

Yearly Status Report - 2019-2020

Part A					
Data of the Institution					
1. Name of the Institution	TSSM'S BHIVARABAI SAWANT COLLEGE OF ENGINEERING AND RESEARCH				
Name of the head of the Institution	Ganesh Arunrao Hinge				
Designation	Principal				
Does the Institution function from own campus	Yes				
Phone no/Alternate Phone no.	020-24608500				
Mobile no.	9764560690				
Registered Email	principal@tssm.edu.in				
Alternate Email	principalbscoer@tssm.edu.in				
Address	S. No. 12/1/2 and 12/2/2, Narhe, Tal. Haveli, Dist. Pune				
City/Town	Pune				
State/UT	Maharashtra				
Pincode	411041				

2. Institutional Status	
Affiliated / Constituent	Affiliated
Type of Institution	Co-education
Location	Urban
Financial Status	Self financed
Name of the IQAC co-ordinator/Director	Atul Prakashchandra Khatri
Phone no/Alternate Phone no.	02024608500
Mobile no.	8149424224
Registered Email	atulkhatri.bscoer@gmail.com
Alternate Email	atul.khatril@gmail.com
3. Website Address	
Web-link of the AQAR: (Previous Academic Year)	https://tssm.edu.in/naac-agar1
4. Whether Academic Calendar prepared during the year	Yes

if yes,whether it is uploaded in the institutional website: Weblink :

5. Accrediation Details

				-			
	Cycle	Grade	CGPA	Year of Accrediation	Year of Validity		dity
					Period From	Period To	
	1	А	3.08	2019	15-Jul-2019	14-Jul-2024	
6. Date of Establishment of IQAC		28-Jun-2016					

<u>19-20/1.1.1.pdf</u>

https://tssm.edu.in/storage/PDF/IQAC/20

7. Internal Quality Assurance System

Quality initiatives by IQAC during the year for promoting quality culture				
Item /Title of the quality initiative by Date & Duration Number of participants/ beneficiaries IQAC				
AutoCAD Training to Lab Assistant	30-Aug-2019 1	15		

Cyber Security fo and Desktop	vber Security for Mobile nd Desktop		12-Nov-2019 2			15	
Teaching Methodo	logy	06-Jan 2		n-2020 2			25
Workshop on Ardu Programming	ino	20-Feb-		b-2020 1			18
Microsoft Excel :	Microsoft Excel Training		28-Deo	c-2019 1			74
Workshop on Pytho Programming for D Science	on Data	20-Feb 3		b-2020 3			18
Plumbing and Fire	e Design	17-Sep-2019 1		Sep-2019 1			25
FDP on Intellector Property Rights	ual	01-Ju		n-2020 1			40
Workshop on Resea Methodology and a aspects	arch its	12-Sep		p-2019 1			28
ICRIET-20		30-Jar 2		n-2020 2			194
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3. Provide the list of fu 3ank/CPE of UGC etc.	inds by Centr	al/ Sta	te Govern	ment- UGC	C/CSIR/I	DST/DBT/ICM	R/TEQIP/World
Institution/Departmen t/Faculty	Scheme	e Funding Agency		Agency	Year o	of award with luration	Amount
	No I	Data E	ntered/1	Not Appli	cable	!!!	
		Nc	Files	Uploaded	!!!		
9. Whether compositio	on of IQAC as	per lat	est	Yes			

NAAC guidelines:	
Upload latest notification of formation of IQAC	<u>View File</u>
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	<u>View File</u>
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)

• Improve the count of startup and quality placement of the students. • Emphasis on Digital content development. • Training program for faculties to increase the number of journal papers, funded project and grant for seminar, conference and workshops. • MOU's with reputed Institutes and industries.

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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

	Ashinements (O. to see
Plan of Action	Achivements/Outcomes
For quality placement and startup of the students training and awareness program are to be arranged	Students are placed with relatively higher salary packages. Incubation is established. More number of students come up with the startups.
To increase number of add on courses to bridge the Industry Institute gap.	Due to addon courses students become employable and job opportunity enhances
To start digital content development which help the students to understand the concept and develop logic	Due to video lecture series students got better insights into the topics which helped them for conceptual understanding
To arrange awareness program for writing research paper in reputed journal and fetch more funded projects	Number of proposals are submitted for research funded project and research papers are under review process
Vie	w File
14. Whether AQAR was placed before statutory body ?	Yes
Name of Statutory Body	Meeting Date
College Development Committee	27-Jun-2020
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	25-Jan-2020

If yes, give a brief descripiton and a list of modules currently operational (maximum 500 words)	The institute uses an inhouse developed Management Information System (MIS) called eSamanway. There are four modules in this system: 1. Course Information System 2. Placement Information System 3. Student Information System 4. Faculty Information System. This system facilitates the maintenance of faculty personal details including faculty qualification, experience, Project guidance details, etc. The student information module contains the academic and personal information about the students. This module turns out to be extremely useful for the student mentoring system of the institute called Guardian Faculty Member (GFM) Scheme for tracking student attendance and academic progress as well as for the result analysis. The faculty information system also provides important insights into faculty appraisals. In addition to the eSamanway MIS, the institute utilizes various other tools for eGovernance such as, MOODLELMS, Tally ERP 9, and AutoLib for effective information management. In addition to these, the Directorate of Technical Education (DTE), Maharashtra facilitates the admissions process. The Savitribai Phule Pune University (SPPU) provides support for online record keeping of student assessment and results.
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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

A quality plan is prepared by institute through Academic Monitoring Committee (AMC) and Internal Quality Assurance Cell (IQAC). The targets and the benchmarks for the academic year are set by the IQAC.
The institute academic calendar is prepared by AMC. Further it is approved by Principal for implementation.
The department academic calendars are prepared by department AMC coordinators. These calendars are comprised of co-curricular and extra-curricular activities at department level. It is verified and approved by Head of the Department (HOD).
Institutional preparation is ensured at three levels viz., faculty, laboratory and departmental preparation.
The theory and practical load is distributed on the basis of experience, expertise and choices given by faculty members. Further it is communicated to faculty members through department AMC.
The necessary formats for record keeping are made available to faculty members.

learning material is made available for students through Learning Management System (LMS)-MOODLE before commencement of semester. All the students are enrolled for respective courses on MOODLE and access is provided to them. • At department level, time table is prepared by departmental time table coordinator. It is verified and approved by HOD. • The course files are verified by AMC for correctness and completeness before commencement of semester. • The department AMC monitors day to day lecture/practical throughout the semester. Teaching plan implementation is monitored weekly by HOD and fortnightly by Dean Academics. • The module coordinators monitor teaching plan execution, quality of teaching material and teaching method of associated teachers. The deviation, if any, is corrected. • Students are categorized into academically weak and strong category and are imparted training accordingly. During semester, continuous assessment of students is carried out through direct and indirect means. • Expert lectures, workshops and seminars are arranged to reinforce curriculum, and students are motivated to undertake mini projects wherever required as per subject plan. • The faculty members are motivated for adoption and usage of Information and Communication Technologies (ICT) tools, project based learning, blogs for respective courses, and experiential learning. • Evaluation of each student is conducted through unit tests, prelims as per institute's academic calendar and in semester, end semester examinations as per prescribed structure of SPPU. Results are discussed with students and remedial actions are taken for improvements. • AMC ensures implementation of curriculum for entire semester as per plan, also providing necessary guidelines against deviation and observations of IQAC. • IQAC verifies and validates the quality requirements of all academic processes and provides feedback to AMC.

1.1.	1.1.2 – Certificate/ Diploma Courses introduced during the academic year					
	Certificate	Diploma Courses	Dates of Introduction	Duration	Focus on employ ability/entreprene urship	Skill Development
	Auto CAD	Nil	12/01/2020	5	Employabil ity	Skill Development
	Q GIS	Nil	12/07/2019	9	Employabil ity	Skill Development
P: a:	Raspberry Pi rogramming nd Project Building	Nil	21/02/2020	10	Employabil ity	Skill Development
	Software Testing	Nil	10/02/2020	7	Employabil ity	Skill Development
ō	PCB designing and making	Nil	08/07/2019	7	Employabil ity	Skill Development
c	Bluetooth controlled robotics using Aurdino	Nil	20/02/2020	5	Employabil ity	Skill Development
	Auto CAD	Nil	03/02/2020	15	Employabil ity	Skill Development
ar	Additive M nufacturing	Nil	19/09/2019	5	Employabil ity	Skill Development

Geometric dimenstions and tolerances	Nil	06/02/2020	5	Employabil ity	Skill Development
Heating Ventilation and Air Conditioning	Nil	17/09/2019	5	Employabil ity	Skill Development
Piping Design	Nil	23/09/2019	5	Employabil ity	Skill Development
1.2 – Academic Flexibilit	y				
1.2.1 – New programmes/c	ourses intro	oduced during the acade	mic year		
Programme/Cours	se	Programme Speci	alization	Dates of In	troduction
No Data E	ntered/N	ot Applicable !!!			
		<u>View Fi</u>	<u>le</u>		
1.2.2 – Programmes in whi affiliated Colleges (if applica	ch Choice I Ible) during	Based Credit System (Cl the academic year.	BCS)/Elective	course system impl	emented at the
Name of programmes adopting CBCS Programme Specialization Date of implementation		mentation of Course System			
No Data Entered/Not Applicable !!!					
1.2.3 – Students enrolled in Certificate/ Diploma Courses introduced during the year					
		Certificate		Diploma	Course
Number of Studer	nts	949		N	Til (1997)
1.3 – Curriculum Enrichn	nent				
1.3.1 – Value-added course	es imparting	g transferable and life sk	ills offered duri	ing the year	
Value Added Cours	ses	Date of Introdu	ction	Number of Stu	dents Enrolled
Primawera I	26	16/01/20)20	57	
Sketch-up		29/08/20)19		84
Communication and teamwork	skills s	18/09/20)19		25
Professional s	kills	18/12/20)19		16
Social aware	ness	24/02/20)20		18
Network Adminis	trator	01/08/20)19		22
Mobile maki	ng	07/02/20)20	22	
Hypermesh		14/08/20)19		71
Computer aided p planning	process	10/08/20)19		48
SAP		15/07/20)19		48
		<u>View</u> Fi	<u>le</u>		
1.3.2 - Field Projects / Inte	rnships und	ler taken during the year			
Project/Programme	Title	Programme Speci	alization	No. of students e Projects / I	enrolled for Field nternships

BE	Civil Engineering	146	
BE	Computer Engineering	54	
BE	E&TC Engineering	35	
BE	Electrical Engineering	2	
BE	Mechanical Engineering	157	

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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

Feedback Process in Institute The institute has a well-defined feedback process. During the feedback process institute assures effectiveness, transparency, efficiency and appropriateness of the feedback system. The feedback forms are designed by IQAC and AMC including aspects like content delivery, curriculum, curricular and extra-curricular activities, placement activities and mentoring. After designing these forms are uploaded on moodle. After uploading the feedback forms on moodle, the notification is sent to stakeholders including students, faculty, alumni, parent and industry person. The stakeholders fill the feedback in online mode through moodle. The feedback filled by stakeholders is analysed by every department and it is reviewed by AMC and HoD at department level. Department wise necessary action is taken on the feedback received by stakeholders. The action taken report is prepared at department level. The information about the feedback is given to IQAC for further action. The action taken reports of all departments are uploaded on institute website. During this feedback process institute takes feedback from students four times a year, from faculty members two times a year, from parent, alumni and industry person once a year. The feedback process of the institute -Provides the platform to the stakeholders in identifying a greater role in the teaching -learning process, Develops a sense of responsibility and belonging to the institution among the stakeholders, Provides opportunities to modify and rearrange the course contents based on students' constructive suggestions Helps the teachers modify and improve their teaching methodologies, Establishes a transparent communication channel between the students and the teacher, and Maintains the functioning of teaching-learning process in the best possible way.

