: 200 - In group of 5(40 groups)

					3. Education, Schools, availability of teachers, Employability 4. Skills and technical education 5. Female participation, Social condition and Employment 6. Health and Hygienes 7. Electricity supply and Street lights 8. Water and sanitation 9. Transportation facility 10. Knowledge of various Government schemes.	
			8/4/2018 to 14/04/2018	Samaj Kalyan scholarship	Document verification of nearby colleges has been done to release scholarship of eligible students	200
			14th June 2018	Static Career Guidance by Secretary MSBTE	Awareness to benefits of studying diploma in every branch of Engineering and its future aspects.	
			June5 & 6 2018	Admission Process	1. Admission process of First Year	No. of students:

					Engineering, 2.Application form filling, Option form filling & allocation of Institutes	approx. 500
		6	8/8/17	Cleanliness drive at Kharghar station	To clean Kharghar station premises and promote Swachh bharat abhiyan	No. of students: 40
			11/8/17	Cleanliness at navrang market	To clean market place and promote Swachh Bharath abhiyan	No. of students: 30
			2/10/17	Cleanliness at karnala fort	To clean karnala fort and create awareness among tourists visiting promote Swachh Bharath abhiyan	No. of students: 23
			25/9/17	Blood donation camp	To create awareness about blood donation process and help needy patients with blood donation	No. of students: 195 No. of staff: 05
			3/10/17	Cyclothon	To motivate peoples to use bicycles, conserve fuel and save environment	No. of students: 16 No. of staff: 01

			26/1/18	Cleanliness awareness in societies near kharghar station	To create awareness among peoples and promote swachh bharat abhiyan	No. of students: 16
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7.1.5 Human Values and Professional Ethics

Code of conduct (handbooks) for various stakeholders

Title	Date of Publication	Follow up (maximum 100 words each)
Handbook on “ Code of Ethics and conduct”	17/09/2017	<p>This Handbook is prepared for good and effective functioning of the institute. The college has Grievance and Women’s development Cell. The cell meets regularly to investigate the complaints and also verifies the smooth conduction of code of conduct. The mechanism to examine the grievances is given below:</p> <ul style="list-style-type: none"> • The grievances/complaints can be given to the Grievance Cell. • Exclusion of the grievance/complaint received is done based on its nature • A report is conceded by the Cell to the Principal who is also Chairman of the cell. • As per the cell report the action is taken thereon. • If required, the Principal set up an inquiry committee to study and resolve the matter.

7.1.6 Activities conducted for promotion of universal Values and Ethics

Activity	Duration (from-----to-----)	Number of participants
Activity name	Duration	Number of participants
Women Empowerment	12/10/2017	300
Taloja Gaon Survey	13/10/2017	11

Guru Poornima	27/07/18 (2pm to 4pm)	50 members
Reviving old smiles(charity event for old age)	Oct 2017	30
Construction of Ferrocement Water Tank at Borimal Pada	24/12/2017 to 30/12/2017	72
Seminar on Civil Services	19/01/2018	350
Ride for Pride	09/02/2018 (3pm to 8pm)	87 organization committee Members, 78 bikers, 1670 audience
Youth Exodus	28/03/2018	300
Maa Tuzhe Salam	04/10/2018	310
Blood Donation	4/10/2018 (10am to 4pm)	230 members
‘NURTURE’ Skill Development Program	2016 - 17	
FE- All Branches	18/01/2016 - 06/04/2018	580
SE-Automobile	30/01/2018 – 03/02/2016	70
SE- Computer	16/01/2016 – 20/01/2016	74
SE- Mechanical-A	22/02/2016 - 15/03/2016	81
SE- Mechanical- B	26/09/2016 – 29/09/2016	63
SE- Mechanical -C	03/10/2016 – 06/10/2016	65
SE-IT	09/01/2017 – 13/01/2017	
SE- Extc-A	01/08/2016 – 05/08/2016	62
SE-Civil-A	08/08/2016 – 11/08/2016	70
SE-Civil-B	23/08/2016 - 26/08/2016	68
SE-Civil -C	29/08/2016 – 01/09/2018	66
‘NURTURE’ ‘Skill Development Program Event- Nurture Youth Uprising (All branches SE)	06/03/2017 – 10/03/2017	600
‘NURTURE’- Personality Development Seminar (DSE Civil & Extc)	22/02/2017	32

