



SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

JSPM'S RAJARSHI SHAHU COLLEGE OF ENGINEERING

JSPM RAJARSHI SHAHU COLLEGE O ENGINEERING ASHOK NAGAR,
TATHAWADE, PUNE-33

411033

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

JSPM's Rajarshi Shahu College of Engineering(RSCOE) is established in 2001 with an aim to provide quality technical education and excellence in the ever expanding horizon of technical revolution of 21st century. The institute offers eight UG[B.Tech] and six PG [M.Tech/MBA/MCA] programs and also recognized as a Ph.D. Research Centre by Savitribai Phule Pune University. The Institute has been acknowledged for **its teaching– learning practices** at various platforms.

In the span of 22 years, RSCOE has created niche with all its UG & PG Programmes. All eligible UG programs are accredited by **National Board of Accreditation(NBA)** consecutively four times. The institute is placed in the **'Band: 150-200'** in **National Institutional Ranking Framework(NIRF)**, for the year 2024. The Institute is accredited by **National Assessment and Accreditation Council(NAAC)** with **'A'Grade** and also awarded as **"Best Professional College under Urban category"** by Savitribai Phule Pune University.

The institute is steadily progressing and accomplishing its vision and mission through well designed **Strategic Development Plan**.

As a result, **Institute has achieved many laurels**, few are stated as:

- Ranked in the **'Band: 150-200'** and **'Band: 151-300 (innovation category)'** in National Institutional Ranking Framework (**NIRF**), for the year 2024 and 2023 respectively.
- Ranked in **'Band A (6–25)'** and **'Excellent'** in Atal Ranking of Institutions on Innovation Achievements (**ARIIA**), for the year 2021 and 2022 respectively.
- RSCOE is selected as **Mentor institute** under "**Paramarsh**" scheme of UGC and **"Margadarshan"** scheme of AICTE for Mentoring NAAC and NBA Accreditation Aspirant Institutions.
- Recognition as **Empowered-Autonomous-Institute** by affiliating university.
- Institute received **"Best Institute Award"** constituted by the Association of managements of un-aided Engineering colleges (Mah.) in June-2023.
- Institute has received **ISTE-Bhartiya Vidya Bhavan National Award** in 2020.
- Ranked amongst **Top 100** in the survey conducted by **Times-Engineering, India Today, outlook survey, Academic insights, Careers360 and The week.**
- Established **section 8 company under Institution Incubation Foundation(IIF)-cell** of the institute.
- Established **Institution Innovation Council(IIC)**, in association with Ministry of Education(MoE), to promote innovation, startups. and has mentored 5- Institutes
- Received **Kirloskar Vasundhara Green College Clean College Award** in 2024.
- **Nodal Center of IIT Bombay** for Spoken Tutorials.

Vision

To satisfy the aspirations of youth force, who wants to lead 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

The institute shines with several impressive strengths, beginning with NAAC accreditation in cycle -1 with CGPA of 3.26 during 2017 subsequently followed by an Autonomous status in the year 2018 by UGC. All UG programs are accredited by National Board of Accreditation consecutively in fourth cycle in 2022 and two PG programs are also accredited by National Board of Accreditation in 2023. The RSCOE also have many such strengths to focus are:

1. The institute is ranked within the band of 151 to 200 in NIRF -2024 ranking, while it also holds the 87th position in India Today's rankings for the year 2024.
2. The institute is popularly known for its best academic practices in the parent university with many rankers of the university. And as a recognition of its distinguish academic practices, the college has been awarded with Best College Award from SPPU in Urban Category in the year 2013 as well as ISTE-Bhartiya Vidya Bhavan National Award for Engineering College having Best Overall Performance and Best Engineering College in the year 2020 and Late Hon. Shri Balasaheb Wagh Memorial Best Institute Award" constituted by the Association of the managements of un-aided Engineering colleges (Mah.) in June 2023
3. The institute has received empowered autonomous status from Savitribai Phule Pune University from the year 2024-25.
4. The institute has also received recognition for 2(f) & 12(B) from UGC.
5. Institute also ranked in 'Band A (Rank Between 6th – 25th)' and 'Excellent' in Atal Ranking of Institutions on Innovation Achievements (ARIIA), an initiative of Ministry of Education (MoE), Govt. of India for the year 2021 and 2022 respectively under the category of Private or Self-Financed Institutes, for its contribution to research and innovation.
6. Institute also established section 8 company under Institution Incubation Foundation (IIF) cell of the institute and established Institution Innovation Council (IIC), in association with Ministry of Education (MoE), Govt. of India to promote innovation and startups in the campus.
7. RSCOE is Selected as Mentor institute under "Paramarsh" scheme of UGC and Margdarshan Scheme from AICTE for Mentoring NAAC and NBA Accreditation Aspirant Institutions.
8. The institute has a collaboration with IITs, NITs and regional colleges all across India and signed 11- MOU International universities across the globe which includes University of Malaysia, Pahang, University of Malaya, NUS, Singapore, KMITL University Thailand and others.

Institutional Weakness

Our's is a private Institute affiliated to Savitribai Phule pune university [SPPU] and is having adequate faculty and students some of the weakness to list are:

1. Number of PhD faculty members.
2. Research funding through AICTE, UGC, DST and other apex bodies.
3. Revenue generation through consultancy.
4. Ecosystem of Venture capitalist to enhance the Number of startups and entrepreneurs.
5. Number of IPR, Copyrights needs to be enhanced.
6. Limited support from alumni in terms of funding/ financial contribution.

Institutional Opportunity

Analyzing the opportunities for RSCOE reveals several promising avenues for growth and development. One key opportunity lies in establishing stronger connections with various industries in and around Pune. This includes facilitating internships, industrial projects, and placements, as well as inviting industry professionals to deliver guest lectures. Such collaborations would provide students with practical exposure, enhancing their readiness for the job market.

Another significant opportunity is the modernization of the curriculum. This involves developing industry-relevant courses, focusing on skill development, interdisciplinary knowledge, and incorporating value-added courses. Addressing societal problems, offering internships, and including industrial projects as part of the curriculum would further enrich the educational experience. Adapting modern techniques in the teaching-learning process can make education more engaging and effective, preparing students to meet contemporary industry demands.

Placement opportunities present another crucial avenue for growth. Given RSCOE's proximity to various industries, there is significant potential for student placements in both IT and core sectors. By targeting a mix of large industries and smaller ancillary units operating around Pune, the institute can enhance employment prospects for its graduates, ensuring they find suitable roles in their respective fields.

Collaborations with foreign universities also offer valuable opportunities. These partnerships can provide students with international exposure through internships, joint research projects, and language training programs. Such collaborations can broaden students' academic and cultural horizons, making them more competitive in the global job market.

By strategically capitalizing on these opportunities, RSCOE can significantly enhance its educational offerings and improve student outcomes. Establishing strong industry connections, modernizing the curriculum, targeting effective placement strategies, and fostering international collaborations are all key steps toward achieving this goal. These initiatives will not only prepare students for successful careers but also elevate the institution's standing in the academic and professional communities.

Institutional Challenge

When considering the challenges faced by institute, several significant factors come into play.

Competition: Pune, being a renowned education hub, presents intense competition from numerous other colleges and universities boasting superior infrastructure, state-of-the-art equipment, comprehensive libraries, robust research programs, and highly qualified staff.

Industrial Development: Rapid and constant changes in industrial requirements due to emerging technologies present another challenge. The institute is adapting swiftly to these changes, ensuring that the curriculum and training programs are aligned with the latest industry standards.

Emerging Online Education: The rise of online education platforms poses a significant challenge, as they offer flexible, accessible, and often more affordable educational alternatives. To compete, your institute needs to leverage technology to enhance traditional e-learning methods, possibly by offering hybrid models that combine in-person and online education. Embracing digital tools and resources can help maintain competitiveness in this rapidly changing educational landscape.

Rise of Private Universities: The increasing number of private universities in and around Pune adds another layer of competition. These institutions often have substantial financial backing, allowing them to invest heavily in infrastructure, faculty, and marketing, thereby attracting top-Tier students. To remain competitive, institute must focus on its unique strengths, such as specialized programs, strong industry connections, exceptional faculty, and effectively communicate these advantages to potential students.

Current Job Situation in the IT Industry: The fluctuating job market in the IT industry poses a notable challenge. While IT remains a significant employment sector, periodic downturns and rapid technological advancements can lead to uncertainties. The institute must ensure its IT curriculum is cutting-edge and responsive to industry needs, preparing students to adapt to these fluctuations and maintain their competitiveness in the job market.

Addressing these challenges requires a strategic approach that includes continuous infrastructure upgrades, fostering strong industry partnerships, embracing technological advancements, and enhancing marketing efforts. By focusing on these areas, your institute can better position itself to navigate the competitive educational environment in Pune and beyond, ensuring it remains a preferred choice for students seeking quality education and career opportunities

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

For any successful academic program in the Institute groundwork lies in its curriculum planning and implementation. Our Institute has carried out methodically linking the course content, and teaching pedagogies that will be used to impart knowledge. Effective curriculum planning ensures that students are open to the elements of relevant, updated, and comprehensive content. In implementation, it is seen that teaching pedagogy is allied with the targets set during planning.

Academic flexibility is vital in the culture of an Autonomous Institute. With the rapid advancement of industries and technologies, Pune being an industry and start-up hub, it is essential to remain malleable for an institute. In institute suppleness allows as to introduce new courses, amend existing ones, and at times change teaching methodologies based on current trends and demands. During the pandemic, this adaptive practice of the faculty members and students helped the Institute to migrate to digital platforms seamlessly. Curriculum

enrichment at RSCOE emphasizes the enhancement of the existing curriculum by integrating additional resources, projects, workshops, and internship programs. For instance, a course on Professional practices is enriched by involving the Builders Association of India, Pune. Such initiatives provide students with practical insights and exposure, enriching their academic experience as a whole. Courses address employability, entrepreneurship, and skills that cater to industrial needs at local and global levels. The buckets for electives, value-added courses, and skill-based courses are zest of the curriculum.

Academic feedback is the backbone of continuous improvement in curriculum planning. Feedback is sourced from various stakeholders, including students, faculty, parent and alumni. Regular feedback sessions have helped the Institute to identify gaps in the curriculum or teaching methodologies For instance, courses on Project based learning, Start up policy ,Engineering design and innovation were introduced accordingly.

The curriculum planning and implementation are imperative for the success of any academic program. By ensuring academic flexibility, Institute remains pertinent and adaptable. Curriculum enrichment initiatives provide students with broader learning experience, and regular academic feedback ensures that the curriculum remains align with its intended objectives. Being autonomous college we have adopted NEP and flexibility in curriculum development

Teaching-learning and Evaluation

The institute makes commendable efforts to serve students of different backgrounds and abilities, through effective teaching-learning experiences. The students from various part of states and countries are admitted to the institute. As the institute is the empowered autonomous institute affiliated with one of the renowned universities in the state of Maharashtra, the demand ratio for all the programs is very high. The institute also welcomes differently-abled students. The institute is majorly known for its strong and distinguished teaching-learning process which is completely student-centric. The emphasis of Teaching-Learning is on outcome-based education which helps in fostering global competencies and inculcating value systems among students. With the evolution in the pedagogies in the education era, all the new methodologies viz. experiential learning, participative learning, peer learning, role play, and many more are regularly and intensively used by all teachers in the institute. Students are regularly encouraged to participate in a variety of quizzes, and group discussions and are also motivated for field and case study-based assignments. Especially the categorization of the students into advanced and slow learners is facilitated by the need-based application of questions and assignments. The institute greatly focuses on the use of various assessment and evaluation processes that are recommended by national education policy. Use of online teaching learning platforms viz. MOOCs, SWAYAM, NPTEL, VLabs, and many more are also encouraged for their best use by the students. The well-qualified and experienced faculty members are also enabled to use various ICT-based tools for their teaching and learning through continuous training, workshops, and FDPs. All classrooms as well as Labs are ICT-enabled. Various academic and co-curricular activities are well planned and disseminated to all the major stake holders of the institute through the academic calendar well before the commencement of each year. Each faculty member is assigned a group of about 20 students for the mentorship wherein various problems of students with academic, financial, and even personal are addressed and well supported. The use of an ERP system for academics and examination activities always results in error-free and highly efficient processes.

Research, Innovations and Extension

Jaywant Shikshan Prasarak Mandal's Rajarshi Shahu College of Engineering (JSPM'S RSCOE) is committed

to fostering research and innovation culture within its academic environment. Faculty members are proactively engaged in cutting-edge research projects, they have secured funding from wide spectrum of prestigious funding agencies like DST, AICTE, SPPU and various industries, funding of Rs.3.4 Crores is received by the faculty members in last five years. Institute is very instrumental in promoting the research culture by providing the seed money to the faculty members, Amount of Rs.18 Lakhs of seed money provided by the institution during the review period. Establishment of Incubation centre, R & D cell and IPR cell at the institute creates complete ecosystem for the innovations. Formation of research advisory committee, ethics policies and plagiarism tools ensure commitment of maintaining the highest standards of academic integrity. Currently 111 PhD. completed faculty are working in the institute, 37 faculty members are registered guides and more than 100 students are pursuing their PhD. under their supervision. Research publications are one of the major benchmark achieved by the faculty and the students of RSCOE. Around 600 journal papers and 315 book chapters are published by the faculty in reputed indexed journal like SCI, WoS, SCOPUS and UGC care in last five years.. Faculty members impressive citations count and h-index reflects their research inclination and awareness. Research consultancy is one of the prominent areas where faculty are doing well and generating funds through it, around Rs. 90 Lakhs is generated in the last five years. Beyond its research and academic pursuits, RSCOE is actively engaged with the community services through an extensive array of extension and outreach initiatives, boasting an impressive student's participation. The institution has also active 85 functional MoUs, thereby fortifying collaborative ventures and the exchange of knowledge.

In conclusion, JSPM'S RSCOE is a dynamic hub of academic excellence and innovation, where faculty and students collaborate to push the boundaries of knowledge. Through a commitment to research, a robust undergraduate presence, and initiatives that promote a culture of innovation. RSCOE continues to excel and make a meaningful impact on the academic landscape.

Infrastructure and Learning Resources

The institution offers a well-developed infrastructure and various facilities designed to promote a research-driven and scientific culture. It provides ample teaching and learning spaces, including 43 classrooms, 80 laboratories, a workshop, five seminar halls, 11 tutorial rooms, and four conference halls. The institution is well-equipped with modern computing devices like computers, laptops, servers, printers, and networking tools. ICT resources available include interactive whiteboards, virtual reality (VR) equipment, barcode scanners for library and inventory management, along with Learning Management Systems (LMS), digital libraries, virtual labs, technical labs, and lecture capture systems. Moreover, the institution features an auditorium, a central library, a gym, sports grounds, and separate rooms for boys and girls, alongside supportive facilities like an ambulance and ATM. The library operates on a partially automated system using AUTOLIB NG, an integrated library management system acquired in 2011, which enhances the library's efficiency by streamlining processes such as acquisition, cataloging, circulation, and reporting. The institution also has a dedicated media studio with editing and mixing tools for e-content creation. Through Impartus, a comprehensive video learning platform, the institution supports lecture capture, flipped classrooms, and virtual learning, enabling faculty and students to create and share content on social media. All classrooms are equipped with ICT tools, and faculty members make use of freeware for effective blended learning delivery. Digital competence is further encouraged by training faculty in the use of platforms like Zoom, Google Meet, and Webex. E-learning is enhanced by cloud-based ERP software, Eduplus, and Moodle LMS. Advanced technologies like Smart Interactive TVs, projectors, and the PeopleLink PDS-ICB-4K Smart Board have significantly improved the teaching and learning experience. The maintenance procedures cover various areas such as IT facilities, the library, electrical systems, classrooms, laboratories, machinery, sports facilities, and the water purification system. These processes are efficiently managed using the UV desk system to ensure smooth operation and upkeep across the

institution

Student Support and Progression

JSPM's Rajarshi Shahu College of Engineering (RSCOE), student support and progression are integral to ensuring academic success and holistic development. The institution offers a wide range of support services to foster the growth and well-being of students. Dedicated mentorship programs help students navigate their academic journey while providing personalized guidance on career planning and skills development. Additionally, RSCOE provides financial assistance through scholarships for meritorious and economically disadvantaged students, empowering them to focus on their studies without financial concerns.

The Training and Placement Cell at RSCOE is actively involved in enhancing employability by offering pre-placement training, soft skills workshops, and mock interviews. Industry tie-ups and internships enable students to gain practical exposure and prepare for future careers. Regular academic audits, performance tracking, and feedback mechanisms ensure that students are consistently progressing toward their goals.

RSCOE strongly encourages student participation in a variety of co-curricular and extracurricular activities. The institution promotes innovation and creativity through events like project competitions, hackathons, and technical symposiums. Clubs such as "Shashwat", "Rotract Club of RSCOE", MESA (Mechanical Engineering Students' Association) Smart India Hakathon and Mechagranics etc., organize workshops, guest lectures, and hands-on sessions, fostering a culture of knowledge sharing. Annual festivals like Innovision as "Tech Fest" and Gandharva as "Cultural Fest" provide a platform for students to showcase their talents, from engineering projects to cultural performances.

Students are also encouraged to engage in sports, social service, and leadership activities, contributing to their overall personality development. Participation in the Institution's Innovation Council (IIC) and Entrepreneurship Development Cell (EDC) helps students to develop entrepreneurial and leadership skills.

RSCOE maintains a strong connection with its alumni, recognizing their role in guiding current students and enhancing the institution's reputation. Alumni are called as examiners for conducting project and Internship reviews. Alumni worked as mentor. An alumnus contributes some equipment for laboratory. Alumni contribute by offering career guidance, internships, and job placements to graduating students. Regular alumni meetups, webinars, and expert sessions facilitate knowledge sharing and networking. Through active engagement, RSCOE alumni play a vital role in enriching the academic and professional landscape of the institution.

Governance, Leadership and Management

JSPMs Rajarshi Shahu College of Engineering ensures the institution's mission and strategic goals are met. The institute's mission statement delineates its unique qualities in terms of addressing societal needs and aligning its vision and mission with higher education objectives. The Governing Body (GB) and associated statutory and nonstatutory committees of the institute ensure alignment of policy statements and action plans with the institute's vision and mission. The well-defined strategic development plan of the institute formulates a clear vision, mission, quality policy, core values, institutional strategic goals, and long/short-term strategies to achieve these goals.

The institute has developed standard operating procedures for various academic and administrative activities for standardization and quality assurance in academic, as well as administrative levels. For effective governance, the institute has well defined HR policy, Service Rules, a Code of conduct, Good Governance handbook. The academic record of students and faculties is maintained through an ERP system called Edu-Plus. Faculties and Students are actively involved in various governance committees.

Rajarshi Shahu College of Engineering has implemented robust frameworks to ensure staff growth, well-being, and productivity. This is achieved through an integrated approach involving performance appraisal, welfare measures, and avenues for career development or progression. These systems enhanced the individual performance of the staff and also contributed to the overall effectiveness of the institution.

For teaching staff, career development often includes opportunities for advanced research, participation in academic conferences, and collaboration with other institutions.

We organize faculty development programs and skill-based training for both teaching and non-teaching staff. These programs involve workshops, certification courses, or even higher education sponsorships. Providing staff with opportunities to enhance their skills ensures they remain competitive in an ever-changing professional environment.

The internal quality assurance Cell (IQAC) of the institute is responsible for continuous improvement of quality and achieving academic excellence. The institution has mechanisms for academic and administrative auditing. It adopts quality management strategies in all academic and administrative aspects. The institution IQAC adopts a participatory approach in managing its provisions.

Institutional Values and Best Practices

Rajarshi Shahu College of Engineering (RSCOE) prioritizes values such as integrity, inclusivity, and excellence, fostering a culture of ethical responsibility. The institution emphasizes social responsibility through community engagement and sustainable practices. RSCOE runs best practices include industry internships and product design and development, enhancing learning outcomes. RSCOE distinct in Pimpri-Chinchwad area of Pune with its Institutions Innovation Council (IIC), Innovation and Incubation Foundation (IIF), and adequately equipped infrastructure, which nurture academic skills, leadership, and social awareness.

Promoting gender equity is essential, with various committees and clubs ensuring equal opportunities for all students. RSCOE maintains a safe environment through its Anti-Sexual Harassment Cell, Grievance Committee, and Student Welfare Committee. The institute also supports renewable energy initiatives, including a solar PV system and solar water heating for hostels. Additionally, a biogas plant converts canteen food waste into biogas, while sensor-based automated labs and LED lighting enhance energy conservation across campus.

Waste management in institute includes separate bins for dry and wet waste, disposal machines for sanitary waste, e-waste recycling, and safe chemical handling to ensure environmental protection. Water conservation efforts include rainwater harvesting and managed bore wells and tanks, overseen by a dedicated maintenance team.

RSCOE promotes public transport, electric vehicles, carpooling and cycling to reduce pollution. The institute conducts energy and environmental audits and participates in sustainability initiatives like river cleaning and tree plantation, earning awards for its commitment to environmental efforts.

Inclusivity is further promoted through a barrier-free environment featuring ramps, accessible washrooms, signage, and assistive technology, ensuring that divyangjan can utilize campus facilities. RSCOE embraces diversity through comprehensive policies, educational programs, support systems, and diverse recruitment practices, fostering tolerance and harmony.

