



SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

JAYAWANTRAO SAWANT COLLEGE OF ENGINEERING

**SURVEY NO. 58, INDRAYANI NAGAR, HANDEWADI ROAD, HADAPSAR,
PUNE, MAHARASHTRA-411028**

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Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

JSPM began its journey under the visionary leadership of Dr.(Prof) T.J.Sawant in 2001 with the establishment of Rajarshi Shahu College of Engineering at Tathawade. Today JSPM is an agglomerate of more than 70 Institutes spread across Six campuses providing quality education ranging from pre-school to Doctoral Research.

JSPM's Jayawantrao Sawant College of Engineering (JSCOE) was established in 2004 and approved by the All India Council of Technical Education (AICTE) and affiliated to Savitribai Phule Pune University (SPPU). The Institute is located in Hadapsar (Pune) surrounded by many Industries, IT Companies and Reputed Townships. The College location has a history as pilgrims traveling from Dehu and Alandi to Pandharpur used to rest here. It was called as "Visawa".

Institute offers 5UG, 5PG programs and one research center. All UG programs are NBA accredited. Every year approximately 2700 students take education in the institute and more than 700 students complete their degree program from the institute. The institution strives hard to shape the students in a way they will be an asset to the community and nation at large. The prime focus of the institute is quality education. To fulfill this objective, institute has created the ecosystem for the overall development of students as well as all employees. The institute has state of the art infrastructure with modern amenities and facilities along with beautifully landscaped surroundings where students can get high quality education meeting their diverse needs and ever changing requirement of professional world. Institute has created all facilities and have ICT enabled classrooms and seminars. All laboratories are well equipped with modern technologies, tools and software.

It is involved in practicing various teaching learning methodologies and student centric pedagogy. The excellent platform for individual skills and personality development, team work and initiative for industry interface is salient features of institute.

Institute believes in imparting right curriculum coupled with innovative teaching methodologies across multiple disciplines, thus creating a vibrant learning experience to all students. The students are infused with an attitude of leading and winning without compromising on the moral and ethical values, making them holistically developed individuals.

Vision

To satisfy the aspirations of the youth force, who wants to lead the nation towards prosperity through techno-economic development.

Mission

To provide, nurture and maintain an environment of high academic excellence, research and entrepreneurship for all aspiring students, which will prepare them to face global challenges maintaining high ethical and moral standards.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Qualified, experienced and dedicated teaching faculty with good retention ratio.
- Student centric functioning with mentoring, counseling and Effective academic monitoring through GFM's .
- Innovative teaching and learning methodology and pedagogical initiatives.
- Good academic results and consistent university toppers.
- Healthy and transparent administrative set up and management support.
- Conducive environment for "startup" and project based learning in the thrust area.
- Strong training and placement cell which resulted skill enhancement and consistent growth in core industry placements.
- Good participation of students in Co-curricular and extra-curricular activities at National Level.

Effective use of ICT facilities and state of art infrastructure.

Skill development of faculty and students in collaboration with reputed organization

Eco friendly campus

Institutional Weakness

More number of interdisciplinary projects should be pursued both at UG and PG level

- The socio-economic background of many of the students (some of them are first and second generation learners) admitted in the College is responsible for poor language competence.
- Moderate placement packages and low placement in core companies.
- Inadequate number of skilled supporting staff
- Poor enrollment for PG programs IN LAST THREE YEARS.
- Need to improve library utilization and to upgrade library resources.
- Deepening of industry-academia partnerships in applied research needs to be encouraged

Institutional Opportunity

Use of E-learning resource like MOODLE, NPTEL notes, open access material available on internet

The Institute has potential to establish Center of Excellence in collaboration with industries

- Scope for interdisciplinary and sponsored projects.
- To introduce job oriented and skill development, self-employed certificate courses and other emerging technologies.
- Networking with National R &D Labs. and reputed institutes
- Improvement in pedagogy
- Improve quality of research by applying research proposal to reputed institute

Competencies of faculty in new age technology using national and international online FDPs and certification courses

Institutional Challenge

- To get meritorious student from the region.
- To collaborate with national and international agencies for research and exchange program.
- To shift student mindset from exam oriented approach to learning/skill enhancement approach.
- To generate revenue through consultancy.
- To improve research quality of publication.
- New private and online education institute give more flexibility for and credit based course access.

To produce industry ready skilled technocrats

To strengthen EDC and III cell to create more opportunities to students from rural region

To retain Faculty due to opportunities in IT sector.

To prepare students for higher studies through GATE and other competitive examination

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The institute is affiliated to Savitribai Phule Pune University (SPPU) and abide to the syllabi of all the programs set by SPPU, which is revised after every four years. The curriculum is well balanced and includes all components for holistic development of learners. It offers enough opportunities for employability and skills to compete industry as well as global challenges.

The institute also takes efforts to enrich the curriculum tuned with Institute's Vision, Mission, Quality Policy. Institute has systematic approach for curriculum design, implementation and delivery. For effective implementation of quality education, institute organizes Curriculum Enrichment Program (CEP) every

semester .The curriculum gap is identified through rigorous process .The appropriate activities to fulfill the gap are discussed and finalized in Department advisory board(DAB) and module coordinators meetings.

During CEP,each course coordinator develop course content in line with Outcome Based Educations. The contents and assessment are designed so that student can achieve intended learning outcome.

Department prepares academic schedule which includes curricular, co-curricular, extracurricular activities.The feedback from stakeholders and input from IQAC are also taken into consideration while designing activities.Curriculum also offers flexibility by including choice based credit system and wide range of elective and audit courses.To upgrade skills.add-on/certificate courses provides required support to the students to meet current and future demands of the industry.Institute organizes various training programs/workshops on current trends which enhances employment opportunities .For holistic development,institute provide platform to tap potential by conducting co-curricular and extracurricular activities.

To address cross-cutting issues such as gender sensitization, climate change, environmental issues,human values,code of conduct , Institute offer value added courses and enrichment programs on moral and ethical values, life skills, better career options. The curriculum is right blend of all components to produce responsible engineers to serve the society.

Teaching-learning and Evaluation

Institute admits students through transparent and well-administered mechanism, complying with all the norms of the concerned regulatory and governing agencies of State Government.The seat allocation for various categories of students is decided by Government of Maharashtra and accordingly admission authority allocates the candidate to the institute through Centralized Admission Process (CAP).

The analysis of student profile is carried out by admission cell.Diversity of students understand by considering various parameters like merit,category,region,gender,mother tongue etc .To cope up the diverse needs of student ,induction programs are arranged and addressed by principal ,deans of various units and HODs.The GFM provides enough support to allocated students to make student safe and homely in the campus.The institute has well qualified and experienced faculty.Every department analyzes the revised curriculum and maps the skill and competency of existing faculty members. Institute encourages faculty by giving enough opportunities to develop professional skills.

Various teaching methodologies such as experiential learning, participative learning, self-learning, role plays, problem-solving techniques, activity-based learning, and project-based learning are accommodated for the effective learning. Newly joined Faculties undergoes for training to understand various academic processes.These trainings are arranged by Central IQAC team.

For effective and efficient delivery of curriculum ,various committees are formed for smooth conduction of academic.The academic activities are monitored by academic dean and academic monitoring committee.The time table committee prepares time table of the department.IQAC plays vital role in improving teaching learning process. It sets the benchmarks for the processes and corresponding outcomes.

SPPU declares academic calender well in advance before starting of each academic year.Taking this into consideration,institute formulates its calendar in consultation with all departments. The academic calendar includes schedule of teaching duration, curricular and extracurricular activities and evaluation. Before preparing

the schedule ,the availability of resources are taken into account.

The institute using Learning Management System (MOODLE) very effectively where all course contents are uploaded and made available to all registered students for easy access. Institute has adopted the assessment and evaluation processes and reforms of the University and Institute has framed its own reforms as part of evaluation of students and continuous assessment.

Research, Innovations and Extension

Institute has formed research committee to promote research culture in all departments .The role of committee is motivate interdisciplinary project activities and to ensure active participation of the UG / PG / Ph.D. students. Institute has recognized research Centre in the Mechanical Engineering which is affiliated to Savitribai Phule Pune University (SPPU). The institute has a policy in place to facilitate smooth progress and a conducive environment for all staff members to participate in the research activity. Institute organizes the various talks and activities to develop scientific temper and innovation amongst the students. Many faculties are involved in research work and completed their Ph.D in last five years.The institute has more than 30 patents on its name as students and faculties have involved in innovative projects,The institute believes in interaction with outside world especially with researchers of eminence to visit the campus and interact with faculty members/students so as to have thoughts/ideas sharing, giving guidelines for further improvement.Institute has collaboration with NSRD and other reputed organizations for mutual benefit and knowledge sharing.Every department encourages Interdisciplinary projects which are carried under student innovation club.Faculty members of the Institute have received grants from industry and research organization. Institute encourages faculties to apply for funding to various agencies and made aware of different government schemes by arranging expert talks. . The Institute has digital library, Research journal subscriptions , computing & IT infrastructure to carry out the research work. As a result of this, institute has grabbed award and prized in innovation ,start ups and projects at national level. More than 500 research papers have been published by the students and faculty members .