‘NURTURE’ Skill development Corporate Readiness Seminar	19/07/2016	204
BE- Mech (A, B, C)	15/07/2016	71
BE- Computer	21/07/2016	75
Corporate readiness, Group Discussion & Interview Guidelines		
BE- Registered students(Navy)		
‘NURTURE’ Skill Development Program (Personality Development, Soft skill & Communication skill)	2017 - 18	
FE- (All Branches -Div.- A-G)	22/01/2018 – 22/03/2018	504
SE- Information Technology	29/01/2018 – 01/02/2018	76
SE- Computer		72
SE-Mechanical-A, C	05/02/2018 – 08/02/2018	75
	12/03/2018 - 15/03/2018	71
	12/02/2018 – 15/02/2018	
‘NURTURE’ Skill Development Program Event	06/03/2017 to 10/03/2017	600
Youth Uprising		
All Branches-SE		

7.1.7 Initiatives taken by the institution to make the campus eco-friendly (at least five)

1. Implementation of Go green concept through presenting visitors, guests, participants in various activities by giving sapling as a token of appreciation.
2. Avoidance of plastic means.
3. Reduction in paper work.
4. We motivate faculty to use carpools as per their convenience for optimal use vehicles and avoid pollution

4. We encourage the students to use college transport system for conveyance resulting in reduced use of personal vehicles and waste of fuel
5. Eco friendly Ganesha & Diwali Festivals Celebration.

7.2 Best Practices

Describe at least two institutional best practices

1). 4-I Model

The concept of 4-I model is primarily focused on strengthening the teaching learning process and quality enhancement in all aspects and continuous improvement in all levels and holistic development of the students

The 4- I model comprises of

a).Students satisfaction index

Student's satisfaction through teacher's feedback: Teacher 's feedback is obtained twice in semester and corrective measures are taken accordingly for effective teaching learning It is observed that student's satisfaction has improved substantially in last year's owing to effective teaching learning process.

b). Parent's satisfaction Index

Parent's satisfaction through teacher's feedback: parents teacher meeting(PTM) is arranged every semester so that the parents are aware of their wards performance in academics and the efforts taken by the institute for the growth of the students through extracurricular activities and the infrastructure facilities provided by the institute for the students It is observed that there is a continuous improvement in parent's satisfaction index over the years last four years because of effective teaching learning process.

c).Alumni Satisfaction Index

Alumni's satisfaction through overall feedback: Our alumni are our great assets .They are portraying the vision of the institute in the outside world and their performance and their well-being us are main priority. To strengthen our academic process and other activities that will help our present students to be industry ready in all aspect ,SOE arrange alumni meet every year wherein the alumni opinion is noted in respect to add on courses to be added to bridge the gap between the curriculum and industry requirements .Feedback is obtained once in year and

corrective measures are taken accordingly. It is observed that Alumni satisfaction has improved significantly in over last years

d).Employer’s satisfaction index

Feedback is obtained once in year from employers for their requirement to make our students industry ready and corrective measures are taken accordingly. It is observed that Employers satisfaction has sustained in last four years

2. By the students and for the students

Better learning happens in an informal environment with enjoyable friendly learning experiences, Saraswati college of engineering had established this innovative concept in 2012-13 of “by the students for the students.” which has gain momentum and has become our best practice over the years and more and more activities are conducted by the students for the students

The five core propositions that made this practice popular were : 1) commitment of students for learning, 2) readiness of experimentation and sharing of knowledge, 3) managing and monitoring student’s learning, 4) Systematic team work and 5) output orientation and competitive spirit.