The curriculum integrates diverse activities to promote responsible citizenship and appreciation for constitutional values. A prescribed Code of Conduct for all stakeholders is monitored to ensure adherence, supported by professional ethics programs. Comprehensive internship and training programs enhance student employability, preparing them with essential skills for successful placements. Product design and development are vital for addressing complex challenges, ensuring innovations are effective and aligned with user needs.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	JSPM'S RAJARSHI SHAHU COLLEGE OF ENGINEERING
Address	JSPM Rajarshi Shahu College o Engineering Ashok Nagar, Tathawade, Pune-33
City	Pune
State	Maharashtra
Pin	411033
Website	www.jspmrscoe.edu.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Director	Santosh P Bhosle	020-67127777	9822768246	020-67127777	rscoe@jspm.edu.in
IQAC / CIQA coordinator	Rachayya R Arakerimath	-	9890835363	-	deaniqac@jspmrscoe.edu.in

Status of the Institution	
Institution Status	Private and 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	
Date of Establishment, Prior to the Grant of	01-01-2001

'Autonomy'	
Date of grant of 'Autonomy' to the College by UGC	10-07-2018

University to which the college is affiliated

State	University name	Document
Maharashtra	Savitribai Phule Pune University	View Document

Details of UGC recognition

Under Section	Date	View Document
2f of UGC	07-03-2016	View Document
12B of UGC	07-03-2016	View Document

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	05-06-2024	12	NA

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?	No

Location and Area of Campus

Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	JSPM Rajarshi Shahu College of Engineering Ashok Nagar, Tathawade, Pune-33	Urban	3.5	14164

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	BTech,Mechanical Engineering,	48	pass HSC with PCM and Non zero Score in MHTCET	English	180	180
UG	BTech,Civil Engineering,	48	pass HSC with PCM and Non zero Score in MHTCET	English	60	60
UG	BTech,Electrical Engineering,	48	pass HSC with PCM and Non zero Score in MHTCET	English	60	60
UG	BTech,Computer Engineering,	48	pass HSC with PCM and Non zero Score in MHTCET	English	180	180
UG	BTech,Information Technology,	48	pass HSC with PCM and Non zero Score in MHTCET	English	120	120
UG	BTech,Computer Science And Business Systems,	48	pass HSC with PCM and Non zero Score in MHTCET	English	60	60
UG	BTech,Automation And Robotics,	48	pass HSC with PCM and Non zero Score in MHTCET	English	60	60

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UG	BTech,Electronics And Telecommunication,	48	pass HSC with PCM and Non zero Score in MHTCET	English	120	120
PG	Mtech,Mechanical Engineering,Design Engineering	24	Pass UG and Non zero score Gate	English	24	17
PG	Mtech,Civil Engineering, Structural Engineering	24	Pass UG and Non zero score Gate	English	24	24
PG	Mtech,Computer Engineering,Computer Engineering	24	Pass UG and Non zero score Gate	English	24	21
PG	MBA,Mba,Master of Business Administration	24	Pass UG and Non zero score Gate	English	60	60
PG	MCA,Mca,Master of Computer Application	36	Pass UG and Non zero score Gate	English	60	60
PG	Mtech,Electronics And Telecommunication,VLSI and Embedded Systems	24	Pass UG and Non zero score Gate	English	24	5
Doctoral (Ph.D)	PhD or DPhil ,Mechanical Engineering,	48	SPPU PET QUALIFIED	English	0	0
Doctoral (Ph.D)	PhD or DPhil,Civil Engineering,	48	SPPU PET QUALIFIED	English	0	0
Doctoral (Ph.D)	PhD or DPhil ,Computer Engineering,	48	SPPU PET QUALIFIED	English	0	0

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Doctoral (Ph.D)	PhD or DPhil,Mba,	48	SPPU PET QUALIFIED	English	0	0
Doctoral (Ph.D)	PhD or DPhil ,Electronics,	48	SPPU PET QUALIFIED	English	0	0

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	21				43				128			
Recruited	18	3	0	21	19	22	0	41	50	78	0	128
Yet to Recruit	0				2				0			
Sanctioned by the Management/Society or Other Authorized Bodies	2				0				19			
Recruited	2	0	0	2	0	0	0	0	9	10	0	19
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				48
Recruited	34	14	0	48
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				41
Recruited	23	18	0	41
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.	20	3	0	19	22	0	7	11	0	82
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	49	80	0	129
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		Total
	0		2		2

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

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Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	3002	52	0	0	3054
	Female	1079	13	0	0	1092
	Others	0	0	0	0	0
PG	Male	208	7	0	0	215
	Female	125	7	0	0	132
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0
Diploma	Male	780	0	0	0	780
	Female	317	0	0	0	317
	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	51	53	49	49
	Female	24	25	18	26
	Others	0	0	0	0
ST	Male	22	27	22	19
	Female	11	16	10	11
	Others	0	0	0	0
OBC	Male	68	69	51	52
	Female	35	42	43	44
	Others	0	0	0	0
General	Male	521	489	449	478
	Female	154	148	132	156
	Others	0	0	0	0
Others	Male	56	65	56	49
	Female	31	37	30	32
	Others	0	0	0	0
Total		973	971	860	916

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Automation And Robotics	View Document
Civil Engineering	View Document
Computer Engineering	View Document
Computer Science And Business Systems	View Document
Electrical Engineering	View Document
Electronics	View Document
Electronics And Telecommunication	View Document
Information Technology	View Document
Mba	View Document
Mca	View Document
Mechanical Engineering	View Document

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	<p>Multidisciplinary education in engineering involves integrating knowledge from multiple disciplines, while interdisciplinary education blends insights and methodologies from different fields to solve complex problems. Both approaches ultimately enhance innovation and creativity in engineering solutions. NEP 2020 emphasizes recognizing, identifying, and fostering the unique capabilities of each student, by sensitizing teachers and parents to promote each student's holistic development in both academic and non-academic spheres. The institution offers multidisciplinary and interdisciplinary courses to the students, allowing them to choose their subjects, courses, and programs from different areas as per NEP 2020. In this regard, the institute has revised its First Year to Final Year B. Tech curriculum. (2023 Pattern - All Programs) commenced from the Academic Year 2023-24. The institute offers open electives where students have the liberty of choosing open electives from other engineering disciplines to discover their interests during their learning journey, and this would enable them to forge their path. The institute also offers Humanities, Science, and Mathematics as an integral part of the engineering courses with major/minor and honor courses in</p>
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	<p>various engineering disciplines. A research culture is enhanced by determining a research theme or thrust areas. Thrust areas will be selected based on national and State priorities/missions. The Institute organizes an interdisciplinary international conference every year to promote a blending of different disciplines leading to the exchange of research ideas and knowledge on topics of overlapping domains. NEP 2020 emphasizes setting up a holistic environment on campus through various clubs and activities. The Institute has identified Major Mandatory Courses and Major Electives based on the prerequisite knowledge the entry-level students acquired. The diversity of the multidisciplinary flexible curriculum is captured in some generic entry-level open electives. Different skill enhancement courses are also coined. Our curriculum has Human values and Ethics focuses on student growth and is a regular credit-based course. Our is an autonomous institute that has been implementing Multidisciplinary education in the form of track-based classes, minors, etc. for the last 3-4 years.</p>
<p>2. Academic bank of credits (ABC):</p>	<p>The Academic Bank of Credit (ABC) allows students to accumulate and transfer credits from various institutions, enhancing flexibility in their engineering education. As per the directions of the Govt. of India NAD-ABC, the institution has taken the initiative to fulfill the requirement of Academic Bank of Credits (ABC) as proposed in NEP-2020 by appointing NAD Nodal officer. All the students have created their ABC ids and NSDL login. The institution has registered under the ABC to permit its learners to avail the benefit of multiple entries and exit during the chosen program through the NAD web portal. The institution has collaboration with various international universities where students can also choose various courses from international universities. The facility of transferring credit has been provided through the NAD web portal. It aims to provide a more personalized learning experience and facilitate smoother program transitions. The new pedagogy, textbook, reading material selections, assignments, and assessments through various national and international collaborations with universities. The faculty members are deputed for training in the various IITs, NITs, and reputed institutes to design the curriculum as per NEP-2020</p>

	<p>and decide the pedagogy. The institute has a separate cell of International Relations (IR), with MoUs with various international and national universities. This collaboration helps to implement the Academic Bank of Credits (ABC) in the institution given NEP-2020. Pedagogy, textbooks, reading material selections, assignments, and assessments through various national and international collaborations with universities. This collaboration helped to implement the Academic Bank of Credits (ABC) in the institution given NEP2020. The examination process is fully automated and uses Eduplus software where all credits and evaluation process is done.</p>
<p>3. Skill development:</p>	<p>Skill development encompasses several vital attributes, including identifying one's skill gaps and enabling one to develop those skills to achieve their goal. Along with technical skills students must possess interpersonal skills too to bag suitable placements, considering this dire requirement institute provides the necessary training from the first year itself. 1. The students are provided with soft skill sessions from the first year of engineering which helps them to strengthen their communication skills 2. To strengthen their interpersonal skills, the Institute has integrated business Communication and Values Science as a part of the curriculum, Japanese language training in association with Accenture. 3. For second-year students we provide dedicated In-House Aptitude training. 4. From the third year we train students in vocational skills such as Career Readiness Training, and Auto CAD. 4. Pre-placement activities such as mock interviews, Group Discussions, and Extempore are conducted 5. The curriculum included ethics and values in order to improve student conduct, helping them to make the right choices, lead their professional lives, and become ethical individuals. Through Subjects like value science, students are enlightened with the ethics required to sustain a workplace environment and thrive in society. Personal counseling through a dedicated on-campus counselor makes students ready for ethical values. SWOT analysis. Institute's efforts 1. Credit score pattern—Every student should appear for language proficiency tests in English, German, Japanese, and French. The credit score will be a minimum of 1 and a maximum of 4 points. 2. Several sessions by industry veterans are conducted such as a</p>

	<p>motivating session by An Army veteran, skill development training for future readiness by the American India Foundation, and a Center of Excellence MoU with Tech Mahindra. Technical training through the Fluid Power Society of India & Automotive competitions like Supra for Mechanical, Transformer, Lamp & EV projects, PLC for Electrical, 3. the 6-month full-time internship in collaboration with different industries to gain practical knowledge and industry norms in advance. The program involves internships to acquire various discipline-related skills and technologies and develop their technical and professional knowledge. 4. A Few Unified platforms for skill mapping are Swayam, Coursera, and NPTEL. These platforms help students to learn on their own with certifications. 5. Online platforms like Unacademy, Cocubes, bvetrainophilic, E-RSCOE YouTube channel support students to learn and gain knowledge. 6. Few CSR training through Barclays GTT & ZENSAR for Python, Java, and Software testing. Such training helps students with lower financial categories. The new curriculum is focused on a student-centered instruction model.</p>
<p>4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):</p>	<p>Educating about Indian culture mediates the sense of self-esteem in an individual because it involves certain aspects of their lives, like beliefs, values, etc., which become the forefront of how one measures their worth. It builds self-esteem, creativity, and problem-solving skills. Our institute has signed a MoU with IIT Ropar and industries like TCS, KPIT, and Veritas for curriculum development which includes curriculum based on the needs of industry, courses for skill development, interdisciplinary knowledge, the inclusion of different value-added courses, societal problems, internship, industrial projects adapting the modern techniques in teaching-learning process, etc. A discussion among the faculty members has been initiated on the key principles of NEP such as diversity for all curriculum and pedagogy with technological innovations in teaching and learning, encouraging logical decision-making and innovation, critical thinking, and creativity. To provide holistic academic growth among students, an Interdisciplinary curriculum has been proposed which gives freedom to the student to choose their preferred options from the range of programs offered by the institution. All the courses offered by the institute are</p>

	<p>Choice Based Credit System (CBCS). A few of (them also include value-based and environment-based subjects like professional Ethics, Environmental studies, principles of Management, project management, etc. All programs are designed in such a way that students get maximum flexibility to choose elective courses. The institute also offered credit courses through MOOCs, Coursera, SWAYAM, etc.</p>
<p>5. Focus on Outcome based education (OBE):</p>	<p>The OBE framework adopted by institution revolves around three important elements: a) description of the student's learning outcomes (COs, POs & PSOs) in the form of a verb (learning activity), its object (the content), and specification of the context and a standard the students are to attain; b) creating a learning environment using teaching/learning environment activities that address that verb and therefore are likely to bring about the intended outcome and c) using assessment tools. A Course Outcome (CO) is a measurable, observable, and specific statement that indicates what a student should know and be able to do as a result of learning. The compliance of module outcomes with each PO and PSO is verified based on action verb, content, and the context of application/performance. The curriculum gap for PO / PSO attainment at course level and at the program level is identified. All activities are mapped to POs and PSOs related to curriculum gaps and content beyond syllabi. Feedback on bridging the curriculum gap and delivery of content beyond syllabi is collected from students. The COs of each course shall be mapped to POs and PSOs along with their correlation strength mentioned in three levels (slight-1, moderate-2, substantial-3) Direct Internal assessment of COs calculated through various tools like mid-sem exams, tests, assignments, MCQ, project, seminar etc on every CO. The direct external CO assessment is based on end-semester exams. The Indirect assessment at the course level is carried out by conducting a course-end survey, lab end survey. The indirect attainment of POs and PSOs is calculated by exit survey, employer's survey, co-curricular activities, extracurricular activities etc. Based on the percentage of CO attainment, the direct assessment of POs and PSOs are calculated. The three levels of PO/ PSO attainments are decided by BOS depending on</p>

	<p>previous attainments levels. In case the PO/PSO has achieved the expected value, then the target is increased by 5% otherwise the previous target is retained and an action plan is prepared for improvement. Practices of the institution about outcome-based education (OBE) in view of NEP 2020. 1. Multiple Entry and Exit The OBE setup at RSCOE is implemented progressively. After every semester the CO attainment and partial Program outcome attainments are calculated. Courses like summer internships and certification programs are mapped to Program outcomes. In the case of multiple-entry students, previous records are maintained in ERP. 2. The institute uses ERP software which facilitates the OBE and Attainment. 3. Multidisciplinary approach through departments like arts, science, humanities, and Interdisciplinary courses by forming clusters of different departments at the institute level. Students are allowed to select elective courses and open electives. The autonomous status helps the students select a course of their choice from other departments and import the assessment required for attainment. 4. Credits for club activities: For PO 6 to PO 12, professional club activities, and student association activities are considered. Activities, where students can earn credits, are disseminated among the students via websites and notices.</p>
6. Distance education/online education:	<p>Distance education or online education in engineering refers to learning conducted via the Internet, allowing students to access course materials, lectures, and assignments remotely. Key features include: 1. Flexibility: Students can learn at their own pace and schedule, making it easier to balance work and study. Many of the faculty give online assignments and they are solved as per student time and submitted before the last date. 2. Accessibility: Provides opportunities for students in remote areas or those with commitments that prevent traditional classroom attendance. Our faculty has few videos, and online material to access as per the student requirement. 3. Diverse Resources: Online platforms often offer a range of multimedia resources, such as videos, simulations, and interactive labs. Few of our faculty have V-Lab sessions under IIT Bombay. Also, we are the nodal center for the same. 4. Global Collaboration: Students can collaborate with peers</p>

and instructors from around the world, enhancing learning experiences. Most of the students have done online internships and training courses from Malaysia University, Taiwan, and have achieved certifications. Online teaching and learning make students more responsible for their education. ICT helps students get ready by letting them explore, assess, share, and present information in a fairly organized way. Modern learners are good with technology, so using ICT in their everyday learning makes them feel and look good. Students are encouraged to learn value-added courses, skill development courses, etc. Using ICT to teach and learn is part of the education system today. ICT-based education helps, improves, and uses information delivery in the best way possible. The classrooms have LCD screens and Wi-Fi, which makes it easy for teachers to upload their lessons and materials and encourages them to do so. Faculty members get regular training and development on how to make e-content. For each module, the faculty makes e-content and puts lecture videos, PPTs, and other learning materials in the EDuPlus software. During live classes, counseling sessions, and mentoring, the teachers talk to the students through the EDuPlus mobile app. Students use the app on their phones to turn in assignments, take MCQ tests, and take descriptive online tests. They can get course materials at any time from the EDuPlus software. Our institute offers some courses online through NPTEL, Swayam etc. In March 2020 when COVID-19 forced a mass shutdown of the institute's physical facilities, the cyber facilities of various online platforms search ads Google Meet, zoom, Microsoft Teams, and Cisco Webex were used very efficiently by the faculty and students alike. This advanced familiarity with the contents enabled the institute to bring its entire teaching and learning on schedule Time. Post-pandemic, the trend has continued, and blended learning has been incorporated with a bigger effect and impact on online learning. Consistent with the national education policy practices of encouraging the use of online platforms for teaching-learning purposes, the institute has been using the Swayam platform for teaching-learning.

Institutional Initiatives for Electoral Literacy

<p>1. Whether Electoral Literacy Club (ELC) has been set up in the College?</p>	<p>Yes we have ELC club in the college and is active. The Social Welfare & Development Committee and the Events Planning & Execution Committee jointly undertake all activities related to electoral literacy. The Club is coordinated by Dean Student Activities Dr.R.A.Dubal who is the faculty advisor and Prof.Mahesh Ghotkar, Nodal Officer</p>
<p>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?</p>	<p>Dean Student Activities Dr.R.A.Dubal, is the faculty advisor Prof.Mahesh Ghotkar, Nodal Officer and SDO, Campus Ambassador Mr.Javed Mujawar and Student Coordinator Mr.Mrunal Sastrakar, are coordinators for this purpose. Two major activities are undertaken every year – the first and foremost important activity is the registration of eligible first-year students as voters in the first two months after joining the institute and the second is organizing an awareness camp highlighting the importance of elections in a democratic system and making them aware about voter rights.</p>
<p>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.</p>	<p>Innovative activities are planned for the students by the SW&D Committee and EPEC Committee in voter registration of students and their eligible friends outside the institute. • Assisting district election administration voter awareness campaigns, and promotion of ethical voting. We also help and coordinate for the students to register for any upcoming democratic elections. We frequently conduct voter awareness campaign's for students and faculty</p>
<p>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.</p>	<p>The socially relevant projects/initiatives taken by the College in electoral-related issues under Dean Students and ELC coordinators, especially research projects, surveys, and awareness drives were also planned and held. Extensive awareness drives, supporting the Election of Commission of India officials in institutes and outside institutes, and student voter registrations are the major activities undertaken so far.</p>
<p>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</p>	<p>Mr Tejas Gujrathi from WE Foundation, Mrs.Minal Kalaskar, Dy. Collector has been liaising with the institute for the past two years. The ELC Committee, along with the government authorities, undertakes a</p>

students as voters.

mega student voter registration drive for all eligible students in the first two months of their enrollment. Around 500+ students admitted in the first year are registered as voters through this joint initiative.

Extended Profile

1 Students

1.1

Number of students on rolls year wise during last five years

2023-24	2022-23	2021-22	2020-21	2019-20
3857	4325	4122	4115	3747
File Description		Document		
Provide Links for any other relevant document		View Document		
Institutional data in the prescribed format (data		View Document		

1.2

Number of final year outgoing students year wise during last five years

2023-24	2022-23	2021-22	2020-21	2019-20
1132	1153	1071	1138	936
File Description		Document		
Provide Links for any other relevant document		View Document		
Institutional data in the prescribed format (data		View Document		

2 Teachers

2.1

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

2023-24	2022-23	2021-22	2020-21	2019-20
197	201	184	186	185
File Description		Document		
Provide Links for any other relevant document		View Document		
Institutional data in the prescribed format		View Document		
Certified list of full time teachers		View Document		

2.2

Total number of full time teachers worked/working in the institution (without repeat count) during last five years:

Response: 292

File Description	Document
Provide Links for any other relevant document	View Document
Institutional data in the prescribed format	View Document

3 Institution

3.1

Total expenditure excluding salary year wise during the last five years (INR in lakhs)

2023-24	2022-23	2021-22	2020-21	2019-20
4061.76	1727.04	1032.36	1185.37	1132.86
Other Upload Files				
1	View Document			

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1

Curricula developed and implemented have relevance to the local, regional, national, and global developmental needs, which is reflected in the Programme outcomes (POs) and Course Outcomes(COs) of the Programmes offered by the institution

Response:

JSPM's Rajarshi Shahu College of Engineering is an Empowered Autonomous Institute affiliated to Savitribai Phule Pune University. To promote the vision and mission of the Institute, the curriculum of all the programmes of the Institute is supported by amalgamation of renowned academic institutes and industries viz: IIT Ropar, Tata Consultancy Service (TCS), KPIT Technologies, Veritas, Bentley Institute, Janatics and TATA Automation Ltd (TAL). This collaboration holds the key to nurture and develop confident, innovative and highly skilled individuals. The members of the various committees in the Institute viz: Academic Council, Board of Studies and Internal Quality Assurance Cell are comprised of experts from industry and academia. The committee periodically evaluate and recommend necessary changes in the curriculum which include new-age technologies and emerging research areas. This has ensured that our graduating engineers can compete on a global platform and possess expected global attributes.

The Institute has a meticulous procedure for development, revision and implementation of curriculum and is aligned with the local, national, regional and global developmental needs. The Institute follows the philosophy of the Outcome Based Education (OBE) process and there is a structured process to frame and evaluate the attainment of the Programme Outcomes (POs), Programme Specific Outcomes (PSOs), and Course Outcomes (COs). The effective implementation of the OBE is reflected by the fact that all our undergraduate programs have been accredited by NBA since 2012. Also, our postgraduate programs (Structural Engineering and Design Engineering) were accredited by NBA in 2023.