Institute also actively engage in outreach activities has encouraging student to carry out projects based which are useful for society.Many departments have developed projects addressing agricultural ,health issues.Institute has incubation facility where student get support for there start ups.

Infrastructure and Learning Resources

Institute always ensure the facilities should be upgraded to cope up need of emerging trends.The campus is spread over 16 acres of land with trees ,greenery. and nice ambience.The built up area of institute is 12000 square meter .Institute has very well advanced modern infrastructure which includes 31 ICT enabled classrooms, fifty well equipped laboratories, eight seminar halls, interactive virtual classroom, research laboratories with high end equipment to carry out research work. A well administrative office section takes care of student admission and administrative work. All the laboratories are not only equipped with desirable equipment for learning but also have necessary equipment required for advance learning and self-learning. Institute developed Laboratories as Museum (LAM) to satisfy the learning needs of variety of learners and create interest in learning process.Students enhance their technical skills in various students technical clubs (Interdisciplinary) also groom their computational skills and communication skills in computer center and

Language laboratory available with suitable PC and multimedia kits.

The institute augments the infrastructure and utilities as per need, enhancement in intake and addition of program/ courses. Additional computer centers are available to the students. The whole campus is Wi-Fi connected with good internet facility. Central library is well stocked with books and also equipped with all digital facilities like e-books and journal, separate digital and reading section.

The campus provides additional common facilities like Girls hostel with capacity of 300, Cafeterias, Bank and ATM, Boys and ladies common room, Sick room, ambulance, Cultural club, gymnasium. Spacious play ground is a noteworthy feature of the institute to support extracurricular activities. The indoor game facilities are also available within the campus. All these facilities are helping the students for their overall development.

For easy commute of students and staff, institute has transportation facility which runs buses from campus to various destination of city.

Student Support and Progression

The institute has strong mechanism to monitor student support system. The GFM scheme where 20 students are mentored by one faculty. It provides necessary support for academic, personal and career growth of the student. GFM also provides guidance to advanced and slow learners and facilitates as a link between teacher and student. Student have all kind of support system to help them to resolve their academic difficulties. Department takes every care of all students and ensures that student will get all resources in time. All department class coordinator use social media and keep communication through this to deliver messages. Student can contact HOD and Principal for any kind of academic difficulties.

The induction programs, alumni meet and parent teacher meet helps student to get connected with institute. The can share their feedback and opinions during these sessions. The suggestion box is installed in office so that student can put their suggestions/feedback without any fear.

Institute has anti-ragging and grievance redressal cell to monitor any discrimination and biases. Institute also conducts various activities for gender sensitization. Institute treats all students equally and encourages girls students to participate in all activities.

There is separate training and placement cell which take care of students skill enhancement and take deliberate efforts to make them job ready. For this It has done various tie up with reputed institute which offers soft skill, aptitude, advanced trainings.

Students are motivated for competitive exams like GATE, GRE, TOFEL, GMAT. Sample GATE questions are discussed in regular academic lectures as content beyond syllabus and made available on MOODLE. Institute has established JACS (Jayawant Academy for Civil Service) for guidance and preparation of competitive exams. Civil services books are provided to the students who prepare for such exams. Institute implemented all scholarship schemes of government as well as non-profit organization, free-ship for the benefit of students belonging to economically and socially weaker section of society.

Alumni also provide good support to junior students and helping them in industry trainings, placements and delivering expert lectures.

Governance, Leadership and Management

The institute is functioning as per guidelines provided by governing bodies and college development committee. The management has transparent policies and processes and includes all stakeholders in decision making process.

Faculty participation in governance promotes diversity of ideas, shared responsibility, collaboration, collegiality, and institutional excellence. Furthermore, it is the right of all faculty members to participate in governance without fear of retaliation in subsequent decisions. It is the responsibility of the central administration, deans and department chairs to protect these rights. The governing faculty of each academic unit should establish the operating procedures of its academic unit governance entities including, but not limited to, procedures of agenda setting, establishment of a quorum, determination of membership qualification of attendance by persons other than members, appointment of a faculty secretary, distribution of minutes, and the retention/filing of minutes. Institute leadership is actively participating in all decision making processes. Principal is member of Governing body and CDC. He use his authority to make decision for the progress of institute. He communicate the feedback of faculties and other stakeholders during meeting and action plan is implemented .

Principal has power to carry out all administrative and academic work without interference. He is well supported by HODs ,deans and office superintendent. All HODs have authority to run department and also participate in decision making process during different meetings at Principal level.

Institute provides autonomy to faculty to execute curriculum for enhancing teaching learning activities. The institution grooms leadership at various levels like student, faculty, university, national leadership, etc. Various committees appointed by principal has given good representation of faculties and student so that they can be part of decision making.

Institute has a well-defined perspective plan for 20 years. Institute has grievance redressal cell like Sexual Harassment of Women, student grievance and anti-ragging. The recruitment process is carried out as per roaster. Institute has self, peer group and administrator appraisal system. Annual increments and promotions to faculty based on their performance. The institution has an effective welfare mechanism for teaching and on teaching staff. The Institution conducts programs to enhance the competency of its faculty and non-teaching staff.

Institutional Values and Best Practices

The institute has many best practices and takes conscious efforts to maintain it in daily life. It has adopted environmental friendly practices from the establishment .It regularly participate tree plantation and green and clean campus activities. Institute conducts green audit every year with the help of state government approved external agency. Institute makes attempt to implement the suggestions (if any) given by auditor. Eco friendly nature of the campus get exhibited through various implemented activities like institutional energy audit, rain water harvesting, reuse and recycling of paper, appropriate e-waste management.

Institute also take efforts to inculcate Indian traditional value system. It celebrates all impotent national days and festivals. It includes celebration of birth anniversary of national leaders, Engineers and teachers day, Republic and independence day are celebrated in the campus .

Apart from these, the NSS cell take initiative for various social activities and conduct programmes like blood

donation,relief fund collection,traffic police help to contribute toward society.

Institute adopted many best practices during last five year.The counseling and mentoring is our rigorous activity to support student from all strata.CEP is highlight of the institute where curriculum is designed to achieve program outcomes.The curriculum is also mapped with industry problems and such problem statements are provided to the student right from second year.The integration of ICT and modern technology is another practice which is consistently implemented across all programs to enhance the learning experience.Institute encourages student to participate in national level reputed competitions and showcase their innovation.For this student has provided good support through innovation club.As a result of these,many student from all department achieved awards and certificates for best projects and many got placement through it.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	JAYAWANTRAO SAWANT COLLEGE OF ENGINEERING
Address	Survey No. 58, Indrayani Nagar, Handewadi Road, Hadapsar, Pune, Maharashtra-411028
City	Pune
State	Maharashtra
Pin	411028
Website	www.jspmjscoe.edu.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Kanphade Rajendra	020-26970886	8669605807	020-26970887	principal@jspmjscoe.edu.in
IQAC / CIQA coordinator	Sharmila Shinde	020-26970886	8237464961	020-26970887	sharmilashinde@jspmjscoe.edu.in

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	

State	University name	Document
Maharashtra	Savitribai Phule Pune University	View Document

Details of UGC recognition		
Under Section	Date	View Document
2f of UGC		
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	02-06-2022	12	Affiliation for one year

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	Yes
If yes, name of the agency	National Board of Accreditation
Date of recognition	01-07-2022

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Survey No. 58, Indrayani Nagar, Handewadi Road, Hadapsar, Pune, Maharashtra-411028	Urban	12.78	16572

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Computer Engineering	48	HSE and CET	English	120	120
UG	BE,Electrical Engineering	48	HSE and CET	English	60	60
UG	BE,Electronics And Telecommunication	48	HSE and CET	English	120	120
UG	BE,Information Technology	48	HSE and CET	English	60	60
UG	BE,Mechanical Engineering	48	HSE and CET	English	180	99
PG	ME,Computer Engineering	24	B.E./B.Tech	English	18	6
PG	ME,Mechanical Engineering	24	B.E./B.Tech	English	24	0
PG	MCA,Master Of Computer Application	24	Graduation	English	60	60
PG	MBA,Master Of Business Administration	24	Graduation	English	60	60
PG	ME,Electronics	24	B.E./B.Tech	English	24	3
Doctoral (Ph.D)	PhD or DPhil, Mechanical Engineering	36	Post graduate	English	10	3

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	10				24				94			
Recruited	6	4	0	10	19	5	0	24	47	47	0	94
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			

Non-Teaching Staff						
	Male		Female		Others	Total
Sanctioned by the UGC /University State Government						0
Recruited	0		0		0	0
Yet to Recruit						0
Sanctioned by the Management/Society or Other Authorized Bodies						74
Recruited	60		14		0	74
Yet to Recruit						0

Technical Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				22
Recruited	9	13	0	22
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	6	4	0	15	4	0	5	0	0	34
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	4	1	0	42	47	0	94
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties				
Number of Visiting/Guest Faculty engaged with the college?	Male	Female	Others	Total
		4	1	0

