

FOR 2nd CYCLE OF ACCREDITATION

AKHIL BHARATIYA MARATHA SHIKSHAN PARISHAD PUNE ANANTRAO PAWAR COLLEGE OF ENGINEERING AND RESEARCH

S. NO 103 SHAHU COLLEGE CAMPUS PARVATI PUNE 411009 www.abmspcoerpune.org

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

August 2023

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Anantrao Pawar College of Engineering and Research is situated in nation's education hub, Pune and recognized for its quality education and research. It is the institute of Akhil Bhartiya Maratha Shikshan Parishad, Parvati Pune 09, an educational trust was founded by a team of renowned educationists and social reformers. The institute is situated in the area of 10 acres of land surrounded by beautiful landscape of Sahyadri Hills of Western Ghat nearing to famous Parvati Hills. The institute is established in 2012 having 5 UG and 2 PG courses affiliated to SPPU, Pune. Institute is on creating versatile engineers who can apply their knowledge and skills in any field across the globe. Highly qualified faculty members, well equipped laboratories, extensive industry - academia interactions all serve to make engineering education at APCOER campus a unique and enriching experience.

Vision

Committed to comprehensive development of students through quality technical education.

Mission

- 1) To Provide state of art infrastructure that shall create ambience to encourage novel ideas, research activities and consultancy services.
- 2) To inspire students in creation & entrepreneurship.
- 3) To create future technocrats with intelligence, technical skills & good ethical moral values so as to serve needs of society & industries.
- 4) To provide healthy Teaching-Learning environment that will cultivate contemporary research activities, innovations & inventions.
- 5) To develop center of excellence in technical education.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Situated at heart of Pune city with easy access to Bus Station, Railway Station and Airport.
- Supportive management
- Strong team of dynamic & well qualified faculty members
- Faculty retention ratio is good
- Faculty have good exposure towards interaction with the outside world: Reviewers, Session Chairs, Syllabus & Paper Setters, Examiners etc.

Page 2/87 31-08-2023 10:19:21

- Strong Industry Connect through
- Staff and students have Innovation Club members with huge experience as mentors for their project, publication
- FE Student enrollment is good in Comp., IT, AIDS & E&TC; DSE student enrollment is good in allbranches
- Strong Alumni network
- Accredited by NAAC
- Higher studies of students in foreign universities
- Postgraduate and PhD Research Centre in Civil and Mechanical Engineering Department
- Active participation of students in co-curricular and extra curricular activities through ISTE Chapter
- Excellent facility for Innovation and Incubation through Incubation Center at institute
- Rigorous Academics with advanced ICT tools
- Use of OBE philosophy
- Success rate of students is good
- Adequate and well-maintained infrastructure for Curricular, Co-curricular and Extracurricular activities
- Recognized as Nodal Centre for Virtual Labs., Spoken tutorial, Remote centre of IIT Bombay
- Active professional bodies, student associations, students Clubs like CSI, ISTE
- ITSA, CESA, MESA, Astronomy etc.

Institutional Weakness

- Less of funded research projects
- Less quality research publications
- Less consultancy projects
- Less placements of Civil and Mechanical branches
- Less Succession ratio
- Less community services

Institutional Opportunity

- Academic Autonomy
- Interdisciplinary projects
- Industry grade certification courses in latest technologies
- Strengthening interaction with Alumni to facilitate better connectivity with the industry
- Developing state of art laboratories in association with Industries
- More Patents and Copyrights
- Undertake significant industry consultancies
- 100% admissions with quality input
- Quality of research publications
- To engage in more community services
- 100 % Placements
- 100% student internships
- Faculty and student exchange program with foreign universities
- Collaboration with Industries, National/ International bodies
- Innovation and funded projects
- Regional recognition

- More number of FDPs /STTPS, National/International Level conferences
- NBA Accreditation of all departments
- To get NAAC Accreditation with A+

Institutional Challenge

- National competition for admissions
- Cope up with emerging technology
- Decline in interest of candidates in Engineering education
- Inculcation of entrepreneurship skills in students
- Student attendance
- Placement of students in core industries