The Practice includes, choosing the expertise area, Diversification of students, Interaction between the students and management for the required logistics, Transfer of knowledge and Skills, competitive spirit , feedback for skill development.

The success of this practice is evident from Skill improvement and practical knowledge, internship ,Improvement in Organization skills ,Improvement in participation in project competitions, Improvement in research papers by students

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

Weblink: <http://engineering.saraswathikharghar.edu.in/wp-content/uploads/sites/6/2018/12/Best-Practices.pdf>

7.3 Institutional Distinctiveness

Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust

1).Research Promotion

At Saraswati College of Engineering, R&D is pursued with the following objectives:

1. To acquire new scientific knowledge.
2. To design novel methodologies in all the fields of Engineering and Technology.
3. To develop new tools and techniques to expedite problem solving with special

emphasis on rural and socially relevant issues.

The Research Promotion Scheme of SCOE aims to nurture research culture in the institute by promoting research in newly emerging and challenging areas of science and engineering. It encourages the Undergraduate and Post graduate candidates to undertake the research in newly emerging frontier areas of science and engineering including multidisciplinary fields. This enhances the general research capability of budding technocrats by way of participating in conferences, seminars, workshops, project competition, etc.

The major R&D activities are as follows:

- External Funded Projects
- Publications in peer-reviewed Journals
- Faculty Development Programs, Conferences, Workshops, STTPs, Symposia etc. (attends and organizes)
- Procurement of high-end computational and laboratory equipments, and software for Research
- Deputation for Higher Studies
- Talks and Lectures by eminent researchers
- Industry Institute Interaction (Students and Faculty)
- Collaboration and MoU with Industry and R&D Organization

2). Holistic Development of Students

Saraswati College of Engineering Education System seeks to provide quality education for all students, taking account of their age, background, ability, and interests.

To enhance effective learning and teaching by:

- Encouraging students to take responsibility for their own learning and behavior.
- Identifying and catering for the individual learning needs of students.
- Establishing well-managed teaching and learning environments
- Ensuring that learning activities build on prior knowledge and experiences and are socially and culturally relevant.
- Providing frequent opportunities for students and their parents to discuss learning programs

and student behavior and progress.

- Identifying key social skills and developing plans for all students to acquire them, or make progress towards them, over time.

Along with Effective Teaching and Learning Holistic Education of the students is an equally important factor which has been taken care of in the Institution

Holistic Education is a methodology which focuses on preparing students to meet any challenges they may face in life and in their academic career. The most important theories behind holistic education are learning about oneself, developing health relationships and positive social behaviors, social and emotional development, resilience, and the ability to view beauty, experience transcendence, and truth.

Holistic education notes that Students need to not only develop academically but develop the ability to survive in the modern world. They need to be able to rise and meet challenges presented to them in the future and contribute to the world in which they live Students need to learn to first value themselves, their worth, and recognize their abilities and how to be able to do what they want in life. Doing what they want ties into the relationships that they build and how they treat those relationships.

Through Holistic education The institute is ensuring that the students learn about their immediate relationships with their friends and family as well as social development, health, and intellectual development. It takes current cultural influences such as the media and music and teaches younger people how to be human.

SCOE has therefore made different clubs for the all-round development of the students ensuring Development in all spheres of work culture

Details of the club are displayed in the website

Research related data and different clubs for holistic development of students are displayed in the link

Weblink:<http://engineering.saraswatikharghar.edu.in/wp-content/uploads/sites/6/2018/12/Institutional-Distinctiveness-n.pdf>

8. Future Plans of action for next academic year (500 words)

- As awareness amongst students regarding energy conservation and waste management, the theme of final year projects of students was “Waste Management”
- Designing of automation modules through students
- NBA accreditation.
- To encourage more faculty to make use of webinar facility extensively.
- To promote self-learning and adaptation to technology among students.
- To enhance project-based
- learning.