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	1842	6	0	0	1848
	Female	582	3	0	0	585
	Others	0	0	0	0	0
PG	Male	154	2	0	0	156
	Female	110	0	0	0	110
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	3	0	0	0	3
	Female	0	0	0	0	0
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years					
Category		Year 1	Year 2	Year 3	Year 4
SC	Male	176	149	220	221
	Female	76	104	78	96
	Others	0	0	0	0
ST	Male	6	8	33	37
	Female	3	3	13	18
	Others	0	0	0	0
OBC	Male	713	415	516	543
	Female	251	167	146	165
	Others	0	0	0	0
General	Male	653	721	946	953
	Female	365	406	394	388
	Others	0	0	0	0
Others	Male	15	191	289	245
	Female	101	95	103	67
	Others	0	0	0	0
Total		2359	2259	2738	2733

Institutional preparedness for NEP

<p>1. Multidisciplinary/interdisciplinary:</p>	<p>The subjects in the SPPU syllabus for entire program of four years fall under one of the following categories Basic Sciences Basic Engineering Sciences Core subjects(including core electives) Interdisciplinary subjects(including interdisciplinary electives) Project/Seminar. Soft skills / Employability/Humanities syllabus maintains the balance in the composition of basic sciences, professional courses and their distribution in core and elective breadth offerings. Curriculum includes core subjects and non credit Audit courses which are mandatory for students .The audit courses addresses various multi-disciplinary approaches. For the holistic development of students ,institute conducts</p>
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	<p>various activities which involves environment issues, code of conduct, humanity community services and energy conservation. Institute follows the curriculum of SPPU which involves credit based as well as choice based courses .From Third year of engineering student can opt for elective courses. It offers them flexibility and preserve their interest in certain domain. Institute provides the platform for students so that they can work on interdisciplinary projects. Every department have student innovation clubs where student from all department can enroll and work on projects which addresses various topics and involves multidisciplinary knowledge. Even student get help from industry experts and institute also made many such collaboration to enhance skills of the students.</p>
<p>2. Academic bank of credits (ABC):</p>	<p>Institute has started awareness program on NEP 2020 and arranged expert talks for faculties and student to get familiar with ABC and other ideas of NEP 2020. Though University has not started implimentation at institute level,butall institute students are registerd for ABC. The curriculum has mentioned the Credit transfer policy if student complete the course on NPTEL/SWAYAM portal. As per SPPU syllabus ,For some courses like Business Communication Skills, Humanity and Social Science Code of Conduct, one credit can be earned by student if student successfully completes the Swayam course as listed in curriculum of respective course .</p>
<p>3. Skill development:</p>	<p>Keeping this in mind, our students should be equipped with recent skills, institute has made all provisions and providing all kind of support to upgrade skills. Institute has all modern laboratory infrastructure, interdisciplinary student technical clubs, student startups and ICT facilities. The institute focus on skill development that enables students to acquire desired competency levels. The college has implemented a curriculum and syllabus in the paradigm of Outcome-Based Education, which helps for skill development and outcomes of learning. The college has separate training department which offers skill training to the registered students. In addition, the institution provides capacity building programmes to all final year Undergraduate and Postgraduate students under the guidance of training and Placement and Cell. All undergraduate students are offered with value-added courses for up gradation</p>

	<p>of skills. The value-added courses include Communication Skills, , Internet of Things and Robotics, Web Development Course, Python and R Programming, Artificial Intelligence and Machine Learning. Skill oriented Value-added courses are offered in online and offline mode. . Courses in all programmes are organized in such a way that students get opportunities for experiential learning and skill development through internships, fieldworks, industrial visits, projects works and hands-on learning methods. Every department offers courses each additionally for employability and skill development. In order to provide value-based education, the institution provides courses and events on professional ethics, research ethics, Indian constitution, life-skills and code of conduct.</p>
<p>4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):</p>	<p>The institute celebrates all national days and important festivals to pay respect to national leaders and get awareness towards Indian culture. As most of the students come from rural area and learn in vernacular medium, faculty members took all efforts to deliver lectures in bilingual mode (English and vernacular language i.e. Marathi). Students are made comfortable in the campus life by providing them personal support to adjust with multicultural environment. The program like art of living are organized to Embibe values of Indian tradition. Yoga day and celebration of festivals helps student to connect with Indian roots. During annual festivals, the promotion of Indian languages, arts and traditions is also facilitated. Various events are organized in local language. To promote culture various competitions such as essay writing, poetry, speech competition, folk song, folk dance and skit are organized so that students will understand Indian tradition culture and values. Curriculum has provision to opt for foreign language and explore Indian knowledge system.</p>
<p>5. Focus on Outcome based education (OBE):</p>	<p>The process and policies for attainment of CO and PO/PSO is well established in DAB and in consultation with internal and external stakeholders. The content design, action plan and assessment tool to be executed for each course are developed by course teachers and reviewed by the module committee and focus group. The process to identify the extent of compliance of the curriculum for attaining POs and PSOs are articulated during the</p>

	<p>Curriculum Enrichment Program (CEP) of one week, conducted at the beginning of every semester. Outcome data is collected after evaluation for verification and attainment purposes. • On the basis of feedback from students and faculty members regarding content design, delivery and assessment. The suggestions are deliberated for further improvements in the next curriculum. Faculty members frame the question in context with OBE/Learning perspective, Questions are mapped to COs and BL New/modified COs formulated to increase the mapping level and questions are framed accordingly. • Module Committee and PAC ensure that the internal assessment questions are framed based on various Cognitive levels and are mapped to the COs with appropriate weightage. Questions also included real-time problems to increase the BL. Attainment of each individual Course Outcome (CO) is calculated at the end of each semester for each course and attainment of the course/subject as a whole is also calculated (using individual CO attainment values). For the systematic implementation of the above assessment procedure, a CO assessment plan for each course/subject is formulated before the start of the new semester by all the faculty members. The program outcomes are the accumulation of knowledge, skill, and attitude of the students over four years of graduation. The POs stipulated are as stated by NBA as criteria for accreditation, also DAB (Department Advisory Board) has formulated the PSOs as program- specific outcomes of graduating students. The quality of POs and PSOs is ensured during the CO attainment process. The relevance of assessment tools used with POs are identified and implemented effectively.</p>
6. Distance education/online education:	<p>The use of ICT based teaching-learning is emphasized viz. PPT, Smart interactive Board, Videos and Virtual Classrooms, etc. Participation and involvement of students by ensuring activities like Game pedagogy four board Method, Quizzes, and TPS, etc. • During Pandemic online sessions are conducted through various online platforms like; google meet, Zoom. To address the students' issues like poor network, power shut downs, recorded videos are developed and made available on LMS- MOODLE for easy access to students. Laboratory manuals explaining the details of the experiment are</p>

	<p>available with the subject teacher and are shared with students during the semester. • Printed laboratory manuals cover all the details about the experiments. All the experiments as per the syllabus of the SPPU were recorded by the concerned faculty members and uploaded on the Moodle, • Students watched the demonstration of the recorded practical videos available on Moodle • Later as part of assessment process, students completed the assigned activities viz. Quiz, Game pedagogy etc Faculty members prepared lab demonstration videos to give exposure of lab activities to students during pandemic ,</p>
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Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	YES
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	YES
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	Sessions conducted for awareness by Tahsil office and Election office
4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.	awareness drive conducted with state government authorities
5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.	new admitted students are encouraged for enrollment and forms get filled and submitted by maximum students.

Extended Profile

1 Students

1.1

Number of students year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
2733	2728	2320	2369	2297
File Description		Document		
Upload supporting document		View Document		
Institutional data in the prescribed format		View Document		

2 Teachers

2.1

Number of teaching staff / full time teachers during the last five years (Without repeat count):

Response: 266

File Description	Document
Institutional data in the prescribed format	View Document

2.2

Number of teaching staff / full time teachers year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
165	169	146	169	165

3 Institution

3.1

Expenditure excluding salary component year wise during the last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
567.39	640.24181	704.72	693.475	562.551