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Since its foundation in 2012, Anantrao Pawar College of Engineering & Research (APCOER) has been affiliated with Savitribai Phule Pune University (SPPU). The university is renowned for providing top-notch instruction. The institution's quality policy is adhered to by all programmes in order to effectively provide outcome-based education. The planning, conducting out, and implementation of the SPPU curriculum is carried out by senior faculty members from the institution. For the proper execution of the curriculum for all faculty members under SPPU, faculty members are involved in creating the industry-relevant syllabus and organising faculty development programmes. The seasoned professors participate in the paper setting process for university exams as a team member and subject chairperson. The academic staff actively participates in paper evaluation at several SPPU-affiliated common assessment centres. Institution. By providing project-based learning, audit courses, optional courses, internships, mini-projects, and final year projects, the institution offers academic flexibility. To increase students' employability across all areas, the institution has organised a variety of additional courses, online certificate programmes, seminars, workshops, and skill development training in evolving fields. For the adjacent villagers, the National Service Scheme (NSS) has organised awareness programmes on gender equality, computer literacy, hygiene, and women's empowerment. The blood donation camp was set up to aid those who need it. To promote social ideals in students, social programmes like donating food and clothing to orphanages and the economically underprivileged are organised. Feedback is gathered from every stakeholder involved, including students, organisations, parents, and alumni. The feedback is analysed, and corrective measures are then taken. Information and communication technology (ICT) was extensively employed for teaching and learning during the COVID-19 pandemic.

Teaching-learning and Evaluation

Anantrao Pawar College of Engineering & Research (APCOER) offers a structured system for the all-round development of students coming from diverse fields and localities. The SE, TE, BE admissions are done at college level as per the guidelines of Savitribai Phule Pune University (SPPU). FE admissions process is conducted by DTE Government of Maharashtra. As the college is affiliated to SPPU, the syllabus is provided by the University Board of Studies. The college follows the institute planner prepared in-lined with SPPU calendar. The institute planner, department academic calendar is well prepared at the start of each semester for

Page 4/87 31-08-2023 10:19:21

smooth conduction of academics. Orientation sessions for students and teachers are conducted in the beginning of the year to introduce the programme. The faculty at the institute is highly skilled and knowledgeable. The course planners carefully prepare their course plans and the internal evaluation procedure, which they then thoroughly explain to the students in the introductory session. Students can learn about the courses, objectives, and outcomes at the first session. The course coordinators conduct the course using a variety of teaching approaches. Faculty members conduct activities like exams, quizzes, seminars, etc. using the most latest ICT technologies. The individual course coordinators administer internal tests at the course level. According to SPPU's schedule, the external TH/OR/PR examinations are conducted. There is a grievance redressal system in place, and the internal and external assessment mechanisms are transparent. The end semester results analysis is done by the committee appointed by respective programs. ICT tools are utilised to improve the learning experiences of students using a variety of student-centric strategies, including experiential learning, participative learning, and problem-solving methodologies. Through a variety of co-curricular and extracurricular activities, students get exposure. All course outcomes (COs) and all of the institution's programmes' programme outcomes (POs) are listed and presented on the website. There is a clear procedure for achieving COs and POs. A variety of internal and external attenment tools are used to evaluate the COs and POs. Students' opinions are collected through a variety of surveys and feedback. Survey results and feedback are utilised to enhance how things are to be done.

Research, Innovations and Extension

The world has seen a remarkable increase in the use of technology in education over the past several years. Contrary to popular belief, the wave of digitization actually increases the demand for interpersonal and group abilities. APCOER has strong research and development and innovations going back to 2012. We plan our academics and establish attainable goals. The research is founded on the following cutting-edge fields, including governance support in terms of grants, management to support research, and personal qualities of research supervisors and experts. To encourage staff and students to engage in research and development activities by utilising resources outside of the classroom, we have Innovation Club. By taking the initiative for knowledge creation and dissemination and setting up cutting-edge infrastructure, the institute has established an ecosystem for Research and Innovation. Teachers organize workshops, conferences, and webinars to give students and teachers an opportunity to learn about contemporary topics and get practical experience. Our research strategies place a strong emphasis on establishing national and international collaborations with higher engineering institutions, companies, and incubator units. The APCOER Institute and Innovation Cell (IIC) conducts workshops, expert sessions, and success stories in an effort to find, support, and encourage aspiring entrepreneurs. The ultimate objective of APCOER is to contribute to the progress of society while also prospering. This is accomplished through raising awareness, participating actively in government-organized drives, and many other things through extension activity.

