



Yearly Status Report - 2019-2020

Part A

Data of the Institution

1. Name of the Institution	SARASWATI COLLEGE OF ENGINEERING, KHARGHAR
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.	02227743706
Mobile no.	7738677011
Registered Email	principal.scoe@gmail.com
Alternate Email	iqac.scoe@sce.edu.in
Address	Plot-46, Sector-5, Kharghar, Navi Mumbai
City/Town	Kharghar
State/UT	Maharashtra
Pincode	410210

2. Institutional Status					
Affiliated / Constituent		Affiliated			
Type of Institution		Co-education			
Location		Urban			
Financial Status		Self financed			
Name of the IQAC co-ordinator/Director		Prof. Sujata Bhairnallykar			
Phone no/Alternate Phone no.		02227743706			
Mobile no.		9920622380			
Registered Email		iqac.scoe@sce.edu.in			
Alternate Email		principal.scoe@gmail.com			
3. Website Address					
Web-link of the AQAR: (Previous Academic Year)		https://engineering.saraswathikharghar.edu.in/wp-content/uploads/sites/6/2020/11/AQAR-18-19.pdf			
4. Whether Academic Calendar prepared during the year		Yes			
if yes, whether it is uploaded in the institutional website: Weblink :		https://engineering.saraswathikharghar.edu.in/academic-calender/			
5. Accreditation Details					
Cycle	Grade	CGPA	Year of Accreditation	Validity	
				Period From	Period To
1	B	2.34	2017	02-May-2017	01-May-2022
6. Date of Establishment of IQAC			17-Jul-2015		
7. Internal Quality Assurance System					
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		

Academic Administrative Audit (AAA) conducted and its follow up action	01-Jan-2020 1	250
Conference on Recent Innovation in Engineering Science and Technology	30-Sep-2019 2	80
Formula style FFS India 2019 students competition at Coimbatore	01-Oct-2019 5	200
Preparation for Participation in NIRF	01-Oct-2019 60	250
Application for Various awards, Rewards and Compitations	01-Nov-2019 120	250
Self Upgradation training programme for Non-teaching staff	05-Jul-2019 2	97
Preparation for NBA	18-Nov-2019 120	250
To strengthen placement Technical Training on C and Java, Python has been conduted for TE and BE students	02-Sep-2019 30	190
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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
SCOE/ Comp/Prof. Sujata Bhairnallykar	Minor Research Grants	University of Mumbai	2019 365	15000
SCOE/ Comp/Prof. Arti Gore	Minor Research Grants	University of Mumbai	2019 365	25000
SCOE/ IT/Prof. Diksha Gautam Kumar	Minor Research Grants	University of Mumbai	2019 365	37000
SCOE/ FE/Dr. Sindhu Tayade & Dr. Sunita Pal	Minor Research Grants	University of Mumbai	2019 365	45000
SCOE/ EXTC/Prof. .Sneha Burnase	Minor Research Grants	University of Mumbai	2019 365	20000
SCOE/ CIVIL/Prof. Shweta Motharkar &	Minor Research Grants	University of Mumbai	2019 365	30000

Prof. Garima Nagpal				
SCOE/ CIVIL/Dr. Sunil Rangari and Prof. Sanjay Singh	Minor Research Grants	University of Mumbai	2019 365	30000
SCOE/ MECH/Mr.Sachin G. Solanke	Minor Research Grants	University of Mumbai	2019 365	48000
SCOE/ Auto/Prof. P. D. Ingle & Prof. Sagar Khatavkar	Minor Research Grants	University of Mumbai	2019 365	30000
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9. Whether composition of IQAC as per latest NAAC guidelines:	Yes
Upload latest notification of formation of IQAC	View File
10. Number of IQAC meetings held during the year :	2
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	Yes
Upload the minutes of meeting and action taken report	View File
11. Whether IQAC received funding from any of the funding agency to support its activities during the year?	No
12. Significant contributions made by IQAC during the current year(maximum five bullets)	
1) All teachers are encouraged to take part actively in research work. They are encouraged to send proposals for patents, major and minor research projects etc.	
2) Quality initiatives for improving teaching learning process by individual faculty members. They are encouraged to participate in Refresher Courses, Orientation Programmes, Seminars, Workshops and preparation of YouTube lectures etc. for the up-gradation of knowledge base.	
3) Quality improvement of projects of final year students. Encouraged students to select project on minimizing environmental degradation. Students participated and won many project competitions.	
4) Design and development of holistic development activities for students. Inclusion of additional student clubs to enhance creative talents like Music, Dance, Drama, sports, Art & Photography are included.	

5) To strengthen the placement many technical, aptitude and soft-skill trainings have been conducted.

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13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year

Plan of Action	Achivements/Outcomes
Increase the quantity of Patents.	Total 16 patents filed as well published.
Introducing Centre of Excellence.	1) Centre of Excellence in Mechanical Modeling and Computing. 2) Red hat centre of excellence—Under it students have got scholarship to attend internship training and courses 3) Centre of excellence in e-Yantra lab 4) Centre of excellence in Huawei Certification
Alumni association registration.	Done
Strengthening consultancy policy.	<ul style="list-style-type: none"> • Training/Consultancy work at A.C Patil College of engineering, Khrarghar. • Consultancy on Approval of Structural Drawing for sewage treatment plant 0.4 MLD capacity with the organization J.M. Enviro Technologies Pvt. Ltd, Vile Parle, Mumbai and completed on 04/03/2020. • Consultancy on Material Testing of Tor Steel reinforcement bars with the organization Institute of Engineers, Belapur CBD, Navi Mumbai and on-going till date.
Improve Entrepreneurship.	<ul style="list-style-type: none"> Companies under registration process • Gym food • Epoxy furniture arts On-going entrepreneurship projects • Indoor mushroom and vegetable farming • Biodegradable packaging • IoT based aquaponics and hydroponics
Strengthening Placement efforts to attract high end organizations.	<ol style="list-style-type: none"> 1) Soft-skill Program for TE and BE class of EXTC, IT and Comp Branches. 2) Technical Training on C and Java, Python in AUG and Sept and January and February and march for TE and BE students of all branches. 3) Two weeks Aptitude Training for All branches interested students run in 4 batches (From Dec to Feb. 2020.) 4) Weekly basis Practice sessions/test series of Aptitude, Technical (MNC Companies practice sessions) , GD and Mock of HR for TE and BE students of all branches.