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

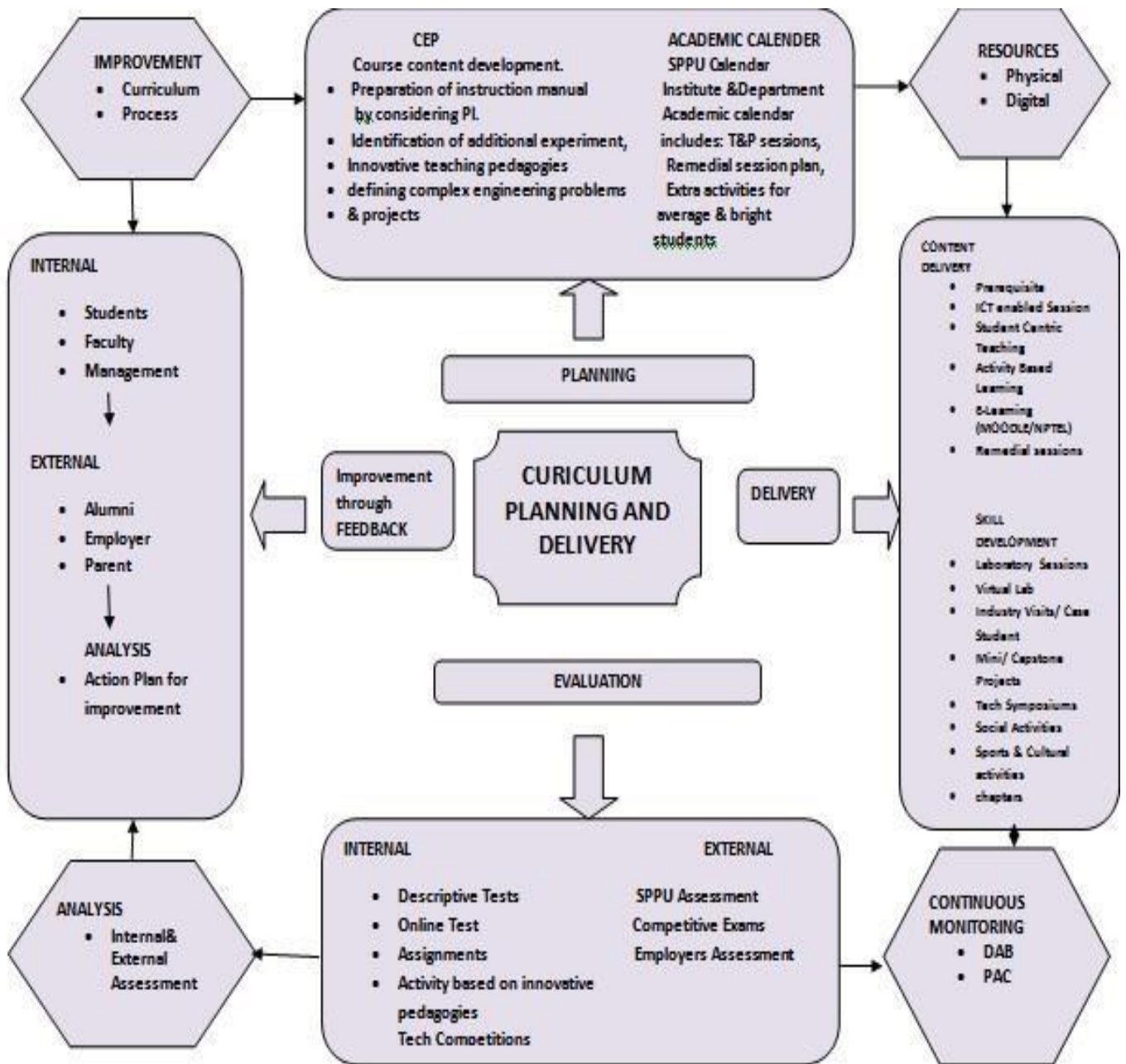
1.1 Curricular Planning and Implementation

1.1.1 The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment

Response:

The institute has systematic approach to ensure effective delivery of curriculum across all programs. The process of teaching learning starts with the curriculum planning & delivery. As institute is affiliated to Savitribai Phule Pune university, it abides to follow curriculum prescribed by it. Institute faculties always take the opportunity and participate in workshops to design revise curriculum. At institute level, specific efforts are also taken to enhance content to achieve learning outcomes.

The process followed to improve quality of teaching and learning described as follow:



Curriculum Planning: On the basis of the academic calendar published by Savitribai Phule Pune University, the institute prepares institute academic calendar in consultation with all the departments. With reference to this calendar, the department academic calendar is prepared, which includes academic planning, T&P sessions, remedial sessions, additional activities for weak & bright students, curricular, extracurricular activities and evaluation schedule. Each department prepares weekly timetable for each class.

Curriculum Enrichment Program (CEP) is a regular practice in the department, which is organized prior to commencement of the every semester, which covers curriculum planning, development of teaching learning

material including innovative teaching pedagogies, preparation of instruction manuals with additional experiment by considering performance indicators, identification of complex engineering problems & projects, evaluation methods and schedule are discussed and finalized in the Focus Group(FG)meeting.

Course Delivery: A Faculty member delivers the course content by using innovative teaching pedagogies. It includes activity based learning, e-learning (Moodle/NPTEL), laboratory sessions, technical competitions, virtual labs, industrial visits, mini/capstone projects, tech symposium & soft skill trainings. Social activities & extracurricular activities are being conducted at department level for the overall development of students.

Evaluation: The evaluation of students is based on internal assessment and external assessment.

Internal assessment is based on descriptive test, online test, assignments, activities based on innovative pedagogies & technical competitions by the respective course co-coordinator.

External assessment includes SPPU examination assessment, Competitive exams & Employer assessment.

Analysis record of internal & external assessment is maintained for continuous improvement of the students.

Feedback: Based on internal and external stakeholder's feedback, remedial actions are planned for the further improvement in teaching learning process.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

1.2 Academic Flexibility

1.2.1 Number of Add on /Certificate/Value added programs offered during the last five years

Response: 54

File Description	Document
Institutional data in the prescribed format	View Document

1.2.2 Percentage of students enrolled in Certificate/ Add-on/Value added programs as against the total number of students during the last five years

Response: 50.41

1.2.2.1 Number of students enrolled in subject related Certificate/ Add-on/Value added programs

year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1392	3248	531	674	429

File Description	Document
Institutional data in the prescribed format	View Document

1.3 Curriculum Enrichment**1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum****Response:**

The curriculum which is prescribed by university is well balanced and addresses cross cutting issues. All department also ensures effective balance all all elements which will help students to grow as a responsible citizen. The university syllabus includes many audit course which are mandatory and focuses on soft skill development, environmental studies, energy conservation, human behavior, emotional intelligence etc. Each department takes special efforts to enrich curriculum which includes co-curricular and extra curricular activities addressing Environmental Sustainability, Gender, Professional Ethics and Human Values, etc., Institute conducts various activities like induction and orientation programs and women empowerment counseling activities.

Students are also encouraged to take projects which addresses environmental issues and energy conservation issues.

Student innovation clubs carried out activities and projects to address agricultural problems facing by farmers.

Audit courses are helping students to understand values and ethics. The environmental studies course is offered in first and second year which focuses on environment and sustainable practices.

The activities carried out in this courses are varied and focused on gender sensitization, treat everyone fairly, respect everyone. Some assignments are given to students based on how to take care of environment, reducing pollution, plastic ban.

‘Humanity & Social Science, ‘Human Behavior’, ‘Cross Cultural Management and Global Leadership, these courses focuses on human values. It helps to develop attitude towards humanity and acceptance of all elements of society.

Professional Ethics And Etiquettes Ethical Practices For Engineers Ethics And Values In IT Indian Ethos & Business Ethics all these course are develop Professional Ethics in students. This also leads to holistic development along with academic knowledge in their core areas.

Gender sensitization is very important aspect for overall growth and development and make them more sensitive and sensitized citizens. The special sessions are arranged by women cell to address the issue.

The expert talks are also arranged by institute to aware about health and hygiene, physical and mental fitness, women empowerment.

All these efforts are taken by institute to integrate cross cutting issues.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

1.3.2 Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)

Response: 54.3

1.3.2.1 Number of students undertaking project work/field work / internships

Response: 1484

File Description	Document
Institutional data in the prescribed format	View Document

1.4 Feedback System

1.4.1 Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website (Yes or No)

Response: Yes

File Description	Document
Upload supporting document	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Enrolment percentage

Response: 73.95

2.1.1.1 Number of students admitted year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
537	553	529	577	524

2.1.1.2 Number of sanctioned seats year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
726	726	726	726	774

File Description

Document

Upload supporting document

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

2.1.2 Percentage of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (Exclusive of supernumerary seats)

Response: 73.95

2.1.2.1 Number of actual students admitted from the reserved categories year - wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
259	262	250	300	289

2.1.2.2 Number of seats earmarked for reserved category as per GOI/ State Govt rule year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
363	363	363	363	387

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

2.2 Student Teacher Ratio

2.2.1 Student – Full time Teacher Ratio (Data for the latest completed academic year)

Response: 16.56

2.3 Teaching- Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences using ICT tools

Response:

The goal of Learning is sharing of knowledge, ideas and experience between the participants. They develop skills in organizing/planning learning activities, working collaboratively with each other's, giving /receiving feedback and evaluating their own learning. Apart from regular class room chalk-talk method, institute focuses on innovative teaching learning pedagogies through various methods, also conducting practicals as per industry perspective.

1. Interactive Learning:

It is a hands-on approach to help students become more engaged. This helps to strengthen student's problem solving and critical thinking skills. Faculty implement this strategy using following techniques:

- 1.Question & answer session at the end of every lesson.
- 2.Student presentation on a given topic.
- 3.Moodle -interactive videos with questions & answers.
- 4.Batch wise tutorial sessions /assignments for personal involvement of the learner in problem solving or analysis
- 5.Batch wise student's interaction & lab experiments conduction after the guidelines by faculty etc.

2. Collaborative Learning:

It involves groups of students working together to solve a problem, complete a task, or create a product. Group activities like technical surveys, model making, chart making, poster presentations

- 1.Seminars / project demonstration
- 2.Industrial visits, Industrial trainings/ workshops
- 3.Curricular and Co-curricular activities like audit course, Tech-manthan, Group Discussion, technical quiz competitions etc.
- 4.Various models of teaching like simulation, mind maps, inductive thinking, fish bowl, role playing, think pair & share, game pedagogy, flip the class etc.