Infrastructure and Learning Resources

The facilities at APCOER are enough for enhancing and maintaining high-quality academics as well as cocurricular activities on campus. Three components of the teaching-learning process—students, teachers, and nonteaching (supporting) staff—are a continuous process that improves each person's experience of campus life. The institution complies with the standards laid down by the AICTE in New Delhi and the Savitribai Phule Pune University (SPPU) in order to provide the facilities necessary to support efficient teaching and learning for students in all disciplines. Well-equiped classrooms, library, canteen, hostel, gym, power and water supply systems, and other amenities are included in the infrastructure. Additionally, IIT Bombay's virtual lab facility is

Page 5/87 31-08-2023 10:19:21

accessible. The network on campus has made it possible to offer e-journals, live online lectures, and application software with ease. The entire campus has 300 MBPS leased lines and enough access points placed in key locations to enable Wi-Fi. Access to the college's official information is available on the website. Through the use of security guards and CCTV cameras, the college provides 24-hour security. The institute supports extracurricular activities in the arts and sports that encourage students' growth, development, and retention in a modern, secure setting, improving possibilities for leadership development and social interaction. According to AICTE standards, the college's central library is well-equipped. The college includes a sizable library that meets the needs of faculty, students, and researchers. All of the library's books have been bar-coded and accession system is automated. To facilitate online access to teaching and learning resources, a digital library with dedicated PCs is made available. The campus is reliably supplied with continuous electrical power thanks to generator. To stop unauthorised access to the internet, firewalls are established. The institution has successfully deployed a biometric attendance (facial recognition) system for college staff. The campus is always being monitored through CCTV. LCD projectors and smart boards are available in the classrooms and seminar spaces. Faculty members at the institute have started utilising Google Class Room and smart boards.

Student Support and Progression

Both government and non-government organisations, such as the State Government, Leela Punawala Foundation Scholarship Scheme for Girl Students and the Sanstha level Scholarships, are offered to the eligible students through the college. The institution has taken the initiative to create programmes for students that will increase their skills and strengthen their capacity. Personal counselling, workshops, Marathi Bhasha Gourav Din, Sadbhavana Diwas, Entrepreneur Camp, soft skills training, language and communication courses, celebrations of Yoga Day and workshops are just a few of the activities conducted. A variety of career counselling and competitive test preparation sessions are provided by the organisation, including Resume Building, Demo Sessions by GATE Tutors, and Career Guidance for Competitive Examinations MPSC/UPSC. For the prompt settlement of student issues, including incidences of sexual harassment and ragging, the institution has a grievance redressal cell, an internal complaints committee, a women's grievance redressal cell, and an anti-ragging committee. During the introduction programme and at the start of the academic year, students are briefed about misconduct and required actions. The Anti-Ragging Policies are posted on notice boards in the dorms and on campus. CCTV cameras have been deployed all throughout the campus to look for and record any fraudulent activity. Online grievance submission is possible through the APCOER grievance redressal portal. Few students choose to pursue additional studies. Some of our students have persuaded higher studies in Indian Universities and some have done it from foreign Universities. At both the national and international levels, our students have succeeded in sports. For the benefit of the students comprehensive growth, many cultural events are conducted. These events include the annual sports competition and SPARTECH, the annual social gathering, both of which are organised by the APCOER ISTE Committee. To establish a strong connection between the alumni, institution, and students, the Anantrao Pawar College of Engineering and Research Alumni Association was officially established on August 21, 2018. Members of the alumni association participate in many different activities, such as technical seminars, webinars, guest lectures, mentoring for events, and serving as judges for various technical competitions.