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
ME	Power System	24	3	3

1			1					
ME	Desig Engineer:	Design Engineering		24		3		3
ME	Signa Processi	Signal Processing		24		Nill		Nill
ME	Comput Engineer:	Computer Engineering		24		1		1
ME	Construc Manageme	tion ent		24		13		13
BE	Electri Engineer:	.cal ing		60		11		11
BE	Mechani Engineer	.cal ing	1	26		43		43
BE	Electron and Telecon cation Engineer	nics mmuni 1 ing		63		17		17
BE	Comput Engineer	er ing		63		60		60
BE	Civi. Engineer	l ing	1	20		25		25
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2.2 – Catering to a	Student Diversity	,		<u>,</u>				
2.2.1 – Student - Fu	Ill time teacher ratio	o (currer	nt year data)				
Year	Number of students enrolled in the institution (UG)	Nur studen in the (nber of ts enrolled institution (PG)	Numbe fulltime tea available institut teaching o course	r of achers in the ion nly UG es	Number of fulltime teache available in th institution teaching only F courses	rs e tea PG	Number of teachers aching both UG nd PG courses
2019	1647		60	12	1	16		Nill
2.3 – Teaching - L	earning Process	-		•		-	•	
2.3.1 – Percentage learning resources e	of teachers using lett. (current year da	CT for e ata)	ffective tead	ching with L	earning.	Management S	System	s (LMS), E-
Number of Teachers on Roll	Number of teachers using ICT (LMS, e- Resources)	ICT T res ava	Fools and Number of ICT Numberof smart sources enabled classrooms railable Classrooms		art E- te	-resources and echniques used		
137	137		10	3:	2	6		12
	View	/ File	of ICT	Tools an	d reso	ources		
View File of E-resources and techniques used								
2.3.2 – Students me	entoring system ava	ailable ir	n the institut	tion? Give d	letails. (maximum 500 v	vords)	
The student me scheme, every ba	The student mentoring system in the institute is called Guardian Faculty Member (GFM) scheme. Under this scheme, every batch of 20 to 25 students is assigned to a faculty member. This faculty member is referred to as							

scheme, every batch of 20 to 25 students is assigned to a faculty member. This faculty member is referred to as Guardian Faculty Member (GFM). The GFM is a local guardian to the students of his/her corresponding batch. Most of the students in the institute are coming away from their parents from remote locations in Maharashtra to the institute for education. The GFM supports the students on academic, personal as well as emotional fronts. The GFM also remains well connected with the parents of every student. This helps to establish healthy relations between teachers, students and parents. The GFM keeps a portfolio of every student which contains the progress and achievements of every student related to regular academics. In addition to that, details regarding the participation of the students in various competitions such as technical, social, cultural and sports activities is also maintained in the student details. During every activity, may it be curricular, co-curricular or extra-curricular, the GFM acts as a facilitator and provides a bridge to the students to reach the desired destination. The GFM motivates and supports the students for participation in various such activities. The institute tries to implement most of its student related activities and policies through the GFM so that it provides a parentally guidance and support to the students. The GFM is responsible to ensure maximum participation from his/her batch in such activities. The GFM also keeps track of the day to day activities of students and if any irregularities are found, counsels the student with the help of his/her parents and the institute counselor. With the effective and efficient implementation of the student mentoring system, the students feel safe, supported, and capable of solving academic and professional challenges.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
1710	137	1:12

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
136	137	Nill	5	14

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 state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2019	Dr. Ganesh A. Hinge	Principal	Patent application published for A quick leveling head device and method therefor
2019	Saravanan Vaideswaran Shanmugham	Assistant Professor	Patent published, A solar Photovoltaic Panel Cleaning Apparatus (Publication Number 49/2019)
2019	Dr. P. M. Patil	Professor	Patent published, Fruit inspection machine (Publication Number 201921054403
2019	Dr. Sanjay G. Kanade	Professor	NPTEL Certification, Topper 1 percent, Python for Data Science
2019	Dr. Sanjay G. Kanade	Professor	NPTEL Certification, Topper 5 percent, The Joy of Computing with

			Python		
2019	Dr. Sanjay G. Kanade	Professor	NPTEL Believer		
2020	Manohar Kishanrao Kodmelwar	Associate Professor	Patent published: AHR vahicle: Adjusting the height of a vehicle According to Indian Road Status (Publication Number 202021004323)		
2020	Dr. Satish N. Gujar	Professor	Patent published: System And Method Implementing Adaptive Dragonfly Optimization For Privacy Preservation In Internet Of Things (IOT) (Publication Number 201821029029)		
2020	Dr. P. M. Patil	Professor	Patent published: Electronic nose for predicting natural ripening time of the fruits (Publication Number 201921051174)		
2020	Anil Daulatrao Gujar	Associate Professor	Patent published: IHY-Prediction: Intelligent System and Method for advanced harvest yield prediction using iot based technology. (Publication Number 201821025144)		
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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	664919110	I/2019-20	02/01/2020	25/04/2020
BE	664919110	III/2019-20	05/12/2019	22/02/2020
BE	664919110	V/2019-20	07/12/2019	20/01/2020
BE	664919110	VII/2019-20	03/12/2019	28/01/2020

BE	664919110	II/2019-20	30/05/2020	21/07/2020
BE	664919110	IV/2019-20	30/05/2020	20/07/2020
BE	664919110	VI/2019-20	30/05/2020	29/07/2020
ME	664921010	ME I/2019-20	21/12/2019	21/02/2020
ME	664921010	ME III/2019-20	18/12/2019	21/02/2020
BE	664924510	I/2019-20	02/01/2020	25/04/2020
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2.5.2 – Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

The learning level of the students are checked by various methods in academics. The university distributed the overall marks for every subject by considering the internal and external performance. The institute has decided various ways by which all students are evaluated. The quizzes, assignments, MOCK, Unit test etc. for internal evaluation. This evaluation will help the students to understand how he can improve in succeeding exams. To evaluate the understanding level of student on taught topics through the Multiple Choice Question using Moodle. Where time duration is provided and students attempt the MCQ test. Their ability of reasoning and understanding is judged and performance evaluated. On important topics the various assignment is given to understand their presentation skill and contents written. The necessary guidance is provided on the evaluated performance. The unit tests are conducted on taught units by selecting the questions on course outcome based. The unit test results are given to students and their counseling is done for improvement in further unit tests. This unit tests will prepare the students for the theory exams in future. For considering the students to perform better in the Practical and oral exams the MOCK tests are conducted by subject teacher to understand their ability to detailed knowledge about the topic. To improve their ability to present and gather new content about the recent trends in the technology the seminars and project reviews are arranged on selected topics from research papers. The guidance is provided for selecting and getting the topic by teacher. The performance is evaluated on the basis of various parameters like content delivery, selection of topic, the presentation and answering ability to questions.

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

Institute prepares the academic calendar in every semester for execution of academic activity. For preparing the calendar the institute refers the university academic calendar to fit the academic activity within a given time period. Institute creates the academic committee at institute level for monitoring and executing the academic activity. The created calendar is referred by all department and prepares their own department academic calendar to execute various activities like guest lecture, workshop, unit test etc. The prepared calendar is displayed and circulated among the students and make them aware about the activities to happen in the future. The students voluntarily join, lead and participate in the activities. Every department having the departmental academic coordinator at department level. With the consultation of

head of the department the activities are monitored and academic progress checked. The regular audit is planned in every month and the progress checked. The institute level dean academics in consultation with principal arranges the meeting with department academic coordinator and the discuss about the ongoing activities and academic progress. Problems in executing activities are solved. the audit contains the teaching information about the attendance of students, lectures conducted, teacher feedback by students, course completed. The audit report discussed with HOD and the possible solutions are applied. In the next audit the shortcoming found in previous audit are checked for improvement. the tests are conducted as per calendar and are assessed. The result displayed for the students. the student having less marks are separately counseled and motivate for achieving good result. Academic audit the set deadlines are followed for activities and reports are prepared and stored in department files.

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://www.tssm.edu.in/storage/PDF/IQAC/2019-20/2.6.1.xlsx

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	
664919110	BE	Civil Engineering	114	114	100	
664924510	BE	Computer Engineering	104	103	99	
664937210	BE	Electronics & Telecommun ication Engineering	26	25	96	
664929310	BE	Electrical Engineering	58	57	98	
664961210	BE	Mechanical Engineering	235	228	97	
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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://www.tssm.edu.in/storage/PDF/IQAC/2019-20/2.7.1.pdf

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	Bhairavnath Sugar Works Ltd. Osmanabad, Maharashtra	0.5	0.5
Minor Projects	365	Bhairavnath Sugar Works Ltd. Osmanabad, Maharashtra	0.75	0.75

Minor Projects	365	Sanas Engineering, Shivane, Pune	0.5	0.5	
Minor Projects	365	Bhairavnath Sugar Works Ltd. Osmanabad, Maharashtra	1	1	
Minor Projects	365	Ganesh Accumulators Pvt.Ltd , Kolhapur	0.7	0.7	
Minor Projects	365	Bhairavnath Sugar Works Ltd. Osmanabad, Maharashtra	0.8	0.8	
Minor Projects	365	Bhairavnath Sugar Works Ltd. Osmanabad, Maharashtra	0.8	0.8	
Minor Projects	365	Bhairavnath Sugar Works Ltd. Osmanabad, Maharashtra	0.8	0.8	
Minor Projects	365	Bhairavnath Sugar Works Ltd. Osmanabad, Maharashtra	0.65	0.65	
Minor Projects	730	Bhairavnath Sugar Works Ltd. Osmanabad, Maharashtra	2	2	
No file uploaded.					