	<p>5) Selection , guidance and motivation of technical multidisciplinary project development and motivating participation in Chhatra Vishvakarma Awards, Avishkar Project Competition of Mumbai University and India Innovative Challenges Design Contest(IICDC)and NASA Space App Challenges-2019. 6. NPTEL Courses on Python and Data Science, Body language key to Professional Success courses of 8 and 4 weeks respectively. 7. Course CS101.1x: Programming Basics, Course CS101.2x: Object-Oriented Programming under IIT Bombay Remote Centre for 21 days. 8. Two week Internship on PYTHON for Second Year Students in May 2020. 9. One week soft skill Training for Second year students in June 2020</p>
<p>Introducing more Add on courses and hands on experiences</p>	<p>1) Body Coating Workshop organized on 12th Feb 2020 for TE and BE students 2) Python Internship organized from 18th to 30th MAY 2020 3) Personality development course organized from 1st to 5th of June 4) MPED course (Mechanical Processes Equipment design) Course. 5) CATIA Course 6) Augmented reality and virtual reality seminar in March 2020, 7) Seminar on Machine Learning in February 2020 8) Seminar on Microsoft Linux on 3rd February 2020 9) Workshop on Arduino for FE, SE and TE students on 8th Feb 2020</p>
<p>Fulfilling social responsibilities.</p>	<p>1) Workshop on "Solid Waste Management" conducted for TE and BE Students main Focus of the workshop is Volume reduction and disposal of thermocol waste generated in the society 2) Blood donation camp in February 2020 3) NSS volunteers organised various rally's to spread awareness about road safety, no honking and responsible driving, beti bachao beti padhao in January 2020. 4) Ride For Pride (RFP) event was organised by college On 7th February 2020. The fund raised by this event was donated to the families of the martyr's.</p>
<p>Encourage students to select project on minimizing environmental degradation</p>	<p>BE Students working on following projects for minimization of environmental degradation • Sewage Buster, • River Cleaning Ro-Boat, • Machine Learning Approach for plant disease detection • Removal of fluoride content from ground water using reverse osmosis • Treatment of grey water using Charcoal for residential building •</p>

Sludge as a raw material for manufacturing of bricks • Removal of toxic metal from industrial waste by using natural absorbents • Utilization of storm water and sewer water for agricultural land • Purification of Drainage water for farm situated near railway tracks • Geopolymer Concrete based on GGBS & Metakaolin • Modern methods of soil stabilisation for pavement design using cement and flyash • Partial replacement of cement by metakaolin

Introducing Incubation Centre.

In process.

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14. Whether AQAR was placed before statutory body ?

Yes

Name of Statutory Body	Meeting Date
Governing Body	17-Sep-2019

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

No

16. Whether institutional data submitted to AISHE:

Yes

Year of Submission

2020

Date of Submission

16-Jan-2020

17. Does the Institution have Management Information System ?

Yes

If yes, give a brief description and a list of modules currently operational (maximum 500 words)

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 categories 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 are 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 extracurricular and cocurricular activities is provided/conducted for students to get an exposure to number of Nonacademic 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 teachinglearning 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: i) Elearning 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 courserelated performancereports, etc. ii) Event Management Event management software helps to keep the record of different events organized.

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

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 so as 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 so as 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 those 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

Certificate	Diploma Courses	Dates of Introduction	Duration	Focus on employ ability/entrepreneurship	Skill Development
Blockchain	Nil	02/08/2019	1	Employability	Block chain technology for ecommerce and e-business
ATV/F5 Car Building Workshop	Nil	17/08/2019	8	Entrepreneurship	The conceptual as well as practical knowledge of Machine
Workshop on IOT	Nil	09/09/2019	3	Employability	Knowledge about IOT
Inauguration of E-yantra	Nil	03/06/2020	1	entrepreneurship	Robotics lab
Workshop	Nil	05/02/2020	2	entrepreneurship	Arduino workshop
Workshop	Nil	04/03/2020	1	entrepreneurship	SQL and DBMS
Placement Drive	Nil	17/01/2020	1	employability	Placement drive for BE
Aptitude Training	Nil	14/01/2020	1	employability	Technical Training
Linux fundamentals and Advanced Server Configuration	Nil	01/09/2020	120	employability	Certification training is designed to shape you as a Linux professional

help you to run applications, perform desired functions on your system and networks, create a network configuration, and maintain security administration.

Machine Learning	Nil	17/01/2020	1	employability	The conceptual as well as practical knowledge of Machine Learning with various applications and their development.
Augmented Reality	Nil	26/11/2020	1	employability	Practical knowledge of AR and future scope in industry.
Augmented reality and virtual reality seminar	Nil	04/03/2020	1	employability	Practical knowledge of AR and future scope in industry. Use of AR technology in different industries with increasing the employability skills of students with hands-on training.
Machine Learning	Nil	11/02/2020	1	employability	The conceptual as well as practical knowledge of Machine Learning with various applications

and their development.

1.2 – Academic Flexibility

1.2.1 – New programmes/courses introduced during the academic year

Programme/Course	Programme Specialization	Dates of Introduction
Nil	Nil	Nil
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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	Programme Specialization	Date of implementation of CBCS/Elective Course System
BE	Computer	08/07/2019
BE	IT	08/07/2019
BE	EXTC	08/07/2019
BE	Civil	08/07/2019
BE	Automobile	08/07/2019

1.2.3 – Students enrolled in Certificate/ Diploma Courses introduced during the year

	Certificate	Diploma Course
Number of Students	449	Nil

1.3 – Curriculum Enrichment

1.3.1 – Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled
Blockchain	02/08/2019	60
ATV / F5 car building workshop	17/08/2019	70
Body Coating Workshop	12/02/2020	72
Seminar on Solid Waste Management	23/08/2019	196
Skill Development Workshop	16/09/2019	100
Conference on Recent Innovations in Engineering	30/09/2019	206
Aptitude Training	09/12/2019	21
Java Training	13/01/2020	21
Aptitude Training	13/01/2020	28
Soft Skill Training	23/10/2019	65
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1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BE	Internship / MSRTC,	6

	Thane	
BE	Internship / CEMS, Mumbai	4
BE	Internship / Elite Techno Groups	3
BE	Internship / Amisha Enterprises, Andheri mumbai	1
BE	Internship / Sai Services Private Limited Maruti, Borivali Mumbai	1
BE	Internship / Shriniwas Motors, Pune	1
BE	Internship / Auto Institute	1
BE	Internship / Hi-Tech Automobiles	1
BE	Internship / Elite Techno Groups	1
BE	Internship / BTC Bhusawal	1
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1.4 – Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes

1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

Feedback Obtained
<p>Feedback form/formats are designed for the stakeholders. This includes faculty feedback, alumina feedback, student feedback, parent feedback, course exit survey, etc. Faculty feedback from the students for the respective course is taken twice in a semester on various teaching/learning aspects and it is analysed by the HODs and corrective measures if any, are informed to the respective faculties for further improvements. Course exit feedback and program exit feedbacks are taken to analyse the understanding capability of the students. Institute has formulated a mechanism to obtain feedback from students and stakeholders, employers/industries and experts from academicians.</p> <ul style="list-style-type: none"> • Students: Feedback for teaching and learning activity is taken twice a semester. It is an online system. The feedbacks are analysed 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 convey 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	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
BE	Mech II shift(UG)	60	4	4
BE	Mech I shift(UG)	120	21	21
BE	Automobile	60	15	15
BE	EXTC	120	8	8
BE	IT	60	45	45
BE	Computer	60	52	52
BE	Civil II shift (UG)	60	3	3
BE	Civil I shift (UG)	120	32	32
ME	ME -Civil Structural(PG)	18	18	18
ME	ME-Mech Manufacturing(PG)	18	Nil	Nil