The curriculum autonomy offers the opportunity to frequently revise the curriculum based on needs and suggestions of the stakeholders. The curriculum incorporates advanced discipline knowledge, modern skills, and their applications while remaining flexible, dynamic, and responsive to changing demands. Students can choose from a basket of courses and have an option for Honors, major specialisation, minor specializations, and a variety of open electives from across disciplines. There is a flexibility in curriculum which encourages students to benefit from the online courses like NPTEL/SWAYAM/MOOC. Students also participate in Hackathons which allow them to work on local, national and global challenges.

The Curriculum has incorporated the new National Educational Policy (NEP) 2020 revisions to prepare graduates who are skilled, creative, innovative and possessing ethical values. Courses such as Community Project have been introduced, which enable the students to analyse local and regional needs and provide solution based on their engineering knowledge acquired. These courses enable students to

take up real life problems thus helping the society at large. The value-added courses, ability enhancement courses, skill enhancement courses, multidisciplinary courses, internships, and projects constitute to about 50% of the total credit for all programmes. In addition, co-curricular and extra - curricular activities, aligned with the overall development of the students, are also given credit. This has an impact on the national and global development needs. Some courses like Innovation and Entrepreneurship are in sync with Start-Up India Policy. These courses help to foster skill and thinking thus leading to a well-rounded competence needed to acquire entrepreneurial skills.

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

1.1.2

The programmes offered by the institution focus on employability/ entrepreneurship/ skill development and their course syllabi are adequately revised to incorporate contemporary requirements

Response:

JSPM's RSCOE is dedicated to offer the best of comprehensive education, incorporating the latest development in all knowledge domains. The Programs offered at institute are competently designed to improve skill development of the students which ensures employability. It concurrently encourages expertise for entrepreneurship. The students are trained to meet the challenges of the contemporary job market. The courses of all the programs offered at RSCOE emphasize on contemporary knowledge and skills which privileges employability of the graduates. The institute contemplate on the idea of inculcating well-built basics understanding of all the knowledge domains. The programs offered in the institute are continuously reviewed and revised in consultation with all the stake holders.

Entrepreneurship : The institute keenly focus on budding and nurturing the students to develop entrepreneurial thinking. The students are mentored to learn the rudiments of entrepreneurship and to attain this objective continuous development in the courses is carried out. The curriculum include learning modules on entrepreneurship. Our preminent recruiters in core domain like KPIT,VW, BOSCH, Schnieder Electric, GE Aerospace, GKN Fokker, Inteva Products,Emerson are the driving force. Our IT partners Cognizant, Capgemini., Accenture,TCS are offering unparalleled support for our efforts.The most modern technology is reflected in the curriculum. The teaching pedagogy implemented in the Institute majorly includes hands on trainings be workshops, seminars, conferences etc. The institute provides opportunities to the aspiring entrepreneurs through access to incubation centre, mentorship programs and networking opportunities. We have Section 8 company registered to help for startups.

Skill Development: The programmes offered at the institute are directed towards skill development. The components on skill development come as an integral feature of every programme of the institute. The different programs aim to train the students with diverse set of skills which are essential for success in

the contemporary world. The Institute regularly conducts workshops on Leadership, Communication Skills, Critical – Thinking, Problem – Solving, and Team – Building etc. Imperative trainings on latest developments in every knowledge domain is regular practice. The amendments in the syllabi are carried out in consultations with the experts from relevant industry. The resolutions passed in the meetings of Board of Studies are further recommended to the Academic Council for due approvals and implementations. Simultaneously, the faculty members actively participate in workshops, conferences and colloquiums to keep abreast with the latest developments in every knowledge domain. The consequent paradigm has empowered our students with highest packages from 14.6 lacs to 1crores. The enterprises like Nutanix(18-29 LPA), Goldman Sachs(32LPA), Amazon (42 LPA), ADOBE(47 LPA) have complemented our curriculum.

The institute puts great emphasis on the feedbacks from its students, alumni, industry experts and recruiters and has a well established feedback mechanism which carefully collects the feedbacks from all the stakeholders. The feedbacks are professionally analysed and are used as inputs in curriculum improvements. Thus developed curricula are more comprehensive and competency boosters enhancing the employability quotient of the graduates. Our curriculum fosters the entrepreneurship, skills and employability through our courses in each faculty of Engineering. The courses are trailed from UG to PG level.

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

1.2 Academic Flexibility

1.2.1

Percentage of new courses introduced out of the total number of courses across all programmes offered during the last five years

Response: 23.76

1.2.1.1 Number of new courses introduced during the last five years:

Response: 1077

1.2.1.2 Consolidated number of courses offered by the institution across all Programmes (without repeat count) during the last five years :

Response: 4532

File Description	Document
Subsequent Academic Council meeting extracts endorsing the decision of BOS	View Document
Minutes of Board of Studies meeting clearly specifying the syllabus approval of new courses	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

1.3 Curriculum Enrichment

1.3.1

Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability and other value framework enshrined in Sustainable Development Goals and National Education Policy – 2020 into the Curriculum

Response:

The Institute is committed to fostering a holistic learning environment that extends beyond academic excellence, embracing values that shape responsible individuals and professionals. The various cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability, and other value frameworks enshrined in the Sustainable Development Goals (SDGs) and National Education Policy (NEP) - 2020 into our curriculum are discussed below:

Professional Ethics: Courses like Professional Practices in Civil Engineering, Employment Skill Development, Business Management, Web Technology, Human Values and Ethics, Human Resources Management, and Entrepreneurship Development are introduced in the curriculum to develop professionals with strong ethics and principles. Plagiarism check is mandatory for all institute research projects, publications and dissertations. All the post-graduate courses have incorporated Research Methodology as a mandatory course in their curriculum.

Gender: The institute promotes gender sensitivity, equality, and inclusivity, empowering students to challenge stereotypes and foster a culture of respect and empathy. Same dress code is prescribed for both the genders and equal opportunities are given for participation in student council, class representation, training programs, placement opportunities, co-curricular & extracurricular activities. There is an institute level committee for maintaining gender equality and sensitization. The campus is secured with 24/7 CCTV surveillance, security checks, and lady bouncers for women's safety. Separate hostels and washrooms for boys and girls are provided, along with healthcare services. Motivational lectures of eminent personnel have been organized to sensitize students on gender issues through Women empowerment and self-defence awareness programs.

Human Values: A compulsory course on 'Human Values and Ethics' is offered for all Programs in the

undergraduate level. The students are encouraged to practice the principles learned in classrooms in their everyday lives. The Institute regularly hosts National Level Workshop on 'Universal Human Values' under the aegis of AICTE. The faculty members teaching the course have undertaken relevant workshops offered by AICTE. The course aims to foster respect, honesty, integrity, accountability, and obedience among peers, superiors and juniors.

Environmental-and-Sustainability: There is a compulsory course on Environmental Studies in the curriculum to sensitize the students about environmental issues. Electives such as Air Pollution and Control, Green and Sustainable Building Technology, Wind and Solar Energy, and Energy Audit & Management prepare students for emerging environmental challenges, ensuring they are equipped to navigate a rapidly changing world. Shaashwat, an eco-sustainability club, is formed to address environmental challenges, promote responsible living, and unite individuals for a more sustainable future. The Club conducts several activities like Plastic Free Village, MegaTree Plantation Drive, Save soil Awareness Drive. The Institute has received a grant for the research project "Long lasting Dhoop batti"/ Insects repellent from Organic Solid Waste for Sustainable Income Generation" through Unnat Bharat Abhiyan. The students also actively participate in 'Jal Dindi', a river rejuvenation project in Pune. The Institute was awarded first position in 'Kirloskar Vasundhara Green College Clean College' for sustainable initiatives. The NSS activities, Swachh Bharath Abhiyan and health awareness camps play a vital role in promoting an inclusive environment towards regional and socioeconomic diversities.

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

1.3.2

Number of certificate/value added courses/Diploma Programmes offered by the institutions and online courses of MOOCs, SWAYAM/e-PG Pathshala/ NPTEL and other recognized platforms (without repeat count) where the students of the institution have enrolled and successfully completed during the last five years.

Response: 149

File Description	Document
List of students and the attendance sheet for the above mentioned programs	View Document
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	View Document
Institutional data in the prescribed format (data template)	View Document
Evidence of course completion, like course completion certificate etc	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

1.3.3

Percentage of programmes that have components of field projects / research projects / internships during the last five years.

Response: 100

1.3.3.1 Total Number of programmes that have components of field projects / research projects / internships (without repeat count) during the last five years

Response: 14

1.3.3.2 Total Number of programmes offered (without repeat count) during the last five years

Response: 14

File Description	Document
Sample Internship completion letter provided by host institutions	View Document
Sample Evaluated project report/field work report submitted by the students	View Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Program and course contents having element of field projects / research projects / internships as approved by BOS	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

1.4 Feedback System

<p>1.4.1</p> <p>Structured feedback for curriculum and its transaction is regularly obtained from stakeholders like Students, Teachers, Employers, Alumni, Academic peers etc., and Feedback processes of the institution may be classified as follows:</p> <p>Response: A. Feedback collected, analysed, action taken & communicated to the relevant bodies and feedback hosted on the institutional website</p>	
File Description	Document
Feedback analysis report submitted to appropriate bodies	View Document
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	View Document
Action taken report on the feedback analysis	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1

Enrolment percentage

Response: 90.37

2.1.1.1 Number of seats filled year wise during last five years (Only first year admissions to be considered)

2023-24	2022-23	2021-22	2020-21	2019-20
973	971	860	916	889

2.1.1.2 Number of sanctioned seats year wise during last five years

2023-24	2022-23	2021-22	2020-21	2019-20
1056	1056	1056	996	936

File Description

Document

Provide the relevant information in institutional website as part of public disclosure

[View Document](#)

Institutional data in the prescribed format (data template)

[View Document](#)

Final admission list as published by the HEI and endorsed by the competent authority

[View Document](#)

Document relating to sanction of intake as approved by competent authority

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

2.1.2

Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years

Response: 82.3

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

2023-24	2022-23	2021-22	2020-21	2019-20
298	334	279	282	351

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

2023-24	2022-23	2021-22	2020-21	2019-20
375	396	396	347	362

File Description	Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Institutional data in the prescribed format (data template)	View Document
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	View Document
Copy of the letter issued by the State govt. or Central Government Indicating the reserved categories(SC, ST, OBC, Divyangjan, etc.) to be considered as per the state rule (Translated copy in English to be provided as applicable)	View Document
Provide Links for any other relevant document to support the claim (if any	View Document

2.2 Catering to Student Diversity**2.2.1**

The institution assesses the learning levels of the students and organises special Programmes to cater to differential learning needs of the student

Response:

The institution employs a structured process to assess and support students' learning levels from the

beginning of their academic journey. Initially, students are classified as slow or advanced learners based on their academic performance and results from an entry-level test conducted during the Induction Program. This process helps customize support strategies for each student, ensuring that both advanced and slow learners receive the necessary academic assistance.

The initial assessment plays a crucial role in identifying students' baseline knowledge and learning gaps. Standardized tests ensure fairness in the evaluation process, and many institutions, particularly in India, use digital platforms for these assessments, providing immediate feedback. This approach aligns with the NAAC core value of leveraging technology effectively in educational assessments.

Rather than relying solely on the initial test, the institution also uses continuous assessment to monitor students' learning progress. This includes quizzes, assignments, and classroom interactions, ensuring that students are regularly evaluated throughout the academic year. Continuous assessment helps identify students who demonstrate improvement and ensures that learning interventions are adjusted accordingly. It also promotes well-rounded, competent individuals who contribute to national development, another key value emphasized by NAAC.

Faculty members provide personalized mentoring and guidance to students, offering tailored support based on their individual learning needs. These mentorship programs not only help students academically but also contribute to their personal growth, reinforcing the NAAC value of instilling a value system. Continuous monitoring through mentoring sessions helps keep both slow and advanced learners on track for academic success.

Support programs for advanced learners are designed to engage them in deeper areas of interest. These students are offered opportunities to participate in honors programs, which cover advanced topics beyond the regular curriculum. They are also encouraged to take part in research projects, internships, and preparation for competitive exams such as GATE, GRE, and CAT. These initiatives promote innovation and excellence, demonstrating the institution's commitment to fostering global competencies and contributing to national development.

For slow learners, the institution provides remedial classes to help them grasp fundamental concepts. Peer tutoring is another important initiative, where advanced learners assist slow learners in understanding difficult subjects. This collaborative environment supports the NAAC core value of inculcating a value system, promoting cooperation and empathy among students.

In addition to academic support, the institution conducts skill development workshops aimed at improving essential academic skills such as time management and study techniques. These workshops utilize modern learning tools, emphasizing the NAAC value of integrating technology in education. Slow learners also benefit from academic and personal counseling, ensuring their holistic development by addressing both academic and emotional challenges they may face.

Overall, the institution's well-organized approach ensures continuous monitoring and personalized interventions for each student. This systematic process guarantees that both advanced and slow learners receive the appropriate academic support needed for success, aligning with the NAAC core values of fostering global competencies, promoting national development, and cultivating a value-based education system.

File Description	Document
Upload Any additional information	View Document
Provide link for additional information	View Document

2.2.2

Student - Full time teacher ratio (Data for the latest completed academic year)

Response: 19.58

File Description	Document
List showing the number of students in each of the programs for the latest completed academic year across all semesters	View Document
Certified list of full time teachers along with the departmental affiliation in the latest completed academic year.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

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 experience and teachers use ICT- enabled tools including online resources for effective teaching and learning process

Response:

At RSCOE, a project-centric and project-based curriculum is implemented to enhance students' learning experiences by promoting skills in organization, scientific thinking, and socio-economic problem-solving.

Project-Centric Learning

The curriculum encourages students to engage in research and innovation starting in their first year. Through hands-on projects, including Engineering Design and Innovations (EDI) and Major Projects, students utilize the latest tools and technologies to develop skills in technical areas, project management, and presentations. These projects emphasize interdisciplinary learning and real-world applications.

Types of Projects

- **Engineering Design and Innovations (EDI):** These projects involve both software and hardware

components, making use of interdisciplinary tools.

- **Software Development Projects (SDP):** These projects focus on developing students' software and coding skills.
- **Course Projects (CP):** These projects help enhance practical skills within specific courses.
- **Major Projects:** These are the culmination of four years of learning, covering the entire project lifecycle.
- **Sponsored Projects:** Industry-sponsored projects, which may fall into any of the above categories.

Implementation and Evaluation

Projects are evaluated twice per semester, based on criteria such as problem statements, literature reviews, design, testing, and quality. Internal and external examiners, including industry experts, assess the projects. Students are also encouraged to present their work in competitions and pursue opportunities to publish papers or file patents based on their projects.

Outcome-Based Assessment

The institution follows an outcome-based assessment mechanism aligned with Bloom's taxonomy, using tools such as group discussions, presentations, viva voce, course projects, lab assignments, and MCQs. This comprehensive approach helps students build skills in technical writing, problem-solving, teamwork, and design.

ICT Tools and Faculty Development

The teaching-learning process integrates ICT tools, including projectors, smart boards, MOOCs, and industry seminars. Faculty members are encouraged to adopt innovative methods like video lectures and virtual labs. Student performance is monitored closely, with regular feedback provided to ensure continuous improvement.

Academic Support and Feedback

The academic calendar includes a structured schedule for examination, co-curricular, and extracurricular activities. "Eduplus software is used for managing attendance, examination, and marks. Student feedback is actively used to improve teaching methods and course content.

Encouraging Innovation and Research

Students are motivated to publish their work and participate in project competitions, fostering a culture of experiential, participative, and problem-solving learning. This approach ensures that students are well-prepared to address real-world challenges and make meaningful contributions to society.

Overall, RSCOE aims to provide a holistic education that equips students with the knowledge, skills, and experiences necessary for successful careers and impactful societal contributions.

File Description	Document
Upload any additional information	View Document
Provide Link for Additional Information	View Document

2.3.2

The institution adopts effective Mentor-Mentee Schemes to address academics and student-psychological issues

Response:

JSPM's Rajarshi Shahu College of Engineering (RSCOE) has implemented an effective Mentor-Mentee system to support students academically, financially, and psychologically. Each student is assigned a Guardian Faculty Member (GFM), who monitors their academic performance and behavioral conduct. This system fosters a close mentor-mentee relationship, helping students navigate both academic and personal challenges.

The mentoring system is structured to maintain comprehensive records of each student, including academic progress, attendance, and personal details, which are accessible to higher authorities such as the Head of Department, Deans and Director. This facilitates timely interventions to address any academic or behavioral issues. Mentors also share regular feedback with parents, department heads, and the management, ensuring that any necessary support is provided promptly.

The objectives of the mentoring system include academic, psychological, and financial guidance, helping students transition smoothly into campus life, and addressing academic progress or behavioral issues through regular counseling sessions from Guardian Faculty Member. The system actively engages with students to identify problems early and take corrective measures by involving parents and departmental authorities if necessary.

Mentors are assigned to small groups of 20-25 students, and they meet fortnightly or as and when required to discuss academic progress and other personal issues. Communication with parents is a key part of the system, with regular updates on attendance and internal assessment results. In cases of poor academic performance or behavioral issues, mentors counsel students and, if necessary, involve parents and senior college officials.

The mentoring system also provides counseling in several key areas:

1. **Academic and Professional Support:** Faculty mentors offer academic advice, help with course selection, and encourage participation in co-curricular activities such as conferences and paper presentations. Special attention is given to students. Mentors also guide students on scholarships and co-curricular activities, significantly reducing dropout rates through academic counseling.
2. **Personal Counseling:** Mentors help students address personal problems, emotional issues, and family concerns. A professional counselor is available on campus to assist students and their families, providing emotional support and helping students adjust to college life.
3. **Skill Development:** Mentors guide students toward additional skill development courses, preparing them for professional success and helping them stay up-to-date with industry trends.
4. **Career Guidance:** Mentors and alumni counsel students on career opportunities and higher studies, while the placement officer plays a crucial role in preparing students for campus placements through

regular guidance and training programs.

5. **All-round Development:** The mentoring system also addresses behavioral and social challenges. Through counseling, students improve their social skills, adopt positive attitudes, and set future goals.

In summary, RSCOE's mentoring system is a holistic approach designed to address academic, psychological, and personal development needs. The system helps students become more employable, self-motivated, and better equipped to handle both academic and life challenges, while ensuring that parents and faculty are actively involved in their overall development.

File Description	Document
Upload any additional information	View Document
List of Active mentors	View Document
Provide Link for Additional Information	View Document

2.3.3

Preparation and adherence of Academic Calendar and Teaching plans by the institution

Describe the Preparation and adherence to Academic Calendar and Teaching plans by the institution.

Response:

At RSCOE, the preparation and adherence to the Academic Calendar and Teaching Plans are carefully structured to provide a smooth academic experience for both students and faculty.

Preparation of the Academic Calendar:

1. **Initial Planning:** The academic year begins with input from various stakeholders, including the Dean Academics, Controller of Examination, Dean of Student Relations, faculty, and students. Key academic and institutional dates, such as public holidays and examination schedules, are incorporated.
2. **Drafting Process:** The office of Dean Academics drafts a preliminary Academic Calendar in line with the affiliated university's schedule. This includes critical dates for semesters, exams, holidays, and events.
3. **Review and Revision:** Department heads and deans review the draft, providing feedback for revisions to ensure alignment with RSCOE's objectives.
4. **Approval and Distribution:** The academic council approves the final calendar, which is then shared with students, faculty, and staff through the website and internal channels.

Preparation of Department Academic Calendar:

Each department aligns its academic calendar with the college's, adding details about tests, seminars,

workshops, industrial visits, and meetings with various institutional bodies. The Department Academic Coordinator (DAC) maintains monthly attendance, syllabus progress, and records of other department-specific activities.

Preparation of Teaching Plans:

1. **Course Development:** Faculty create Teaching Plans outlining learning objectives, instructional methods, and weekly schedules. These plans ensure comprehensive coverage of course material using various teaching methods, including ICT tools and reference materials.
2. **Alignment with Academic Calendar:** Teaching Plans are aligned with the broader academic timetable, ensuring that lectures, assignments, and assessments fit within the semester's schedule.
3. **Review and Approval:** Teaching Plans undergo review by departmental heads to ensure academic standards and course requirements are met before being finalized.

Adherence to Academic Calendar and Teaching Plans:

1. **Execution:** Faculty implement Teaching Plans by conducting lectures, assignments, and assessments as scheduled. They adjust based on student feedback and progress, utilizing innovative teaching methods and tools like MOODLE, ERP, Kahoot, and Word Wall for online assessments.
2. **Monitoring:** The Dean Academics and IQAC periodically check attendance, course completion, and adherence to schedules. Regular review meetings ensure alignment with plans.
3. **Feedback Collection:** Feedback from students and faculty helps identify deviations and potential improvements.
4. **Reporting and Compliance:** Detailed records are maintained by the Dean Academics to ensure adherence to the academic schedule and teaching plans, generating reports to monitor compliance.

Standard Operating Procedures:

1. **Documentation:** Each step, from preparation to execution, is documented, including feedback and revisions.
2. **Communication:** The office of Dean Academics ensures effective communication with stakeholders through meetings and digital platforms.
3. **Continuous Improvement:** RSCOE adopts a continuous improvement approach by using feedback and performance data to refine future Academic Calendars and Teaching Plans.