3. Project based learning:

This approach is adopted right from first year by assigning mini projects to the group of students.The real life problems are given to the student to find efficient solution.Student learn to work in group and apply engineering solution to given problem statement.

4. Peer learning:

Student learn with their peers by giving some presentation or performing some case studies.skill development in organizing and planning learning activities, working collaboratively with each other's etc.

5.Independent Learning:

In independent Learning students learn by accessing remote resources as well as by utilization of facilities provided by institute. This inculcates self-learning capabilities in students.

Following are the examples of self-learning facilities are provided to the students:

- 1.Moodle platform (Notes, PPT, Interactive videos, Quizzes, Books in soft copy, reference papers, links etc.)
- 2.Central library of the institute (text book section, reference section, e-learning section, journals, papers & study room)
- 3.Virtual laboratories available online by renowned institutes & research centers.
- 4.NPTEL courses through local chapter etc.

Various pedagogical initiatives:

In order to make the process of learning effective, faculty use innovative teaching methods, which is a combination of the traditional lecture method along with the use of other digital tools and methods.

Innovative teaching-learning methods are listed below

1. Game pedagogy
2. Flip the class
3. Think Pair and share(TPS)
4. Models
5. Role play
6. Fish bowl
7. Adaptive learning style
8. Collaborative learning
9. Additional experiment
10. Crossover learning (visit to museum, industrial visit, field visit)

A new pedagogical approach(industry perspective teaching learning) is adopted by faculties to encourage learning experiences of weak students. The faculty makes rigorous planning of game pedagogy. The content is decided and shared with students so that they come with full preparation for a given topic. This strategy help student to enjoy learning and reduce boredom

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

2.4 Teacher Profile and Quality

2.4.1 Percentage of full-time teachers against sanctioned posts during the last five years

Response: 100

2.4.1.1 Number of Sanctioned posts / required positions for teaching staff/ full time teachers year wise during the last five years:

2021-22	2020-21	2019-20	2018-19	2017-18
165	169	146	169	165

File Description	Document
Upload supporting document	View Document

2.4.2 Percentage of full time teachers with NET/SET/SLET/ Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

Response: 10.93

2.4.2.1 Number of full time teachers with NET/SET/SLET/Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
029	014	013	021	012

File Description	Document
Institutional data in the prescribed format	View Document

2.5 Evaluation Process and Reforms

2.5.1 Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient

Response:

For internal assessment ,Each department prepares assessment schedule and communicates to the students well in advance.The assessment plan also uploaded on Moodle and department notice boards.Each faculty prepares assessment tools and marking schemes.The internal assessment is carried out as per schedule which is also mentioned in academic calender. The assessment is monitored by department exam coordinator.The internal assessment follows all OBE parameters and mapped with CO and POs. The quality of internal assessment paper is checked by module coordinators.

Any grievance form students are noted by exam coordinator and conveyed to respective faculty and HOD for necessary action.Students are free to report their grievance to higher authority if not resolved at department level.

For external assessment which is carried out by university is monitored by CEO. Institute follows all guidelines set by university.Institute has appointed CEO who is responsible to communicate university

exam information to institute and act as mediator between institute and university. He also reports the grievance of the student for external assessment on behalf of students. Students can apply for reevaluation, any error in mark sheet with standard process. Institute CEO takes care and follow up of queries to resolve the issues in time.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

2.6 Student Performance and Learning Outcomes

2.6.1 Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website and attainment of POs and COs are evaluated

Response:

The institute has adopted OBE since 2015 and effectively implemented across all programs. As POs are mentioned by NBA are adopted by the institute which addresses the knowledge and skills that graduates. The stakeholders are informed about the program outcomes using all kind of communication on various occasion.

The POs are displayed on website as well as published in news letters and brochure of the institute. It is displayed in department corridors, HOD cabins and laboratories. It is communicated to students and others during induction programs, parent teacher meet, alumni meetings and through mails.

The awareness program is arranged for newly joined faculties and HOD and senior faculties also address the COs and POs to student during lecture session and important occasion. The Course Outcomes (COs) for all the programs offered by the institute are enhanced by course coordinators of all departments in tune with university curriculum. It is essential that the students must be acquainted with the program and course outcomes.

The faculties design COs with the help of module coordinators and prepares assessment in line with COs. The internal and external assessment tools are designed to cover COs and POs. The data for all assessment is collected and recorded properly. Course exit surveys are carried out at the end of each semester.

There is systematic approach to evaluate CO and PO attainment which is carried out by faculties for respective course. Each department measure the attainment of POs at program level and necessary actions are taken for improvements.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

2.6.2 Pass percentage of Students during last five years

Response: 95.84

2.6.2.1 Number of final year students who passed the university examination year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
778	737	625	522	589

2.6.2.2 Number of final year students who appeared for the university examination year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
814	745	625	593	615

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.43

File Description	Document
Upload database of all students on roll	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

Response: 25.13

3.1.1.1 Total Grants from Government and non-governmental agencies for research projects , endowments, Chairs in the institution during the last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
3.5	8.16	5.1	6.26	2.11

File Description

Document

Upload supporting document

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

Response:

The Institution provides conducive atmosphere, infrastructure, resources to carry out innovative activities. All innovative and extension activities are student centric and help to nurture students innovative ideas and creativity. Students are encouraged to focus on projects to solve various problems faced by the society. The institute has many tie ups and MOUs with industries to benefit student and faculties for research and enhance technical skills,

The student innovation club(interdisciplinary thrust area), student startups, Research and III cell take efforts to enhance research culture in the institute, The expert talks and workshops are helpful for creation and transfer of knowledge. Activities conducted by these are helpful to develop upgrade various skills and planning. Institute has a recognized research Centre of SPPU University in mechanical engineering where Research guides and the research scholars are involved in research activities and carrying out many projects to solve intricate problems.

Many faculties and students have made remarkable contribution in their research specialization. Many faculties and students of the institute have published good research papers in reputed Scopus indexed journals like springer, Elsevier and IEEE conferences.

Many of the research guides and students have received awards and honors for innovation. Institute has IEEE,ISTE and ASHRE chapter under which many expert talks are conducted in last five years to promote research activities. Students also got research funding from ASHRE and other agencies to carry out their project work.

The management has supported innovation clubs by providing funds to develop infrastructure and incubation facilities.The IOT club got 7.5 lakh fund and Drone club received 4 lakh funding from management.The students from different clubs have developed innovative product like smart gas trolley, smart helmet, Multipurpose Sprinkler for agriculture, Drone, electrical vehicle etc.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

3.2.2 Number of workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years

Response: 89

3.2.2.1 Total number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
43	30	11	4	1

File Description	Document
Institutional data in the prescribed format	View Document

3.3 Research Publications and Awards

3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

Response: 0.86

3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
58	77	31	30	34

File Description	Document
Institutional data in the prescribed format	View Document

3.3.2 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

Response: 0.19

3.3.2.1 Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
3	23	11	12	2

File Description	Document
Institutional data in the prescribed format	View Document

3.4 Extension Activities

3.4.1 Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.

Response:

The college performs various activities through students associations and NSS for community development services. During induction, the coordinators of these sections narrate to the students on the benefits and scope of the extension activities. To carry out the extension activities; budget for the said activities is approved and necessary support is provided by the institute. The NSS unit of the institute takes initiative in imbuing value education, social awareness, team work amongst students and staff. Seven days camps are organized every year for NSS students in rural areas where they perform many activities to help and guide local people. The team conducts various activities to make awareness on cleanliness, health, education and save girl child. The skit and street play are performed for the locals. During this camp student also involve in tree plantation, water harvesting and other environment friendly topics.

The institute is always contribute if any natural calamities occur. In 2019 student association has collected funds, daily essentials like food and clothes for the flood impacted people. Every year institute organized blood donation camp with the help of NGO and all volunteers donate the blood. During palakhi when

pilgrims from all over Maharashtra come to pune,the traffic management become prime issue. To manage traffic,our institute student always helps local police .

To aware the society on gender equity,student conducts drama based on save girl child and perform on streets for public awareness.Institute also conducted Swaccha bharat Abhiyaan activities and student actively participated in campus cleaning.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

3.4.2 Awards and recognitions received for extension activities from government / government recognised bodies

Response:

Students and faculties grabbed many awards in Smart India Hackathon, Ayush Mantralaya, KPIT Sparkle, Startup India, IEEE, AICTE Vishwakarma Award, NASA, IICDC Texas, Atmanirbhar Hackathon, Poornima Hackathon, IIT project competitions, TCS championship, etc. during last five years for their projects which are useful for society.

Our students developed projects to address agricultural issues and awarded by national agencies.The student teal developed project to promote environmental sustainability and save energy which are appreciated by industry experts and government agencies.They received funding and cash prizes in national project competitions for their contribution toward society.

Our Student drone startup(Cerebrospark) working with Bihar Govt. for excise surveillance and with Defence Pune region.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organised in collaboration with industry, community and NGOs) during the last five years

Response: 40

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry,

community, and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
7	9	7	11	6

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

3.5 Collaboration

3.5.1 Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

Response: 52

File Description	Document
Institutional data in the prescribed format	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 Availability of adequate infrastructure and physical facilities viz., classrooms, laboratories, ICT facilities, cultural activities, gymnasium, yoga centre etc. in the institution

Response:

The institution provides all kind of infrastructure as per the requirement, .The management is always eager to enhance the infrastructure of the institution from time to time.Institute has good infrastructure facilities such as-

Board Room: The institution has an air conditioned Board Room with round table and smart TV.All department also have board room facility to conduct meeting and discussions.