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
Seminar on Patent File	Electrical Engineering	16/09/2019
Seminar on Patent Grant	Computer Engineering	26/11/2019
Workshop on Patent Publish	Electrical Engineering	06/01/2020
Workshop on Patent Publish and Grant	Mechanical Engineeirng	13/01/2020
Bio-disel and Turn Key Projects for Biodisel:A future oppurtunity	Electronics Telecommunication	23/01/2020
Workshop on Patent Publish and Grant	Civil Engineering	11/02/2020
Seminar on Paper Publication and Patent	Mechanical Engineeirng	17/02/2020

Fil	File							
Blutooth Cor using A	ntrol Robot rduino	Electronics Telecommunication Engineering			20/02/2020			
Intellectua Rights	l Property (IPR)	Electronics Telecommunication Engineering				03/03/2020		
3.2.2 – Awards for Ir	nnovation won by I	nstitution/Teachers/Research scholars/				Students during	g the year	
Title of the innovation	on Name of Awa	ardee	Awarding	g Agency	Date of award		Category	
COVID-19 Innovation Challenge	Sai Cha	van	Chinchwad College of Engineering ,Pune Institutions Innovation Council (Ministry of HRD Initiative)		05	5/06/2020	Student	
COVID-19 Innovation Challenge	Sura Birajda	j .r	Pin Chino Colley Engine , Pu Institu Innov Counc Ministry Initia	mpri hwad ge of eering une utions ation cil (r of HRD ative) r File	05	5/06/2020	Student	
3.2.3 – No. of Incuba	ation centre create	d, start-	ups incubat	ed on camp	us durii	ng the year		
Incubation Center	Name	Spon	sered By	Name of Start-u	the Ip	Nature of Star up	t- Date of Commencement	
Endeavour Incubation Center	Samadhan Ekande	BS	TSSMs COER	Ambi Electri Padol Osmana	.ka cal, i, bad	Electrica Contractor	al 08/01/2019	
Endeavour Incubation Center	Pratik Pimparikar	BS	TSSMs SCOER	Prav Media an tertain / Pravah Lab (Pu	rah nd En ment n Cad ne)	Media Engg. Desig	29/05/2020 gn	
Endeavour Incubation Center	Mayur Tagunde	BS	TSSMs SCOER	Winse Autoco (Jambuly Pune	dom mp wadi)	Sheet metal work	s	
Endeavour Incubation Center	Anup Jadhavar	BS	TSSMs SCOER	Jadhav onstruct	var C ions	PWD- Contractor	11/12/2019 r	
Endeavour Incubation	Lokesh Darshankar	BS	TSSMs SCOER	LI enginee	ring	Electron: circuit	ic 01/06/2019	

Center						desi	gning		
			<u>View File</u>						
3.3 – Research Publication	ns and Av	wards							
3.3.1 - Incentive to the teach	ers who re	eceive reco	gnition/a	wards					
State			Natio	onal			Internatio	onal	
0			6				0		
3.3.2 – Ph. Ds awarded durir	ng the yea	r (applicabl	e for PG	College	e, Research	Center)			
Name of the	Departme	ent		Number of PhD's Awarded					
	0			Nill					
3.3.3 – Research Publication	s in the Jo	ournals noti	fied on L	JGC wel	bsite during	the yea	r		
Туре	D	epartment		Numb	per of Public	ation	Average Ir	npact Factor (if any)	
International	Civi	l Engine	ering		3			5.47	
International	Eng	Computer gineerin	a a		3			0.84	
International	International Electronics Telecommunica Engineerin				3			0.2	
International	rnational Electrical Engineering				1		0.18		
International	M Eng	echanica gineerin	anical 4 eering		4		2.34		
	1		View	File			1		
3.3.4 – Books and Chapters Proceedings per Teacher dur	in edited \ ing the ye	/olumes / B ar	Books pu	blished,	and papers	in Natio	onal/Internati	onal Conference	
Depa	rtment			Number of Publication					
Civil E	ngineer	ing		50					
Computer	Enginee	ring		35					
Electronics Te Engine	elecomm	unicatio	n	20					
Electrical	Engine	ering					9		
Mechanical	Engine	ering					29		
Genera	L Sciend	ce					1		
			<u>View</u>	<u>File</u>					
3.3.5 – Bibliometrics of the p Web of Science or PubMed/ I	ublications ndian Cita	s during the Ition Index	alast Aca	ademic y	vear based o	on avera	age citation ir	ndex in Scopus/	
Title of the Name or Paper Author	Title	of journal	Yea public	r of ation	Citation Inc	dex I a m the	nstitutional affiliation as nentioned in e publication	Number of citations excluding self citation	
Crow P M search Patil algorithm with	E ^r nary li	volutio y Intel gence	20	019	3		TSSMs BSCOER, Pune	3	

discrete wavelet transform to aid Mumford Shah inpainting model						
Pentagonal Shaped Mul ti- Wideband Antenna for Indoor Wireless C ommunicati on	P N Shinde	Internat ional Journal of Computer A pplication s	2019	0	TSSMs BSCOER, Pune	Nill
Multi-pe rformance optimizati on of abrasive water jet machining of carbon epoxy composite material	A D Dhanwade	Indian Journal of Engineerin g and Materials Sciences	2019	3	TSSMs BSCOER, Pune	2
Fatigue life prediction of commercial dental implant using analytical approach and verifi cation by FEA	U M Shirsat	Proceedi ngs of Fatigue, Durability and Fracture Mechanics	2019	1	TSSMs BSCOER, Pune	Nill
An Innovative Simulation Approach To Improve The Electr ochemical Machining Performanc e	D S Bilgi	Journal of Aerospace Engineerin g Technology	2019	0	TSSMs BSCOER, Pune	Nill
Combustion and emission c	R. N. Pote	SN Applied Sciences	2019	5	TSSMs BSCOER, Pune	5

haracteris tics analysis of waste tyre pyrolysis oil 3.3.6 - h-Index o	f the Institutiona	Publications du	<u>View File</u> ring the year. (ba	ased 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
Segmenta tion and C lassificat ion of Primary Brain Tumor Using Multilayer Perceptron	P M Patil	Internat ional Conference on Computa tional Vision and bio inspired computing Springer, Cham	2019	17	2	TSSMs BSCOER
Multiframe image supe rresolutio n based on cepstral analysis	P M Patil	Signal,I mage video processing Springer London	2019	17	3	TSSMs BSCOER
Implemen ting adaptive dragonfly optimizati on for privacy pr eservation in IoT	S N Gujar	Journal of High Speed Networks	2019	2	2	TSSMs BSCOER
SELF DRIVING CAR PROTOTYPE	S U Kadam	Journal of Emerging T echnologie s and Innovative Research	2019	3	2	TSSMS BSCOER
Abrasive water jet machining of carbon epoxy composite: Cutting pe	A D Dhanwade	Indian Journal of Engineerin g and Materials Sciences (IJEMS)	2019	5	Nill	TSSMs BSCOER

predictive models and optimizati on								
Experime ntal study on abrasive water jet machining of carbon epoxy composite	A D Dhanwad	Advance in Material; and Processin Technolog es	Advances 2 in Materials and rocessing echnologi es		5	2		TSSMS BSCOER
Signific ance of Or thotropic Material Models to Predict Stress Around Bon e-Implant Interface Using Numerical Simulation	U M Sirsat	BioNanc	os 2()19	4	6		TSSMS BSCOER
			<u>View</u>	File				
3.3.7 – Faculty pa	articipation i	n Seminars/Confe	erences and	Symposi	a during the yea	ar :		
Number of Fac	ulty	nternational	national Natio		State	;		Local
Attended/S nars/Worksh	3emi lops	2	2		Nill			Nill
Presente	ed	1 4 4	Nill					
papers		144	N	i11	Nil	.1		Nill
Resourc persons	e	144 Nill	N: N:	ill ill	Nil Nil	.1		Nill Nill
Resourc persons	e	144 Nill	N: N: <u>View</u>	ill ill <u>File</u>	Nil Nil	.1		Nill Nill
Resourc persons 3.4 – Extension	Activities	144 Nill	N: N: <u>View</u>	ill ill <u>File</u>	Ni] Ni]	.1		Nill Nill
Resourc persons 3.4 – Extension 3.4.1 – Number o Non- Government	Activities	144 Nill and outreach propons through NSS/	N: <u>View</u> grammes co NCC/Red cr	ill ill <u>File</u> onducted i ross/Youth	Nil Nil	.1 .1 with indus RC) etc., o	stry, cc during	Nill Nill
appers Resourc persons 3.4 - Extension 3.4.1 - Number o Non- Government Title of the address	Activities	Nill and outreach prog ons through NSS/I Organising unit collaborating	N: View grammes cc NCC/Red cr /agency/ agency/	ill File onducted i oss/Youth Numb partic	in collaboration h Red Cross (Y ber of teachers cipated in such activities	.1 .1 with indus RC) etc., o	stry, cc during umber articipa act	Nill Nill ommunity and the year of students ated in such tivities
appers Resourc persons 3.4 - Extension 3.4.1 - Number o Non- Government Title of the ad Cleaning Village	Activities	Nill and outreach prog ons through NSS/ Organising unit collaborating a National a Scheme (1	N: View grammes cc NCC/Red cr /agency/ agency/ agency Service NSS)	ill File onducted i ross/Youth Numb partic	in collaboration h Red Cross (Y ber of teachers cipated in such activities 22	.1 .1 with indus RC) etc., o	stry, cc during umber articipa act	Nill Nill ommunity and the year of students ated in such tivities 25
papers Resourc persons 3.4 - Extension 3.4.1 - Number o Non- Government Title of the ac Cleanin Villag Prepar platform for plant	Activities of extension corganisation ctivities ng of ge ring r Biogas	Nill and outreach proposed ons through NSS/ Organising unit collaborating a National a Scheme (1) National a Scheme (1)	N: View grammes cc NCC/Red cr /agency/ agency/ agency Service NSS) Service NSS)	ill File onducted i oss/Youth Numb partic	in collaboration h Red Cross (Y ber of teachers cipated in such activities 22 22	.1 .1 with indus RC) etc., o	stry, co during umber articipa act	Nill Nill Ommunity and the year of students ated in such tivities 25 25 25

	Alumni Meet								
tr	Preparation of ench, Cleaning Smashanbhumi,	of of	National Scheme (:	Service NSS)		22		25	
ç cł	Competitions a games for schoo hildren, Cultur Program	and ol ral	National Scheme ()	Service NSS)	22		25		
w	Collection of National water samples for Scheme Testing, Valedictory		National Scheme ()	Service 22 NSS)		22	25		
				<u>Viev</u>	<u>v File</u>				
3.4. durir	2 – Awards and reco ng the year	ognitio	on received for ex	tension act	ivities from	Government and	other	recognized bodies	
	Name of the activity	y	Award/Reco	gnition	Award	ling Bodies	N	umber of students Benefited	
ĸŀ	NSS camp at Ha uurd,Taluka Bho District Pune	tve or,	Appreci Lette	ation r	Gra Hatve K Bhor, Di	Grampanchyat Hatve Khurd,Taluka Bhor, District Pune		25	
	View File								
3.4.3 Orga	3 – Students particip anisations and progr	pating amme	in extension acti es such as Swach	vities with G hh Bharat, A	Government Aids Awaren	Organisations, N ess, Gender Issu	on-Go e, etc	overnment . during the year	
Na	me of the scheme	Orga cy/	nising unit/Agen /collaborating agency	Name of the activity		Number of teachers participated in such activites		Number of students participated in such activites	
Sa	Swachh Bharat rvekshan 2020	Nag	Jejuri Jarparishad Jejuri.	To construct Wall By using watse plastic bottle		2		18	
Ex	Mock CET Entrance amination for Engineering Aspirants	TS (II	SM and JSPM Group of nstitutes	Moc Entra Examinat Engine Aspir	k CET acnce tion for eering cants	27		32	
	How to Achive MHTCET Exam Score from Takalakar classes	TS (II	SM and JSPM Group of nstitutes	MHTCE Guid	T Score ance	24		34	
Sa	Swachh Bharat rvekshan 2020	Ser	National vice Scheme (NSS)	Clear Class	ning of rooms	4		26	
Sa	Swachh Bharat rvekshan 2020	National vice Scheme (NSS)	Rally on Health Awareness and Cleanliness		7		23		
				View	v 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				
Collaborative research - Paper published in Journal ELSEVIER Experimental study for measuring discharge through compound broad crested weir	Ketaki H. Kulkarni, MIT Pune and Dr. Ganesh A. Hinge, TSSM's BSCOER, Pune	Parent institutes	180				
Collaborative research - Paper published in International Journal of Engineering and Advanced Technology (IJEAT) Controlled Ski-jump Spillway Model Design According to IS code	Vivek S. Chavhan, AISSMS CoE, Pune and Dr. Ganesh A. Hinge, TSSM's BSCOER, Pune	Parent institutes	180				
Collaborative research - Paper published in International Journal of Applied Evolutionary Computation Analysis of Privacy Preservation Techniques in IoT	Ravindra Sadashivrao Apare, JJT University, Rajasthan, India and Dr. Satish Narayanrao Gujar, BSCOER, Pune, India	Parent institutes	180				
Collaborative research - Paper published in IJournal of High Speed Networks Implementing adaptive dragonfly optimization for privacy preservation in IoT	Ravindra Sadashivrao Apare, JJT University, Rajasthan, India and Dr. Satish Narayanrao Gujar, BSCOER, Pune, India	Parent institutes	180				
Collaborative research - Paper published in IEEE International Conf. Emerging Smart Computing and Informatics - Hybrid image inpainting model using optimized DWT and Reproducing Kernal Hillbert	Balasaheb H. Patil, AISSMS IOIT, Pune, Kanchan Vaidya, TSSM's BSCOER, Pune	Parent institutes	180				