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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 fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2019	2186	36	138	6	6

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
138	138	25	18	6	8

[View File of ICT Tools and resources](#)

[View File of E-resources and techniques used](#)

2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

The Counselling service in the college was introduced to meet the following needs of the students: 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. 7. To ensure the proper utilization of time spent outside the classrooms. Counseling is also required when: 1. The student requires not only reliable information but also an interesting introspection of that 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 seem 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 counseling. ? Mental health counseling. ? Educational Counseling. 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. Behavioural 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
2222	138	1 : 20

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
142	138	4	13	11

2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year)

Year of Award	Name of full time teachers receiving awards from	Designation	Name of the award, fellowship, received from
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	state level, national level, international level		Government or recognized bodies
2019	Nilesh B B patil	Assistant Professor	CSI award 2019 Best Student Project
2020	Shraddha Subhedar	Assistant Professor	Appreciated at IIT Bombay for being active SPOC NPTEL
2019	Dr. Deepa Parasar	Associate Professor	CSI
2019	Dr. Manjusha Deshmukh	Principal	CSI
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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
BE	315424510	SE- IV	18/04/2020	14/09/2020
BE	315424510	BE-VII	26/11/2019	02/01/2020
BE	315424510	TE-V	29/11/2019	18/01/2020
BE	315424510	SE- III	28/11/2019	18/01/2020
BE	315460210	VIII/BE	17/10/2020	13/11/2020
BE	315460210	VI/TE	18/04/2020	13/09/2020
BE	315460210	IV/SE	18/04/2020	13/09/2020
BE	315460210	VII/BE	26/11/2020	06/01/2020
BE	315460210	V/TE	27/11/2019	03/02/2020
BE	315460210	III/SE	26/11/2019	03/02/2020
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2.5.2 – Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

As per guidelines issued by University for Evaluation System of each individual subject varies somewhat in the pattern but the categorization is same the guidelines are given below: Internal Assessment (IA) (20 Marks): The first internal test is based on 40 of the syllabus and second test on the next 40 of the syllabus. 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, and they must revise in the class. This also helps the students to improve their performance in final evaluation. End Semester Examination (80 Marks) Marks): Question paper will comprise of 6 questions, each carrying 20 marks. The students need to solve total 4 questions. Term Work/ Tutorial: At least 02 assignments covering entire syllabus must be given during the class wise tutorial. The assignments should be students centric and an attempt should be made to make assignments more meaningful, interesting and innovative. Term work assessment must be based on

the overall performance of the student with every assignment graded from time to time. The grades will be converted to marks as per credit and grading system manual and should be added and averaged. Based on above scheme grading and term work assessment should be done.

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

Every year we prepare the academic calendar for the institute and also a department wise activity schedule for smooth functioning. The academic calendar is displayed on the institute website and also shares with the head of the departments and faculty members to ensure the proper execution of curriculum. Academic calendar contains the plan of activities such as • Beginning of the semester. • Ending of the semester. • Expert lecture and Industry interaction schedule • Technical event • Displaying defaulter list • Taking Feedback • Internal Test examination schedule. • Annual Fest 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, 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 mid-month of semester, social activity was done in last week followed by feedback and first defaulter list. 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 (to provide the weblink)

https://engineering.saraswatikharghar.edu.in/wp-content/uploads/sites/6/2020/06/Alldept_POs-PSOs-COs.pdf

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
315461220	BE	Mechanical Engineering - II	70	70	100
315461210	BE	Mechanical Engineering - I	134	134	100
315424610	BE	Information Technology	83	83	100

315437210	BE	EXTC Engineering	90	89	98.88
315419120	BE	Civil Engi neering-II	68	68	100
315419110	BE	Civil Engi neering-I	141	141	100
315460210	BE	Automobile Engineering	70	70	100
315424510	BE	Computer Engineering	65	65	100
View File					

2.7 – Student Satisfaction Survey

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

<https://engineering.saraswathikharghar.edu.in/student-satisfactory-survey/index.php>

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 organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Minor Projects	365	University of Mumbai	0.15	0.12
Minor Projects	365	University of Mumbai	0.25	0.2
Minor Projects	365	University of Mumbai	0.37	0.29
Minor Projects	365	University of Mumbai	0.45	0.3
Minor Projects	365	University of Mumbai	0.2	0.16
Minor Projects	365	University of Mumbai	0.3	0.24
Minor Projects	365	University of Mumbai	0.3	0.24
Minor Projects	365	University of Mumbai	0.48	0.38
Minor Projects	365	University of Mumbai	0.3	0.24
Industry sponsored Projects	275	DST and Texas Instruments	0.14	0.11

[View File](#)

3.2 – 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
One day workshop on Aurdino for Teachers	EXTC Engineering	08/02/2020
One day workshop on SQL and ORDBMS	IT and Comp Engg.	04/03/2020
One week Course on a Personality Development	IT, EXTC and Comp Engg.	01/06/2020
Two Weeks- Hands on workshop on JAVA- (digital)	IT and Comp Engg.	01/06/2020
Webinar on Whats Next	Civil Engg.	29/05/2020
Webinar on Understanding Cement Test Reports	Civil Engg.	28/05/2020
Online Test Series a Placement Activity	IT, EXTC and Comp Engg.	16/05/2020
Python Training	IT and Comp Engg.	11/03/2020
Java Training Program	IT and Comp Engg.	03/02/2020
Seminar on Machine learning	IT and Comp Engg.	17/01/2020
Aptitude Training for BE students	IT, EXTC and Comp Engg.	13/01/2020
Two Week Java Training	IT, EXTC and Comp Engg.	13/01/2020
Aptitude Training	IT, EXTC and Comp Engg.	09/12/2019

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

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
IWWA Award	Prof. Pooja Soman ,Kiran karjawkar	IWWA	10/01/2020	IWWA Award
Purification of Sea Water	Priyesh Srivastav, Ajay Gaikwad and Abhijeet Hodbe ,Prof.Pooja Somani	National Convention of Chatra Vishwakarma Awards at AICTE,New Delhi.	24/02/2020	Purification of Sea Water
Fabrication and testing of Tiles made from Plastic Waste	Neha Chougule, Harsh Acharekar, Krushnali Chavan, Hemant Dalvi,Dr.Sunil Rangari	Avishkar, Mumbai University	01/02/2020	Fabrication and testing of Tiles made from Plastic Waste
Nasa Space app Hackathon 2019 Zonal Round winner	Mony Suradkar, Ameya Mallya, Prathmesh Tambe	Nasa Space App, India	01/10/2020	Nasa Space app Hackathon 2019 Zonal Round winner
ISTL Runner Up	Deepak Ram Kumar, Sadaquat	ISHRAE Mumbai Chapter	13/02/2020	ISTL Runner Up