Classrooms: ICT enabled adequate number of well-furnished acoustic classrooms for lectures (core/electives), seminars; tutorials, etc. are available and maintained regularly.All seminar halls are Equipped with smart panels,LCD projector and connected with WI-FI.

Laboratories:

1) Laboratories are having necessary furniture like table's chairs, racks, cupboard, notice board and blackboards.

2) Laboratories like hardware laboratories, physics laboratory, and chemistry laboratory are having fixtures.

3)Computer Laboratories are facilitated with access to national/international journals, subscriptions (IEEE, McGraw-hill, Springer), Virtual labs from IITs.

4) Self-learning labs are available to access digital course content through MOODLE.5)Virtual classroom: Virtual classroom facility allows participants to communicate with one another, view presentations or videos, interact with other participants, and engage with resources in work groups.

5) Industry perspective workplace for practicals and projects are available with advance facilities.

6) Startup Innovation Cell is available.

Computing Facilities:Institute has two computer centers and 486 computers,printers and Photo copier machines facility is available.

Training and Placement Cell: The institution has spacious Training and Placement Cell, which is headed by a qualified and experienced Placement Officer. It also have space to conduct trainings and mock interviews.

Library: The institute has a fully automated library

Extra-curricular activities-sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc.

Outdoor Games – Ground for Football, Cricket, Kho-Kho, Kabaddi, and Volleyball court is available in

the campus.

Indoor Games - Table Tennis Boards, Caroms, and Chess boards are available.

Gymnasium – Gymnasium facility is available. Cultural Activities – Institute provides infrastructural facility (Hall) for Different Clubs in various Fields. That is working under the Arts & Cultural Promotion Council (Kala Mandal) like Firodiya Chashak, Purushottam Karandak. Also, every year college organizes Annual Social Gathering-Antarnad, Department level Fresher's induction program and Farewell function are organized every year for SE & BE students respectively.

Internet and Wi-Fi facility Students can avail internet facility at digital library and self-learning laboratory. Campus is Wi-Fi enabled.

Recreational facility-Girls and Boys common room with audio-visual equipment

Hostel: Safe and secure Girls Hostel is located in the main campus of the institute. The Boys Hostel is located outside campus under institute administration

Bank and ATM: Institute provides bank and ATM facility within campus for easy banking activities.

Ambulance and Sick room: Ambulance is available 24 hours for any medical emergency .

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

4.1.2 Percentage of expenditure, excluding salary for infrastructure augmentation during last five years (INR in Lakhs)

Response: 7.65

4.1.2.1 Expenditure for infrastructure augmentation, excluding salary during the last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
3.57	2.14224	142.98	5.84	87.899

File Description	Document
Institutional data in the prescribed format	View Document

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS), subscription to e-

resources, amount spent on purchase of books, journals and per day usage of library**Response:**

The institute Library is a key learning resource for faculty as well as students. Institute has formed separate committee to monitor library activities . Library has spacious ambiance and well furnished with comfortable furniture for students and teachers. The library is managed by OPAC facility and the have intra access to e publications via INFLIBNET . National Program on Technology Enhanced Learning (NPTEL), National Library and Information Services Infrastructure for scholarly content (NLIST) and National Mission on Education through Information and Communication Technology (NMEICT) are available to students and faculty. The library is subscribed with N-LIST (National Library and Information Services Infrastructure for Scholarly Content) which enables the users to access more than 5000 e-journals and e-books through a login username and password. Library software AutoLib is used to perform all Library function. Library uses central storage database for student/staff/books in software AutoLib.

To access E-resources digital library with 10 multimedia computers is facilitated to the users in the central library and internet connectivity along with access in all computer labs is useful for students to public access. Library has separate reference section with rich collection of books and journals

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

4.3 IT Infrastructure**4.3.1 Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection****Response:**

The institute regularly updates IT facilities . All classrooms and laboratories are well facilitated by modern IT tools and equipments. All facilities like Offices, Computers Lab, Conference room, Board room, Seminar halls, Library and Hostel is connected with LAN and the Campus is enabled with Wi-Fi. Each department are equipped with LCD projectors, 64inch & 71inch smart and interactive panels. CCTV cameras installed in all corridors and important places in the institute for security and monitoring. Institute faculty members and students use MOODLE effectively for teaching and learning. Video conferencing facility is available in campus for delivering lectures and meetings. The system admin takes care of all ICT facilities and administer overall server maintenance.

The computers in admin and account department are also connected with Stand alone online UPS is maintained by the ICT Centre All Computer systems are connected to internet via switches and central

server. The entire building is connected through centralized server room by OFC 1000 base converter Centralized UTM/Firewall Sophos, 10 kVA online UPS Central Generator backup of 240KVA. 150 Mbps IIL from BSNL, & 350 Mbps Internet lease line from Teleglobal Pvt Ltd directly terminated to Sophos XG550 through SFC port. This UTM have 1000 base Ethernet port. Sophos XG550 UTM provide Web filter, Application filter & QoS for bandwidth management Outdoor access points are installed @ JSCOE A/B/C building.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

4.3.2 Student – Computer ratio (Data for the latest completed academic year)

Response: 5.62

4.3.2.1 Number of computers available for students usage during the latest completed academic year:

Response: 486

File Description	Document
Upload supporting document	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years (INR in Lakhs)

Response: 51.5

4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year wise during the last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
42.0711	358.046	435.75	446.76	349

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Percentage of students benefited by scholarships and freeships provided by the Government and Non-Government agencies during last five years

Response: 79.53

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government and Non-Government agencies year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
2065	2080	2162	2345	1247

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

5.1.2 Capacity building and skills enhancement initiatives taken by the institution include the following

1. Soft skills
2. Language and communication skills
3. Life skills (Yoga, physical fitness, health and hygiene)
4. ICT/computing skills

Response: A. All of the above

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

5.1.3 Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years

Response: 34.05

5.1.3.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1436	835	952	495	520

File Description	Document
Institutional data in the prescribed format	View Document

5.1.4 The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

- 1. Implementation of guidelines of statutory/regulatory bodies**
- 2. Organisation wide awareness and undertakings on policies with zero tolerance**
- 3. Mechanisms for submission of online/offline students' grievances**
- 4. Timely redressal of the grievances through appropriate committees**

Response: A. All of the above

File Description	Document
Upload supporting document	View Document

5.2 Student Progression

5.2.1 Percentage of placement of outgoing students and students progressing to higher education during the last five years

Response: 58.72

5.2.1.1 Number of outgoing students placed and / or progressed to higher education year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
470	433	388	379	350

5.2.1.2 Number of outgoing students year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
778	763	657	653	589

File Description	Document
Institutional data in the prescribed format	View Document

5.2.2 Percentage of students qualifying in state/national/ international level examinations during the last five years (eg: JAM/CLAT/GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 15.41

5.2.2.1 Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ Judicial Services/Public Prosecution services/All India Bar Exams/State government examinations) year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1	3	15	5	17

5.2.2.2 Number of students appearing in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT,GRE/ TOFEL/ Civil Services/ State government examinations) year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
15	26	70	45	110

File Description	Document
Institutional data in the prescribed format	View Document

5.3 Student Participation and Activities

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

Response: 26

5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
2	6	4	9	5

File Description	Document
Institutional data in the prescribed format	View Document

5.3.2 Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)

Response: 30.4

5.3.2.1 Number of sports and cultural programs in which students of the Institution participated year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
42	10	40	35	25

File Description	Document
Institutional data in the prescribed format	View Document

5.4 Alumni Engagement

5.4.1 There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Response:

The institute has registers Alumni association which provides a strong support to our institution. Alumni Association formed and registered in the year 2008 to continue the bond between Alumni and the institution for the mutual benefits. Alumni Association is administered by an Alumni Committee. The alumni association is very active in promoting interactions among the alumni, staff and the management. Alumni playing important role to achieve the vision and mission of the institution. They are actively participate in activities to help fellow students for placements. Every year there is alumni meet during which interaction program is arranged between the alumni and the students . Alumni conducting expert lectures based on thrust area to skill the students also guides the students on employability opportunities and industry expectation.