Space for removal of damaged portions of old photograph			
Collaborative research - Paper published in International Conference ICRIET20 Experimental performance of rectangular broad crested weir for measurement of discharge	Ketaki H. Kulkarni, MIT Pune and Dr. Ganesh A. Hinge, TSSM's BSCOER, Pune	Parent institutes	180
Collaborative research - Paper published in International Conference Inscribed Pentagonal UWB Fractal Antenna with Novel Parasitic Band- Notch Structure	"Pratap N. Shinde, TSSM's BSCOER, Pune, India, and Jayashree P. Shinde Sinhgad Academy of Engineering, Pune, India "	Parent institutes	180
Collaborative research - Paper published in International Conference Control of Electrochemical Deep Hole Drilling Process	D.S.Bilgi, TSSM's BSCOER, Pune, D. B. Jadhav, A. V. Kulkarni, V. K. Jain, Bharti Vidyap eeth,Pune,India	Parent institutes	180
Collaborative research - Paper published in International Conference Multiphysics Simulation and Experimental Validation of ECM Drilling Process	D.S.Bilgi, TSSM's BSCOER, Pune, A. M. Pawar, S. S. Chavan, Bharti Vidy apeeth,Pune,India	Parent institutes	180
Collaborative research - Paper published in International Conference Design and Finite Element Analysis of Ultrasonic Transducer	D.S.Bilgi, TSSM's BSCOER, Pune, P. V. Jadhav, Bharti Vidy apeeth,Pune,India	Parent institutes	180
	View	<u>File</u>	
3.5.2 – Linkages with instituti facilities etc. during the year	ons/industries for internship,	on-the- job training, project w	vork, sharing of research

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
Industrial Visit	Site Visit	Om Sai Pro perties,Chan drang Builde rsDevelopers Pvt Ltd	29/02/2020	29/02/2020	Students
Industrial Visit	Site Visit	Dimbe Dam Hydropower Plant.Rasta Peth, Pune	24/09/2019	24/09/2019	Students
Industrial Visit	Site Visit	Sewage Treatment Plant ,Matre Bridge,Pune	09/09/2019	09/09/2019	Students
Industrial Visit	Site Visit	Dimbe Dam Hydropower Plant.Rasta Peth, Pune	24/09/2019	24/09/2019	Students
Construction Industry Exposure	Internship- field training	Swaraj Dev elopers,Pune	15/12/2019	01/01/2020	Akshay Narute
Construction Industry Exposure	Internship- field training	SCON Projects Pvt. Ltd., Samarth House,Survey No.116/3/1,3 /3,3/10.Pune -411058.Mobi le No96899 66422	16/12/2019	11/01/2020	Rahul Khandale
Construction Industry Exposure	Internship- field training	SCON Projects Pvt. Ltd., Samarth House,Survey No.116/3/1,3 /3,3/10.Pune -411058.Mobi le No96899 66422	16/12/2019	11/01/2020	Ashish Dedwal
Construction Industry Exposure	Internship- field training	Icchapurti Global Buildcon Pvt. Ltd. , Shop No.6 7, Nutan	01/07/2019	31/07/2019	Sanket Yashwant Bari

Construction Industry Exposure	Inter fie train	rnship- eld ning	Maratha Shopping Com plex,Jalgaon -425001. Dhanasmurti Buildcon Pv. Ltd.,Wadgaon Sheri,Pune-4 11014. Mob. No94233280 11	15/12/2019	01/0	1/2020	Raviraj Vikas Nimbalkar
Construction Industry Exposure 3.5.3 - MoUs signe	Inter fie train d with inst	rnship- eld ning titutions o	P- Real 15/12/2019 Strength Inf rastructure ,F7,Shivanag ari,Left Bhusari Colo ny,Kothrud,P une-411038,M aharashtra. Mob. No.:-98 50974346, E- mail:-realst rengthinfra@ gmail.com		01/01/2020		Shriyash Surendra Puranik
houses etc. during th Organisatio	ne year n	Date	of MoU signed	Purpose/Activities		۱ stud	Number of
N-gen auton	nation	C	7/08/2019	For enhancing the quality of engineering education being imparted to the		participated under MoUs 20	
SNJ Acade Shivaji hou Colony, Pu	SNJ Academy, O Shivaji housing Colony, Pune		02/03/2020	To Conduct training and other activities required for skill development in MEP		75	
SKY Win	SKY Wings 0		2/01/2020	For enhancing quality of engineering education b imparted to students	ng the of ng eing the		20
Sunrise	rs	O	01/10/2019	students To Conduct training and other activities required for skill			23

			development in MEP domain.			
	Precision Engineering Works, MIDC, Bhosari, Pune	13/09/2019	To Conduct training and other activities required for skill development in MEP domain.	56		
	Rajarshi Shahu College of Engineering, Tathawade, Pune	11/11/2019	For enhancing the quality of engineering education being imparted to the students	82		
	Research Approach, Banglore	02/01/2020	To Conduct training and other activities required for skill development in MEP domain.	43		
	Kas Net	13/01/2020	For enhancing the quality of engineering education being imparted to the students	51		
	ecoRise	02/02/2020	To Conduct mongoDB and NoSQL training and other activities required for skill development in BackEnd domain.	43		
	BODH Developers,Plot No.81,Flat No9,Nandan Apartment,Right Bhusari Colony ,Kothrud, Pune-38.	09/12/2019	Site Visit ,Onsite Orientation Program	21		
	L	Viev	<u>v File</u>			
С	RITERION IV - INFRAS	TRUCTURE AND LEAR				
4	.1 – Physical Facilities					
	1.1 – Budget allocation, exc	luding salary for infrastructu	re augmentation during the ye	ear		
	Budget allocated for infra	. 37	Budget utilized for infra:	structure development		
4	I.1.2 – Details of augmentatic	on in infrastructure facilities c	Juring the year			
	Facil	ties	Existing or N	ewly Added		
	Campu	s Area	Exis	sting		
	Class	rooms	Existing			

	Labor	atories		Existing				
	Semina	ar Halls		Existing				
Classr	ooms wit	h LCD facilitie	es	Existing				
Seminar	halls wi	th ICT facilit	ies	Existing				
	Video	Centre			H	Existing		
Value o during	of the eq the year	uipment purchas (rs. in lakhs)	sed)		I	Existing		
Number purchased dur:	Number of important equipments purchased (Greater than 1-0 lakh) during the current year					Existing		
Class	rooms wi	th Wi-Fi OR LA	N		H	Existing		
	Ot	hers			H	Existing		
			<u>View</u>	<i>ı</i> File				
4.2 – Library as	a Learning	Resource						
4.2.1 – Library is	automated	Integrated Library M	lanagem	ent Syst	em (ILMS)}			
Name of the softwar	e ILMS re	Nature of automatic or patially)	on (fully		Version	Year of	automation	
Autol	Lib	Partiall	у		v.1.0.1		2013	
4.2.2 – Library Se	ervices			<u> </u>				
Library Service Type	Library Existing Newly Added Total							
Text Books	13762	2 4345888		36	15325	13798	4361213	
Reference Books	4080	1819811	1819811 N		Nill	4080	1819811	
e-Books	Nill	Nill	33	3000	210000	33000	210000	
Journals	Nill	Nill	1	.21	366298	121	366298	
e- Journals	Nill	Nill	2	197	1631139	2197	1631139	
CD & Video	1763	17630	N	i11	Nill	1763	17630	
		Nc	file	upload	led.			
4.2.3 – E-content Graduate) SWAY (Learning Manage	developed AM other Mo ement Syste	by teachers such as: DOCs platform NPTE m (LMS) etc	: e-PG- F EL/NMEI	Pathshal CT/any	a, CEC (under e- other Governmer	PG- Pathshala (nt initiatives & in:	CEC (Under stitutional	
Name of the	Teacher	Name of the Mo	dule	Platforr	m on which modu s developed	Ile Date of I	aunching e-	
S. U. Kad	am	Information Systems And Engineering Economics		Moo	dle-LMS	15/05/	2019	
S. N. Guj	ar	Object Orier Systems	nted	Moodle-LMS 23/05/2019			2019	
S. M. Cho	udhari	Data Base		Moodle-LMS 29/05/2019			2019	

		Mar	agement a	System					
A. D.	A. D. Gujar System Analysis And Design		Moodle-LMS		:	19/05/2019			
s. v.	Ingale	I	ata Analy	ytics	Moodle-LMS 22/05/2019		9		
М. К.	M. K. Mokashi Data Structure And Algorithms			Moodle-LMS 18/05/2019)		
V. N. Naikwadi Artificial Intelligence			Moodle	e-LMS	:	20/05/2019)		
P. D.	Chouksey	7 I Ele Log	oigital ctronics ric Design	And	Moodle	e-LMS	:	19/05/2019	9
A. R.	Teke	T Cor	heory Of putation		Moodle	e-lms	:	22/05/2019)
L. M.	Bharate	I Mat	iscrete hematics		Moodle	è-LMS	:	28/05/2019	9
	View File								
4.3 – IT Infr	astructure)							
4.3.1 – Tech	nnology Up	gradation (overall)						
Туре	Total Co mputers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departme nts	Available Bandwidt h (MBPS/ GBPS)	Others
Existin g	709	0	709	0	0	18	668	65	0
Added	0	0	0	0	0	0	0	0	0
Total	709	0	709	0	0	18	668	65	0
4.3.2 – Band	dwidth avail	able of inte	ernet connec	tion in the I	nstitution (L	eased line)			
				65 MBI	PS/ GBPS				
4.3.3 – Faci	lity for e-co	ntent							
Nam	e of the e-c	content dev	elopment fa	cility	Provide t	he link of th rea	e videos a cording fac	and media ce cility	ntre and
v	Video Cor	nferenci	ng Facili	lty	https://youtu.be/0_LvHs-WD6w				
	Interac	ctive Sm	art board	1	https://youtu.be/0NGE8xcYtzU			<u>tzU</u>	
Digita	al Studi	o for L	ecture re	cording	https://youtu.be/r663pMIhrvA			<u>rvA</u>	
4.4 – Mainte	enance of	Campus	nfrastructu	ire					
4.4.1 – Expe component,	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 facilities			Assigne	Assigned budget on physical facilities facilities facilities		curredon f physical s			
	76.91		74.3	38		86.58		83.7	/3
4.4.2 – Proc library, sports institutional V	4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)								