	Shaikh, Sayali Patil, Bhagyashri Narkhede			
Winner of Zonal Round in Avishkar, Research Convention in Science and Tech. category	Rahul Maurya, Vishrut Kekatpure, Abhishek kulkarni	Mumbai University	20/01/2020	Winner of Zonal Round in Avishkar, Research Convention in Science and Tech. category
Shortlisted for Final round of Science research Contest organised by Marathi vidyan Parishad .	Mony Suradkar, Ameya Mallya, Prathmesh Tambe	Marathi Vidyan Parishad, Mumbai	15/02/2020	Shortlisted for Final round of Science research Contest organised by Marathi vidyan Parishad .
Winner of Zonal Round in Avishkar Research Convention in Commerce category	Deepak Ram Kumar, Sadaquat Shaikh, Sayali Patil, Bhagyashri Narkhede	Mumbai University	20/01/2020	Winner of Zonal Round in Avishkar Research Convention in Commerce category
Elected for Zonal Round in Avishkar Research Convention In Agriculture Category	Swati Narayan kar, Prajakta Saste, Akash Hodge, Siddhesh Patil	Mumbai University	20/01/2020	Elected for Zonal Round in Avishkar Research Convention In Agriculture Category
Best Student project	Nilesh B B Patil	CSI	28/09/2019	Best Student project
View File				

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

Incubation Center	Name	Sponsored By	Name of the Start-up	Nature of Start-up	Date of Commencement
Nil	Nil	Nil	Ribittle Venture Pvt Ltd	Computer related activities	09/10/2019
Nil	Nil	Nil	Mal art	FOOD and services	18/05/2020
View File					

3.3 – Research Publications and Awards

3.3.1 – Incentive to the teachers who receive recognition/awards

State	National	International
0	2	0

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

Name of the Department	Number of PhD's Awarded
NA	Nil

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

Type	Department	Number of Publication	Average Impact Factor (if any)
International	Automobile	2	1.8
International	Computer Engineering	23	4.17
National	EXTC	1	0
International	FE	4	1
International	IT	28	0
International	MECH	50	0
National	Civil	14	1.3
International	Civil	52	0.65
View File			

3.3.4 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication
Civil	66
Computer	23
IT	28
MECH	50
Automobile	2
EXTC	2
FE	4
View File	

3.3.5 – Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
Seismic Analysis of Multistoried RCC building with Crescent Shaped Bracing in Ground Soft Storey	Roshni John and Pallavi Partani	IJEAST	2019	89	Saraswati College of Engineering	89
Response	Roshni	IJSRD	2019	80		80

of multistoried RCC framed structure with crescent shaped bracing in Soft Storey	John and Pallavi Partani				Saraswati College of Engineering	
Performance of C-shaped structure with inverted V shaped bracings	Roshni John and Nilesh Shinde	IJEAST	2019	110	Saraswati College of Engineering	110
Comparative Study on Shear Lag Effect and Effective Width of PSC Box Girder	Roshni John and Amruta Kawade	IJEAST	2019	121	Saraswati College of Engineering	121
Performance Evaluation of High-Rise with Reinforced Concrete Flag Walls under Sismic Load	Manoj Pillai, Roshni John	UGC Approved (IJSER)	2019	28	Saraswati College of Engineering	28
Performance Evaluation of High-Rise with Reinforced Concrete Flag Walls under Sismic Load	Manoj Pillai, Roshni John	International Research Journal of Engineering and Technology (IRJET) (UGC based journal)	2019	28	Saraswati College of Engineering	28
A Review on Box Pushing Technique	Priyanka M. Rajput	International Research Journal of Engineering and Technology	2019	49	Saraswati College of Engineering	49

		(IRJET) (UGC based journal)				
Comparative Study of Solid Waste Management by Chemophytostabilization Technique	Asmita Lakhote, Kamini Katkade, Sayali Gawade, Roshan Telange, Sanket Ghadge	IJIRAS (International journal of innovative research and advanced studies)	2019	62	Saraswati College of Engineering	62
Performance Evaluation of High-Rise with Reinforced Concrete Flag Walls under Wind Load	Manoj Pillai, Roshni John	JETIR	2019	28	Saraswati College of Engineering	28
Effect of Joule-Thomson pressure drop on a cryogenic three fluid heat exchanger with two communications	Chodankar V., Aswatha, Krishna V.	Cryogenics	2020	0	Saraswati College of Engineering	Nil
View File						

3.3.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
Performance Evaluation of Flag Wall on Irregular Shaped High Rise RCC Building under Seismic Load	Roshni John and Amish Kapuria	JETIR	2019	2	69	Saraswati College of Engineering

BIO-CONCRETE THE SELF HEALING CONCRETE	Molly Mathew, Bhavesh PATIL and Shraddha Kadam	INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE INVENTION	2019	1	22	Saraswati College of Engineering
Seismic Analysis of Multistoried RCC building with Crescent Shaped Bracing in Ground Soft Storey	Roshni John and Pallavi Partani	IJEAST	2019	3	89	Saraswati College of Engineering
Response of multistoried RCC framed structure with crescent shaped bracing in Soft Storey	Roshni John and Pallavi Partani	IJSRD	2019	3	80	Saraswati College of Engineering
Performance of C-shaped structure with inverted V shaped bracings	Roshni John and Nilesh Shinde	IJEAST	2019	4	110	Saraswati College of Engineering
Comparative Study on Shear Lag Effect and Effective Width of PSC Box Girder	Roshni John and Amruta Kawade	IJEAST	2019	6	121	Saraswati College of Engineering
Performance Evaluation of High-Rise with Reinforced Concrete Flag Walls under Seismic	Manoj Pillai, Roshni John	UGC Approved (IJSER)	2019	2	28	Saraswati College of Engineering

Load						
A Review on Box Pushing Technique	Priyanka M. Rajput	International Research Journal of Engineering and Technology (IRJET) (UGC based journal)	2019	4	49	Saraswati College of Engineering
Comparative Study of Solid Waste Management by Chemophytostabilization Technique	Asmita Lakhote, Kamini Katkade, Sayali Gawade, Roshan Telange, Sanket Ghadge	IJIRAS (International journal of innovative research and advanced studies)	2019	4	62	Saraswati College of Engineering
Performance Evaluation of High-Rise with Reinforced Concrete Flag Walls under Wind Load	Manoj Pillai, Roshni John	JETIR	2019	5	131	Saraswati College of Engineering
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3.3.7 – Faculty participation in Seminars/Conferences and Symposia during the year :