Governance, Leadership and Management

In accordance with its vision and goal, the institution has developed a number of policies and strategies. It has a clear Standard Operating Procedure (SOP) in terms of ISO. It has created protocols for administrative and educational activities that are regularly put into practise. Through good leadership, the institution makes an

Page 6/87 31-08-2023 10:19:21

attempt to achieve the goals that have been defined. The institution develops a participatory culture, as a result stakeholders develop a sense of ownership. The achievement of the institution's quality education is a result of the stakeholders' collective efforts and teamwork. The institution has a prospective plan that emphasises the comprehensive growth of faculty members and students. In developing and implementation of quality policies and development plans, top management, the College Development Committee (CDC), the Principal, the Internal Quality Assurance Cell (IQAC), and faculty members all play significant roles. A number of committees are established for responsibilities associated with administration, academia, student interactions and R&D as well as for the decentralised governance. The institution adheres to best practises for quality improvement in R&D, industrial interaction and effective teaching-learning. The institution always puts a strong emphasis on the technical and personal development of both teaching and non-teaching staff members. At the institutional level, a self-appraisal system is in place to guide all teachers towards an effective method of teaching and learning. The institution frequently assesses how effectively and efficiently the financial resources are being used. Audits are carried out both internally and externally to verify the actual expenses. At all times, quality assurance is a primary focus. The IQAC develops, implements, and reviews quality assurance policies. Through feedback from stakeholders and appropriate action, quality assurance focuses on the efficient and successful operation of academic and administrative processes.

Institutional Values and Best Practices

'Bahujan Hitay, Bahujan Sukhay' is the motto of the Akhil Bhartiya Maratha Sikshan Parishad. Therefore, every employee of our institute strives to live up to the institute's philosophy and constantly encourages our students to be good citizens and contribute to society in both technical and social ways. In order to prevent gender discrimination, the institute promotes a healthy working environment for staff and students. This is demonstrated by the fact that we have more than 50% female employees at our institute and that several of our departments and committees are managed by female faculty. We observe a number of national and international holidays and festivals on our campus as evidence that our institution believes in the equality of all cultures and traditions. By installing solar power panels and a rainwater harvesting system on our campus, we have also taken steps to conserve energy and water. Additionally, our institute's building have undergone energy audit and our campus have undergone environmental, and green audits. The institute makes an attempt to provide an atmosphere of acceptance by maintaining tolerance and harmony towards socioeconomic activities related to cultures, regions, languages, and communities. As an example, Tree Plantation was organised to maintain socioeconomic diversity. By organising activities like Sadbhavana Din, which fosters students and staff about the constitutional obligations, values, rights, duties, and responsibilities of citizens, the institute raises awareness of students' and staff's obligations under the constitution. The institution has continued to apply its best practises and strives to improve them yearly. The institution employs a variety of effective practises, but Innovation Cell and Indian Society for Technical Education (ISTE) Student Chapter are two of the best. The success of these two best practises demonstrates how the institution has improved its efforts to keep these practises as best practises within the organisation. The Innovation Cell, the Incubation Centre, the financial support offered by the institution for various student activities, and the fee waiver programmes for deserving students are all examples of the institute's distinctiveness.

Page 7/87 31-08-2023 10:19:21

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College				
Name	AKHIL BHARATIYA MARATHA SHIKSHAN PARISHAD PUNE ANANTRAO PAWAR COLLEGE OF ENGINEERING AND RESEARCH			
Address	S. No 103 Shahu College Campus Parvati Pune			
City	Pune			
State	Maharashtra			
Pin	411009			
Website	www.abmspcoerpune.org			

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Sunil Bhimrao Thakare	020-24218901		020-2421895 9	
IQAC / CIQA coordinator	Ganesh Eknath Kondhalkar	020-24213929	9822676607	020-2424895	iqac@abmspcoerpu ne.org