The institute has policies for daily maintenance, preventive maintenance and breakdown maintenance. Daily maintenance: Wherever required complete Cleaning, Lubrication, Repair, and Inspect (CLRI) procedure is adopted. Maintenance chart is filled on daily basis which is supervised by the concerned. It is ensured that no equipment/infrastructure faces emergency maintenance. Daily maintenance provides opportunity to avoid emergency situations. Preventive maintenance: As per the schedule, all the preventive maintenance activities are carried out resulting in upkeep of infrastructure and equipment. Also, it helps to ensure availability of infrastructure for ready use. Preventive maintenance is carried out under supervision of maintenance cell. The corresponding records are maintained in designed formats. Before commencement of semester the corresponding cells ensure that no preventive maintenance activity is pending and the infrastructures as well as laboratories are functioning correctly as per standards. Breakdown maintenance: In case of breakdown, alternate arrangement for the required infrastructure and the equipment is made so as to avoid hampering of activities. In case, if the maintenance is beyond the reach of maintenance cell, then the work is outsourced to third party. In case the equipment are beyond repair or have lost the significance from the perspective of utility, they are written-off through the defined mechanism of the institute. Due care is taken to write-off environmentally sensitive material. In any of the cases, the problem is conveyed by the process owner to the maintenance team and accordingly the manpower is deputed to resolve the same. It is expected that the process owner should certify satisfactory condition of infrastructure or that of equipment after maintenance thereby closing the case. Also, the provision of dead-stock verification helps to identify the availability and loss of equipment. The process of dead-stock verification is carried out twice in a year by the designated committee. Utmost care is taken to maintain conducive environment in library. Annually, stock taking is mandatory process for library. The printed periodicals accumulated during the year are bound together so as to prolong their life and avoid loss. Also, after inspection of all the books, the identified books are re-bound. In case of loss of book, the book needs to be replaced by the user. With respect to utility of the infrastructure and all other facilities, planning is carried out before commencement of semester at central level. Barring the common facilities, like, sports complex and library, every department has exclusive infrastructure with them and thus, no hurdle is faced for implementing various activities. Within the department, resource utilization plan is also developed and conveyed to the concerned so as to avoid the inconvenience and loss of academics.

https://www.tssm.edu.in/storage/PDF/IQAC/2019-20/4.4.2.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	0	0	0	
Financial Support from Other Sources				
a) National	Scholarship, Freeship, EBC, Leela Poonawala	1403	67691690	
b)International	0	Nill	0	
<u>View File</u>				

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 implemetation	Number of students enrolled	Agencies involved
Remedial Coaching - Engineering Mathematics II	03/09/2019	17	TSSMs BSCOER
Piping Design	23/09/2019	86	Asian Academy
Heating, Ventilation and air conditioning	17/09/2019	90	SNJ Academy
Opportunity in Additive Manufacturing	19/09/2019	100	ADM Technology Pvt Ltd
Python Training	05/06/2019	45	Profound
Face Placement Traing	17/06/2019	95	FACE
Works shop on Auto cad	02/03/2020	159	TSSMs BSCOER
Barclays Softskill Training	17/12/2019	630	Barclays
Remedial Coaching - Basic Electronics Engineering	05/09/2019	18	TSSMS BSCOER
Remedial Coaching - Engineering Mechanics	06/09/2019	32	TSSMs BSCOER
		- 1 - 2	

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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 passedin the comp. exam	Number of studentsp placed
2020	Career Counselling Sesssion On Python Programmin	Nill	10	Nill	6
2019	Demonstrat ion of CAD, BIM & Sketchup Softwares	Nill	100	Nill	24
2019	Carrier Op portunities in Plumbing & Fire	Nill	100	Nill	31

	Fighting Design Field					
2019	Introduction to different civil enginering softwares	Nill	108	Nill	30	
2020	Career in PSU, Govt Sector through Competitve Examination	93	Nill	1	NILL	
2019	Career Opportunity in Additive Manufacturin g	Nill	100	Nill	35	
2020	Career Opportunity in PSU, Government Sector	Nill	93	1	Nill	
2020	Career Opportunity in Geometric Dimensions and Tolerances	Nill	90	Nill	21	
2020	How to crack AMVI- RTO	Nill	80	Nill	13	
2019	Career Cou nselling- Expert lecture on- Career oppor tunities for electrical engineers	NILL	54	Nill	10	
		View	<u>/ File</u>			
5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year						
Total griev	ances received	Number of grieva	ances redressed	Avg. number of days for grievance redressal		
	Nill Nill Nill					
5.2 – Student P	rogression	uring the year				
		anny the year		Off campus		
Nameof	Number of	Number of	Nameof	Number of	Number of	

	organizations visited	students participated	stduents placed	organizations visited	students participated	stduents placed	
	Amazon, Mphasis, Cuelogic, Jaro, Xorient, Majestic Realties	1255	163	TCS, TechM ahindra, Capgemini, Global Step, Talentino	1304	123	
5	22 - Student pro	aression to higher a		<u>File</u>	r		
	Voor	Number of	Brogrammo	Doprotmont	Namo of	Name of	
	Teal	students enrolling into higher education	graduated from	graduated from	institution joined	programme admitted to	
	2019	1	BE Computer Engineering	Computer Engineering	Hochschule hof University of Applied Science ,Germany	MS (Software En gineeringfor Industrial a aplications)	
	2019	1	BE Civil Engineering	Civil Engineering	Rajarambapu Institute of Technology, Sangli	M. Tech (Structures)	
	2019	1	BE Electronics and Telecomm unication Engineering	Electronics and Telecomm unication Engineering	Coventry University, UK	MS (CAAI)	
			View	<u>v File</u>			
5. (e	2.3 – Students qu g:NET/SET/SLET/	alifying in state/ nat /GATE/GMAT/CAT/	tional/ international GRE/TOFEL/Civil S	level examinations Services/State Gove	during the year ernment Services)		
Γ		Items		Number of	students selected/	qualifying	
		NET			Nill		
		SET		Nill			
		SLET		Nill			
		GATE		Nill			
		GMAT		Nill			
		CAT		Nill			
		GRE			3		
		TOFEL			1		
		Civil Service	S	Nill			
		Any Other			1		
Ľ			<u>View</u>	<u>v File</u>			
5.	5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year						

	Activity			Level		Number of Participants		
	Cultural Jashna -E - Youth			Institute		250		
	Annu	al Sports		Institute		235		
				<u>View File</u>				
5	5.3 – Student P	articipation and A	Activities					
; le	5.3.1 – Number (evel (award for a	of awards/medals f team event should	or outstanding d be counted a	performance in s s one)	sports/cultu	ral activities at nation	al/international	
	Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number o awards fo Cultural	of Student ID or number	Name of the student	
	2019	Second Prize Best Actor, Sarpotdar karndak (I nte- college)	National	Nill	1	7643	Suhas Gaikwad	
	2019	Second Prize Best Actor, Sarpotdar karndak (I nte- college)	National	Nill	1	7644	Akash Galande	
	2019	Second Prize, Sarpotdar Karandak (Inter- College)	National	Nill	1	4041	Sahil Mulla	
	2019	Second Prize Best Actor, Sarpotdar karndak (I nte- college)	National	Nill	1	7263	Sameer Anjankar	
	2019	Third Prize, Safe Kids Foundation (Inter- College)	National	Nill	1	4041	Sahil Mulla	
	2019	First Prize, Vedant 2019 (Inte r-College)	National	Nill	1	7643	Suhas Gaikwad	
	2019	Third Prize, Pune city	National	1	Nill	7042	shivtej sing thigale	

Zonal Spor tsWrestlin g Free style(70 kg)		
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<u>View File</u>

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

The institute has active Student Council. Every year, the formation of Student Council is done as per the guidelines set by SPPU. The objective behind formation of Student Council is to give an opportunity and responsibility to the students to organize various activities in the institution to enhance and develop various skills like leadership quality, stage daring, social awareness and a sense of responsibility towards the society. Students also get an opportunity to work in team and get a platform to express their views and showcase their talent and creativity. The Student Council is governed by the faculty members headed by the Principal. The mechanism of formation of Student Council includes the following steps: 1. Notice is circulated amongst the students by Students Welfare Officer regarding submission of application for various posts of Student Council. 2. After receiving the applications for the different posts meeting is conducted by the Principal consisting of Head of Departments Student Welfare Officer providing information of various posts and selection criteria followed by scrutiny of applications received from students for various posts. 3. Notice is displayed by Students Welfare Officer on notice board containing list of shortlisted candidates interviews are scheduled for the same. 4.Student Welfare Officer along with the panel conducts interviews of shortlisted candidates based on their overall academic performance, participation in various curricular extracurricular activities, leadership qualities, social connectivity etc. 5.Based on the interview performance the students are selected and the council is formed. Once the Student Council is formed, it plays a vital role in solving issues at Institute and University level and acts as a mediator between the Institute and students. Every year Student Council organizes various cocurricularand extra-curricular activities in the Institute. Sports Committee in the institute organizes various sports competitions for the students that provides platform for them to participate at University and State level. The Cultural Committee of Student Council also ensures to provide platform for students to participate incultural activities like annual gathering, Purushottam Karandak, Konkan Karandak. The institute helps to form various departmental chapters, professional chapters in each department. I tprovides platform for students to develop event management skills and team work. The institute has various administrative bodies like entrepreneurship development cell library committeein which students are active members. National Service Scheme (NSS) is active in conducting various social activities like blood donation camp, cleanliness camps at adopted villages, tree plantation and yoga day celebration. In this year 2019-20 after pandemic situation of COIVD-19, NSS has conducted various activities regarding awareness program of Covid -19. Students are prepared facial mask and distributed to needy people. Most to students help to workers such as distributing foods, daily needs to poor person those suffer in pandemic situation. NSS students collected database of Blood donor of around 1000 students who are ready to donate blood and submitted to university.

5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

Institute has registered Alumni Association under Assistant Charity Commissioner, Pune, in the name of "TSSM's Bhivarabai Sawant College of Engineering and Research, Narhe, Pune, Alumni Association", dated 29th February 2016. With registration number MAHA/343/2016/Pune. Institute arranges Alumni meet once in an academic year in which alumni addresses the juniors and updates their information available with organization. The objectives of TSSM's BSCOER Alumni association formation are: Alumni Association is supports institute with some financial ways such as: 1. Membership of alumni association 2. Donation towards development activities - 1 (Printer Scanner) 3. Institutionalization of scholarships 4. Financial contribution towards development of academic facilities 5.Sponsoring the events rewards 6.Donating in kind, books, mementoes. 7. Avail sponsorship to deserving students for higher education and sports. Apart from the above financial aids the Alumni Association helps students to guide, motivate , refers and Promote with Non Financial ways as follows. 1.To avail financial and Non-financial assistance by individuals or by group of students who are associated with Alumni association. 2. For interaction of existing students with Alumni. 3.To encourage the Alumina for the development of the institute. 4.To deliver academic lectures for students on topics of interest 5.To deliver lectures on career guidance 6.To encourage students of the institute for Research and Development. 7. Promotion of Industry Institute interaction cell to bridge the gap between current engineering education and future trends in industries 8.Contribution in laboratory development 9.To support in Organizing industrial visits. 10.Participating in curriculum development 11. Extending help for campus interviews 12. Active role in bringing up MOUs. 13. Acting as brand ambassador of the institute 14.Facilitating sponsored projects for students 15.Facilitating internships for students 16.Sharing experiences with students 17.Sharing information about higher studies 18.Guidance for co-curricular and extra-curricular activities 19.Participation in social welfare activities This way Alumni can help or guide the existing students by financial and non financial way. More than 270 students are presents for the Alumni meet.