File Description	Document
Upload any additional information	View Document
Provide Link for Additional Information	View Document

2.4 Teacher Profile and Quality

2.4.1

Average percentage of full time teachers appointed against the number of sanctioned posts year wise during the last five years**Response:** 100**2.4.1.1 Number of sanctioned posts year wise during the last five years**

2023-24	2022-23	2021-22	2020-21	2019-20
197	201	184	186	185

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts).	View Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Institutional data in the prescribed format (data template merged with 2.4.3 and 2.4.4)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.4.2**Percentage of full time teachers with Ph.D./D.Sc. / D.Litt./ L.L.D during the last five years****Response:** 38.01**2.4.2.1 Number of full time teachers with *Ph.D./D.Sc. / D.Litt./ L.L.D* during the last five years**

Response: 111

File Description	Document
List of faculty having Ph.D./D.Sc. / D.Litt./ L.L.D along with particulars of the degree awarding university, subject and the year of award per academic year.	View Document
Institutional data in the prescribed format (data template merged with 3.2.3 and 3.4.2)	View Document
Copies of Ph.D./D.Sc. / D.Litt./ L.L.D awarded by UGC recognized universities	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.4.3

Average teaching experience of full time teachers (Data to be provided only for the latest completed academic year, in number of years)

Response: 14.75

2.4.3.1 Total teaching experience of full-time teachers as of latest completed academic year

Response: 2905

File Description	Document
Institutional data in the prescribed format (data template merged with 2.4.1 and 2.4.4)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.4.4

Percentage of full time teachers working in the institution throughout during the last five years

Response: 67.57

2.4.4.1 Number of full time teachers worked in the institution throughout during the last five years:

Response: 125

File Description	Document
Institutional data in the prescribed format (data template merged with 2.4.1 and 2.4.3)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.5 Evaluation Process and Reforms

2.5.1

Average number of days from the date of last semester-end/ year- end examination till the last date of declaration of results during the last five years

Response: 16

2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
13	16	18	18	15

File Description	Document
Result Sheet with date of publication	View Document
Policy document on Declaration of results (if any)	View Document
Institutional data in the prescribed format (data template)	View Document
Exam timetable released by the Controller of Examination	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.5.2

Percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Response: 0.58

2.5.2.1 Number of complaints/grievances about evaluation year wise during last five years

2023-24	2022-23	2021-22	2020-21	2019-20
35	34	25	16	8

2.5.2.2 Number of students appeared in the examination conducted by the institution year wise during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
4288	4312	4040	4119	3725

File Description	Document
List of students who have applied for re-valuation/re-totaling program wise certified by the Controller of Examinations year-wise for the assessment period.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.5.3

IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA)/Formative Assessment have brought in considerable improvement in Examination Management System (EMS) of the Institution

Describe the examination reforms with reference to the following within a minimum of 500 words

- **Examination procedures**
- **Processes integrating IT**
- **Continuous internal assessment system**

Response:

RSCOE has implemented significant reforms in its examination procedures and processes, focusing on integrating IT solutions and refining the Continuous Internal Assessment (CIA) system. These reforms aim to enhance the efficiency, transparency, and overall effectiveness of the Examination Management System (EMS).

1. Examination Procedures

a. Centralized Examination Scheduling: RSCOE has streamlined examination scheduling through a

centralized system. This system automates the scheduling process, ensuring that exam dates are well-coordinated across all departments and minimizing conflicts. It helps in efficient resource allocation and reduces scheduling errors.

b. Enhanced Security Measures: The institution has bolstered examination security with measures such as randomized question papers. Physical examination halls are also equipped with CCTV surveillance to prevent malpractices.

2. Processes Integrating IT

a. Advanced Examination Management Software: The EMS(eduplus) at JSPM RSCOE leverages sophisticated software that integrates various aspects of the examination process. This software manages scheduling, question paper generation, student registration, and result processing, ensuring a cohesive and efficient examination workflow.

b. Cloud-Based Data Storage: All examination-related data, including question papers, student records, and results, are securely stored in cloud-based systems. This integration enables real-time access to data, enhances security, and supports robust backup and recovery processes.

c. Automated Question Paper Generation: The college uses an IT-enabled system for generating question papers. This system automates the process, ensuring a balanced distribution of questions across different topics and difficulty levels, and reduces the manual effort involved.

d. Digital Mark Sheets and Transcripts: Digital mark sheets and transcripts are now available to students through online platforms. This digital approach simplifies access to academic records, facilitates faster verification by employers, and improves overall record management.

e. Integrated Feedback Mechanism: The EMS (eduplus) includes an integrated feedback system that collects input from students and faculty on the examination process. This feedback is analyzed to identify areas for improvement and to make necessary adjustments to enhance the examination experience.

3. Continuous Internal Assessment (CIA) System

a. Holistic Assessment Framework: RSCOE's CIA system provides a comprehensive evaluation of student performance throughout the semester. It includes a variety of assessments such as quizzes, assignments, presentations, and practical work, ensuring a well-rounded evaluation of student learning.

b. Digital Submission and Evaluation: Assignments and projects are submitted through a dedicated online portal. This system supports digital submission, and timely feedback, streamlining the evaluation process and ensuring academic integrity.

c. Regular Monitoring and Reporting: The CIA system features regular monitoring of student progress through periodic assessments. Detailed reports are generated and shared with students and academic advisors, helping identify students who may need additional support.

d. Integration with Overall Grading: Results from the CIA are integrated with the overall grading system. This ensures that internal assessments contribute effectively to final grades and provides a comprehensive view of student performance across various evaluation components.

f. Training and Support: RSCOE provides training for both students and faculty on the CIA system and digital tools. This training ensures that all stakeholders are familiar with the procedures and can effectively use the available resources.

File Description	Document
Upload any additional information	View Document
Provide links as Additional Information	View Document

2.6 Student Performance and Learning Outcomes

2.6.1

The institution has stated learning outcomes (programme and course outcome)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents and the attainment of the same are evaluated by the institution

Response:

The institution is dedicated to improving educational quality by integrating learning outcomes and graduate attributes into its assessment processes within the Outcome-Based Education (OBE) framework. This approach enables students to gain knowledge and develop essential skills, values, and competencies necessary for personal and professional success. The Programme Outcomes (POs), Course Outcomes (COs), and Programme Specific Outcomes (PSOs), are aligned with graduate attributes and are widely communicated through institute website <https://www.jspmrscoe.edu.in/> and academic documents.

Course Outcomes (COs) are clearly articulated to ensure alignment between teaching objectives and student learning. The process involves several key steps:

1. **CO Framing:** At RSCOE, COs are developed for each course based on the program's overall objectives and industry requirements. These outcomes are measurable and aligned with POs and Program Educational Objectives (PEOs).
2. **Integration with Curriculum:** COs are incorporated into curriculum design to ensure that all instructional activities, assessments, and evaluations align with desired outcomes, enabling students to achieve the established learning goals.
3. **Communication:**
 - **To Faculty:** COs are discussed in departmental meetings and reinforced through workshops and training sessions aimed at effective incorporation into course planning and assessments.
 - **To Students:** COs are included in course syllabi, posted on the institute's ERP system ("Eduplus"), and introduced during orientation sessions, ensuring students are well-informed about learning outcomes and expectations.

Continuous Feedback and Updates: RSCOE has established a feedback mechanism allowing input from students and faculty on COs, ensuring their ongoing relevance. COs are periodically reviewed for

alignment with industry standards and educational goals, with updates communicated through various channels.

Integration with the Assessment Process: The institution employs a comprehensive evaluation system to assess the attainment of COs, POs, and PSOs. Each course's COs are mapped to one or more POs to ensure specific outcomes contribute to broader program objectives. Faculty design assessments—such as quizzes, exams, and projects—to measure student achievement of COs. Innovative methods, including group projects and case studies, evaluate essential graduate attributes like communication and teamwork.

Mapping and Attainment of COs to POs and PSOs: The CO attainment process involves defining specific outcomes and mapping assessments accordingly. Student performance data is analyzed to determine if predefined thresholds for CO attainment are met. Continuous assessment allows faculty to adjust teaching strategies based on student performance. COs are aggregated to calculate PO attainment, while PSOs are aligned with industry standards and measured through assessments and feedback. The complete process of attainment is documented in the OBE handbook displayed on the institute's website.

Evaluation and Continuous Improvement: The institution regularly evaluates COs, POs, and PSOs to identify areas for improvement in curriculum, teaching methods, and student support services. Feedback from industry experts, alumni, and stakeholders is incorporated to ensure learning outcomes remain relevant to professional needs.

Dissemination of Outcomes: The institution publishes learning outcomes and their attainment on its website, promoting transparency and helping students understand the competencies they are expected to develop. This comprehensive approach ensures a well-rounded educational experience and aligns with the institution's commitment to quality education.

The complete OBE handbook is available on college website <https://www.jspmrscoe.edu.in/civil-engineering/program-outcome>

File Description	Document
Upload POs and COs for all courses (exemplars from Glossary)	View Document
Upload any additional information	View Document
Provide links as Additional Information	View Document

2.6.2

Pass percentage of students (excluding backlog students) (Data for the latest completed academic year)

Response: 97.7

2.6.2.1 Total number of final year students who passed the examination conducted by Institution during the latest completed academic year:

Response: 1106

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Certified report from the COE indicating the pass percentage of students of the final year (final semester) eligible for the degree program-wise / year wise	View Document
Annual report of Controller of Examinations (COE) highlighting the pass percentage of final year students	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.7 Student Satisfaction Survey**2.7.1****Online student satisfaction survey regarding teaching learning process****Response: 3.62**

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1

The institution's research facilities are frequently updated and there are well defined policy for promotion of research which is uploaded on the institutional website and implemented

Response:

JSPM's Rajarshi Shahu College of Engineering is committed to promote research and innovation culture. Institute Focuses on socially relevant multidisciplinary applied research for socio economic development, relevant areas like Health care, smart city, defense, green earth, energy, agriculture, pollution, waste management etc. Faculty and student capacity building and capacity development Initiatives to establish collaborative

relations with national, international, and private research institutions.

Our faculty members are actively involved in cutting-edge research projects and have received funding from prestigious organizations such as DST, AICTE, and various renowned Industries. Industry internships in India / Abroad, Seed Money, FDP Sponsorship, policy for ethics, plagiarism software, collaborative research projects, Ph.D. encouragement, knowledge creation facilitation, training, and various competitions. We encourage faculty members to leverage their individual expertise to generate funds through consultancy, research projects, training, and patents. We create overall research ambience and promote the Institution's research initiatives by providing opportunities for faculty and students to advance their professional growth and development.

Research Objectives:

- To enhance the Research & Innovation ambience in the institute.
- To encourage faculty members and students to transform their knowledge into research
- To promote research potential of faculty members with their innovative ideas.
- Generation of patents and IPRs.
- To inculcate ethics in Research& Development
- To identify research thrust areas in cutting edge technologies

Research Initiatives Taken by the Institute:

- Research incentive policies to encourage publications and IPR
- Organizing conferences, workshops and faculty development programs focused on R & D
- Submitting quality research proposals for grant to government and non-government funding agencies
- Pursuing consultancy work sponsored by industry.
- Guidance and sponsorship for writing patents

Research Facilities Available at the Institute:

1. Digital library with international and national books, journals and periodicals
2. Well-equipped research laboratory
3. Advanced equipment, high end data systems, mathematical and analytical software for VLSI and Signal and Image processing

4. High speed internet facility with Wi-Fi
5. Access to the licensed plagiarism software (Turnitin)
6. Expert lectures by eminent faculty members, industry experts.

Research Promotion: Institute has well defined research incentive policy to promote the research and development activities through quality publications, Patents, Copyrights, up skilling, conferences etc. Incentives are given to the faculty as well as the students for their research work.

Students Research & Development Activities:

Our students are actively involved in the research and development activities. On the basis of their domain study and implementation they present and publish their work in various reputed indexed conferences like IEEE, Springer etc. Almost every project group publish two papers based on their project work. Few of the project group also file the patent on their innovative ideas. Periodical updation in research facilities: Institute has committed to provide state of the art infrastructure facilities to promote high quality research. The specific research software like MATLAB Simulink. Microwind 3.1 with DCH3, COGENDA TCAD, NETSIM Network Simulator, ANSYS, CREO, Gram ++ etc. are acquired periodically to update the research facilities

File Description	Document
Upload any additional information	View Document
Provide links as Additional Information	View Document

3.1.2

The institution provides seed money to its teachers for research

Response: 18.2

3.1.2.1 Amount of seed money provided by institution to its teachers for research year wise during last five years (INR in lakhs)

2023-24	2022-23	2021-22	2020-21	2019-20
3.89876	2.47606	8.99752	0	2.82335

File Description	Document
Sanction letters of seed money to the teachers is mandatory	View Document
List of faculty who have been provided with seed money for research along with the title of the project, duration and amount year-wise	View Document
Institutional data in the prescribed format (data template)	View Document
Audited Income-Expenditure statement highlighting the expenditure towards seed money endorsed by the Finance Officer	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.1.3

Percentage of teachers receiving national/ international fellowship/financial support by various agencies for advanced studies/ research during the last five years

Response: 5.48

3.1.3.1 Number of teachers who received national/international fellowship /financial support by various agencies, for advanced studies / research; year-wise during the last five years

Response: 16

File Description	Document
List of teachers who have received the awards along with nature of award, the awarding agency etc.	View Document
Institutional data in the prescribed format (data template)	View Document
E-copies of the award letters of the teachers	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.2 Resource Mobilization for Research**3.2.1**

Total Grants research funding received by the institution and its faculties through Government

and non-government sources such as industry, corporate houses, international bodies for research project, endowment research chairs during the last five years (INR in Lakhs)

Response: 341.54

File Description	Document
List of Extramural funding received for research, Endowment Research Chairs received during the last five years along with the nature of award, the awarding agency and the amount	View Document
Institutional data in the prescribed format (data template is merged with 3.2.2)	View Document
Copies of the letters of award for research, endowments, Chairs sponsored by non-government sources	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.2.2

Number of research projects per teacher funded by government, non-government , industry, corporate houses, international bodies during the last five years

Response: 0.06

3.2.2.1 Number of research projects funded by government and non-government agencies during the last five years.

Response: 17

File Description	Document
List of project titles with details of Principal Investigator, amount sanctioned and sanctioning agency etc	View Document
Institutional data in the prescribed format (data template merged with 3.2.1)	View Document
Copies of the grant award letters for research projects sponsored by government agencies	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.2.3

Percentage of teachers recognised as research guides as in the latest completed academic year**Response:** 18.78**3.2.3.1 Number of teachers recognised as research guides as in the latest completed academic year:**

Response: 37

File Description	Document
Upload copies of the letter of the university recognizing faculty as research guides	View Document
Institutional data in the prescribed format (data template merged with 2.4.2 and 3.4.2)	View Document

3.3 Innovation Ecosystem**3.3.1**

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident

Response:

Rajarshi Shahu College of Engineering (RSCOE) is committed for 360 degree holistic development of students which make the students future and industry ready. This enforces institute to impart strong research and innovation initiatives considering societal needs. Implementation of future perspective approach has impelled us to have strong innovation ecosystem at RSCOE for students. All innovative practices like Indian Knowledge System (IKS), Intellectual Property Right (IPR), Incubation center etc. aims to facilitate our students for their holistic development. It is impacting at large on the research outcomes in the form of increase in the number of publications and patents. Further, the incubation center facilitates and motivates the students to become entrepreneur and open their startups. Our initiatives improve student's complex problem-solving ability as well as lifelong learning ability.

Indian Knowledge System (IKS): Implementation of IKS majorly focus on the followings collection of ancient Indian literature, organizing essay competition and debate competition, organizing camp and campaigning for awareness, study and analysis of current situation and how to implement ancient knowledge.

At institute level various activities are carried out under the tradition of Indian knowledge. IKS cell is established for all-round development of students and to realize and study the golden history of India. Our IKS cell is committed to the scientific study of the Indian knowledge tradition and its impact on human life and the entire universe.

IKS cell works for the mental health and well-being and holistic development of students and teaching faculty and non-teaching staff.

Intellectual Property Rights (IPR): Institute is instrumental in creating awareness about the IPR, Students and faculty members are encouraged and motivated to file patents and copyrights. Students file copyrights of their project title and also file the patents for few of them. Institute provide complete ecosystem for the awareness about IPR by organizing expert sessions.

Incubation centre: RSCOE Innovation and Incubation Foundation (IIF) is a Section 8 company registered in the institute. IIF has state of the art infrastructure for the incubation where students explore their innovative ideas and transfer their knowledge to develop the prototype, register their enterprises and launch the product. RSCOE IIF facilitate to work under various thrust areas such as agriculture and food processing , electrical vehicles, energy, artificial intelligence and machine learning, automation & robotics, drone technology, defence, sustainability and healthcare related projects. It helps the students in entrepreneurship and start-ups. It also guides for patent procedures and intellectual property rights as a patent facilitation centre. Also we have a prototyping area, incubation area and brainstorming areas in our Incubation Centre.

Entrepreneurship: Institute has a dedicated Entrepreneurship Development Cell (ED Cell) which is a student-run cell of spirited individuals who are striving to create, foster and promote entrepreneurship among the students of JSPMs Rajarshi Shahu College of Engineering.

Design Thinking: From this initiative our students focus on understanding the needs and perspectives of users to create innovative and effective solutions. Our students learn problem solving approach, critical thinking, ideating solutions, prototyping and testing to refine the results.

File Description	Document
Upload any additional information	View Document
Link for Any other additional information	View Document

3.4 Research Publications and Awards

3.4.1

The Institution ensures implementation of its stated Code of Ethics for research.

The institution has a stated Code of Ethics for research and the implementation of which is ensured through the following:

- 1. Inclusion of research ethics in the research methodology course work**
- 2. Presence of institutional Ethics committee (Animal, Chemical, Bio-ethics etc.)**
- 3. Plagiarism check through software**
- 4. Research Advisory Committee**

Response: A. All of the above

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Copy of the syllabus of the research methodology course work to indicate if research ethics is included	View Document
Constitution of the ethics committee and its proceedings as approved by the appropriate body	View Document
Constitution of research advisory committee and its proceedings as approved by the appropriate body.	View Document
Bills of purchase of licensed plagiarism check software in the name of the HEI	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4.2

Number of candidates registered for Ph.D per teacher during the last five years

Response: 2.7

3.4.2.1 Number of candidates registered for Ph.D during the last 5 years:

Response: 100

File Description	Document
Ph.D. registration letters/Joining reports of candidates.	View Document
Letter from the university indicating name of the Ph.D. student with title of the doctoral study and the name of the guide.	View Document
Institutional data in the prescribed format (data template merged with 2.4.2 and 3.2.3)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4.3

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

Response: 2.03**3.4.3.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years**

Response: 594

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Link to the uploaded papers, the first page/full paper (with author and affiliation details) on the institutional website	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document
Links to the paper published in journals listed in UGC CARE list	View Document
Link re-directing to journal source-cite website in case of digital journals	View Document

3.4.4**Number of books and chapters in edited volumes published per teacher during the last five years****Response:** 1.08**3.4.4.1 Total Number of books and chapters in edited volumes published during the last five years**

Response: 314

File Description	Document
List of chapter/book along with the links redirecting to the source website	View Document
Institutional data in the prescribed format (data template)	View Document
Copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4.5

Bibliometrics of the publications during the last five years based on average Citation index in Scopus/ Web of Science**Response:** 5.33

File Description	Document
Bibliometrics of the publications during the last five years	View Document
Any additional information	View Document

3.4.6***Bibliometrics of the publications during the last five years based on Scopus/ Web of Science – h-index of the Institution*****Response:** 15

File Description	Document
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document
Any additional information	View Document

3.5 Consultancy**3.5.1****Revenue generated from consultancy and corporate training during the last five years****Response:** 105.6**3.5.1.1 Total Amount generated from consultancy and corporate training year wise during last five years (INR in lakhs)**

2023-24	2022-23	2021-22	2020-21	2019-20
26	8.3468	10.50	25.75	35.0

File Description	Document
Letter from the corporate to whom training was imparted along with the fee paid.	View Document
Letter from the beneficiary of the consultancy along with details of the consultancy fee	View Document
Institutional data in the prescribed format (data template)	View Document
CA certified copy of statement of accounts as attested by head of the institution	View Document
Audited statements of accounts indicating the revenue generated through corporate training/consultancy.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.6 Extension Activities

3.6.1

Outcomes of extension activities in the neighbourhood community in terms of impact and sensitizing the students to social issues and holistic development, and awards received if any during the last five years (Showcase at least four case studies to the peer team)

Describe the impact of extension activities in sensitising students to social issues and holistic development with four case studies within a maximum of 500 words

Response:

JSPM's Rajarshi Shahu College of Engineering is dedicated to serving society through various extension and outreach activities, including clubs & communities. These caters the technical and social aspects of society. These activities focus on areas such as health awareness, women empowerment, technology application for social upliftment etc. The institute consistently directs student's energy toward addressing real-life problems facing the average person and society at large, believing in the need for comprehensive development.

Extension activities can be seen in the various means of disseminating the experiences and research outputs of staff and students in collaboration with industry, in the form of hosting/ attending workshops, seminars, conferences, Industrial Visits, sponsored projects and setting up innovation labs.

The RSCOE has carried out several social services projects throughout the year under the various clubs:

National Service Scheme: - NSS, aims to develop social responsibility among students by understanding their community, needs, problems, and involving them in problem-solving.

Events under NSS include Women's Empowerment Program, Blood Donation Camp, River Cleaning, Har Ghar Tiranga, Swachhata Abhiyan, seminars on Indian Constitution, Awareness on National Pollution, Environment and Energy Conservation, Yoga Workshop, Participation in Sant Tukaram Maharaj Palkhi Sohala, Nirbhay Kanya Abhiyan, Tree Plantation, Energy Conservation Day etc.

Shashwat Club: Eco Sustainability Club promotes environmental awareness and action among students. Events conducted such as plastic free village for health awareness, sweet donation in slums, yoga workshops, safe and environment friendly Ganesh festival, healthy diet webinar, and mental health-vaccination awareness campaign.