File Description	Document
Upload Additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance and leadership is in accordance with vision and mission of the institution and it is visible in various institutional practices such as decentralization and participation in the institutional governance

Response:

The College functions under JSPM trust and administered by Campus director , Principal. The College ensures decentralized and participatory governance by involving all its stakeholders. The principal forms various committees and involves faculties and students based on their interest and competency. He shoulders various administrative responsibilities and appoints them as officials that include Vice Principals, Dean-Academic, Dean-Research, Dean-Students affairs, Dean III, IQAC Co-ordinator, Controller of Examinations, Heads of various Departments, Office Superintendent and Coordinator of various cells. All these committees helps for smooth conduction of academics and other activities of the institute. Each committee coordinator has opportunity to exercise his power and take decision.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

6.2 Strategy Development and Deployment

6.2.1 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, deployment of institutional Strategic/ perspective/development plan etc

Response:

The policy statements and action plans for fulfillment of the stated mission of the institute in terms of

- Various policies with respect to academic excellence, research and entrepreneurship are been decided in the Governing body meeting which are conducted twice in a year. Stakeholder feedback, achievement of institute, proposal of various department and guideline from controlling body (AICTE, DTE, SPPU).
- The policy decision is taken in the Governing body are percolated to HOD and activity coordinators by principal in weekly meetings and accordingly time bound action plan is decided.
- HOD and coordinators executes the plan through faculty members by conducting departmental meetings. The problems in achieving the time limit given, are been discussed in the next departmental and principal meeting.
- The status of execution of the policy is reported back to the governing body in the next bi-annual meeting. Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

6.2.2 Implementation of e-governance in areas of operation

1. Administration
2. Finance and Accounts
3. Student Admission and Support
4. Examination

Response: B. Any 3 of the above

File Description	Document
Upload supporting document	View Document

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures and Performance Appraisal System for teaching and non-teaching staff

Response:

The institute has transparent performance appraisal system of the staff to evaluate and ensure that information on multiple activities as follow:

Institute adheres to UGC/GOI/State Govt. policies on performance appraisal based on roster considering gender sensitivity, equity; physically disabilities while recruitment of faculty members.

Institute has self, peer group and administrator appraisal system, which implement to evaluate and ensure the information of multiple activities.

In self-appraisal academic performance, performance as guardian faculty member, publications, research projects, student feedback, strengths and weaknesses of faculty members are mainly considered In the appraisal willingness to take responsibilities in new area of work, contribution in co-curricular/ extracurricular / extension activities, participation/organization of workshop /lectures, ability to inspire and motivate students, supervisory ability are mainly focused.

In administrator appraisal system Recommended/ Not recommended for annual increment / promotion for the next grade is decided on the basis of self and peer group appraisal for this performance budgeting as core planning activity used by institution for inform decision making for appraisal.

The institution / management evaluate staff based on teaching, research and participation in development activities in and outside the institute.

The appraisal, due importance is given to all curricular /co-curricular /extracurricular activities.

The concerned administrator gives his remark on the performance of the faculty through formative evaluation.

Based on this performance appraisal, the faculty is awarded with appreciation and additional motivation for further improvement in their performance.

File Description	Document
Upload Additional information	View Document

6.3.2 Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

Response: 7.99

6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
35	7	10	10	3

File Description	Document
Institutional data in the prescribed format	View Document

6.3.3 Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), professional development /administrative training programs during the last five years

Response: 54.83

6.3.3.1 Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), professional development /administrative training programs during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
62	91	240	303	48

6.3.3.2 Number of non-teaching staff year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
96	75	110	125	137

File Description	Document
Institutional data in the prescribed format	View Document

6.4 Financial Management and Resource Mobilization**6.4.1 Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)****Response:**

The Institute has following mechanism to monitor effective and efficient use of available financial resources At the beginning of every financial year the estimated budget from each department is collected. This budget is based on the requirements raised by the staff and concerned HOD. The budget submitted by HOD is scrutinized by the principal and forwarded to CDC & GB for approval. All the major financial transactions are analyzed and verified by the governing body under different heads like Research & Development , Training & Placement Software & Internet charges ,Library Books / Journals Repair & maintenance , Printing & stationary Equipment & Consumables ,Furniture & Fixtures After final approval of budget the purchasing process is initiated by purchase committee which includes all head of departments and account officer, accordingly the quotations called and after the negotiations purchase order are placed.

The major source of institutional receipt is fees collected from students. The management looks into the matter if deficit arises. Institute adhered to Utilization of budget approved for academic expenses and administrative expenses.

The institute encourages all the faculty members to undertake the research projects funded by different agencies like SPPU (BCUD), ISRO, and DRDO etc. Details of grant revived from various agencies since inception of the college which are given below.

Institutional Procedure for Utilization of the funds:

The Institute has following rules for utilization of the funds received from funding agencies

1. The funds received are diverted to the individual account /Joint account of the investigator /principal that is a in charge of the funded project. The investigator with Academic Research Coordinator &Principal makes expenses for respective research project.
2. After verification the year wise statement of receipt and payment is audited by CA and then it is submitted to the funding agency for correspondence.

3. The status of the project undertaken is continuously monitored by the concerned Departmental head, and Principal. Time to time report submitted to external agencies.

File Description	Document
Provide Link for Additional information	View Document

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

Response:

IQAC plays an important role in planning, executing and satisfying needs to achieve quality policy, mission and vision of the institute. It constantly monitors all activities in all departments and give suggestions to improve the quality. IQAC has prepared strategic plan to achieve the goals of quality education.

IQAC ensure the quality in teaching learning and administrative processes, with critical analysis of data and feedback responses. The IQAC has framed standard processes and prepared formats and documents for record keeping. All department maintain there data as per formats which is provided by IQAC. The institute has developed student centric environment for quality education as per institute's quality policy. The academic monitoring is carried out regularly by IQAC. All department send there reports monthly to IQAC. It contributes in enhancement of evaluation procedures in teaching learning assessment. The academic audit also carried out for each department. The preparedness report is collected from each department at the beginning of semester and End sem report is also collected at the end of semester to analyze the progress of department in each area.

IQAC proposes integration of modern methods / Tools in teaching and learning and encouraging faculties to develop e-learning platform for student. IQAC has standard framework and administrative setup to implement OBE process. IQAC has provided program assessment handbook to all faculties to maintain standard procedure to assessment and CO-PO attainment. It also trains faculty for outcome based education. The statements of PO's, PEO's, are imbibed by the students and response is received towards the quality improvement in teaching learning process. IQAC keep watch on program attainment and ask all department to take corrective measures for improvement.

IQAC receive the feedback from students in order to improve the quality of teaching methodology, variations of teaching aids and administration processes. It seeks contribution of students in the development of quality culture in the institute.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

6.5.2 Quality assurance initiatives of the institution include:

- 1.Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements**
- 2.Collaborative quality initiatives with other institution(s)/ membership of international networks**
- 3.Participation in NIRF**
- 4.any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA, ISO Certification etc**

Response: B. Any 3 of the above

File Description	Document
Institutional data in the prescribed format	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity and Institutional initiatives to celebrate / organize national and international commemorative days, events and festivals during the last five years

Response:

The institute has policy to ensure a safe and healthy environment for girls and several measures and initiatives have been undertaken to promote gender equity and empowerment of women. The institute has formed Women grievance Cell which look after the girls security and health. CCTV Cameras and security guards are provided for the safety of girls in the campus.

It has organized various programs and events for the awareness of Women's health and safety. It also schedule visit to girls hostel weekly to give confidence to the students. Womens day on 8th march is celebrated every year in the campus. The Girls Common Room is available with a sanitary pad vending machine and an incinerator.

Institute celebrates 15th August, 26th January and all other National commemorative days.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

7.1.2 The Institution has facilities and initiatives for

1. Alternate sources of energy and energy conservation measures
2. Management of the various types of degradable and nondegradable waste
3. Water conservation
4. Green campus initiatives
5. Disabled-friendly, barrier free environment

Response: C. 2 of the above

File Description	Document
Upload supporting document	View Document

7.1.3 Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following

1. Green audit / Environment audit
2. Energy audit

3.Clean and green campus initiatives**4.Beyond the campus environmental promotion activities**

Response: A. All of the above

File Description	Document
Upload supporting document	View Document

7.1.4 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic diversity and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

Response:

The college makes enormous efforts to provide necessary assistance to students to acquire meaningful experience for learning at the campus & to facilitate holistic development & progression. It provides all the important information to the students through prospectus & the college website. Institution has a well structured & organized guidance & counseling system in the campus. The college recognizes very well that education is a dynamic process that strengthens the students to make the best use of their capacity to make the world a better place to live in. It works according to the guidelines issued by the state government & the commission rate of college education for it. It tries to achieve various goals that reflect its vision & mission. The principal and faculty play decisive & major role in design and implementation of its quality policy and plans. Efforts are made by the college to groom leadership at various levels. The principal delegates authority to the various conveners of committees and faculty to work towards.

File Description	Document
Provide Link for Additional information	View Document

7.2 Best Practices

7.2.1 Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual

Response:

BEST PRACTICE-1:

Title of the practice- Mentor and Mentees Program GFM (Students Grooming and Nurturing)

1.Objective of the practice:

- To understand and guide to overcome student's personal and academic problems in learning

process.

- To update students on regular basis about Internal and External Examination patterns and accordingly monitor their Academic progress.

The Context:

1. Mentoring was required for students for academic growth to promote overall progress.
2. Prolonging of academic year and uncertainty related to final internal concurrent evaluation and external examination mode was one of the stressors of student. Faculty (mentors) were in regular touch with the students.
3. Some working students were from rural area facing problems like Internet and network connecting themselves with faculty members for lectures on request of students & mentors, few subjects were revised those who were working.

The Practice:

In the beginning of the semester, assigned students (as a mentee) to each faculty members (as a mentor) and informed faculty members and students in Induction program in detail about assigning of Mentor and Mentees accordingly.