5.4.2 - No. of enrolled Alumni:

2632

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

277000

5.4.4 - Meetings/activities organized by Alumni Association :

Alumni Connect - 22 February 2020 - 440 alumni members attended the program.

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)

Academic Monitoring Committee: AMC is headed by Dean Academics and supported by department level academic coordinators. The representative from each department acting as Departmental Academic Coordinator is the member of AMC. All Teachers are responsible for implementing AMC policy in all academic activities. There are various subcommittees involved to carry out smooth conduction of academic activities like Time Table coordinator ,Exam coordinator, Parent Teacher Meet coordinator, Student Feedback coordinator, Guest lecture coordinator and Department MOODLE portal coordinator. Following are the objectives of AMC : 1.To restructure, review, and monitor the academic activities of the graduate programme 2.To ensure that the programme not only remains competitive, but also

relevant to the present context so as to enhance the emerging and contemporary

issues 3.To take consistent efforts to blend the industry expectation and academic curriculum 4.To introduce innovative and creative ways in imparting knowledge and skill sets to promote academic excellence 5.To ensure overall grooming of entrepreneurial and managerial skill sets of the students Responsibilities: 1. The AMC thoroughly works on designing the educational process 2.It continuously reviews and monitors the process, keeping in view the emerging needs and expectations of the industry 3. The AMC along with the strength of the faculty members continuously works on updating and restructuring the innovative skill sets for promoting academic excellence. IQAC Initiatives : The best practices institutionalized as a result of IQAC initiatives are elaborated below: 1.Laboratory Preparation: Towards the end of June 2019, IQAC through its audit found that there exists need to strengthen the laboratory preparation to achieve the course outcomes. IQAC has recommended to implement a scheme called "Laboratory Preparation". This scheme would ensure correct functioning of all the instruments and setups, availability of standard results of the experiments validated by the corresponding faculty members, availability of required setup as per curriculum fulfilling the need of prerequisite and gaps. It has helped the faculty members to verify the outcomes of the candidates and help them if they are lagging. This has saved faculty's time in explaining each and everything to the candidate and has provided an opportunity to resolve students' problems. Further it resulted in two more advantages, viz., making the students life-long learner by imbibing the habit of self-learning and the second advantage is system becomes more student centric. 2. Faculty Development Program: IQAC has recommended to impart training to the faculty members at institute itself rather than deputing individual or few faculty members at other locations. Also, such a practice will orient all the faculty members towards the objectives of the institute and in turn, towards mission and vision.

6.1.2 – Does the institution have a Management Information System (MIS)?					
Ye	Yes				
6.2 – Strategy Development and Deployment					
6.2.1 - Quality improvement strategies adopted by the ins	titution for each of the following (with in 100 words each):				
Strategy Type	Details				
Admission of Students	Admissions in the institute are done centralized admission process (CAP). Institute follows guidelines given by State common Entrance Cell (CET) and Directorate Technical Education(DTE) at various stages like allotment ,Sanctioned Intake, Allocation of Seats, Reservations and Eligibility Criteria. Document Verification carried at Facilitation Center , Display of Provisional Final Merit List for various Courses, and Allotment of seats at different Rounds carried by DTE. Admissions in Institutional Quota and vacant seats after CAP are filled following process given by SECTC in institute. After completion of Admission process institute submit the Admission- approval proposal to the Director Technical Education.				
Industry Interaction / Collaboration	The Principal, IIC in charge and co-				

		ordinators from different departments are associated with the Industry Institute Interaction Cell (IIIC) guide the activities to enhance academics, research and placement activity. This facilitates strong association/ interaction with industrial, academic and research establishments. MOUs benefits the students to give realistic exposure through industrial visits, sponsored projects, expert lectures, software testing, etc. Based on feedback mechanism of industry requirement through TPO, industries are identified through IIC and communication was initiated on mutual convenience and need to work on specific tasks that include resource sharing, project reviews, expert lectures, sponsored projects, internships, training, and placement.
	Human Resource Management	To serve the growth of the students and procurement of staff and job performance rewards adequate human resources are provided. Governing body takes the decisions as per the requirements of institute and staff and executes through the College Development Committee (CDC) under control of Principal and faculty in decentralized and participative environment. The Internal Quality Assurance Cell (IQAC) of institute plans and control the working of Academic Monitoring Cell (AMC), Institute Research Cell (IRC), Industry Institute Interaction Cell (IIIC), Entrepreneurship Development Cell (EDC), examination cell, anti-ragging cell, alumni cell, National Social Service Cell (NSS), grievance redrsesel cell etc.
	Library, ICT and Physical Infrastructure / Instrumentation	The 762 sq. m. library with Auto lib and reading room of 450 sq.m. acts as a premier Learning Centre for students. The Library has reference books, textbooks, with 4783 titles and 17842 volumes, print journals, periodicals, magazines, e-journals and CDs. It has institutional membership of e- shodhsindhu, National Digital Library, ProQuest e-books. The digital library with 10 machines and access to all the e-contents of Springer, Science Direct, ASCE, ASTM and ProQuest e-Books (33650). Annual budget was Rs.1293069/ The institute has Wi-Fi

	campus with 65 Mbps internet. The centralized video conferencing, recording is one of the unique features the institute.
Research and Development	BSCOER practices research through Institutional Research Cell (IRC) through product development and entrepreneurship related activities. BSCOER is the approved research centre to pursue doctorate in Civil Engg. and E TC Engg. The facilities provided are library, digital library, research/self- learning laboratory, high end systems, mathematical and analytical software and plagiarism software. Students are encouraged to participate and supported to organize the various events such as Technical symposium (Techno vision), workshops, seminars/paper presentation and project exhibition through student's association. Institute provides financial support to organize seminars workshops, for innovative projects and patents, travel grants to attend conferences and workshops.
Examination and Evaluation	Examination and evaluation process of the institute are under the control of affiliating university SPPU examination unit. In semester exam is under supervision of BSCOER Principal through college examination officer. For end semester examination BSCOER CEO and senior supervisor will plan for human resources needed and inform them in advance for their duties and control. SPPU appoints external senior supervisor during the period of examination. The evaluation process is outcome based. Continuous assessment system is incorporated in the institute for assessment of practical based on learning outcome and through tests, assignments and quiz. Grievances are addressed by Grievance Redressal Cell.
Teaching and Learning	Teaching learning process through highly qualified and experienced faculty members is student centric and outcome based. Focus is on students learning which get reflected through use of self learning laboratory ICT based learning material aided by Learning Management System-MOODLE, workshop practice, and methodologies like participative learning, experiential learning, e-resources and collaborative learning. Institute incorporates specific attributes like,

		<pre>honesty, hard-work, team-work, social work, and national integrity through various cells. SWOC and close monitoring help for institutional improvement. The best practices successfully implemented by the institution are Mentor-Mentee scheme, Multilevel Monitoring of Students Development of Digital Teaching- Learning Resources.</pre>
	Curriculum Development	Institute offers various programs as per the syllabus prescribed by Savitribai Phule Pune University (SPPU). Industry-academia gap bridging is attempted by means of add-on courses, expert lectures, industrial visits, study tours, implant training and sponsored projects. Institute conducts value added courses to achieve overall development of the students and inculcate professionalism and also plans and contents beyond curriculum. Institute consistently approaches the stake holders for the inputs on curriculum through feedback and corresponding analyses is conveyed to SPPU and are implemented through enrichment activities at the Institute. SPPU revised the syllabus for first engineering will revise for higher classes successively.
1		

E-governace area	Details
Planning and Development	<pre>1.E-Samanway E-Samanway Software implemented in the college from year 2016.This software Eases to maintain faculty personal details including faculty qualification, experience Project guidance details etc. 2.Microsoft Desktop Education: This License Software is utilized since 2011.Faculty members, students, staff utilizes all the features of software like operating system, word, excel, power point, servers, etc.</pre>
Administration	1.Autolib: Autolib-Library Management Software purchased in 2010.This software is utilized for to search, issue and return the books and generating relevant reports. 2.Microsoft Desktop Education: This License Software is utilized since 2011.Faculty members, students, staff utilizes all the features of software like operating system, word, excel, power point, servers, etc. 3.KOHA

	Library Automation Software: Koha is open source library automation software. It has all the modules for acquisition, serials, members, circulation, cataloging, reports, and tools. 4.AICTE Institute Portal: This portal is used for approval process, PG scholarships, funding for various programs like FDP, STTP Research promotion schemes, MODROB, Student Internship. 5.AISHE Institute Portal: This portal provides the facility to the institute to portray the status of higher education through an annual web- based All India Survey on Higher Education (AISHE) since 2010-11.
Finance and Accounts	 Tally ERP 9 is accounting software purchased in 2010. It is used for finance and accounting purpose and to generate the relevant reports. Microsoft Desktop Education: This License Software is utilized since Software is utilized since Faculty members, students, staff utilizes all the features of software like operating system, word, excel,
Student Admission and Support	power point, servers, etc. 1. MOODLE-In-house It is a Learning Management Software used to enhance teaching learning process. It is used for providing course material in the form of notes ,PPTS, videos question banks and also for continuous assessment of the students. 2.DTE The Directorate of Technical Education in Maharashtra confirms the policies, rules, guidelines and strategies for engineering admission process formulated by the Central and State governments. 3.Microsoft Desktop Education: This License Software is utilized since 2011.Faculty members, students, staff utilizes all the features of software like operating system, word, excel, power point, servers, etc.
Examination	 MOODLE-In-house It is a Learning Management Software used to enhance teaching learning process. It is used for providing course material in the form of notes ,PPTS, videos question banks and also for continuous assessment of the students. 2. OMS Support -Savitribai Phule Pune University, Pune, - Exam Section (SPPU) SPPU Provides support for conduction of online examinations for assessment of students and declares result.