Rotaract Club : This club provides opportunities for personal and group activities to recognize leadership qualities and vocational responsibilities, motivate students to undertake cleaning work, and help them in personality development. Events organized under this club include cloth donation, Voters Day celebrations, E-Khel Mahotsav, Chamber of Art, Gratitude 3.0, Harmony music challenge, sanitary pad donation and elevating persona.

Young Inspirers Network (YIN) Club: The YIN offers youth a platform for networking and collaboration, promoting personal, professional, and social development for nation transformation. Events organized under this includes food, book and blood donation, selfie with police, Swacha Bharat Abhiyan at RTO Office, coffee with YIN Ministers, Summer Youth Summit.

IT department has organised visit at Apang Prashikshan Kendra & shared the computer skills.

Unnat Bharat Abhiyan : This aims to enable higher educational institutions to work with rural India to identify development challenges and evolve appropriate solutions for accelerating sustainable growth. Activities under these include awareness programs, village surveys, solar lamp visits and tree plantation.

Institute is consistently focusing on overall development of student and motivating them to participate in various activities. As a fruit of it many students got selected in parades held at the Kartavya Path on Republic Day-26th January honouring India's unity in diversity. The "Akshay Blood Bank" also presented the Institute with an appreciation award in recognition of their commitment to the community and support of blood donation campaigns.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

3.6.2

Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community year wise during the last five years

Response: 88

3.6.2.1 Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community year wise during the last five years.

2023-24	2022-23	2021-22	2020-21	2019-20
17	20	27	05	19

File Description	Document
Photographs and any other supporting document of relevance should have proper captions and dates.	View Document
Institutional data in the prescribed format (data template)	View Document
Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.7 Collaboration**3.7.1**

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: 87

File Description	Document
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc	View Document
List of year wise activities and exchange should be provided	View Document
List and Copies of documents indicating the functional MoUs/linkage/collaborations activity-wise and year-wise	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1

The Institution has adequate infrastructure and other facilities for

1. teaching – learning, viz., classrooms, laboratories, computing equipment etc
2. ICT – enabled facilities such as smart class, LMS etc.
3. Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc.

Response:

JSPM's Rajarshi Shahu College of Engineering, Pune prides itself on its comprehensive range of facilities aligned with the standards set by the All India Council for Technical Education and Savitribai Phule Pune University and designed to foster holistic development among its students.

1. Teaching – learning, viz., classrooms, laboratories, computing equipment etc.

Institute has modern, well-ventilated classrooms including projectors and smart boards. Specialized laboratories like Centre of Excellence in Robotics and Automation in association with TATA Automation Ltd (TAL), Pune, Centre of Excellence in Mechatronics, Centre for Training in IoT, ML & AI in association with India First Robotics, Centre for High Speed Machining are available in Automation and Robotics and Mechanical engineering department. The computer engineering department has a Remote Centre by IIT Bombay, Civil engineering department has a Building Information Modelling (BIM) computing facility sponsored by Bentley Systems, USA. The electrical engineering department has designed and developed a Power system analysis virtual lab in association with IIT Bombay. All the departments have state-of-art infrastructure & laboratories enriched with industry based softwares. The institute features an Incubation Center dedicated to research activities and projects. There are separate laboratories for Chemistry, Physics, and Mathematics with modern equipment for conducting experiments.

2. ICT – enabled facilities such as smart class, LMS etc.

Institute offers a range of IT facilities to support the academic and administrative needs of students and faculty. It has more than 1200 Computers and multiple computer laboratories equipped with high-performance PCs, essential software, and internet connectivity. The institution has ICT enabled facilities such as smart classrooms and seminar halls, multimedia projectors, and high-speed internet connectivity. These modern learning spaces are meticulously designed to enhance the academic experience, fostering interactive and engaging modes of teaching and learning. It uses EduPlus ERP software for sharing academic resources and conducting quizzes,

serving as a Learning Management System (LMS).

3. Facilities for cultural and sports activities, yoga center, games (indoor and outdoor), Gymnasium, auditorium etc.

The institution has facilities for cultural and sports activities, yoga center, games (indoor and outdoor), Gymnasium, auditorium. For cultural development, the separate cultural hall named Rangbhumi provides a space for students to explore and showcase their talents. The institution has a dedicated yoga hall for yoga training, contributing to students' physical and mental well-being. The institute also offers both indoor and outdoor sports facilities, including a hall for chess, carom, table tennis and a ground for cricket, football, and basketball. Separate gymnasiums for boys and girls are available to promote physical fitness. The institution's auditorium further serves as a versatile venue for a wide range of student and faculty-related activities like seminars, guest lectures, and cultural programs.

Following are numbers of ICT enabled classrooms and laboratories and other facilities.

Sr. No.	Room Type	Number of Rooms
1	Classroom	43
2	Laboratories	80
3	Seminar Hall	5
4	Conference Hall	4
5	Gymnasium facility	1
6	Sports facility	1
7	Yoga center	1
8	Workshop	1
9	Placement office	1
10	Central Library	1
11	Canteen facility	2

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

4.1.2

Percentage of expenditure excluding salary, for infrastructure development and augmentation year wise during the last five years

Response: 35.12

4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise

during last five years (INR in lakhs)

2023-24	2022-23	2021-22	2020-21	2019-20
2184.55	322.68	229.94	275.60	196.93

File Description	Document
Institutional data in the prescribed format (data template is merged with 4.2.2 and 4.4.1)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	View Document

4.2 Library as a Learning Resource

4.2.1

Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students

Response:

JSPM's Rajarshi Shahu College of Engineering Library is partially automated using AUTOLIB NG Version Integrated Library Management System (ILMS) Library had purchased software in 2011 from Akash Infotech, Pune. Autolib software is integrated multi-user, multi-tasking, user friendly software. All books are barcodes generated through AutoLib Software. Acquisition, cataloguing, circulation, serial control, OPAC, Reports are the modules which support library staff to maintain Library services.

Circulation: With the help of this module, books can be circulated quickly with barcodes, auto overdue reminders can be forwarded, reservations can be handled easily. Penalty records can be maintained in a good manner.

On-line Public Access Catalogue (OPAC): Library users can access the available library books easily with simple search and boolean search.

Catalogue: This module is helpful to catalogue books etc.

Serial Control: Master database can be created for individual journals; journal issues received can be entered.

Report Generation: Different reports like Purchase list, Accession Register, Library Status, Issue List,

Overdue Books List, Circulation Statistics, Frequently issued books, Issue/Return Summary, Titles/Volumes Summary etc.

Acquisition: This module supports the entire process of book procurement .

Autolib NG Web OPAC

Auto Lib Software has been upgraded with Web OPAC Version in 2015. Web OPAC is the Online Public Access Catalogue, which allows users (Students and faculty members) to avail the services of the library using the internet that enables speedy searching of library databases including books, e-books, e-journals and other e-resources. The Web OPAC is working as a gateway library. Web OPAC database accessed by a single key word at the click of the mouse. The search results are helpful in getting complete details of the document related to the search query, saving the time and energy of the searching library users.

The Features of Web OPAC is:

- Search facility: By specifying author, title, subject or any other field.
- Status of the Book: Whether the book is on shelf or issued.
- Number of copies available in library

How to access the library Web OPAC:

- Users need to type the URL: <http://103.68.11.174/AutoLibWebOPAC/Search.aspx>

in the Mozilla /Google Chrome address bar.

- After clicking on the above mentioned link, the OPAC screen will pop up on their computer.
- Click the search tab and put the fields you required on Author, Title, and Publisher etc. You will get details of book availability.
- Enter your Library Card Number as login and default password as your date of Birth

Adequate Subscription to e-resources and journals:

JSPM's Rajarshi Shahu College of Engineering subscribes scholarly journals both in print and electronic format every year to fulfil the research needs of students and faculty members. Institute subscribes to IEEE, ASCE, ASME, Science Direct, J-Gate, Springer e-journals. McGraw-Hill and ProQuest e-Books and N-List, and DELNET databases during 2019 to 2023.

The library is optimally used by the faculty and students:

The Library has been utilized adequately by faculty members and students. Analysis of the usage of library resources both in physical and electronic format available at Library of Rajarshi Shahu College of Engineering, Pune.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

4.2.2

Percentage of expenditure for purchase of books/ e-books and subscription to journals/e-journals year wise during the last five years

Response: 4.21

4.2.2.1 Expenditure for purchase of books / e-books and subscription to journals/e-journals year wise during last five years (INR in lakhs)

2023-24	2022-23	2021-22	2020-21	2019-20
69.72	56.25	61.33	60.71	136.96

File Description	Document
Institutional data in the prescribed format (data template merged with 4.1.2 and 4.4.1)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for purchase of books/ e-books and subscription to journals/e-journals should be clearly highlighted)	View Document

4.3 IT Infrastructure

4.3.1

Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection

Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words**Response:**

System administrator in JSPM's RSCOE is responsible for proper utilization and maintenance of LAN, Internet and Wi-Fi facilities. Repair and maintenance of Lab equipment and instruments is carried out by internal technicians under the guidance of System administrator.

Enhanced Learning Experiences: ICT tools, such as interactive simulations, virtual labs, and online courses, provide immersive and practical learning opportunities. They help students grasp complex concepts through hands-on experiments and real-time feedback, fostering a deeper understanding of technology. Technical Aids such as Multimedia Projectors, Laptops, desktops, printers, Wi-Fi, LAN etc. are maintained by trained technicians. Interactive whiteboards and digital projectors bring lessons to life with multimedia content, while educational apps and software offer personalized learning experiences and instant feedback.

Advanced Research Capabilities: Tools like data analytics software, high-performance computing clusters, and specialized research platforms enable students and faculty to conduct cutting-edge research. These tools facilitate complex data analysis, modeling, and simulations, driving innovation and discovery.

Efficient Collaboration: Collaborative platforms such as GitHub, Google Workspace, and Microsoft Teams allow students and researchers to work together seamlessly on projects, share code, and manage collaborative tasks, regardless of geographical location.

Streamlined Administration: ICT tools like EduPlus ERP Learning Management Systems (LMS) and Student Information Systems (SIS) simplify administrative tasks, including course management, grading, and student records. This automation improves efficiency and reduces administrative burden.

Access to Global Resources: Online databases, e-libraries, and digital journals provide access to wealth of information and research materials, supporting both teaching and independent study. This global connectivity ensures that students and researchers stay updated with the latest advancements in their fields. Moreover, the emphasis on Cyber security underscores the institution's commitment to protecting sensitive data and maintaining the integrity of its digital infrastructure against Cyber threats and breaches.

Innovation and Skill Development: Exposure to cutting-edge ICT tools prepares students for the rapidly evolving technology sector. By working with industry-standard software and platforms, students develop relevant skills that enhance their employability and ability to contribute to technological advancements. Advanced simulation software, such as MATLAB and ANSYS, allows students to model and test engineering concepts in virtual environments, fostering a deeper understanding of complex systems. CAD (Computer-Aided Design) tools, like AutoCAD and SolidWorks, enable students to create precise technical drawings and 3D models, which are crucial for design and manufacturing processes. Collaborative platforms such as GitHub facilitate version control and collaborative coding for software development projects. Additionally, ICT tools like virtual laboratories and online resources offer hands-on experiences and access to cutting-edge research without the constraints of physical lab space.

Overall, the institution's proactive IT initiatives and budget allocations demonstrate its commitment to leveraging technology as a catalyst for academic excellence and institutional advancement.

Updates of IT facilities and bandwidth for internet connection:

Sr.No	Name of Item	Increment In the year				
		2019-20	2020-21	2021-22	2022-23	2023-24
1	Computer	380	8	480	-	278
2	Internet/WIFI	120 MBPS	155 MBPS	810 MBPS	310 MBPS	2300 MBPS
3	LED Smart TV	-	1	12	5	1
4	Application Software	1	1	-	5	2

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

4.3.2

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

Response: 3.1

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

Response: 1246

File Description	Document
Purchased Bills/Copies highlighting the number of computers purchased	View Document
Extracts stock register/ highlighting the computers issued to respective departments for student's usage.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.3.3

Institution has dedicated audio visual centre, mixing equipment, editing facility, media studio, lecture capturing system(LCS) and related hardware and software for e-content development

Response:

The institution boasts a dedicated media studio, mixing equipment, and editing facilities with open-source software and hardware for various e-content creation. In recent times, there has been a significant shift towards incorporating multimedia and digital tools in education fields, the institution is proactively embracing these changes to maintain its relevance by actively adapting to the new technology. This initiative aims to enhance the educational experience and support our students and faculty in academic and extracurricular activities by:

Enhanced Learning Experience: Integration of multimedia resources makes complex engineering concepts more comprehensive and engaging for students.

Support for Faculty: Professors and researchers will benefit from tools that facilitate dynamic presentations and effective communication of research findings.

Administrative Efficiency: Improved audio-visual capabilities streamline administrative meetings, workshops, and training sessions.

Extracurricular Activities: The centre will provide a venue for student activities such as film screenings, presentations, and cultural events.

The institute incorporated Impartus, a comprehensive, video learning platform that enhances educational delivery. This platform supported various teaching methods, including lecture capture, which allows instructors to record their lectures for later access; flip classrooms, and virtual classrooms that facilitate real-time learning regardless of physical location. Through the use of these platforms, the faculties and students have created and shared the e-content. This collaboration has led to the production of high-quality educational materials which are disseminated on social media gaining considerable attention.

The faculty upholds academic integrity and remains vigilant in adopting innovative teaching methodologies. They consistently explore various ICT-enabled resources that enhance traditional teaching and learning methods. The importance of these tools became particularly evident during the COVID-19 pandemic.

All the classrooms are well equipped with ICT facilities. Making use of the available freeware, faculty members can effectively deliver the content to the students in a blended mode. The institution frequently promotes awareness and competence in utilizing these systems by training educators to use online learning platforms like Zoom, Google Meet, and Webex. These efforts encourage the faculty to seamlessly integrate these platforms into their everyday teaching practices. A multipurpose cloud-based ERP software, Eduplus and Moodle LMS create engaging e-Learning experiences for better learning outcomes. The use of tools enables mentors to easily create quizzes, gather feedback, and access a range of other features. This allows faculty and students to manage courses, collaborate seamlessly, and

generate detailed reports to address all educational needs.

The integration of modern technologies such as Smart Interactive TVs and projectors has significantly enriched both teaching and learning experiences. The PeopleLink PDS-ICB-4K Smart Board is at the heart of this setup, used by students for presentations and by teachers for lessons, online courses, and even ICT virtual seminars. These seminars, specially designed for students, provide a great opportunity to explore current trends in technology and digital learning. The Smart Board also supports conferences, making sessions more interactive and engaging for everyone involved, fostering collaboration, and enhancing digital learning experiences.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1

Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years

Response: 27.28

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities of DDE and total expenditure excluding salary, year - wise, over the last five years (INR in lakhs)

2023-24	2022-23	2021-22	2020-21	2019-20
801.12	726.05	382.68	455.85	127.64

File Description	Document
Institutional data in the prescribed format (data template merged with 4.1.2 and 4.2.2)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for maintenance of physical facilities and academic support facilities should be clearly highlighted)	View Document

4.4.2

There are established systems and procedures for maintaining and utilizing physical and academic support facilities – laboratory, library, sports complex, computers, classrooms etc.

Describe policy details of systems and procedures for maintaining and utilizing physical, academic and support facilities within a maximum of 500 words

Response:

We utilize JSPM Support Centre, an open-source help desk software, to manage maintenance and repair requests across various departments. This system centralizes all service tickets, enabling effective tracking and resolution of issues related to electrical, electronics, mechanical, and civil maintenance, as well as networking and hardware issues of PC's, smart board maintenance, and software support.

1. Laboratory Maintenance: Laboratories are managed according to a structured timetable that aligns with course requirements, research projects, and special events. Maintenance policies are documented for all laboratories. An online ticketing system (UV Desk) allows faculty to report maintenance issues, which are addressed promptly. Lab assistants and technicians provide guidance on equipment use and safety, supporting effective laboratory utilization.

2. Library Maintenance: The library is equipped with AutoLib-an integrated ERP software,digital resources, and both physical and online journals. The SLIM 21EX software, in use since 2003, supports library operations through modules for acquisitions, cataloging, circulation, serial control, and article indexing. The circulation system uses barcodes and QR codes for tracking books, and students receive email reminders about due dates for borrowed materials. Newly admitted students get Barcoded ID Cards from the office along with Permanent Registration Number.

3. Sports Facility Maintenance: Sports facilities are maintained under the supervision of a Physical Director and ground cleaning staff. Regular maintenance includes cleaning, leveling, and marking of the grounds. The campus also features a gymnasium, which is cleaned and maintained regularly. Equipment manuals are provided, and specialized training is given to users.

4.Computer & related Facility Maintenance: The IT infrastructure, which includes computers, laptops, internet access, Wi-Fi, firewalls, servers, LCD projectors, and smart TVs, is overseen by a dedicated System Administrator and technical staff. Daily tasks involve managing firewall settings, antivirus

updates, and network configurations to ensure smooth operation. The System Administrator also handles the procurement and renewal of IT resources, such as computers and software licenses, to keep technology current and functional.

5. Classroom Maintenance: Classrooms are well-furnished and equipped with smart boards and CCTV for surveillance. Portable projectors are available in each department. Daily cleaning tasks, including dusting, sweeping, and mopping, are performed by housekeeping staff under supervision. For furniture and electrical repairs, carpenters and electricians are employed. Repairs to wood or iron materials are handled in-house or sent to external workshops as needed.

6. Electrical Supply and Equipment Maintenance: Electrical maintenance is managed by a specialized support staff responsible for all aspects of electricity use, including new installations, repairs, and upgrades. This team ensures that all electrical equipment, including standby systems like inverters and generators, are kept in working condition. Regular inspections, testing, and repairs are conducted to prevent issues that could lead to system failures. Preventive maintenance procedures include cleaning breakers and outlets, managing electrical loads, and inspecting generators periodically.

7. Infrastructure maintainance: Workshop technical staff takes active part in repair and maintenance activity related to fabrication-Metallic and Woodern etc., also plumbing & painting work. Cleaning of all class rooms, labs are outsourced to external housekeeping facility management agency for cleaning activities of bathrooms & toilets.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	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 institution, government and non-government bodies, industries, individuals, philanthropists during the last five years

Response: 65.24

5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists year wise during last five years

2023-24	2022-23	2021-22	2020-21	2019-20
2826	2808	2575	2633	2315

File Description

Document

Year-wise list of beneficiary students in each scheme duly signed by the competent authority.

[View Document](#)

Upload Sanction letter of scholarship and free ships (along with English translated version if it is in regional language).

[View Document](#)

Institutional data in the prescribed format (data template)

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

5.1.2

Efforts taken by the institution to provide career counselling including e-counselling and guidance for competitive examinations during the last five years

Response:

Over the past five years, College has implemented a comprehensive and multifaceted career counseling program aimed at supporting students in their career development, competitive examinations and personal growth. These programs has been instrumental in enhancing students' abilities in language, soft skills, communication skills and life skills and awareness of technological trends, ensuring students were well-prepared for the professional world. The development of soft skills program has been a key focus of

the college's efforts. To this end, a series of training sessions were conducted, including Career Readiness Training with Talentio, Talently, and Inlustro in last year, which saw the participation of 229 students. Additionally, further communication skills sessions were organized in same year, where students had the opportunity to improve their interpersonal abilities. The college also facilitated alumni-led placement guidance sessions featuring experts from prominent companies such as Force Motors, Cummins, and Accenture were one of them.

The College partnered with the Imperial Institute of Excellence (I2E) and Learning Labs Consulting to offer specialized programs such as GATE awareness and GRE-based courses for the aspiring student. Regular workshops and seminars on career planning, resume writing, interview skills, and job search strategies have been organized to educate students about various career options and enhance their employability skills. Moreover, workshops organized for Mechanical Engineering students on CAD/CAM tools, and for all the students of college organized research paper writing and personality development were organized further contributing to students' readiness for the demands of the professional environment. Institution conducts personality and aptitude assessments to help students understand their strengths, interests, and skills, which can assist them in making informed career decisions.

The institute's commitment for overall student development was further demonstrated through life skills training programs. These initiatives focused on areas such as physical fitness, health and hygiene, self-employment, and entrepreneurial skills. To foster personal growth and prepare students for diverse career paths, the college organized program for students under National Youth Day celebrations, expert lectures on sales and application opportunities for mechanical candidates, and mock interviews.

Students interested in competitive examinations, institutions may offer specialized guidance, mock tests, and study materials to help them prepare effectively. The Competitive Exam Cell (CEC) is a dedicated organization that prepares students for competitive exams and guides them towards successful careers. It offers various initiatives like daily learning sessions, field visits to prestigious institutions, and interactions with officers. CEC also hosts events like debates, alumni talks, experts sessions, and the Competitive Exam Conclave, providing networking and learning opportunities. Members consistently achieve awards and participate in National-level competitions.

Institution use online platforms and tools for e-counseling. This can include video conferencing for remote counseling sessions, webinars, and online career assessment tools. This digital approach proved particularly beneficial during the COVID-19 pandemic, ensuring that students received continuous guidance and mentorship.