Number of Faculty	International	National	State	Local
Attended/Seminars/Workshops	8	130	7	138
Presented papers	73	2	1	5
Resource persons	Nil	1	Nil	6
View File				

3.4 – Extension Activities

3.4.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
Fire safety seminar	NSS	2	32
Awareness rally	NSS	2	42

Bandhara construction At Borimal Pada, Camp site	NSS	2	50
Shramadaan at Borimal Pada For School Building Renovation, maintenance of toilets, painting of houses, etc.	NSS	2	50
Skill Development Training for children At borimal pada, camp village.	NSS	2	50
CPR training at camp site i.e borimal pada	NSS	2	50
Blood Donation camp	NSS	2	75
Utkarsh selection camp	NSS	2	80
Road safety seminar	NSS	2	52
Old-age home visit at kalyan and koparkhairane	NSS	2	45
View File			

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	Number of students Benefited
Purification of Sea Water	Award	National Convention of Chatra Vishwakarma Awards at AICTE, New Delhi.	3
Nurturing intelligence for curious engineers(9/10/20)	winner	IET	1
INTERGALACTIC INVASION(22/9/20)	SECOND PLACE	SCOE	1
BATTLE OF MINDS	FIRST	SIES ROTRACT CLUB	1
MR ENGINEUS(24/8/20)	RUNNERUP	SCOE	1
VIRTUAL e-debate(20/7/2020)	winner	Kolhapur district	1
INTERNATIONAL CONFERENCE ON	Best paper	SCOE	4

INDUSTRY 4.0 (03/04/2020)			
Technovation 2020 (Inter - Collegiate) April 09, 2020	SECOND PLACE	intercollegiate	4
Avishkar Research Convention (Inter - Collegiate) December 21, 2019	semi-finalist	intercollegiate	4
View File			

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

Name of the scheme	Organising unit/Agency/collaborating agency	Name of the activity	Number of teachers participated in such activities	Number of students participated in such activities
SwachhaBharat Abhiyan	NSS	Cleanliness at SCOE campus	2	30
SwachhaBharat Abhiyan	NSS	Cleaning of Offices, complexes, toilets garbage of District zonal Office(Cleanliness at Panvel Post Office)	2	25
SwachhaBharat Abhiyan	NSS	Cleanliness drive to clean street and common places (Cleanliness at Kharghar Railway Station, college road)	2	40
SwachhaBharat Abhiyan	NSS	Cleanliness seminar at adopted village i.e Borimal Pada,khalapur	2	8
SwachhaBharat Abhiyan	NSS	Cleanliness drive at ganesh visarjan places in kharghar.	2	35
SwachhaBharat Abhiyan	NSS	Clean up activity at vashi garden and sea-shore	2	22
SwachhaBharat Abhiyan	Mumbai University	Kalina campus cleaning activity	2	16

[View File](#)

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
FDP on "Industry 4.0"	47	Self Financed	5
International Internship	1	Personal	42

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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	Duration To	Participant
Internship	E Commerce Website	Internshala	06/04/2020	18/05/2020	1
Internship	Veterinary Website	Internshala	03/09/2019	15/11/2019	1
Internship	De centralised Voting System	Blocklogy Edutech Pvt. Ltd	22/03/2019	31/12/2019	4
Internship	Student Management System	Trivia software	01/01/2020	30/03/2020	2
Internship	Student Management System	Trivia software	01/01/2020	30/03/2020	4
Internship	Student Management System	Trivia software	03/06/2019	30/08/2019	4
BE Project	Saitronics ltd	Saitronics ltd karad,AIR POLLUTION INDICATING SYSTEM	01/07/2019	01/03/2020	4
Internships	JNPT	JNPT,Administrative building,sheva ,Navi mumbai, uran	06/12/2019	30/12/2019	1
Internships	Doordarshan Kendra	Doordarshan Kendra, p. b. Marg,	09/12/2019	14/12/2019	2

		worli, Mumbai -400030			
Industry Institute Interaction	Conducting experiments for Elective :Advanced Concrete Technology	Global Lab , TTC Industrial Area, Turbhe, Navi Mumbai-400613 Tel : 02260600679	03/10/2019	07/10/2019	115
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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/Activities	Number of students/teachers participated under MoUs
Tata Power Skill Development Institute	21/06/2019	Bringing familiarization of Power Plant for students	14
Centre of Excellence in Maritime and Shipbuilding, Mumbai	22/05/2019	Internship Program	67
Saitronics karad	01/08/2019	Technical Support and technology training session	80
S B Infotech, Jalgaon	03/03/2019	Seminar	35
CMS IT services Pvt. Ltd.	01/03/2019	Faculty Development Program	10
Blocklogy Edutech Pvt. Ltd	24/06/2019	Internship, Faculty Development Program , Research Co-operation	55
Priarweb Private India Limited	18/09/2019	Training, Seminar Internship	59
View File			

CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

4.1 – Physical Facilities

4.1.1 – Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
660	552.53

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Campus Area	Existing
Class rooms	Existing

Laboratories	Existing
Seminar Halls	Existing
Seminar Halls	Existing
Classrooms with LCD facilities	Existing
Seminar halls with ICT facilities	Existing
Video Centre	Existing
Value of the equipment purchased during the year (rs. in lakhs)	Existing
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Newly Added
View File	

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	0	2016

4.2.2 – Library Services

Library Service Type	Existing		Newly Added		Total	
Text Books	21961	5553275	Nil	Nil	21961	5553275
Reference Books	5135	1667279	Nil	Nil	5135	1667279
e-Books	Nil	Nil	10000	85000	10000	85000
Journals	106	2266775	106	270370	212	2537145
Journals	Nil	Nil	99	260960	99	260960
e-Journals	Nil	Nil	4500	Nil	4500	Nil
CD & Video	1946	Nil	21500	Nil	23446	Nil
Weeding (hard & soft)	42	9326	Nil	Nil	42	9326
View File						

4.2.3 – 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
Dr. Manjusha	Image Region	SCOE -Remote	07/04/2020

Deshmukh	Splitting	Centre Lab	
Dr. Manjusha Deshmukh	Opening and Closing Operation Image Morphology	SCOE -Remote Centre Lab	24/06/2020
Dr. Manjusha Deshmukh	Dilation and Erosion, Opening and Closing	SCOE -Remote Centre Lab	20/04/2020
Dr. Manjusha Deshmukh	Relationship Between Pixels	SCOE -Remote Centre Lab	15/04/2020
Dr. Manjusha Deshmukh	Histogram of an Image	SCOE -Remote Centre Lab	17/03/2020
Dr. Manjusha Deshmukh	Histogram Equalization Solved Example	SCOE -Remote Centre Lab	22/03/2020
Dr. Manjusha Deshmukh	Histogram Specification / Matching with solved example	SCOE -Remote Centre Lab	12/04/2020
Dr. Manjusha Deshmukh	Image Region Splitting with Solved Example	SCOE -Remote Centre Lab	07/04/2020
Dr. Manjusha Deshmukh	Knowledge Representation and Reasoning in Artificial Intelligence	SCOE -Remote Centre Lab	02/05/2020
Dr. Manjusha Deshmukh	Logarithmic Transformation of Image	SCOE -Remote Centre Lab	16/03/2020
View File			