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	M. K. Kodmelwar	NA	Computer society of India ,Membership	18750
2020	S.N.Gujar	ICRIET2020	NA	500
2020	A.D.Gujar	ICRIET2020	NA	500
2020	M.K.Kodmelwar	ICRIET2020	NA	500
2020	S.V.Ingale	ICRIET2020	NA	500
2020	M.K.Mokashi	ICRIET2020	NA	500
2020	P.D.Chouksey	ICRIET2020	NA	500
2020	S.B.Karale	ICRIET2020	NA	500
2020	L.M.Bharate	ICRIET2020	NA	500
2020	P.B.Lonkar	ICRIET2020	NA	500
		<u>View File</u>		

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)
2020	Workshop on Arduino Programmin g	NA	20/02/2020	22/02/2020	18	Nill
2019	Workshop on Python Programmin g for Data Science	NA	22/08/2019	23/08/2019	30	Nill
2019	NA	AutoCAD	30/08/2019	30/08/2019	Nill	15
2019	Workshop on Research M ethodology and its aspects	NA	12/09/2019	12/09/2019	28	Nill
2019	Plumbing and Fire	NA	17/09/2019	17/09/2019	25	Nill

		De	sign								
	2019		NA	Cyber Security for Mobil and Desktop	e	12/11/2019	13	/11/2019	Ni	11	15
	2019	Micr Er Tra	cosoft ccel ining	NA	:	28/12/2019	28	/12/2019	74	4	Nill
	2020	Te Meth	aching odolog Y	NA	(06/01/2020	07	/01/2020	2!	5	Nill
	2020	FD lle Pro Ri	P Inte ctual opery ghts	NA	(07/01/2020	07	/01/2020	4(D	Nill
	2020		NA	Electrica Safety Week	1 1	17/01/2020	17	/01/2020	Ni	11	40
						<u>View File</u>					
e C	5.3.3 – No. of tea Course, Short Ter	achers rm Cou	attending urse, Facu	professional o Ilty Developme	deve ent F	elopment progra Programmes du	amn Iring	nes, viz., Orie g the year	entation Pr	rogram	me, Refresher
	Title of the professiona developmer programme	al nt Ə	Number who a	of teachers attended		From Date		To da	te		Duration
	Seven Da AICTE Appro FDP	ays oved		2		10/06/2019		16/06/	/2019		7
	online one week faculty development program on Moodle learning management system			1		23/05/2020		29/05/	/2020		7
	one week online faculty development program on Outcome based education:A step towards excellence			4		11/05/2020		15/05/2020		5	
	online m credit cours authorized IBM and offereed through courseerad	non rse by 1		1		26/04/2020		26/04/	/2020		1

fundamentals of scalable data science							
Attended webinar on introduction to video software editing	2	19/0	7/2020	19	9/07/20	20	1
one day online FOP on computer graphics SE 2019 course	2	07/0	4/2020	07	07/04/2020		1
one day online FDP on OOP and CG laboratory SE 2019 course	1	27/0	5/2020	27	7/05/20:	20	1
completed the quiz on NBA Accreditation An Outcome based Education	1	29/0	29/06/2020		04/07/2020		6
one week online Certificate Course on DIGITAL TEACHING TECHNIQUES Organized by ICT Academy	1	28/0	28/05/2020 28		3/05/20:	20	1
completed the quiz on NAAC - ASSESSMENT AND ACCREDITATION	1	01/0	01/06/2020		05/06/2020		5
		<u>Vie</u> v	<u>v File</u>				
6.3.4 – Faculty and Staf	f recruitment (r	o. for permanent re	ecruitment):				
	Teaching			Non-teaching			
Permanent		Full Time	Pe	rmanen	t		Full Time
Nill		137		Nill			70
6.3.5 – Welfare scheme	s for						
Teaching	Non-teaching Students				tudents		

	Teaching	Non-teaching	Students
	Provident Fund Facility	Group Insurance for all	Free Medical Checkup,
	for Staff, Group	Staff, Medical facility	Earn and Learn, Book Bank
	Insurance for all Staff,	for Staff, Provision for	
	Medical facility for	supporting higher studies	
	Staff, Free trainings	at institute of national	
	facility to staff, 100	importance, Incentives	
	revenue generated out of	for achievements for	
	consultancy is	teaching and non-teaching	
I			

|--|

6.4 – Financial Management and Resource Mobilization

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

Institution believes that it has effective and robust in-house mechanism for financial audit. However, like to have opinion of third party too. Till date institutional financial audit is carried out by Chartered Accountant (CA) by Corporate Office. The observations and comments of CA are taken into considerations and implemented immediately.Similarly financial assistance and remuneration received from SPPU is separately audited by external CA and audited balance sheet is submitted to SPPU for the approval. The funds received from non-governmental organization (Consultancy, Resource sharing) is separately deposited and utilized for said activity. This account is separately audited and report is submitted to respective non-government organization for information.All the departments having departmental association where students contribute for department specific co-curricular and extra-curricular activities. This account is also audited and audited balance sheet is displayed on notice board for information of all students.Funds received from reservation are required to distribute all the students in their account. This account is also verified and audited by government regularly.

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
Student associations	147117	Students Welfare
	<u>View File</u>	

6.4.3 - Total corpus fund generated

338.8

6.5 – Internal Quality Assurance System

6.5.1 - Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	Exte	rnal	Internal		
	Yes/No Agency		Yes/No	Authority	
Academic	Yes	Narhe Technical Campus	Yes	IQAC	
Administrative	Yes	Narhe Technical	Yes	IQAC	

	Camp	p us						
6.5.2 – Activities and support from the Parent – Teacher Association (at least three)								
1. Student Attendance Discipline: Class teachers Teacher Guardians (Guardian Faculty Members) associate with Parent in implementing student discipline and attendance regulation. Guardian Faculty member regularly monitor attendance of students, absent students parent are informed by same day. Parent thus get informed about attentiveness of student. Parents thus help in maintaining attendance. 2. Activity Planning: Parent meeting is held at least twice in the semester by every department. First meeting is conducted at the start of semester and second meeting is conducted at the middle of semester. During first parent meeting academic activity plan is presented by Head of Department. Parent are also involved in activity design. Parent's suggestions are taken through feedback. In Second meeting review of conducted activity is taken. During this meeting progress of student is reviewed. Implementation of activity plan is also reviewed. Grievances of parents are addressed. 3. Social Activity: As part of social awareness different social initiatives are conducted by college. Parent and teachers are also associated in different social activities. Parent have supported activities like Tree plantation, Cleanliness Drive through direct participation or by providing monetary support. Parent teacher association has nurtured the social welfare aspect of the institute.								
6.5.3 – Development programmes for	support staff (at leas	st three)						
1. Industrial Safety Week training 4. Workshop on	2. Cyber Secu Fire Safety 5.	rity for Disaster	Mobil r Mana	le and Deskto agement Works	p 3. AutoCAD hop by NDRF			
6.5.4 – Post Accreditation initiative(s)	(mention at least thr	ee)						
1. Guest lectures for difficult subjects: In order to support student learning and improve academic practices guest lectures for difficult subjects are conducted. Subject experts for difficult subjects of SE TE from the other educational institutes are invited by institute. Guest lectures from the expert faculty members are conducted to support and enhance students learning on difficult topic. In some cases the expert faculty member conduct hands on session explaining 2. Placement oriented training to students: Placement of student is major concern. Along with academic activities placement oriented training is provided to students to enhance their aptitude skills and problem solving ability. Training placement Cell of college proactively conducts different activities under the guidance of expert consultants. This activity has helped student in Campus placement. 3. Entrepreneurship through Product based Project development: Entrepreneurship is need of today. Government has provided many different initiatives to support the Entrepreneurship development. So to achieve this final year students are motivated to design and develop product through which they can further convert the same into product. In order to encourage students to become entrepreneur college has arranged the guest lecture by eminent personality from industry and from government institution like MCED (Maharashtra Centre for Entrepreneurship Development).								
6.5.5 – Internal Quality Assurance Sys	tem Details							
a) Submission of Data for Als	Yes							
b)Participation in NIF				No				
d)NBA or any other qualit	y audit			No				
6.5.6 – Number of Quality Initiatives un	ndertaken during the	year						
Year Name of quality	6.5.6 – Number of Quality Initiatives undertaken during the year							

	initiative by IQAC	conduc	ting IQAC				participants	3
2020	ICRIET-20	30/	01/2020	30/01/	2020	31/01/202	20 194	
2019	Workshop on Research Methodology and its aspects	12/	09/2019	12/09/	2019	12/09/20	19 28	
2020	FDP Intellectual Propery Rights	01/	06/2020	01/06/	2020	01/06/20	20 40	
2019	Plumbing and Fire Design	17/	09/2019	17/09/	2019	17/09/20	19 25	
2019	Workshop on Python Programming for Data Science	22/	22/08/2019		2019	23/08/20	19 30	
2019	Microsoft Excel Training	28/	12/2019	28/12/	2019	28/12/20	19 74	
2020	Workshop on Arduino Programming	20/	02/2020	20/02/	2020	22/02/20	20 18	
2020	Teaching Methodology	06/	01/2020	06/01/	2020	07/01/20	20 25	
2019	Cyber Security for Mobile and Desktop	12/	11/2019	12/11/	2019	13/11/20	19 15	
2019	AutoCAD Training to Lab Assistant	30/	08/2019	30/08/	2019	30/08/20	19 15	
			View	File				
CRITERION VII -	INSTITUTIONA	L VAL	UES AND	BEST PR	ACTIC	ES		
7.1 – Institutional	Values and Socia	I Resp	onsibilities	5				
7.1.1 – Gender Equ year)	ity (Number of gen	der equi	ty promotio	n programm	nes orga	inized by the in	stitution during the	
Title of the programme	Period fro	m	Perio	d To		Number of F	Participants	
					ŀ	emale	Male	
Yoga Day Ce	le 21/06/2	019	21/0	6/2019		30	45	

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male
Yoga Day Cele britation(Promo tional Activity For Womens health)	21/06/2019	21/06/2019	30	45
Rangoli Competition	14/01/2020	14/01/2020	30	Nill

Womens celebrat	Day ion	ay 14/03/2		14/03/2020			40		Nill		
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											
18.34											
7.1.3 – Differently abled (Divyangjan) friendliness											
lte	Item facilities				/No		Number of beneficiaries				
Physic	Physical facilities			Y	es		1				
Provi	Provision for lift			Yes				1			
R	amp/Rails			Y	es		1				
Softwar	Braille re/facilit:	ies		1	No		Nill				
R	est Rooms		Yes				1				
Scribes	for examin	nation		Y	es		Nill				
Spe deve differ s	Special skill development for differently abled students			No				Nill			
Any of	Any other similar facility			Yes				1			
7.1.4 – Inclusio	on and Situated	dness									
Year	Number of initiatives to address locational advantages and disadva ntages	Number initiative taken to engage v and contribute local commun	of es o vith e to ity	Date	Duration	N: in	ame of itiative	Issues addressed	Number of participating students and staff		
2019	Nill	1		11/10/2 019	1	cho and Doi	Health eck up Blood nation	Social Awareness	125		
2019	Nill	1		14/09/2 019	1	le on man	Guest cture Stress agemen t	Awareness of health	129		
2020	Nill	1		14/01/2 020	1	ant	ree Pl tation	Awareness of Enviro nment	28		
2020	Nill	1		16/01/2 020	1	on sa tr cc	Rally road afety and affic ntrol	Awareness of Safety	23		