Overall, our institution's holistic approach towards integrating comprehensive career counseling, specialized exam guidance, and a culture of continuous learning aims to mould our students into academically competent, multi-faceted, and adaptable individuals, well-prepared for the corporate world.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

5.1.3

Following capacity development and skills enhancement activities are organised for improving students' capability

- 1.Soft skills**
- 2.Language and communication skills**
- 3.Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)**
- 4.Awareness of trends in technology**

Response: A. All of the above

File Description	Document
Report with photographs on programmes conducted for awareness of trends in technology	View Document
Report with photographs on programmes/activities conducted to enhance soft skills, Language & communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.1.4

The institution adopts the following for 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
Proof w.r.t Organisation wide awareness and undertakings on policies with zero tolerance	View Document
Proof related to Mechanisms for submission of online/offline students' grievances	View Document
Proof for Implementation of guidelines of statutory/regulatory bodies	View Document
Details of statutory/regulatory Committees (to be notified in institutional website also)	View Document
Annual report of the committee monitoring the activities and number of grievances	View Document
Provide Links for any other relevant document to support the claim (if any)	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: 60.77

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

2023-24	2022-23	2021-22	2020-21	2019-20
565	720	682	732	601

File Description

Document

Institutional data in the prescribed format (data template)

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

5.2.2

Percentage of students qualifying in state/ national/ international level examinations out of the

graduated students during the last five years

(eg: NET/SLET/ Civil Services/State government examinations etc.)

Response: 2.08**5.2.2.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/SLET/Civil Services/State government examinations etc.) year wise during last five years**

2023-24	2022-23	2021-22	2020-21	2019-20
49	38	7	9	10

File Description	Document
List of students qualified year wise with details of examination and links to Qualifying Certificates of the students taking the examination	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	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 events during the last five years****Response:** 202**5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at University / state / national / international level events (award for a team event should be counted as one) year wise during last five years**

2023-24	2022-23	2021-22	2020-21	2019-20
66	39	16	21	60

File Description	Document
list and links to e-copies of award letters and certificates	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.3.2

Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution.

Describe the Student Council activity and students' role in academic & administrative bodies within a maximum of 500 words

Response:

In representing the student body, a student council is essential because it provides a forum for students to express their opinions, exchange ideas, and give back to the University and the larger community. By giving students the freedom to voice their opinions and organise events that promote campus welfare and spirit, it raises the standard of higher education. As the voice of the student body, the council assists in informing the college and the community about the interests and concerns of the student body.

The Student Council will choose its goals. Several broad goals might be:

- To improve staff, management, and student communication.
- To encourage an atmosphere that supports learning and individual growth.
- To encourage respect and camaraderie among students.
- To assist the college's staff and administration in their development.
- To speak for the students' opinions on issues that are important to them in general.
- To officially represent all the students in the institute.

Effective communication between the Student Council and the college management, Director, and staff is key to fostering trust and respect within the College community. By working together towards shared goals, much can be accomplished. Good communication not only involves informing others about activities but also seeking their input, consulting, and sharing ideas with all members of the college. This ensures everyone understands the Student Council's purpose and goals. Regular attendance by a teacher at Council meetings further enhances communication. Core Student Council members:

- President (final-year B.Tech)
- General Secretary (third-year)
- Lady Representative (third-year)
- NSS Representative (third-year)
- Presidents of official college clubs and professional student chapters
- Sports Coordinator.
- Head of art circle
- EDC coordinator
- Magazine Secretary
- Alumni Representative

The Student Relations Activities Committee, comprising of the Student Council, works toward societal betterment and sustainable development while promoting social values among students. Key events include the NSS Camp, where students spend a week in a village working on development and raising awareness on social and environmental issues; Shashwat an eco-sustainable club that works on Sustainable development goals are emblems of our Institute. Other initiatives include the Green Club, Unnat Bharat initiatives and various activities supporting village and women empowerment, which inculcate student empathy. The committee also engages in river policing and active involvement in Jaldindi Pratishtan.

The institute has several student committees, including Vighraha, Coding Clubs, and Student Training Clubs, as well as EDC (Entrepreneurship Development Cell), TEDx RSCOE, Sambhav, and Rotaract, each with over many members. These committees organize events like resume workshops, mock interviews, entrepreneurial sessions, and TEDx talks. The institute supports 59+ student clubs hosting activities throughout the year.

Various committees have student representatives, including the College Development Committee (Student Council President), Anti-Sexual Harassment Committee (2 Girls, 1 Boy), Anti-Ragging Committee (1 Girl, 1 Boy), and Student Welfare Committee (Student President). NSS includes More than 100 students. Departments encourage professionalism, skills, and empathy through industry-affiliated student chapters.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

5.3.3

The institution conducts / organizes following activities:

- 1.Sports competitions/events**
- 2.Cultural competitions/events**
- 3.Technical fest/Academic fest**
- 4.Any other events through Active clubs and forums**

Response: A. All four of the above

File Description	Document
Report on Sports, Cultural competitions/events, Technical/academic fests, Any other events through active clubs and forums along with photographs appropriately dated and captioned (whichever is applicable)	View Document
List of students participated in different events year wise signed by the head of the Institution	View Document
Institutional data in the prescribed format (data template)	View Document
Copy of circular/brochure indicating such kind of activities.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.4 Alumni Engagement

5.4.1

Total Amount of alumni contribution during the last five years (INR in lakhs) to the institution through registered Alumni association:

Response: 25.3

5.4.1.1 Total Amount of alumni contribution during the last five years (INR in lakhs) to the institution year wise through registered Alumni association:

2023-24	2022-23	2021-22	2020-21	2019-20
5.69462	5.52577	4.80303	4.69920	4.57993

File Description	Document
List of alumnus/alumni with the amount contributed year-wise	View Document
Annual audited statements of accounts of the HEI highlighting the Alumni contribution duly certified by the Chartered Accountant/Finance Officer	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.4.2

Alumni contributes and engages significantly to the development of institution through academic and other support system

Describe the alumni contributions and engagements within a maximum of 500 words

Response:

JSPM's Rajarshi Shahu College of Engineering, Pune, maintains a dynamic and evolving relationship with its alumni, which significantly contributes to academics and student development. This bond is a strategic partnership that bridges the gap between theoretical knowledge and industry requirements, ensuring that students are well-prepared for their future careers. The following outlines the key areas of alumni contributions and their methods of engagement at our College:

1. **Bridging the Gap between Academics and Industry:** Alumni who have gained experience in various industries actively contribute to aligning the college academic curriculum with the practical needs of the market. This helps equip students with the latest industry-relevant skills, enabling them to compete successfully in a fast-paced and competitive environment. Alumni inputs are invaluable in shaping the academic content to reflect current trends, innovations, and demands in the professional world.
2. **Delivering Cutting-Edge Technology Sessions:** Alumni are often the ones who plan and facilitate seminars that highlight the newest developments in their disciplines and technology trends. Several alumni delivered lectures both online and offline during the period, benefiting faculty and students alike.
3. **Curriculum and Assessment Design:** Alumni not only facilitate technology sessions but are essential to the creation of curricula. Their involvement in curriculum development in almost all BoS our alumni are part of curricular framing. They have been called as examiners for practical as well as internship review.
4. **Real-World Project and Project Opportunities:** Alumni give students the opportunity to work on practical projects, giving them significant practical experience. Our alumni are providing opportunity to work on live projects so students become more proficient technically as well as more prepared for the workforce and better at solving problems.
5. **Guidance and Mentorship:** Alumni frequently act as mentors for current students, providing advice on subjects pertaining to both academics and careers and panel discussions and give guest lectures. Students benefit from this mentorship by developing a solution-focused mindset and learning how to tackle problems more skillfully.
6. **Internship Opportunities:** Alumni offer valuable internships that span across semester, giving students a taste of the industry and boosting their confidence to step into the professional world.
7. **Global Support for Higher Studies and Job Search:** Alumni who have pursued higher education or settled abroad extend support to students aiming to follow similar paths.

8. **Methodical Engagement for Comprehensive Development:** The College has designed a systematic approach to engage alumni in all facets of student and institutional development. Our alumni help the students who are working in Supra, Baha and Tifen National Level competitions. Also alumni guide the students for Smart India Hackathon.

9. **Academic and Industrial Interaction by Alumni:** Alumni actively contribute to academic and industrial interaction by participating in the Board of Studies, being included in the, serving as resource persons for credit courses, delivering guest lectures, participating in in-plant training/internships/placements, and contributing to lab development and training initiatives.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1

The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.

Response:

VISION

“To satisfy the aspirations of 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.”

The institute's **mission** statement delineates its unique qualities in terms of addressing societal needs and aligning its vision and mission with higher education objectives. The Governing Body (GB) and associated statutory and non statutory committees of the institute ensures alignment of policy statements and action plans with the institute's vision and mission. **The well defined strategic development plan** of the institute formulates a clear vision, mission, quality policy, core values, institutional strategic goals and long/short term strategies to achieve these goals. Rajarshi Shahu College of Engineering (RSCOE) focuses on strategic steps toward the next level of inclusive excellence by accomplishing institutional goals.

The **NEP 2020** emphasizes recognizing, identifying, and fostering the unique capabilities of each student, by sensitizing teachers and parents to promote each student’s holistic development in both academic and non-academic spheres. The institution offers multidisciplinary and interdisciplinary courses to the students, allowing them to choose their subjects, courses, and programs from different areas as per NEP 2020 and guidelines received from Government of Maharashtra about implementation of NEP. **In this regard, the institute has revised its First Year to Final Year B. Tech curriculum. (2023 Pattern - All Programs) commenced from the Academic Year 2023-24.**

The institute offers open electives where students have the liberty of choosing open electives from other engineering disciplines to discover their interests during their learning journey, and this would enable them to forge their path. The institute also offers Humanities, Science, and Mathematics as an integral part of the engineering courses with major/minor and honor courses in various engineering disciplines. A research culture is enhanced by determining a research theme or thrust areas. Thrust areas will be selected based on national and State priorities/missions. The Institute organizes an interdisciplinary international conference every year to promote a blending of different disciplines leading to the exchange

of research ideas and knowledge on topics of overlapping domains. NEP 2020 emphasizes setting up a holistic environment on campus through various clubs and activities.

As per the directions of the Govt. of India NAD-ABC, the institution has taken the initiative to fulfill the requirement of Academic Bank of Credits (ABC) as proposed in NEP-2020 by appointing NAD Nodel officer. **All the students have created their ABC ids and NSDL login.** The institution has registered under the ABC to permit its learners to avail the benefit of multiple entries and exit during the chosen program through the NAD web portal. The institution has collaboration with various international universities where students can also choose various courses from international universities. **The facility of transferring credit has been provided through the NAD webportal.**

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

6.2 Strategy Development and Deployment

6.2.1

The institutional perspective plan is effectively deployed and functioning of the institutional bodies are effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc

Response:

The institutional perspective plan is effectively deployed which includes

Effective Governance

The institute has developed standard operating procedures for various academic and administrative activities for standardization and quality assurance in academics, as well in administrative levels. For effective governance, the institute has well defined HR policy, Service Rules, Code of conduct, Good Governance handbook. The academic record of students and faculties is maintained through an ERP system called Edu-Plus. **Faculties and Students are actively involved in various governance committees.**

Academic Excellence through Outcome Based Education

The institute has signed MoU with IIT ROPAR for curriculum design along with well known industries like TCS, VERITAS, KPIT, Persistent Ltd. The major focus on student performance is through outcomes which includes the subject knowledge, industry required skills and attitudes.

NEP 2020 implementation:

Each student is enrolled in an Academic Credit Bank, ensuring a digitalized and organized record-keeping process. Each BoS has adequate representation of academic experts from IIT/NITs as well from Industries.

The curriculum from AY 2023-24, includes courses focused on niche areas within respective programs, increased inclusion of art and HSS courses, and the addition of value-added courses such as UHV, Industrial Psychology, and Indian Knowledge Systems. Furthermore, skill-based courses in both program and multi-disciplinary domains are included, along with flexibility for students to join training or certification courses in their final semester. To enhance students' skills and employability honors in thrust area and minor in other programs is offered.

Human Resource Enrichment

Efforts for the welfare and enrichment of human resources through well defined HR policy document and faculty incentives scheme for teaching, research, and contributions have been implemented.

Sustainable infrastructure

Conventional classrooms converted into smart classrooms and regular upgradation of lab equipment as per curriculum. Solar panels have been installed, generating 3% of the total electricity from renewable sources. Additionally, indoor sports facilities have been established to promote student well-being. Additional facilities created to increase entrepreneurship and incubation include the establishment of Institutions Innovation Council (IIC),Centers of Excellence (CoE) such as the Apple CoE, Industry 4.0 CoE by Janatics, CNC/VMC high speed machining center, and Intel CoE. Awareness sessions are conducted to promote entrepreneurship.

Student Progression through Holistic Development

Measures for student progression through holistic development include the formation of active technical and cultural clubs, with 60 clubs currently operational. Regular activities are scheduled for these clubs, and students are involved in governance through various committees. There has also been a satisfactory increase in placements, internships, and admissions to reputed institutes, along with efforts to promote entrepreneurship and incubation.

Empowering Minds through Research and Innovation

Measures taken to collaborate and excel include signing Memorandums of Understanding (MoUs) with partner universities. Student exchange programs are in process with at least two partner universities, and joint research projects with industries and universities are being pursued.

Community Outreach

Social events are organized in collaboration with industries, and the institution has secured a better position in regional rankings and awards. Furthermore, international conferences have been held annually, contributing to community engagement and knowledge sharing.

File Description	Document
Upload any additional information	View Document
Institutional perspective Plan and deployment documents on the website	View Document
Provide the link for additional information	View Document

6.2.2

Institution implements e-governance in its operations. e-governance is implemented covering the following areas of operations:

- 1. Administration including complaint management**
- 2. Finance and Accounts**
- 3. Student Admission and Support**
- 4. Examinations**

Response: A. All of the above

File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	View Document
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	View Document
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.3 Faculty Empowerment Strategies

6.3.1

The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression

Response:

An institution's success largely depends on its employees, both teaching and non-teaching. Recognizing

this, Rajarshi Shahu college of Engineering have implemented robust frameworks to ensure staff's growth, well-being, and productivity. This is achieved through an integrated approach involving performance appraisal, welfare measures, and avenues for career development or progression.

Performance Appraisal System

Our Appraisal system provides a structured way to assess accomplishments, identify areas for improvement, and align individual performance with institutional goals.

An ERP based effective appraisal system in the institute typically focuses on a variety of factors, such as teaching effectiveness, research contributions, and service to the institution. For non-teaching staff, the emphasis may be on operational efficiency, administrative support, or technological expertise. This ensures two-way communication between the appraiser and the employee. Feedback is a core element, offering constructive criticism as well as recognition of achievements. This open communication helps to identify gaps and areas where additional training or resources may be needed, fostering a culture of continuous improvement. Moreover, appraisals pave the way for rewards and recognition like Best Teacher, Best Guardian Faculty Member (GFM) , Best Department Academic Coordinator (DAC) which boost morale and motivate employees to reach higher levels of performance.

Welfare Measures for Teaching and Non-Teaching Staff

Employee welfare is another key component in ensuring a motivated and healthy workforce. Welfare measures should cater to both the professional and personal well-being of staff members, creating a supportive environment that fosters productivity and job satisfaction.

Welfare measures are summarized below:

- Group Insurance scheme for staff members.
- Reimbursement of claim for registration of conference/FDP/STTP/Workshops.
- Casual leave, medical leave, earn leave facility. Maternity Leaves to female staff for six months.
- Provident fund.
- Study leaves for Ph D, higher education and training programmes.
- Employee gets fees concession for their ward in JSPM associated schools.
- As Institution has a multicultural environment in the campus, the management ensures the celebration of all the festivals together.
- Internet and free Wi-Fi facilities are available in campus for staff.
- Summer and Winter Vacations for faculty members.
- Faculty development programs(FDP) and Skill development courses for faculty on regular basis to enhance their skills in work environment.
- Gratuity for the employees of the institution.
- Women Empowerment Cell is established for creating venues for women members to flourish and gain momentum.
- Centralized reprography facility (Xerox) for Teaching & Non Teaching staff.
- Salary advance facility for teaching and non teaching staff in case of urgency.
- Sports and Cultural facilities for teaching and non teaching staff.

In our institute, employee assistance programs (EAPs) offers mental health support through counseling services, stress management workshops, and other resources. Additionally, work-life balance is promoted

through policies like flexible working hours, paid leaves, and vacation plans.

Avenues for Career Development and Progression

Career development is essential for personal growth and institutional success. We prioritize employee development where individuals feel valued and are more likely to contribute meaningfully to the institution's goals. Offering opportunities for growth and progression also helps in retaining talented staff.

For teaching staff, career development often includes opportunities for advanced research, participation in academic conferences, and collaboration with other institutions.

The Institute provides transparent criteria for promotions—based on merit, seniority, or contributions to the institution.

File Description	Document
Upload any additional information	View Document
Provide the link for 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: 32.95

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

2023-24	2022-23	2021-22	2020-21	2019-20
142	78	49	14	31

File Description	Document
Policy document on providing financial support to teachers	View Document
Institutional data in the prescribed format (data template)	View Document
Copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head.	View Document
Audited statement of account highlighting the financial support to teachers to attend conferences/workshops and towards membership fee for professional bodies	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.3.3

Percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDPs)/ Management Development Programmes (MDPs) during the last five years

Response: 61.59

6.3.3.1 Total number of teachers who have undergone online/ face-to-face Faculty Development Programmes (FDP)/ Management Development Programs (MDP) during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
163	85	109	101	129

File Description	Document
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	View Document
Institutional data in the prescribed format (data template)	View Document
Copy of the certificates of the program attended by teachers.	View Document
Annual reports highlighting the programmes undertaken by the teachers	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.4 Financial Management and Resource Mobilization

6.4.1

Institutional strategies for mobilisation of funds other than salary and fees and the optimal utilisation of resources

Describe the resource mobilisation policy and procedures of the Institution within a maximum of 500 words

Response:

Mobilization of funds in the institute is through several ways. The primary source of revenue for the college is the **Annual fee collected from students and various consultancies**. The fee is collected as per the Fees Reulating Authority and the guidelines of the State Government. The collected fee is deposited into fixed deposits and withdrawn periodically as per the requirements of the institute.

We received grants through sponsored projects from AICTE, SPPU (affiliating university), DST,UGC, industries for the development and maintenance of Infrastructure, upgrade of the Learning Resources, faculty & students trainings and Research (including grants for conferences). Also, funds received through consultancy offered by the institution. Budget estimations are collected and Budget is prepared. The same will be submitted to finance committee & Governing-body for approval.

Resource mobilization include financial resources, human resources, social resources, and the mobilization of resources through interorganizational relations. For utilization of funds is concerned, We have a clear and transparent approach towards it. All the expenditures are incurred keeping in view the academic and infrastructural requirements of the institution. The funds received from the government are utilized strictly as per the instructions and conditions specified with the provision of funds. Also, Funds are provided to meet day-to- day operational and administrative expenses and maintenance of the fixed assets. Funds are utilized for purchase of advanced laboratories equipment to encourage research interest of the faculty and students. Enhancement of library facilities leads to novel learning practices and

accordingly required funds are provided every year. Adequate funds are allocated for effective teaching-learning practices that include conduct of FDPs, orientation-programs, workshops, inter disciplinary activities, training programmes that ensure quality education.

Our institute regularly **conducts internal and external financial audits**. It has a full-time Treasurer and Accounts Department since inception to ensure maintenance of annual accounts and audits. Chartered Accountant of the Institute conducts regular accounts audit and certifies its Annual Financial Statements. All Utilization Certificates to various grant giving agencies are also countersigned by the CA. All Financial Statements upto 2023-24 have been certified by the CA. Work of Internal Audit of the Institute has been entrusted to the Internal Auditor of the Institute. He also pre-checks salary fixations, pension and gratuity payments and final payments of EPF. Whenever there are additional expenses over and above the budget proposals, special sanction is to be taken from the Governing body.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

6.4.2

Funds / Grants received from government bodies, non-government bodies, and philanthropists during the last five years (not covered in Criterion III and V)

Response: 79.37

6.4.2.1 Total Grants received from government/non-government bodies, philanthropists year wise during last five years (not covered in Criterion III and V) (INR in Lakhs)

2023-24	2022-23	2021-22	2020-21	2019-20
19.16	0.34	9.81	14.5	35.56

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Copy of the sanction letters received from government/ non government bodies and philanthropists	View Document
Annual audited statements of accounts highlighting the grants received	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.4.3

Institution regularly conducts internal and external financial audits regularly

Enumerate the various internal and external financial audits carried out during the last five years with the mechanism for settling audit objections within a maximum of 500 words

Response:

The institute regularly conducts internal and external financial audits. It has a full-time Treasurer and Accounts Department since inception to ensure maintenance of annual accounts and audits. The following agencies conduct regular financial audit in the Institute:

Internal Audit: Internal Audit is conducted regularly by an accounts officer along with Account assistants of the institute along with mechanisms for settling audit objections, if any. The Management of the institute conducts meetings to discuss findings, corrective action plans, and regular follow-ups to settle the objections.

External Audit: External Audit is conducted by the Chartered Accountant of the JSPM group of Institutes. This includes statutory audit covering all financial and accounting activities of the Institute. This includes scrutiny of the following:

(a) All receipts of income sources of the institute like fees collected, consultancies, donations, grants, contributions, and interest earned and returns on investments;

(b) All payments to staff members, vendors, contractors, students and other service providers.

It is pointed out that no major objections/irregularities found in the audit during last five years. Chartered Accountant of the Institute conducts regular accounts audit and certifies its Annual Financial Statements. All Utilization Certificates to various grants giving agencies are also countersigned by the CA. All Financial Statements up to 2023-24 have been certified by the CA. Work of Internal Audit of the Institute has been entrusted to the Internal Auditor of the Institute. This is mainly pre-audit of major receipts and payments and concurrent/post audit of all other receipts and payments. He also pre-checks

salary fixations, pension and gratuity payments and final payments of EPF. Whenever there are additional expenses over and above the budget proposals, special sanction is to be taken from the Governing body.