4.3 – IT Infrastructure

4.3.1 – Technology Upgradation (overall)

Type	Total Co mputers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departme nts	Available Bandwid th (MBPS/ GBPS)	Others
Existin g	710	25	2	1	1	1	6	100	0
Added	10	0	0	0	0	0	0	0	0
Total	720	25	2	1	1	1	6	100	0

4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

100 MBPS/ GBPS

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
SCOE -Remote Centre Lab	https://www.youtube.com/channel/UCM14Iw97mnCoNZCI8knb5Uw/videos

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

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
1276.13	125.83	0	0

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)

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 upgrade 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, fire fighting 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. • Student section processes for admission and enrolment, eligibility and scholarships of admitted students • Training and Placement processes for ensure maximum in-campus recruitment.

<https://engineering.saraswatikharghar.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 and Freeship	998	70178328
Financial Support from Other Sources			
a) National	Shri Brihad Bhartiya Samaj Tata Trust J.J Trust	102	654500

	N.M.M.C Mahalaxmi trust		
b) International	Nil	Nil	0
View File			

5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Campus to Corporate	03/07/2019	19	Institute
Campus to Corporate	09/12/2019	15	Institute
Campus to Corporate	13/01/2020	52	Institute
Campus to Corporate	13/01/2020	3	Institute
JAVA Training	24/08/2019	37	Institute
Projects Guidance	01/08/2019	83	Institute
Mentoring for participation in national and international competition	01/08/2019	83	Institute
Counselling of needy student	01/08/2019	15	Department
Aptitude Training	09/12/2019	21	Campus Credentials
Aptitude Training	13/01/2020	28	My Perfectice
View File			

5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passed in the comp. exam	Number of students placed
2019	Seminar on higher studies (by Gate Forum)	43	65	2	47
2019	Java Training	58	58	Nil	47
2019	Java Training	47	47	Nil	24
2019	Campus to Corporate	Nil	35	Nil	24
View File					

5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
Nil	Nil	Nil

5.2 – Student Progression

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
Refer Excel sheet Uploaded	358	187	Refer Excel sheet Uploaded	168	28
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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 to
2019	1	Automobile	Automobile Engg.	Meng University of Windsor	MS
2019	1	Automobile	Automobile Engg.	IDEMI, mumbai	PGD in Tool Design and CAD CAM
2019	1	Automobile	Automobile Engg.	NMIMS	PGDBM, Operation Management
2019	1	Automobile	Automobile Engg.	VJTI	M.Tech.
2019	1	Computer	Computer Engg.	Stevens Institute of Technology	Information system
2019	1	Computer	Computer Engg.	Griffith college Dublin, Ireland	Msc in Data Management and analysis
2019	1	IT	Department of Information Technology	Dublin City University Glasnevin, Dublin 9, Ireland	Master in Data Science
View File					

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	Number of students selected/ qualifying

GATE	7
GRE	12
TOFEL	1
Any Other	25
View File	

5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
Cricket 25	Inter college	80
200m running 25	Inter college	15
100m running 25	Inter college	20
Sports-KHO - KHO 25	Inter college	30
Sports-KABADI 25	Inter college	40
Sports-FOOTBALL 25	Inter college	70
Sports-VOLLEYBALL 25	Inter college	60
Club Sport 25	College level	100
Nakshtra cultural 25	College and inter college level	250
Nakshtra Sports 25	College and inter college level	500
View File		

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	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2020	7th Go-kart Design Challenge (GKDC) Organised by Indian Society of New Era Engineers (ISNEE) (Token Of Gratitude) , 7th GKDC Overall 8th AIR	National	1	Nil	S1761179	Pawar Abhishek D
2020	Gold Medal in Kumite event 25th Euro-Asia	International	1	Nil	S1867199	Prathamesh Tilottam Shirodkar

	international WFSKO open Karate Championship					
2020	Silver medal	National	1	Nil	EXTC	jignesh mhatre
2020	5th position	National	1	Nil	EXTC	Aditya savlekar
2020	quarter finalist	National	1	Nil	EXTC	vikas gaddam
2020	runner up	National	1	Nil	EXTC	swapnil mali
2020	qualifier in national level match (pune) -cricket team	National	1	Nil	IT	Vivek Prajapati
2020	KJSCE SKREAM Open Cricket	National	1	Nil	IT	Rohit Patil
2020	Solo singing competition	National	Nil	1	Comp	Ananya Kamalapur
2020	Solo singing, Group Singing	National	Nil	1	Comp	Ananya Kamalapur

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

Student councils offer a representative structure for students, through which they can become involved in the affairs of the college, working in partnership with College management, staff and parents for the benefit of the College and its students. Student council or Student body is a curricular or extracurricular activity for students within college and inter college. The student council helps to share students' their ideas, interests, and concerns with teachers and College principals. They often also help raise funds for College activities, including social events, community projects, helping people in need and College reform. Student Council Role: 1] To promote the interests of the students, 2] To assist and advise the students, 3] To be the link between students and teachers and Management. Responsibilities of the Student Council: 1] Smooth Conduction of the Institute Annual Day every year, 2] Smooth conduction of Foundation Day every year, 3] Conducting Fresher's day every year, 4] Prevention of ragging in the campus through counselling senior students, helping the administration whenever necessary, 5] Suggesting the administration to improve the student amenities to improve their career and personality building, 6] Helping the administration in smooth conduct of student activities on the campus, 7] Guiding the junior and needy students to improve their technical, organizational and managerial skills by organizing

seminars/ symposia/ workshops etc, 8] Encouraging innovative and creative skills of the under graduate and post graduate students, 9] Organize the programs in the campus to improve the cleanliness and greenery in campus, 10] Any activity to improve the knowledge and skills of the campus students, 11] Maintenance of the peace and harmony among campus community in General and student community in particular. Activity of Council :- Fresher's Party , Independence Day, Youth Festival, Women's in Defence Seminar, Ganpati Festival, Garbha Festival, Teachers Day, Foundation Day, Deepotsav Festival, Republic Day, Ride for Pride {SUPERBIKES EXHIBITION}, Theme Release, Nakshtra, Women's Day, Holi Celebration.

5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

The Institute firmly believes in connecting with all alumni through alumni association. Alumni activities are regularly arranged and annual alumni meet are organised to discuss and enhance wholesome education and development of institute. Alumni members help the institution in every possible extend. They are regularly invited to interact with the students. They come and share their expertise from various fields like government, academia, corporate world, startups etc. Alumni are active members of IQAC and their inputs are helping us for quality enhancements.