GOAL I: -To develop an environment for the students to succeed at their highest level through high quality academic programs, co-curricular and extra-curricular activities and community outreach based programs

- Be among the highly respected institutions in the Navi Mumbai for undergraduate and post graduate studies in Engineering.
- Relentlessly pursue institutional effectiveness.
- Redefine PEO's and PO's.
- To initiate the Outcome Based Education, Monitor and Implement Effectively in view of NBA.
- To ensure fair access to and affordability of academic programmes for various sections of society.
- To enhance outreach programmes for the members of the backward community.
- To enhance the number of smart class rooms in the academic departments.
- To introduce fully e-based system for different administrative processes like, admission, result publication, etc.
- To support students. (meritorious and academically weak)
- To address student grievances.
- To conduct greater numbers of seminars and workshops of National and International importance at our campus.
- To arrange special programs for teaching/non-teaching staff.

- Expand the SCOE's global footprint and influence to ensure that it is graduating global citizens.
- Recruit, retain and enable a community of exceptional faculty and staff.
- To arrange interactive skill oriented training programs

GOAL 2: -Pursue research, consultancy, innovation, and entrepreneurship activities to address the grand challenges and opportunities of the future

- To motivate faculty for Industry-Interaction with objectives to get Sponsored Projects and Placement of Students.
- Ensure that innovation, entrepreneurship, and public service are fundamental characteristics of engineering graduates.
- To strengthen industry linkages.
- Pursue research, consultancy, innovation, and entrepreneurship activities to address the grand challenges and opportunities of the future.
- To enhance collaborative research among the departments and to take initiative for inter-institutional collaboration
- To sign MOU with industries to get Industry Sponsored Projects and Internship, Training of Students.
- Sustain and enhance excellence in scholarship and research.

GOAL 3: -Enhance Engagement with Society and Industry

Enhance Alumni Engagement Alumni have been key stakeholders in the Institute's evolution and growth. Alumni achievements have been a source of pride for the Institute and have contributed significantly in society. The Institute has been recognizing alumni with Distinguished Alumnus, Young Alumnus and Distinguished Service. The Institute has more than 5,000 alumni. The Institute will make efforts to enhance the engagement with all alumni. The focus will be on a two way interaction. The Institute is committed to lifelong involvement with all students who will continue to be part of the SCOE family even after they graduate. The Institute will build its engagement on adding value and support to the alumni in their careers and professions with specialized training, lectures, access to the latest research and help with networking.

- To strengthen alumni participation

- To increase participation in Institutional Social Responsibility (ISR) and Extension activities
- To strengthen National and International linkages.
- To strengthen the liaison among the stakeholders like, students, teachers, parents, employers etc

GAOL 4: - Develop a Cleaner and Greener Campus

The Institute is committed to grow sustainably and develop as a model clean, green campus. The existing Green Campus Committee which consists of representatives from students, faculty and staff decides campus policies to promote sustainable practices and maintain the flora and fauna of the campus. Initiatives will include energy efficient appliances, increased use of renewable energy, improved solid waste and waste water management systems. The campus will move towards a reduced energy and carbon footprint (low carbon campus) and a zero-discharge campus. New innovative technologies for energy, waste management and emissions control will be showcased on the campus and their viability assessed.

- To fulfill our social obligations, arrange different programs through NSS.
- To protect the environment. We plan to conduct an Environmental Audit.

Name: Prof. Sheetal Bhujade



Signature of the Coordinator, IQAC

Name: Dr. Manjusha Deshmukh



Signature of the Chairperson, IQAC

Abbreviations

I.T.	: Information Technology
E & TC	: Electronics & Telecommunication
F.E.	: Humanities & Engineering Sciences
NET	: National Eligibility Test
SET	: State Eligibility Test
UPSC	: Union Public Service Commission
R & D	: Research & Development
HOD	: Head of the Department
Dept.	: Department
FDP	: Faculty Development Programme
QMS	: Quality Management System
MU	: Mumbai University
UG	: Under Graduate
PG	: Post Graduate
CBCS	: Choice Based Credit System
PCB	: Printed Circuit Board
IOT	: Internet of Things
GRE	: Graduate Record Examinations
TOEFL	: Test of English as a Foreign Language