20	20	Nill	1		08/02/2 020	1	le on Ri Jud Sy and	Guest cture Human ghts, ndian iciary ystem The C tituti	Awareness for higher education	55	
							0 I	n of ndia			
20	20	1	Nill		10/01/2 020	365	Ce	Xerox entre	Locatio nal disad vantage	80	
20	20	1	Nill		17/06/2 019	365	I ial	ndustr Visit	Locatio nal disad vantage	250	
					View	<u>r File</u>					
7.1.5 – H	7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders										
		Title		Date of publication				Follow up(max 100 words)			
	BSCOER Handbook			17/06/2019				Quality Assurances and standard operating procedure manual for Information of Staff and Students which clearly defines various procedures about academics, Finance, Administration and Overall working of the institute.			
7.1.6 – A	ctivities	s conducted fo	or promoti	on o	f universal Valı	ues and Ethics	S				
	Activity Du			Iration From Duration T			o Number of pa		participants		
	Yoga day 2		21/06/2019 21/06/20			019 1		.49			
Т	Teachers day 0		5/09/2019 05/09/2			9/20	019		46		
Er	nginee	ers Day	1	5/09/2019 15/09/20)19 1		.97	
Gan	ndhi	Javanti	0	2/09/2019 06/09/20 2/10/2019 02/10/20			0/20	019		48	
s	Shiv javanti 10			.9/02/2020 19/02/2020)20	327		
	View File										
7.1.7 – Ir	7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)										
1) Bio gas Plant 2) Tree plantation 3) E waste management 4) Water recycling plant 5) Rain water Harvesting											
7.2 – Bes	7.2 – Best Practices										
7.2.1 – D	7.2.1 – Describe at least two institutional best practices										
1. Title of the practice Multilevel Monitoring of Students Objectives The major											

aim of multilevel monitoring is to create conducive environment for the students which facilitates to improve their attitude towards academic, social and ethical values. This is subdivided into following objectives: • To monitor and provide support for improving academic performance • To nurture the conducive environment for their multidimensional development by providing relevant guidance • To mentor the students for their behavioral, professional and personality development • To improve interpersonal connectedness with teachers and peers • To enlighten the students on professional ethics and social awareness • To provide emotional support to individuals in consultation with the parent The context Future of the nation depends on well-qualified and skillful technocrats. In this regard higher education should facilitate the students with adequate skills to impart their efforts towards the growth of the nation. India will arise followed by the support from academic institution and their interaction with industries. The Institute has implemented multilevel monitoring in order to improve academic performance and overall personality of the students in all the dimensions. It enlightens the students on professional ethics, behavioral and social aspects. It also establishes healthy relations between teachers, students and parents. The practice The institute has introduced a "Multilevel Monitoring Scheme" by the involvement of all the concerned authorities in the institute for overall development of the competent engineers. As the college excels in the triad of engagement, the students feel safe, supported, and capable of solving academic and professional challenges. Multilevel Monitoring Scheme is categorized into three parts: • Academic engagement Increasing student's engagement in learning means setting high academic and behavioral standards, implementing flexible teaching methods, and making students feel that learning is relevant. Helping students to reach a high academic and behavioral standard requires learning support for all students. As and when required, academic counseling is provided at multiple levels as GFM, class teacher, GFM coordinator, HOD, Principal and management. GFM provide college tutoring and other learning supports. Efforts are made to imbibe professional ethics and social values amongst the students to make them responsible citizens. TPC'S and TPO specifically focus on employability and developing such graduate attributes to enhance skilled based education. Entrepreneurship development cell help students in establishing startup at an early stage, where student can convert their idea in to highly scalable and viable enterprise. • Interpersonal connectedness: For better connect with, teachers must increase interpersonal connectedness in their classrooms. Connected teachers can identify students' needs and potential, that helps in each student's successes. Also it creates a caring, structured environment with high and clear expectations. For the same, one teacher is nominated as 'Guardian Faculty Member (GFM)' for batch of students. The GFM regularly monitors the attendance, academic performance and maintains all relevant records of students in a systematic way. Free time of GFM is available to student and parents outside the Class to share their problems. GFM develops family ties by communicating regularly about student's achievements and challenges. This scheme helps break the barrier amongst the students, teachers and release some burden off the parents. . Physical and emotional safety: Promote positive college environment through zone of physical, emotional, and academic safety that involves implementing strategies that encourage students to feel valued and competent and to act with pride and respect for college policies and property. Such environment creates good interpersonal connections of students with their teachers and peers. GFM acts as a mentor to students in emotional and academic support with motivation. The GFM class coordinator helps the students in resolving problems related to campus life and domestic issues. A professional counselor is available on campus for psychological and personal issues like depression, anxiety and loneliness. Identified cases are forwarded to the professional counselor. Tutor is available for providing self-awareness to develop strengths and control weaknesses, develop personal and professional

goals. Evidence of success • University rankers and improved academic results • Increased number of participants in technical activities • Increased number of participants in co-curricular, extracurricular and social activities • Students Placement in Multinational Companies • Increased number of Entrepreneur Problems Encountered and Resources Required ? Considering the special needs of psychological counseling of the students, professional counselor was required and appointed. ? Newly appointed faculty members need orientation program for effective implementation of the scheme. Notes: Considering the success of the scheme, it is evident that, teachers can play a vital role in the overall development of the students. Refinement of the existing system may lead to better performance with respect to learning. 1. Title of the practice In-house Development of Digital Teaching-Learning Resources 2. Objectives • The major objective of the practice is to develop digital teaching-learning resources and provide an open platform to make those available through the use of ICT enabled technologies. • To provide a platform for knowledge transformation and live interaction with experts through video conferencing facility • To inculcate habit of independent learning amongst the students through the use of selflearning laboratory • To provide experience of learning rather than reading from books by referring exclusively recorded video sessions prepared by faculty members. • To provide easy interface of the developed digital resources through QR codes. 3. The context The quality of engineering education largely depends on the nature of learning rather than good credits. Sound practical knowledge is essential to become successful engineer, which is missing at present and require to bridge the gap between expected knowledge and the credits. ICT enabled teaching learning methods are instrumental in developing self and independent learning attitude amongst the students. In line with OBE, to enhance the learning ability use of ICT tools like, LMS MOODLE, Self-learning Laboratories, VC and Online Video Recordings of theory and laboratory sessions. 4. The practice Learning Management System - MOODLE, which is free and opensource software used to prepare lecture notes, laboratory manuals, presentations, university question papers with solutions, e-books, tutorials, videos, quiz, etc. by respective subject coordinator. Assignments, mini projects, add value in improving practical and intellectual skills of students. MOODLE is available as a mobile app, which is highly beneficial to students for 24x7 accesses. Communication through WhatsApp, Google groups, text messages by the faculty for information dissemination. Video lectures are integrated as part of traditional courses, serves as a cornerstone of many blended courses, which is main information delivery mechanism in MOOCs. Students can watch at their own place, pause, repeat small sections of the entire videos. Watching something being done before their eyes over and over again can be beneficial for learning comprehension. For naturally visual learners, a video can help them move from knowing to understanding, and increase their confidence that they are carrying out instructions correctly of faculties. So, institute recorded different videos of faculties while teaching and giving demonstration of practical sessions and it is uploaded on You-tube. Virtual classrooms are the need of the present education system for effectively and efficiently disseminating knowledge. VC (video conference) lectures are now becoming a necessary and important tool and teachers are using it more and more for teaching and learning in their classrooms. The technology facilitates learning by enabling distant or remote learners to learn and collaborate with IITs and NITS irrespective of their location. The technology has become a great tool educators can use to improve their students learning. Sometimes students get bored of the teachers teaching methods and class, which is why you need to break up that monotony with a special guest speaker. Also, institutes that make frequent use of video conferencing for teaching and learning give learners the opportunity to learn from a slew of informative experts and specialists, while eliminating the hassle of inviting a guest speaker to the classroom. Self learning is also important since any learning is effective only when such

learning happens from within and not forced due to external circumstances. In other words, self-learning is motivated by a desire from within which makes it useful for learners to actualize the drive and the necessary motivation from within so that such learning is enriching. Apart from this, the luxury of learning at one's own pace and at a time of choosing means that students can pick up from where they left off in addition to learning from any device or location that makes such learning a leisurely experience. So, institute provides Self learning labs ion each department which contains different materials for learning like URL of NPTEL videos, virtual labs, e-books and relevant learning materials. The provision of smart board is also made available at selected locations in each department of the institute. Institute has seminar hall equipped with video conferencing facility for delivering online lectures. 5. Evidence of success . Learning Management System on Moodle • VC lecture photos • Utilization of self-learning lab • YouTube link • QR Codes for Lab Setups 6. Problems Encountered and Resources Required • Faculty need to be trained • Extra efforts require for development of ICT based learning material.

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

https://www.tssm.edu.in/storage/PDF/IQAC/2019-20/7.2.1.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

Title: Need based Professional Skill Development The institute has established Professional Skill Development Center (PSDC) which identifies the significant industry with requirement of workforce on specific skillset. PSDC then prepares common agreement (MoU) between institute and the industry by involving respective department and Training and Placement department to ensure skill development of graduates as per industry requirement. The institute and industry involve their experts to train the graduating students on specific skillsets required by industry. Industry also can review the development of students during training program. Institute has affiliated with international certifying organizations based on training skills. Students are insisted to appear for certification examination offered by international certification organization on the respective skills. After successful completion of training program and certification, the industry offers internship to the students who will undergo skill based training. Internal faculty members and industry experts review the progress of students during internship. Internship certificates are distributed to students who are successfully completing internship offered by industry. Finally the students are evaluated by industry and offers job opportunities to them. The computer Department conducted workshop on "Rasberry PI Programming Project Building" in association with Dolphin labs. Also established MOU with Trishta Global privet limited to train students on manual software testing and Automation software testing provide internship and employment opportunities in Trishta Global privet limited. The institute is affiliated to international Software Testing qualifier board for global certification in software testing. 08 Students were trained and accepted internship in software testing in year 2019-20. Department of Mechanical Engineering have conducted value added course on CATIA V5 by Design Tech System. The course duration was for 80 hours and total 15 mechanical engineering students have attended the course which was certified by Dassault Systems. Also, a session on career opportunities in "Piping Design" was conducted. Experts from piping design background were the guest of sessions. They have provided the students a detailed understanding of piping design and students got to know about the piping design as career opportunity. Total 86

students have attended the session. To enhance the programming ability of students by real time programming application and to make students aware about the different Aurduino Department of ETC Engineering Organized a Three days workshop on Bluetooth Controlled Robot using Aurduino on 20th to 22nd Feb.2020 in Association with Sky wing Technologies, Pune. The workshop was open for SE,TE and BE students of ETC Department. The civil Engineering department conducted workshop on "Plumbing Fire Fighting Design Field" in which they came across various types of knowledge and idea about the said topic i.e., how the capacity of overhead water tank in residential as well as in commercials should be decided, how underground capacity of reservoir is decided, etc. This training facilitates students to become familiar with the practical work actually carried out on the field.

Provide the weblink of the institution

https://www.tssm.edu.in/storage/PDF/IOAC/2019-20/7.3.1.pdf

8. Future Plans of Actions for Next Academic Year

By identifying the need of training and placement of the students, it is planned to focus more on increasing the industry institute interaction. It will bridge the gap between the academic curriculum and Industry practices. The bridging will be achieved through identifying discipline wise core industries, which will offer placements with good salary packages. The students' internship programme in identified industries will enhance the hands-on skillsets of our students. Eligible students will be provided required additional skills and knowledge via value added programme / courses through external agencies/internal faculty members. To give the insight of principles of operations, logics, applications of various machines or equipment used in industries, faculties will be motivated to prepare the video lectures in well-established setup of digital content development cell. The incubation centre has been established in the institute through which we plan to increase the number of entrepreneurs by motivating and supporting the aspirants. Faculties will be encouraged to prepare and submit the research proposals to various funding agencies for fetching research funding. The added outcome of which will be in terms of quality research publications and patents.