5.4.2 – No. of enrolled Alumni:

11

5.4.3 – Alumni contribution during the year (in Rupees) :

5500

5.4.4 – Meetings/activities organized by Alumni Association :

Meeting organized for account formation and increasing number of alumni registration.

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 works were conveyed to the management through the IQAC team and Principal and necessary actions were taken.

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

Yes

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):

Strategy Type	Details
Curriculum Development	<p>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</p>

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. Student's council members represent their program and convey 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

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 are done by using academic diary. Maintenance of score records with respect to performance of students is 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. • 9 minor research projects have been granted from university of Mumbai • 48 MOU'S has been established till 2019-20

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 are 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. • 5 Classrooms with Wi-Fi/ LAN has been newly developed. Always 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 enrolment, 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:

E-governance area	Details
Administration	<ul style="list-style-type: none"> • 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	<p>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.</p>
Student Admission and Support	<ul style="list-style-type: none"> • 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 enrolment, 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.

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.

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
2019	Prof. Suhasuni Parvatikar	International Conference, Chennai	International Conference, Chennai	3500
2019	Prof. Deepa Parasar	International Conference, Chennai	International Conference, Chennai	3500
2020	Dr. Manjusha Deshmukh	Research Proposal presentation	Research Proposal presentation in Department of Biotechnology, Delhi	16865
2020	Dr. Manjusha Deshmukh	Higher Education Conclave	Higher Education Conclave	48000
2019	Dr. Manjusha Deshmukh	CSI Awards	CSI Awards	2500
2019	Prof. Nilesh B Patil	CSI Awards	CSI Awards	2500
2019	Dr. Manjusha Deshmukh, Prof. Roshani John, Prof. Prasanna Raut, Prof. Amit Mane	Patent Filing	Patent Filing	6500

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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	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
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2019	STTP on Sustainable Development Technological Advancements Challenges	NIL	16/12/2019	20/12/2019	34	2
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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	From Date	To date	Duration
Orientation Program for DSIP and DSIP lab	1	10/07/2019	10/07/2019	1
Orientation Program for AISC and AISC lab	1	19/07/2019	19/07/2019	1
Orientation Program for HMI and HMI lab	1	11/01/2020	11/01/2020	1
Orientation Program for DC and DC lab	1	15/01/2020	15/01/2020	1
Orientation Program for NLP and Computational lab 2	1	08/01/2020	08/01/2020	1
Orientation Program for Cloud Computing Lab	1	17/01/2020	17/01/2020	1
FDP on High Performance Computing- Application perspective.	1	11/11/2019	16/11/2019	6
STTP on Machine Learning and Data Analytics	1	10/12/2019	14/12/2019	5
FDP on Python 3.4.3	1	21/04/2020	25/04/2020	5
Boss Linux 3.4.2 Operating system by Spoken Tutorial	1	25/04/2020	01/05/2020	7

6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
118	138	113	113

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
<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. • EPF - Paid as per PF Act to all the employees. • Gratuity - Paid as per Gratuity Act. • Group insurance policy for teaching staff 	<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. • EPF - Paid as per PF Act to all the employees. • Gratuity - Paid as per Gratuity Act. • Group insurance policy for nonteaching staff 	<ul style="list-style-type: none"> • Grievance redressal cell • Placement and Counselling cell • Annual Prize Distribution (Culture /Sports) • Soft Skills Programmes • Career Guidance Scheme • Student-related Seminar/Conferences/Workshops/Camps etc. • Canteen facility • Transportation facilities are provided to the students to travel between kharghar railway station and the institute in subsidized cost. • Institute is organizing number of events under NSS and students from all programs are part of the NSS team. • 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". • 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, clean up drives, Nirbhaya campaigns, Ecofriendly Ganesha making etc. • GIC group insurance of

students have been initiated from the academic year 2015-2016.

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/ Grnats received in Rs.	Purpose
SCOE Management, Indian oil ltd, Ikon Promos, Slices, Aker solution	427500	Nakshtra (Sports and Cultural events), RAF social event, Womens in defence awairness programme, RAF social event,RAF social event
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6.4.3 – Total corpus fund generated

0

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	Academicians from other Institutes	Yes	Dean Academic
Administrative	Yes	Academicians from other Institutes	Yes	Dean Administrative

6.5.2 – Activities and support from the Parent – Teacher Association (at least three)

- Mr. Appasaheb Anandrao Avchare father of Lalit Avchare of TE has helped in arranging Site Visit for BDD at Indo Scottish Global School, Mansarovar, Navi Mumbai on 30th January 2020. Around 67 students visited that site.
- Mr. Maruti Dhirde, Member of local governing body, Shahapur father of Mayur M Dhirde helped in Site visit for final year students to Bhatsa dam at Shahapur, Maharashtra on 11-10-2019 for the subject Water Resources Engineering. Total number of students-187.
- Feedback Collected from PTA organized were effectively used for Quality improvement in all aspects. 1. As parents were worried about their wards physical ,emotional mental health automobile dept. organized "Mental health and Meditation Program. " 2. According to Skill development of wards automobile dept initiated Python Training . 3.The concern

of higher education of wards were satisfied various Seminar given by different educational institute

6.5.3 – Development programmes for support staff (at least three)

- Institute believes in up gradation of skill and quality improvement.
- The institute conducts Skill Development courses for the supporting staff.
- Encourages supporting staff to enrol for new technology and certification courses.

6.5.4 – Post Accreditation initiative(s) (mention at least three)

- Encourage the faculties for Patents filing.
- Placement efforts to attract high end organizations.
- Alumni association registration.
- Introducing Centre of Excellence.
- Participation to NIRF ranking.
- Preparation for NBA.

6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b) Participation in NIRF	Yes
c) ISO certification	No
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 IQAC	Duration From	Duration To	Number of participants
2019	Conference on Recent Innovation in Engineering Science and Technology	30/09/2020	30/09/2019	01/10/2019	80
2019	Formula style FFS India 2019 students competition at Coimbatore	01/10/2019	01/10/2019	05/10/2019	200
2019	Preparation for Participation in NIRF	01/10/2019	01/10/2019	30/11/2019	250
2019	Application for Various awards, Rewards and Compitations	01/11/2019	01/11/2019	28/02/2020	250
2019	IQAC Meeting	11/07/2019	11/07/2019	11/07/2019	14
2019	Self Upgradation training	05/07/2019	05/07/2019	06/07/2019	97

	programme for Non-teaching staff				
2019	Preparation for NBA	18/11/2019	18/11/2019	13/03/2020	250
2019	To strengthen placement Technical Training on C and Java, Python has been conducted for TE and BE students	02/09/2019	02/09/2019	02/10/2019	190
2020	Academic Administrative Audit (AAA) conducted and its follow up action	01/01/2020	01/01/2020	01/01/2020	250
2020	IQAC Meeting	03/01/2020	03/01/2020	03/01/2020	14
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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	Period To	Number of Participants	
			Female	Male
Fashion Show	28/02/2020	28/02/2020	20	35
Dance competition	27/02/2020	27/02/2020	10	15
Womens Day Celebration	08/03/2020	08/03/2020	95	Nil