Mechanism for Settling Audit Objections

1. **Account section of the institute** reviews audit findings and objections, facilitating dialogue between auditors and management.
2. **Formal documentation** will be prepared about objections, management responses, and action plans for addressing findings.
3. **Follow-up meetings** to monitor the implementation of corrective actions and resolve any objectionable issues.
4. **Training and Awareness Programs** The institute conducts sessions for staff to understand audit findings and compliance requirements, fostering a culture of accountability. By ensuring that a robust mechanism is in place for addressing audit objections, The institute enhanced financial integrity and operational efficiency.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

6.5 Internal Quality Assurance System

6.5.1

Internal Quality Assurance Cell (IQAC)/ Internal Quality Assurance System (IQAS) has contributed significantly for institutionalizing the quality assurance strategies and processes, by constantly reviewing the teaching-learning process, structures & methodologies of operations and learning outcomes, at periodic intervals

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes visible in terms of –

- **Incremental improvements made for the preceding five years with regard to quality (in case of first cycle)**
- **Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles)**

Describe two practices institutionalized as a result of IQAC initiatives within a maximum of 500 words

Response:

Internal Quality Assurance Cell (IQAC) is one of the major policy making and implementing unit in our

Institute. IQAC along with Institute administration gives suggestions based on stakeholder's feedback to improve teaching-learning process. Institute regularly conducts training to staff and faculty members for implementation of quality procedures. Institute follows multilevel monitoring system to review teaching-learning process to ensure that activities are conducted as per academic calendar. In IQAC meeting, the quality benchmarks and parameters are identified and process of execution is also defined for various Academic and Administrative activities of the Institution. IQAC aids in the creation of a learner-centric environment conducive to quality education.

Best practices institutionalized:

1. Outcome based education in teaching and learning practices.

IQAC efforts to promote the outcome based education in teaching and learning practices. A Course Outcome (CO) is a measurable, observable, and specific statement that clearly indicates what a student should know and be able to do as a result of learning. The curriculum gap for PO / PSO attainment at course level (POs and PSOs relating to knowledge and skill) and at program level (POs relating to attitude or behavioral) is identified. All activities are mapped to POs and PSOs related to curriculum gap and content beyond syllabi. Feedback on bridging the curriculum gap and delivery of content beyond syllabi is collected from students.

Direct Internal assessment of COs calculates through various tools like mid-sem exams, tests, assignments, MCQ, project, seminar etc on every CO. The direct external CO assessment is based on end semester exams. The Indirect assessment at course level is carried out by conducting course end survey, lab end survey. The indirect attainment of POs and PSOs is calculated by exit survey, employer's survey, co curricular activities, extracurricular activities etc. Based on percentage of CO attainment, the direct assessment of POs and PSOs are calculated. The three levels of PO/ PSO attainments are decided by Department advisory board depending on previous attainments levels. In case PO/PSO has achieved the expected value, then the target is increased by 5% otherwise the previous target is retained and action plan is prepared for improvement.

2. Internal & External Academic Audit :

At the beginning of academic session, The institute collects academic plan, extension activity, collaboration, innovative and best practices, assignment, ICT based activity, students competition, seminar and workshop supposed to organize for better performance.

The Institute takes academic audit of each department and various committees every year to increase and maintain the quality of education. Internal and external Academic Audit committee is set up for this purpose.

The report of the committee was submitted to the IQAC and the same is put in the Governing Body and Academic Council for discussion, suggestion and approval. Due to such academic audit, it is found out that all departments have been constantly improving their curricular, co- curricular and extra co-curricular performances.

3. Use of ICT:

The use of ICT tools has become an integral part in teaching-learning process. IQAC always encouraged teachers to utilize these tools in classroom teaching and laboratories. The IQAC has advised the administration to enrich ICT infrastructure by purchasing advanced ICT tools, Hi speed internet Wi-Fi facility, Smart Boards. The institute is also using MOODLE and ERP system. With the help of this, faculties can share notes, PPTs, NPTEL video links, simulations and case studies for the particular topic, research papers, etc. Students can solve the quizzes online and can submit their assignments.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

6.5.2

The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms

Describe any two examples of institutional reviews and implementation of teaching learning reforms facilitated by the IQAC within a maximum of 500 words each.

Response:

IQAC of the institution ensures quality culture as the prime concern through institutionalizing and internalizing all the initiatives taken with internal and external support and periodical conduct of Academic and Administrative Audit and its follow-up.

IQAC facilitates the learner-centric environment conducive to quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process.

Two examples of institutional reviews and implementation of teaching learning reforms facilitated by the IQAC are

1. The IQAC improve the teaching-learning process through standard academic practices and Implementation of Outcome-based learning education in each program.

2. Participation of college in NIRF, ARIIA, NBA, AISHE, and various other quality audits recognized by the state, national and international agencies.

IQAC act as a nodal agency of the Institution for coordinating quality-related activities, including adoption and dissemination of best practices. Some of the initiatives are :

- Implementation of Outcome-based learning education in each program.
- Promote industrial involvement in academic practices by organizing industrial training, industrial

visits, workshops and guest lectures from industry experts, MOUs etc.

- Conducting quality programs i.e., seminars, webinars, guest lectures, conferences, etc.
- To implement and enhance the use of ICT tools to strengthen the teaching-learning process.
- Introduces the employability skill development courses for students to enhance personality and employability.
- Establishment of Institute Innovation Council (IIC) under MHRD.
- Establishing Research and Development cell to promote Research and Development activities.
- Establishment of various processes to take feedback/surveys from various stakeholders.
- Establishment of the Mentor-mentee process and its effective implementation.
- To institutionalize the best efforts to make the campus ragging-free and develop the discipline in the students along with the establishment of grievance redressal cell.

Other than these initiatives IQAC works on improving the teaching-learning process and supports adopting Outcome-Based Education (OBE) in all programs of college gradually. The Program outcomes are adapted from NBA, program-specific outcomes, and course outcomes prepared by each program considering Bloom's taxonomy in collaboration with faculty, industry experts, and other stakeholders. Outcome-based education aims to create a student-centric learning environment at the course level including curriculum and training. The POs, PSOs, and COs attainment is measured every session, for low attained courses, proper action is planned and efforts are made to improve the attainments if required beyond curriculum content and activities planned and implemented, this helps in improving the employability of students and also rewarded with the NBA accreditation

The Institute takes academic audit of each department and various committees every year to increase and maintain the quality of education. Internal and external Academic Audit committee is set up for this purpose.

The report of the committee was submitted to the IQAC and the same is put in the Governing Body and Academic Council for discussion, suggestion and approval. Due to such academic audit, it is found out that all departments have been constantly improving their curricular, co- curricular and extra co-curricular performances.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

6.5.3

Institution has adopted the following for Quality assurance:

1. Academic and Administrative Audit (AAA) and follow up action taken

2. Conferences, Seminars, Workshops on quality conducted
3. Collaborative quality initiatives with other institution(s)
4. Orientation programme on quality issues for teachers and students
5. Participation in NIRF and other recognized ranking like Shanghai Ranking, QS Ranking Times Ranking etc
6. Any other quality audit recognized by state, national or international agencies

Response: A. Any 5 or more of the above

File Description	Document
Quality audit reports/certificate as applicable and valid for the assessment period	View Document
NIRF report, AAA report and details on follow up actions	View Document
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document
Link to Minute of IQAC meetings, hosted on HEI website	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1

Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.

Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words

Response:

Rajarshi Shahu College of Engineering(RSCOE), Tathawade,Pune, is committed to ensuring equal opportunities for both girls and boys in all academic and extracurricular activities to foster gender equity. Gender-sensitive practices are meticulously observed throughout the college system by establishing various committees and clubs to provide sufficient facilities for female and male students and staff members. At the beginning of the academic year, during the induction program, students are informed about these committees as well clubs. These committees are responsible for handling concerns, complaints, or disputes that may arise among employees, students. RSCOE also offers an online grievance redressal system at <https://www.jspmrscoe.edu/grievance>. To ensure a safe working environment, the institution has formed the Anti Sexual Harassment, Internal Complaint Committee(Vishakha : Cell “) , Grievance Committee, Student Welfare Committee, Extra Curricular committee. An Internal Complaints Committee, constituted on the guidelines of the Supreme Court of India, receives complaints of sexual harassment, makes inquiry and recommends necessary actions. Grievance redressal and internal complaints committees address harassment and gender-based issues.”Vishakha” cell works against harassment and atrocities behavior against women. The board of students welfare committee organize “ Nirbhaya Kanya Abhiyan ‘ for developing the confidence and personality of women.

Efforts to promote gender equity include integrating women into all facets of the workplace and strictly prohibiting sexual harassment. Many leadership positions, such as Heads of Departments and Deans, Club coordinators, are led by women. Female faculty members are encouraged to engage in research, extra curricular activities.RSCOE also encourages male and female students to participate in national level events, ensuring equal career progression opportunities. Female faculty members are actively promoted and supported in their research endeavors by allowing them to pursue higher level education. Training and placement cell promotes equal career progression opportunities for all students. Institute Innovation Council organise various events to produce, reinforce and develop a dynamic Start-up ecosystem to promote advancement through Innovation, Patents and enterprise driven business and financial development.

RSCOE is committed to gender equity through a range of initiatives supporting both male and female students and staff. Gender sensitization programs, including workshops on women’s empowerment, self-defense, and legal rights, are regularly held. The campus is secured with 24/7 CCTV surveillance, security checks, and lady bouncers for women’s safety. Separate hostels and washrooms for boys and girls are provided, along with healthcare services like a medical center, sick rooms, and ambulance services.

Organizing gender equality workshops, panel presentations, and hackathons raises awareness, challenges biases, and promotes inclusivity, promoting progress toward a more equitable future in engineering and technology.

Counseling and mentorship programs, including a mentor-mentee scheme and professional counseling services, offer emotional support. Female faculty are encouraged to take on leadership roles and engage in research, with flexible work timings provided for new mothers and those who have family responsibility. The institution also honors faculty efforts through awards. Inclusive events like “INNOVISION” and “GANDHARVA” celebrate both genders’ talents. Celebration of National/International commemorative days is celebrated. Overall, RSCOE fosters a holistic environment promoting gender equity and social responsibility.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

7.1.2

The Institution has facilities for alternate sources of energy and energy conservation measures

1. Solar energy
2. Biogas plant
3. Wheeling to the Grid
4. Sensor-based energy conservation
5. Use of LED bulbs/ power efficient equipment
6. Wind mill or any other clean green energy

Response: A. Any 4 or more of the above

File Description	Document
Geo-tagged photographs of the facilities.	View Document
Bills for the purchase of equipment’s for the facilities created under this metric	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.3

Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- **Solid waste management**
- **Liquid waste management**
- **Biomedical waste management**
- **e-Waste management**
- **Waste recycling system**
- **Hazardous chemicals and radioactive waste management**

Response:

The JSPM's RSCOE has following types of waste management:

1. Solid waste management
2. Biomedical waste management
3. Liquid waste management
4. e-Waste management
5. Waste recycling system
6. Chemicals waste management

JSPM's RSCOE incorporates several techniques for waste management. The focus is to reduce, reuse and recycle the waste.

1. Solid waste management

For solid waste management separate bins for dry & wet waste are placed at different places in the college. This ensures that solid waste is segregated at the source. Every day, the waste has been collected from college premises by housekeeping personnel and dumped to the municipality garbage collecting van for disposal.

RSCOE has a biogas plant by which the degradable waste from the canteen is collected & converted to biogas which is a sustainable alternative to fossil fuels. This energy is used in the canteen for cooking purpose. Thus, by producing renewable energy in the form of biogas, waste recycling is done. Also, it helps to reduce dependence on non-renewable energy sources.

1. Biomedical waste management

The biomedical waste like Sanitary Pads is nondegradable & very harmful to the environment & human health. For preventing this disposal machines are placed in lady's washrooms which are used by female students & faculty of the college. Any other type of biomedical waste has been not generated in RSCOE.

2. Liquid waste management

The liquid waste from bathrooms is collected separately and given to trees in the college garden. By means of this waste water harvesting is implemented which helps in conserving the water resources.

3. e-Waste management

E-waste management drives have been organized in RSCOE to create awareness among students about segregating the E-waste & not mixing it with the other waste. E-waste like non repairable computer spare parts and other electronic gadgets is collected centrally and sent to the recycling vendor per semester (6 months) for further processing. This results in resource conservation. And it also helps in protecting the environment from pollution.

4. Waste recycling system

Scripted answer sheets and old papers are sent to vendors for paper pulping thus waste paper is recycled which in turn saves trees from cutting. By use of this sustainable waste recycling is done. It contributes to conservation of natural resources and reduction of greenhouse gas emissions.

5. Chemicals waste management

Chemical waste management in RSCOE involves the handling of chemicals with safety precautions. The strong chemicals in the chemistry lab are stored in the Sand bath & for safe handling of these materials hand gloves & goggles are used. Proper instructions are given to the students about safe handling of the chemicals before performing the practical. Used chemicals during practical are diluted before sinking into the sink. The broken glassware is stored in the separate wooden container & disposed separately to the remote place.

The hazardous radioactive waste is not generated in RSCOE.

JSPM's RSCOE has devoted itself to carry out the best waste management practices for minimizing its environmental footmark.

File Description	Document
Relevant documents like agreements/MoUs with Government and other approved agencies	View Document
Geo-tagged photographs of the facilities	View Document
Any other relevant information	View Document

7.1.4

Water conservation facilities available in the Institution:

1. Rain water harvesting

2. Borewell /Open well recharge
3. Construction of tanks and bunds
4. Waste water recycling
5. Maintenance of water bodies and distribution system in the campus

Response: A. Any 4 or more of the above

File Description	Document
Green audit reports on water conservation by recognised bodies	View Document
Geo-tagged photographs of the facilities	View Document
Bills for the purchase of equipment's for the facilities created under this metric	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.5

Green campus initiatives include

Describe the Green campus initiative of the institution including Restricted entry of automobiles, Use of Bicycles/ Battery powered vehicles , Pedestrian Friendly pathways , Ban on use of Plastic, landscaping with trees and plants etc in 500 words

Response:

The objectives of Green Campus initiatives typically focus on ecofriendly sustainable campus promoting environmental responsibility, and the well-being of the campus community. The key points that contribute to the Green Campus initiatives and followed in the campus are:

Students and staff are encouraged to use public transport and car pool to minimize vehicle usage and by doing this there will be restricted use of automobiles in the campus thus reducing pollution which will contribute in reducing carbon dioxide emissions. Vehicles are parked away from the academic building. Also, some staff members and students use bicycle to avoid any kind of pollution. Battery powered vehicles are used in campus particularly Electric vehicles, for the benefit and movement of the people and goods inside the campus, and awareness of students for use of Electric vehicles is given to students. Institute has pedestrian friendly pathways used by students and faculties. There are various kinds of garbage cans available in campus to collect the garbage which includes plastic for careful elimination. Furthermore Frequent notifications are provided to minimize the usage of plastics at all events and hordings are displayed in institute campus for ban on Plastic.

The institute the campus is kept up with an extensive assortment of variety of trees as well as plants. The campus is enriched with greenery that comprises grassy, shrubby and tree-filled settings. Landscaping of trees as well as plants are made properly to bring campus's atmosphere as well as aesthetic appeal. The Landscaping initiatives in the institute are for creating aesthetically pleasing, sustainability and

maintaining the oxygen level. Energy efficient electronic gadgets and Newly built buildings employ LED bulbs while a few incandescent along with fluorescent tube lights have been switched for LED bulbs. Nearly every one of the classrooms, labs, office buildings, computer centers, libraries, seminar halls including staff rooms have LED lighting installed. A 10 KW rooftop solar power plant has also been erected to partially offset the institute's electricity needs.

Infrastructure projects at colleges have made use of green building materials and construction techniques.

These initiatives often involve collaboration among students, faculty, staff, and the surrounding community to create a more sustainable and environmentally responsible campus.

The institute aims at achieving below mentioned objectives under green campus initiatives.

- Enhancing the green cover on campus and contribute to environmental sustainability
- Improving air quality, reduce carbon footprint, and promote biodiversity.
- To develop an eco-friendly and sustainable campus
- To encourage students for protecting and conserving the environment and sustaining the natural resources.
- To develop an institution on a self- sustainability basis in the areas of power, water and cleanliness
- Carry out tree plantation once in a year
- To increase the green cover in and around the campus.

Some initiatives include providing easily accessible recycling bins across campus for paper, plastic, glass, and metals and Educating the campus community about proper recycling practices. Some more initiatives are non use of use and throw tea cups in canteen.

File Description	Document
Policy document on the green campus/plastic free campus	View Document
Geo-tagged photographs/videos of the facilities	View Document
Circulars and report of activities for the implementation of the initiatives document	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.6

Quality audits on environment and energy are regularly undertaken by the institution

The institutional environment and energy initiatives are confirmed through the following

1. Green audit / Environmental audit

2. Energy audit**3. Clean and green campus recognitions/awards****4. Beyond the campus environmental promotion and sustainability activities**

Response: A. All of the above

File Description	Document
Report on environmental promotion and sustainability activities conducted beyond the campus with geo-tagged photographs with caption and date.	View Document
Policy document on environment and energy usage Certificate from the auditing agency	View Document
Green audit/environmental audit report from recognized bodies	View Document
Certificates of the awards received from recognized agency (if any).	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.7

The Institution has Differently-abled (Divyangjan) friendly, barrier free environment

Write description covering the various components of barrier free environment in your institution in maximum of 500 words

- **Built environment with Ramps/lifts for easy access to classrooms**
- **Divyangjan friendly washrooms**
- **Signage including tactile path, lights, display boards and signposts**
- **Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment**
- **Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading**

Response:

Creating a barrier-free environment is pivotal for inclusivity and accessibility, ensuring that all individuals, including those with disabilities, can access and utilize the facilities and resources of an institution. JSPM RSCOE has made substantial efforts to cultivate such an environment, aligning with the barrier-free environment for disabled-friendly campus.

A : Architectural Accessibility

1. Ramps and Pathways:

The campus is equipped with ramps at building entrances and key areas, providing smooth and easy access for individuals using wheelchairs or mobility aids. Pathways are wide and unobstructed, ensuring safe and comfortable movement across the campus.

2. Elevators:

Buildings are fitted with spacious elevators that have Braille buttons and audio announcements. This facilitates easy floor navigation for individuals with visual impairments and those who find staircases challenging.

3. Restrooms:

Accessible restrooms are strategically located across the campus. These restrooms are designed with wider doors, grab bars, and sufficient space for manoeuvring a wheelchair, ensuring privacy and safety.

B : Technological Support

1. Assistive Technologies:

Computer labs are equipped with screen readers, magnification software, and speech-to-text programs. This ensures that students with visual impairments or learning disabilities can access digital content effectively.

2. Hearing Loops and Amplifiers:

Dedicated desk, these technologies enhance auditory signals, making it easier for students with hearing impairments to follow lectures and participate in discussions.

C : Inclusive Learning Environment

Flexible Teaching Methods:

JSPM RSCOE Faculty members are trained in inclusive teaching practices. They employ diverse instructional strategies, including visual aids, interactive sessions, and hands-on activities, smart board recordings.

D : Support Services

1. Disability Support Center:

This includes academic counselling, personalized support plans, and liaison with faculty to ensure reasonable accommodations. The HOD's are also aware of disability awareness and sensitivity training for staff and students.

2. Peer Support Programs:

Trained student volunteers provide academic and social support to their peers with disabilities, facilitating their integration into campus life.

E : Sensitization

Awareness Campaigns:

Regular awareness campaigns and workshops are conducted to promote understanding and sensitivity towards individuals with disabilities. These initiatives aim to dismantle stereotypes and encourage a culture of respect and inclusion within the campus community.

F : Recreational and Extracurricular Accessibility

1. Accessible Sports Facilities:

The campus sports facilities are designed to be inclusive, with accessible sports equipment and modified games that accommodate students with disabilities. This promotes physical activity and team participation among all students.

2. Inclusive Events:

Cultural and extracurricular events are organized with accessibility in mind. Venues are wheelchair accessible, and sign language interpreters are provided when needed. This ensures that students with disabilities can actively participate in and enjoy campus events.

G : Transportation Services

Accessible Transport

The institution offers transportation services with wheelchair-accessible vehicles, ensuring that students with mobility impairments can commute to and from the campus conveniently and safely.

JSPM RSCOE's commitment to creating a barrier-free environment reflects its dedication to inclusivity and equal opportunity for all students.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

7.1.8

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and such other diversities (within 500 words).

Response:

JSPM's Rajarshi Shahu College of Engineering, Pune (RSCOE, Pune) plays a crucial role in fostering an inclusive environment that embraces diversity in all its forms. Through various policies, educational programs, support systems, diverse recruitment practices, and community engagement, RSCOE Pune can promote tolerance and harmony.

- **Institutional Commitment to Diversity and Inclusion:**

Establishing clear policies that define the RSCOE Pune's commitment to diversity and inclusion. This includes anti-discrimination policies, equal opportunity statements, and codes of conduct that promote respect and understanding. Creating dedicated offices or committees focused on diversity and inclusion. These bodies are responsible for developing, implementing, and monitoring initiatives that promote an inclusive environment. Continuous assessment and improvement of these initiatives are essential to ensure they are effective. The RSCOE, Pune has defined a policy that shows our commitment towards diversity and gives equal opportunity to all. We have a different committee and office that helps in implementing and monitoring initiatives taken for the development.

- **Educational Programs and Curriculum:**

We have educational programs and curriculum that includes courses like Universal Human Values. Incorporating diversity and inclusion topics into the curriculum. This ensures that students are educated about different cultures, perspectives, and social issues, fostering a more inclusive mind set.