To keep the record of the mentor mentee interactions the form was designed accordingly. Dates of mentor mentee interactions its purpose problem discussed and solution provided from time to time were noted.

Actual Practice:

Scope for mentoring and guidance was on high priority.

- Mentor used to call their mentees to make them aware about to check for attendance in lectures as per the time table. Understanding their problems for absenteeism like personal problems and tried to give appropriate solutions and maintained the records.
- For other curricular activities (Concurrent evaluation) use of social media, emails and Google platform were used to get it done. Used to confirm first about their educational progress, placement related activities on continues basis. No date fixed to discuss and solve their problems. At any time students (mentees) were calling on Mobile phone or through Whatsapp or by SMS.
- Mentors (faculty members) used to respond do the mentees about SIP, Internal Assignments (Concurrent evaluation), University Examination pattern, External and internal evaluation, Placement etc.

Evidence of Success:

Institution received best results of the students in the SPPU External Examinations; Improvement in attendance was observed. Increased participation in co-curricular and extra-curricular activities. Students were confident about their personal employability skills. Some of them were placed in the company.

1. Problems Encountered and Resources Required This year main challenge was to bring students on

Offline classes for teaching and learning. Rural area students were not open up to take guidance on their personal & academic progress easily until and unless mentors took initiative for the same in a matured manner.

BEST PRACTICE-2:

1. Title of the Practice: Effective integration of ICT in Teaching- learning:

2. Goal-To provide personal, academic and career support to the students.

3. Context As the world is changing rapidly, ICT is playing a crucial role in teaching and learning. Also today's generation demands new technology use in the learning process. Keeping this in mind, faculties are structuring their courses which are suitable for ICT integration.

4.The practice: Many faculties are developing their own sites and using learning management platforms like MOODLE, Genomio to disseminate content and also effectively using it for assessment purposes. It helps the faculty to monitor the performance of each learner and also the response of the learner.IT also provides an opportunity to provide quick feedback to the learner about their performance. Lerner get immediate response where they can improve further.

Some faculties have prepared video lectures so that learners can access it from anywhere and anytime. It is also helping those who missed the classes.

Some Faculties are integrating mobile devices as they are easily available with most of the learners. The faculties are collaborating on some activities through social media.

Blogs are also important media to collaborate group activities.

Digital LCD are used to give presentations. Google classes are also effective tools to manage classroom activities and to conduct assessment. All these tools are implemented by faculties whenever required.

Many classrooms have smart panels which are very helpful to present digital content. Also it is easily used to show simulation and animation to understand complex processes and engineering concepts.

Institute also promotes use of virtual lab and online courses for training purposes.

Many learners are collaborating on their project work using ICT. Online discussion forums are providing platform for students for peer learning.

5. Evidence of Success

ICT tool	Effectiveness
LMS	Well organized content available to students for easy access from anywhere
Projector	Better understanding of concept through visuals

You tube video	Wide reach of content
Social media	Peer learning and learning with ease.
File Description	
Document	
Best practices as hosted on the Institutional website	View Document

7.3 Institutional Distinctiveness

7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Response:

JSCOE has very distinctive feature of Collaborative work culture through student's innovation club. The objective of innovation club is to enhance the student's practical knowledge horizon by organizing the workshops, seminars and competitions on various technical level within the college. It also aims to develop a platform where the technical innovative-ness of students could be nurtured and given a practical shape so as to improve the technical abilities of students as well as the reputation of institute as a leader in innovation and creativity.

Each department has two to three interdisciplinary student clubs which are classified according to various thrust areas. These technical clubs are run successfully by students' body and activities are monitored by faculty coordinator. Every year students bring innovative ideas on the table which are helpful for society in various fields like agriculture, energy, automation, health etc. These ideas are tested with the help of faculty, alumni and industry expert for feasibility and real time implementation. Students actively participate in the National & International technical competitions like Smart India Hackathon, Ayush Mantralaya, KPIT Sparkle, Startup India, IEEE, AICTE Vishwakarma Award, NASA, IICDC Texas, Atmanirbhar Hackathon, Poornima Hackathon, IIT project competitions, TCS championship, etc. through these clubs and also grabs the awards and prizes.

The students across the department work collaboratively on these ideas and carry out their work within campus. These activity give them opportunities to work on interdisciplinary and multidisciplinary projects. The work is coordinated by expert faculties and industry mentor. The funding is provided by management if required. The outcome of these clubs are displayed in many exhibitions, project competition and various forums. Many industries have acknowledged the ideas and shown keen interest to provide sponsorship for start-ups and work with collaboration. The projects/products carried out through student club achieved many awards and cash prizes in Hackathon, KPIT sparkle and many other national level competitions. Through this initiative, many students also got good job opportunities in reputed industries. Students are also selected for international internship programs.

The Drone club students set up a startup(Cerebrospark innovation LLP) in the college to develop drones for different applications like surveillance, photography, agriculture applications, Defence, etc, . IOT club has developed many products which are beneficial for society. The institute faculty and student with collaboration with Kesh ayurveda has developed product to monitor intestine temperature, which got First Prize in Startup Challenge Global Ayush Investment & Innovation

Summit 2022 Electrical vehicle product developed by auto club got ten lakh cash prize in KPIT sparkle in year 2020-21. The girl's student team has won two lakh cash prize and best female entrepreneur award in 2020-21. Student and faculty have published patents for the developed products.

File Description	Document
Appropriate web in the Institutional website	View Document

5. CONCLUSION

Additional Information :

Institute taking efforts to strengthen quality of education

1. Institute industry tie ups.
2. Platform for incubation and startups through student innovation clubs.
3. ICT enabled facilities and modern pedagogy.
4. Skill enhancement trainings through NPTEL ,coursera and other digital platforms.
5. Faculty development programs for professional development.
6. Involvement of stakeholder in Academics activities.
7. Strong feedback mechanism to monitor quality.
8. Staff welfare policies.
9. Counseling and mentoring for overall wellbeing.

Concluding Remarks :

Institute is always striving to fulfill its vision and mission .To achieve this,institute engages students in quality teaching learning activities.As there are changing requirements of industry,institute take efforts to enhance students skill set to cope up with changing environment and expectation of corporate world.

Keeping in mind the need of digitization,institute has built up strong ICT facilities and infrastructure set up. The college is working towards preparedness for the implementation of NEP 2020.Institute faculties are adopted student centric pedagogy to ensure that student will get good learning experiences.Institute believes in holistic development of all members of organization.It provides the platform to showcase their talent and creativity in all domain of life. The motto of the institute is to create responsible citizen willing to make contribution in nation building . Institute try to inculcate values and ethics amongst students by organizing programmes like celebration of national festivals and important days.Institute has adopted many eco friendly practices to conserve energy and keep environment clean and green.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																				
2.4.2	<p>Percentage of full time teachers with NET/SET/SLET/ Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)</p> <p>2.4.2.1. Number of full time teachers with NET/SET/SLET/Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. year wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>32</td> <td>20</td> <td>16</td> <td>23</td> <td>13</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>029</td> <td>014</td> <td>013</td> <td>021</td> <td>012</td> </tr> </tbody> </table> <p>Remark : Input edited as per the only consolidated list, HEI not provided any certificates</p>	2021-22	2020-21	2019-20	2018-19	2017-18	32	20	16	23	13	2021-22	2020-21	2019-20	2018-19	2017-18	029	014	013	021	012
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029	014	013	021	012																	
3.3.1	<p>Number of research papers published per teacher in the Journals notified on UGC care list during the last five years</p> <p>3.3.1.1. Number of research papers in the Journals notified on UGC CARE list year wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>107</td> <td>80</td> <td>102</td> <td>101</td> <td>79</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>58</td> <td>77</td> <td>31</td> <td>30</td> <td>34</td> </tr> </tbody> </table> <p>Remark : Input edited as per the supporting documents.</p>	2021-22	2020-21	2019-20	2018-19	2017-18	107	80	102	101	79	2021-22	2020-21	2019-20	2018-19	2017-18	58	77	31	30	34
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107	80	102	101	79																	
2021-22	2020-21	2019-20	2018-19	2017-18																	
58	77	31	30	34																	
3.3.2	<p>Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years</p> <p>3.3.2.1. Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	2021-22	2020-21	2019-20	2018-19	2017-18															
2021-22	2020-21	2019-20	2018-19	2017-18																	

3	74	11	27	2
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Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
3	23	11	12	2

Remark : Input edited as per the supporting documents.

7.1.2	<p>The Institution has facilities and initiatives for</p> <ol style="list-style-type: none"> 1. Alternate sources of energy and energy conservation measures 2. Management of the various types of degradable and nondegradable waste 3. Water conservation 4. Green campus initiatives 5. Disabled-friendly, barrier free environment <p>Answer before DVV Verification : A. 4 or All of the above Answer After DVV Verification: C. 2 of the above Remark : Input edited as per the supporting documents.</p>
7.1.3	<p>Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following</p> <ol style="list-style-type: none"> 1. Green audit / Environment audit 2. Energy audit 3. Clean and green campus initiatives 4. Beyond the campus environmental promotion activities <p>Answer before DVV Verification : A. All of the above Answer After DVV Verification: A. All of the above</p>

2.Extended Profile Deviations

Extended Profile Deviations
No Deviations