7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources
<ul style="list-style-type: none"> • Sewage Treatment Plant of 1,00,000 lit per day filtration capacity • Rainwater harvesting tank Capacity of Rainwater harvesting is 50,000 liters

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	1

Provision for lift	Yes	2
Ramp/Rails	Yes	1
Braille Software/facilities	No	Nil
Rest Rooms	Yes	1
Scribes for examination	Yes	2
Special skill development for differently abled students	No	Nil
Any other similar facility	No	Nil

7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2019	1	1	10/10/2019	1	Blood Donation Drive	To create awareness about blood Donation process and help needy patients with blood donation(Nss organized in collaboration with Etsa, Mesa and Sait)	79
2019	1	1	06/08/2019	1	Promoters use of helmet	Retract collaboration with NSS organized a activity under theme of road safety.	17

2019	1	1	19/08/2019	1	street play on eco-friendly Ganesh ustav	To create awareness about using eco-friendly products for making ganesh murtis. (nss unit of scoe organized in collab with mesa)	27
2020	1	1	15/01/2020	1	Bike Rally by traffic police	To create awareness about road safety .	34
2020	1	1	24/01/2020	1	Beto ba chao, beti padhao rally	To create awareness about girls right.	40

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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(max 100 words)
Handbook on “ Code of Ethics and conduct”	17/09/2019	This Handbook is prepared for good and effective functioning of the institute. The same has been communicated to the stakeholders and is always made available in the Institutes Administrative Office.

7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
Tree Plantation	19/07/2019	19/07/2019	26
induction program for FE	29/07/2019	29/07/2019	100
Promoters use of helmet	06/08/2019	06/08/2019	55
Cultural activitie for FE students	13/08/2019	13/08/2019	90

Motivational videos	09/08/2019	09/08/2019	100
lecture on value education	06/08/2019	06/08/2019	90
Skill development program for FE	14/08/2019	14/08/2019	100
Sports Activity	27/08/2019	27/08/2019	100
Zumba Session for FE	01/09/2019	01/09/2019	100
Flood Relief	13/08/2019	13/08/2019	350
View File			

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

<ul style="list-style-type: none"> • Implementation of Go green concept through presenting visitors, guests, participants in various activities by giving sapling as a token of appreciation.
<ul style="list-style-type: none"> • Eco friendly Ganesha Diwali Festivals Celebration.
<ul style="list-style-type: none"> • Refuse, reduce, reuse or recycle- : say no to disposable plastic when possible, cut down on buying products with excessive packaging, opt for reusable containers over single-use plastic
<ul style="list-style-type: none"> • Composit Pit construction for usage of canteen waste.
<ul style="list-style-type: none"> • Reduction in paper work.
<ul style="list-style-type: none"> • We encourage the students to use college transport system for conveyance resulting in reduced use of personal vehicles and waste of fuel.

7.2 – Best Practices

7.2.1 – Describe at least two institutional best practices

<p>BEST PRACTICES 1. Centre of Excellence Centre of Excellence is a function that facilitates the collection of standards and practice in an institution to develop the skills of team members and to promote the institution to the next level. It refers to a team, a shared facility or an entity that provides leadership, practices, research, support and training for a particular area. It is often associated with new software tools, technologies and people's network. It also focus on a particular area of research, such center may bring together the faculty members from different disciplines and provide share facilities. Following Centre of Excellence has been introduced: 1) Centre of Excellence in Mechanical Modeling and Computing. 2) Red hat centre of excellence -under it students have got scholarship to attend internship training and courses 3) Centre of excellence in e-Yantra lab 4) Centre of excellence in Huawei Certification To meet the requirements of industries, value added courses are organized for students through these forum. As learning is the continuous process, Faculty Development Programme (FDP) is organized once in a semester to update knowledge and to promote skills of the faculty members. Research and Development (RD) activities are conducted in which both the students and faculty members are equipped. Skill Development Courses are organized for the students and the faculty members of other institutions. 2. Placement Training Programme To Strengthen the Placement, certification programmes are organized by the departments. Students are also provided with aptitude training, Resume writing practice, mock test and mock interviews. The final year students undergo a technical training, conducted by industry personnel. To Strengthen the Placement following sessions has been conducted: • Soft-skill Program for TE and BE class of EXTC, IT and Comp Branches. • Technical Training on C and</p>

Java, Python in AUG and Sept and January and February and March for TE and BE students of all branches. • Two weeks Aptitude Training for All branches interested students run in 4 batches (From Dec to Feb. 2020.) • Weekly basis Practice sessions/test series of Aptitude, Technical (MNC Companies practice sessions), GD and Mock of HR for TE and BE students of all branches. • Course CS101.1x: Programming Basics, Course CS101.2x: Object-Oriented Programming under IIT Bombay Remote Centre for 21 days. • Two week Internship on PYTHON for Second Year Students in May 2020. • One week soft skill Training for Second year students in June 2020.

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

https://engineering.saraswathikharghar.edu.in/wp-content/uploads/sites/6/2020/12/Implementation-of-best-practices_19-20.pdf

7.3 – Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

1. In "Times Engineering Institute Ranking Survey 2020", SCOE secured 107th position in Top Engineering Institute in India, survey conducted by Times of India. 2. College has won "Best Emerging Technical Institute Award-2019" by Dr. P V Pawar Research and Innovation Centre held in January 2019. 3. College has secured second position in SENERGY Green Campus Award held in January 2019. Sarawati 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: • 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 behaviour 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 behaviours, social and emotional development, resilience, and the ability to view beauty, experience transcendence, and truth. 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. Clubs like Music, Dance, Drama, sports, Art Photography are included to enhance creative talents.

Provide the weblink of the institution

<https://engineering.saraswathikharghar.edu.in/>

8.Future Plans of Actions for Next Academic Year

The institute has set the following Future Plans of action for the next academic year: 1) Strengthening the ICT. 2) Promoting International collaboration for Academic Interaction and Research Resource Exchange. 3) To have more industry academic interface so that there is more corporate participation in academics. 4)

Introducing Incubation Centre for Social sciences projects. 5) Conducting activities to explore the creative skills of students and provide a platform to show their creativity. 6) To arrange special programs for teaching/non-teaching staff to enhance their knowledge. 7) Increase the number of MoU's by each academic department for student and faculty exchange. 8) Strengthen alumni participation. 9) Enhance the number of smart class rooms in the academic departments. 10) NBA Accreditation.