- **Various Clubs**

Various clubs are created based upon the social commitment and events are organised under the respective club belonging to various departments. The club take the initiative to arrange for the events related to social causes like blood donation camp, tree plantation, road safety etc.

- **Cultural Events**

Various events are organised at departmental as well as RSCOE levels for fostering cultural, regional and linguistic equality. Traditional day to embrace various cultures is celebrated in the college. Hosting cultural events, festivals, and celebrations that highlight the diversity of the campus community. These events promote cross-cultural understanding and appreciation.

- **Recruitment and Retention**

Implementing strategies to recruit and retain a diverse faculty and staff. This includes diverse hiring committees, outreach to underrepresented groups, and creating an inclusive workplace culture. This helps in creating a more socio-economically diverse student body.

- **Community Engagement**

Nation first is the motto as per as the NSS of our college is concerned. Along with various clubs of the college have been actively doing the work for social development and economic cause by conducting events and camps in the remote areas for development. The committee is formed baseless of caste and creed only with a motto of social help and promoting social awareness among the students.

- **E-Cell**

The institution for promoting entrepreneurs and start-up has formulated a E-Cell. Various entrepreneurs are called from different sectors to promote and encourage students to start a business advent by themselves. With association with TED-X events are arranged to motivate students and have an understanding of various domains start-ups can be started. Various sessions are arranged by the cell to encourage young aspirants towards starting start-ups. The details relating to funds are made aware to the students to help recruitment and change the scenario of the developing country by their active contribution.

File Description	Document
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document
Any other relevant information	View Document

7.1.9

Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

Describe the various activities in the Institution for inculcating values for being responsible citizens as reflected in the Constitution of India within 500 words.

Response:

Rajarshi Shahu College of Engineering (RSCOE) incorporates a wide range of activities into the curriculum and extracurricular programs that significantly contribute for developing a culture of responsible citizenship and deepening students' appreciation for the values, rights, duties, and responsibilities specified in the constitution. By integrating these activities, the students and employees actively engage themselves in the betterment of society and the nation.

Awareness through Diverse Initiatives

The core of our approach lies in implanting constitutional values into both academic and extracurricular activities. Activities organized under Shaashwat club, NSS, Rotaract club, and Sambhav club are instrumental in this endeavor. The Shaashwat Club actively promotes ecological responsibility, social responsibility, and community service through its initiatives. These include celebrating International vegan day, organizing donations of food and clothing, and conducting awareness drives on world ozone day and world water day. It reflects a commitment to the Indian constitutional principles of justice, equality, and fraternity. Activities like the cleaning of river Pavana and the save soil awareness drive are hands-on projects that enhance students' understanding of their environmental and social duties that directly contribute to sustainable development.

NSS, Unnat Bharat Abhiyan and Rotaract Initiatives

The NSS, UBA and Rotaract club further reinforce the values of civic engagement and social responsibility. NSS activities such as eye checkups, women empowerment programs, tree plantations and rallies on anti-corruption awareness help students develop a sense of empathy and commitment to societal welfare. Events like Har Ghar Tiranga and Run for Unity instill a sense of national pride and unity, while blood donation camps underline the importance of contributing to society. RSCOE has received funding to start making incense sticks from Nirmalya in village Nere.

Environmental and Health Awareness

Our commitment to fostering environmental and health consciousness is evident through a variety of activities such as the Go Green initiative, plastic-free village campaign and Swachh Bharat Rally. These programs address critical issues related to environmental sustainability and public health and encourages participation from students and employees in creating a cleaner and healthier society.

Civic Responsibility and Leadership Development

Celebrations of republic, independence, constitution day, along with national pollution control, serve as reminders of the principles that guide our nation. Leadership development programs further complement these efforts by instilling ethical leadership qualities and a strong sense of civic duty in students. RSCOE organizes faculty development programs on Universal Human values and Ethics, wherein a participation is seen from inhouse faculty members and from other institutes, from various states. Institute also encouraged employees to attend the FDP.

In RSCOE the curriculum designed includes one credit course on, "Human values and Ethics" and has successfully implemented it from academic year 2020-2021 for second year engineering students. As per NEP, RSCOE has started offering "Universal Human Values and Ethics" for students in curriculum from academic year 2023-24 with weightage of 2 credits, makes students equipped on the human values. This holistic approach ensures that our students are well-prepared to engage with and contribute positively to their communities.

File Description	Document
Details of activities that inculcate values necessary to nurture students to become responsible citizens	View Document
Any other relevant information	View Document

7.1.10

The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

- 1. The institutional Code of Conduct principles are displayed on the website**
- 2. There is a committee to monitor adherence to the institutional Code of Conduct principles**
- 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff**
- 4. Annual awareness programmes on Code of Conduct are organized**

Response: A. All of the above

File Description	Document
Report on the student attributes facilitated by the Institution	View Document
Policy document on code of ethics.	View Document
Handbooks, manuals and brochures on human values and professional ethics	View Document
Document showing the Code of Conduct for students, teachers, governing body and administration as approved by the competent authority.	View Document
Constitution and proceedings of the monitoring committee.	View Document
Circulars and geo-tagged photographs with date and caption of the activities organized under this metric for teachers, students, administrators and other staff	View Document
Provide Links for any other relevant document to support the claim (if any)	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 Practices at Rajarshi Shahu College of Engineering (RSCOE)

Best Practice 1: Employability Enhancement through Industry Internship and Trainings

1. Context

Rajarshi Shahu College of Engineering (RSCOE) has designed comprehensive internship and training programs that aimed for enhancing student employability. These programs encompass aptitude tests, group discussions, interviews, and presentation skills. Students are encouraged to regularly participate in online assessments through platforms like MNC campus connects and Skill Rack. Department coordinators evaluate student performance to identify strengths and weaknesses, and guiding accordingly to face any challenge.

Aptitude training begins in the sixth semester, supported by guidance from senior students on aptitude preparation and resume building. Professional training institutes provide ongoing instruction in aptitude, programming, language skills, and soft skills, ensuring thorough placement readiness.

2. Objectives of the Practice

- Develop industry-relevant skills.
- Bridge the gap between theory and practice.
- Improve employability and job readiness.
- Promote professional growth and development..
- Foster problem-solving and critical thinking skills.
- Encourage career exploration and planning.
- Support entrepreneurship and innovation.

3. The Practice

RSCOE creates career opportunities for engineering graduates by facilitating training and internships through MOUs with reputed organizations. From the first year, students participate in a variety of training programs, including language workshops in English, German, and Japanese, and seminars tailored to enhance their employability.

Table 1. Language Training Details

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Sr. No.	Year	English	German	Japanese
1	2023-24	464	249	162
2	2022-23	380	390	164
3	2021-22	366	302	158
4	2020-21	298	311	174
5	2019-20	418	204	154

Pre-final year students are assessed based on data collected from their departments. RSCOE collaborates with external agencies

for tailored training, including mock interviews. Alumni also provide valuable guidance during placement sessions. Activities with organizations like RPG Zensar, the ESD Program, and the KPIT Nova Program enhance internship opportunities, bridging theoretical knowledge with practical application. Students are encouraged to leverage these internships to develop essential professional skills, build networks, and gain insights into industry practices.

4. Evidence of Success

Table 2. Internship Registration Data

Sr. No	Academic Year	International Internship	National Internship	International Student Exchange Program	Students Placed Through Internship
1	2023-24	3	1029	2	213
2	2022-23	4	951	2	295
3	2021-22	38	632	-	128
4	2020-21	26	510	-	29
5	2019-20	5	365	-	20

TCS Partnership Highlights

- RSCOE is one of the premier institutes which has tie up with TCS.
- The sole college from the PCMC area to host TCS recruitment on campus.
- Every year 120+ offers from TCS, including over 50+ for 7 LPA Digital and 9 LPA Prime.

Top Recruiters

- Delivered exceptional placement numbers for Accenture, KPIT, and Capgemini.

- Highest package reached close to 20 LPA, with an incredible 40+ LPA.

Internship Excellence

- Over 1500 internships offered for last two batches of engineering students.
- Highest stipend recorded was 1,10,000.
- Seven students participated in an internship program in Taiwan under the guidance of a foreign university.

5. Problems Encountered and Resources Required

- **Poor Communication Skills:** Many students from rural backgrounds face challenges in English communication. RSCOE offers English language courses and organizes group discussions to improve leadership skills.
- **Performance Assessment:** Evaluating student internship performance can be difficult. RSCOE mentors physically visit industries to assess student performance alongside industry mentors.
- **Integration into Company Culture:** Interns may struggle to adapt to workplace culture. To facilitate this, RSCOE encourages short-term internships during vacations before long term internship in the industry.

6. Conclusion

The internship and training programs significantly enhance employability by providing students with practical experience and exposure to real-world challenges. These initiatives foster essential skills such as teamwork, communication, and technical proficiency while helping students build valuable professional networks. Overall, these experiences bridge the gap between education and employment, preparing students for successful careers.

Best Practice 2: Product Design and Development Practices for Enhancing Students' Interdisciplinary Skills

1. Context

Product design and development are critical in creating products and solutions that tackle complex challenges across various industries. These processes ensure that innovations are practical, effective, and aligned with user needs and industry standards.

2. Objectives of the Practice

- Equip students to identify, analyze, and solve complex engineering problems.

- Encourage the development of novel solutions to real-world issues.
- Foster teamwork among students.
- Bridge the gap between theoretical knowledge and practical application.
- Ensure students acquire both technical and soft skills essential for success.
- Promote research and development contributing to advancements in engineering and technology.

3. The Practice

RSCOE fosters creativity and innovation through hands-on workshops, design challenges, and real-world problem-solving experiences. Students are encouraged to transform ideas into tangible solutions, enhancing their academic growth and preparing them for leadership roles in engineering.

In the first year, students engage in group projects under faculty mentorship. Assessment rubrics include:

- Concept formation and application of principles.
- Use of modern tools and technologies.
- Effective teamwork and communication.
- Recognition of social, moral, and legal responsibilities.

From the second year onwards, students engage in engineering design and innovation, selecting problem statements from various domains (e.g., smart cities, healthcare, renewable energy).

4. Evidence of Success

Table 3. Product Design Outcomes

Sr. No.	Academic Year	Total Product Developed including FY, SY and TY	Major Project B. Tech	Scopus/ SCI/UGC Publications	Patents Published	Patents Granted
1	2023-24	476	397	119	7	7
2	2022-23	632	382	102	1	-
3	2021-22	497	374	81	1	-
4	2020-21	391	352	20	-	-
5	2019-20	364	302	11	-	-

5. Problems Encountered and Resources Required

- Financial Support: RSCOE provides funding to support product development.
- Time Constraints: Labs remain open beyond working hours to allow project completion.
- Mentorship for Innovative Business Models: Industry-sponsored projects often require mentorship.

6. Conclusion

The product design and development process transforms ideas into practical solutions, emphasizing creativity, problem-solving, and collaboration. Effective communication and iterative testing are vital for refining designs. Ultimately, this process fosters innovation, meeting user and industry needs while achieving successful engineering outcomes.

URL: <https://www.jspmrscoe.edu.in/naac/naac-cycle-ii/SSR-DVV-Support-Documents/cover/CRITERIA%207/7.2.1>

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:

Title: State of the art infrastructure to promote innovation, startups, advance software and hardware trainings.

Pune city is the hub of educational institutions and is also known for “City of Education” A few private engineering institutes were introduced in 1983 and now almost 40 plus engineering institutions are present across the city. Among these institutes RSCOE is distinct in following areas,

1. Institutions Innovation Council (IIC)
2. Innovation and Incubation Foundation (IIF)
3. Adequately Equipped Infrastructure

Institutions Innovation Council

In 2018, the Ministry of Education (MoE), in partnership with the All India Council for Technical

Education (AICTE), launched the Institution's Innovation Council (IIC) program. This initiative aims to systematically promote a culture of innovation and develop a startup ecosystem within higher educational institutions (HEIs). IIC at RSCOE has following programs and schemes.

1. Innovation Ambassador Program: Develop in-house human resource capacity to effectively engage, manage, and deliver innovation and entrepreneurship (I&E) training and mentoring for students and faculty.
2. Impact Lecture Series: Provide funding support to higher education institutions (HEIs) in remote areas to host impactful lectures to enhance institutional performance.
3. Innovation Challenge: A comprehensive experiential learning program for aspiring student innovators and entrepreneurs.
4. Mentor-Mentee Program: Facilitate peer group mentoring with funding support to enhance institutional development and foster inter-institutional collaborations.
5. YUKTI National Innovation Repository: Create a centralized system for gathering ideas, innovations, and startups, facilitating the journey from campus to commercialization.
6. ATAL Tinkering Lab: Cultivate curiosity, creativity, and imagination among young learners through hands-on experimentation and innovation.

Outcomes:

1. Four star rating by MOE/AICTE.
2. One team got selected for the Grand Finale for the software category at Rungta College of Engineering, Bhillai among the top 180 teams from the Smart India Hackathon (SIH) 2023
3. One of the team member Mr. Parth Jadhav attended the IDE boot camp as an extension to SIH 2023. He won place in Top 10 teams to give better business model and got eligible for funding from Wadhvani Foundation.
4. More than 400 students have uploaded their ideas and prototypes to YUKTI repository.
5. Dr. Shailaja Patil has received the "IP Recognition Award" at IP Conclave and IPTSE Awards 2022, Government of India on 19th April 2022
6. RSCOE has been given AICTE Sponsored mentorship of following five mentee institutes.
7. AISSMS IOIT, Pune
8. MMIT, Lohgaon, Pune
9. SIES, Navi Mumbai

10.SKN Sinhgad, Lonavala

11.Parvatibai Chowgule College of Arts and Science, Goa

Innovation and Incubation Foundation (IIF)

Rajarshi Shahu College of Engineering (RSCOE) established Innovation and Incubation Foundation (IIF) which is a Section 8 company incorporated on 20 April 2022. The purpose of this section 8 company is to nurture Innovation and Entrepreneurship culture in Students and faculty of our Institute.

The IIF follow the following process for Incubation:-

The incubation process starts with idea generation, where innovative concepts are brainstormed and identified. IP facilitation follows to protect intellectual property, ensuring competitive advantage. In the pre-incubation phase, ideas are refined and assessed for market viability, leading to prototyping, where tangible models are developed for testing. Finally, during incubation, startups receive mentorship and resources to scale their prototypes into successful businesses.

Objectives of RSCOE IIF:-

The RSCOE Innovation and Incubation Framework (IIF) aims to provide unique and incentivized solutions that inspire students, researchers, and individuals or groups to generate and develop innovative ideas.

- Nurture Innovators: Encourage ideation in key focus areas.
- Foster Creativity: Utilize the design thinking process to enhance creativity.
- Inclusive Innovation: Provide opportunities for everyone, regardless of age, to innovate and create solutions.
- Capacity Building: Equip emerging innovators with the skills to transform their ideas into impactful solutions through training in evolving technologies.
- Collaborative Partnerships: Engage with local industries and institutions to solve real-world problems through innovative products, services, and processes, leveraging Public-Private Partnerships (PPP) for sustainable financial support.

Collaborations:-

RSCOE has signed MoU with following organizations.

Sr. No.	Name of Organization	Date
01	Pimpri Chinchwad Startup	29-11-2021

	Incubation Center	
02	Pune Management Association	3-12-2021
03	AIC Pinnacle Entrepreneurship Forum	11-2-2022
04	Marathwada Accelerator for Growth & Incubation Council (MAGIC), Aurangabad	22-03-2022
05	3DWizard,Pune	2-6-2022
06	BE Solutions, Pune	30-7-2022
07	Bharatiya Yuva Shakti Trust (BYST), Pune	22-8-2022
08	Auto boat India	4-8-2023
09	MSME Care CMRS Associates LLP Chartered Accounts	7-8-2023
10	SATURDAY CLUB GOBAL TRUST	8-11-2023

Outcomes:

Under RSCOE IIF Section 8 company the Incubated Companies registered are as follows:

- 1.Savan Vasundhara Enterprises Pvt. Ltd.
- 2.3D Wizard
- 3.Pestosys LLP
- 4.KSDU Women Farmers Producer Company Limited.
- 5.AG AUTOMATE Pvt.Ltd.
- 6.Arjun Orthotech Pvt.Ltd.

Adequately Equipped Infrastructure

1. JANATICS Centre for Innovation in Smart Factory

The RSCOE has JAANATICS center of excellence which leads to fulfill industry 4.0 requirements. The lab is equipped with following details,

The COBOT Trainer Kit:

It is a 6-axis collaborative robot with a 900 mm reach and a 4kg payload capacity, suitable for various tasks. It operates on a wide power supply range of 100-240 VAC and complies with safety standards ISO 10218-1 and ISO TS 15066.

The Modular Manufacturing System with Industry 4.0:

This technology enhances the production efficiency and flexibility. Its modular design allows for easy customization and scalability. Key features include energy management for optimizing resource use, augmented reality for improved training and maintenance, and a Manufacturing Execution System (MES) for real-time process monitoring.

Centre of Excellence by TATA AUTOMATION LTD. (TAL), Pune:

RSCOE has a Centre of Excellence in Robotics and Automation which is established in association with TATA Automation Ltd (TAL), Pune. It has the Centre of Excellence in Mechatronics established in association with Nayan Electronics, Pune. RSCOE is also featured with Centre for Training in IoT, ML & AI in association with India First Robotics, Pune

The Apple Laboratory:

RSCOE has the Apple Laboratory is equipped with with 30 computers, providing ample resources for students and staff. It supports a range of software, including iMAC OS, Java, Swift, Python, and Eclipse, catering to various programming and development needs.

File Description	Document
Appropriate webpage in the Institutional website	View Document
Any other relevant information	View Document

5. CONCLUSION

Additional Information :

Institute has achieved many laurels during its journey of Engineering Education, few are stated as below:

- Ranked in the '**Band: 150 to 200**' in National Institutional Ranking Framework (NIRF), Ministry of Human Resource Development, Government of India for the year 2024.
- Ranked in the '**Band: 151 to 300**' in National Institutional Ranking Framework (NIRF), Ministry of Human Resource Development, Government of India for the year 2023 under **innovation category**.
- Recognition for **2(f) & 12(B)** from UGC.
- Ranked in '**Band A (Rank Between 6th – 25th)**' and '**Excellent**' in Atal Ranking of Institutions on Innovation Achievements (ARIIA), an initiative of Ministry of Education (MoE), Govt. of India for the year **2021 and 2022** respectively under the category of Private or Self-Financed Institutes.
- NAAC Accreditation Grade 'A' with CGPA **3.26**
- All UG programs are accredited by **National Board of Accreditation** consecutively in fourth cycle in 2022 and two PG programs are accredited by **National Board of Accreditation** in 2023.
- Established **section 8 company under Institution Incubation Foundation (IIF) cell of the institute**.
- Permanent affiliation of Savitribai Phule Pune University to various UG as well as PG courses
- Institute has received "**Best Engineering College Award**" under urban Category from Savitribai Phule Pune University.
- Institute has received "**Late Hon. Shri Balasaheb Wagh Memorial Best Institute Award**" constituted by the Association of the managements of un-aided Engineering colleges (Mah.) in June 2023.
- Institute has received **ISTE-Bhartiya Vidya Bhavan National Award for Engineering College** having Best Overall Performance and **Best Engineering College Principal in 2020**.
- Ranked amongst **Top 100 institutes in the survey conducted by Times Engineering, India Today, outlook survey, Academic insights, Careers360 and The week** consecutively three times.
- Established **Institution Innovation Council (IIC)**, in association with Ministry of Education (MoE), Govt. of India to promote innovation and startups in the campus.
- Institute has received "" in 2023.
- Professional Membership/Chapters with **IEEE, CSI, ASME, ARAI, ASCE,ISHRAE,MCCIA**
- Well established **Entrepreneurship Development Cell NEN** (National Entrepreneurship Network) - Membership No: **JSPM2682**

Concluding Remarks :

This SSR highlights the institution's commitment to delivering quality education and fostering an conducive environment to academic and personal growth. Key strengths include a dedicated faculty, robust infrastructure, and innovative programs that align with the needs of stakeholders.

However, we find some challenges, such as enhancing research output and improving student engagement. The institution recognizes these areas for improvement and is committed to implementing strategic initiatives to address them. The comprehensive evaluation process has provided valuable insights, and the institution look forward to leverage these findings to further enhance its governance, leadership, and overall effectiveness. The main focus will be on continuous improvement, stakeholder collaboration, and adapting to emerging

educational trends, ensures the expectations of its community.

JSPMs Rajarshi Shahu College of Engineering have been established with the objective of creating centers of excellence for education in the field of Engineering. We believe that strategic planning is a needed for effective governance and management. Therefore, institute has taken rigorous efforts to analyze the education scenario at national and regional level, identified the expectations from various stakeholders. While designing the strategic planning, the **New Education Policy 2020** has taken into consideration. All strategies are designed by keeping vision of institute in the mind and these strategies are aligned to achieve the mission of the institute. By implementing all strategies successfully, **various criteria of accreditation and many attributes of NEP 2020 are satisfied**. As we embrace the NEP framework, our institute is committed to implement its core principles to enhance the quality of education and ensure that our graduates are equipped to meet the challenges of a rapidly evolving global landscape. The focus mainly would be on good governance, best in class teaching learning, research & innovation and highly employable students who act as brand ambassadors for the institution. In a nutshell, the implementation of NEP in our institute has initiated significant changes in curriculum, teaching methodologies, and overall educational outcomes. By addressing challenges and fostering a culture of innovation, we aim to fulfill the objectives of NEP and prepare our students for future challenges.