Status of the Institution	
Institution Status	Self Financing

Type of Institution		
By Gender	Co-education	
By Shift	Regular	

Recognized Minority institution	
If it is a recognized minroity institution	No

Page 8/87 31-08-2023 10:19:21

Establishment Details

State	University name	Document
Maharashtra	Savitribai Phule Pune University	View Document

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

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)					
Statutory Regulatory Authority	Recognition/Appr oval details Instit ution/Department programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks	
AICTE	View Document	10-04-2017	12	Extension of Approval	
AICTE	View Document	10-04-2017	12	Extension of Approval	
AICTE	View Document	10-04-2017	12	Extension of Approval	
AICTE	View Document	10-04-2017	12	Extension of Approval	
AICTE	View Document	10-04-2017	12	Extension of Approval	

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

Page 9/87 31-08-2023 10:19:21

Location and Area of Campus					
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.	
Main campus area	S. No 103 Shahu College Campus Parvati Pune	Urban	67.1	14708	

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Pro gramme/Co urse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Civil Engineering	48	HSC	English	240	234
UG	BE,Compute r Engineering	48	HSC	English	240	306
UG	BE,Electroni cs And Telec ommunicatio n Engineering	48	HSC	English	180	104
UG	BE,Informati on Technology	48	HSC	English	240	294
UG	BE,Mechanic al Engineering	48	HSC	English	240	186
UG	BE,Artificial Intellegence And Data Science	48	HSC	English	60	71
UG	BVoc,Bvoc	36	HSC and Equivalent	English	30	0
UG	BVoc,Bvoc	36	HSC and Equivalent	English	30	3
UG	BVoc,Bvoc	36	HSC and Equivalent	English	30	1
UG	BVoc,Bvoc	36	HSC and	English	30	0

Page 10/87 31-08-2023 10:19:21

			Equivalent			
PG	ME,Civil En vironmental Engineering	24	Bachelor of Engineering	English	48	37
PG	ME,Mechani cal Design Engineering	24	Bachelor of Engineering	English	48	20
Doctoral (Ph.D)	PhD or DPhil,Phd	36	Master of Mechanical Engineering	English	17	0
Doctoral (Ph.D)	PhD or DPhil,Phd	36	Master of Civil Engineering	English	19	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	Iniversity		14			47						
Recruited	3	0	0	3	4	0	0	4	18	29	0	47
Yet to Recruit	5	·			10			0				
Sanctioned by the Management/Soci ety or Other Authorized Bodies	3		0	0		28						
Recruited	3	0	0	3	0	0	0	0	21	7	0	28
Yet to Recruit	0	'			0	•			0		'	

Page 11/87 31-08-2023 10:19:21

	Non-Teaching Staff					
	Male	Female	Others	Total		
Sanctioned by the UGC /University State Government				17		
Recruited	14	3	0	17		
Yet to Recruit				0		
Sanctioned by the Management/Society or Other Authorized Bodies				0		
Recruited	0	0	0	0		
Yet to Recruit				0		

	Technical Staff						
	Male	Female	Others	Total			
Sanctioned by the UGC /University State Government				12			
Recruited	10	2	0	12			
Yet to Recruit				0			
Sanctioned by the Management/Society or Other Authorized Bodies				0			
Recruited	0	0	0	0			
Yet to Recruit				0			

Qualification Details of the Teaching Staff

Page 12/87 31-08-2023 10:19:21

	Permanent Teachers									
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	2	0	0	1	0	0	2	2	0	7
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	9	13	0	22
UG	0	0	0	0	0	0	0	0	0	0

	Temporary Teachers									
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	1	0	0	3	0	0	1	0	0	5
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	16	25	0	41
UG	0	0	0	0	0	0	0	0	0	0

Page 13/87 31-08-2023 10:19:21

Part Time Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	3	0	0	0	0	0	7	0	0	10
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	Male	Female	Others	Total		
engaged with the college?	0	0	0	0		

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	865	2	0	0	867
	Female	331	1	0	0	332
	Others	0	0	0	0	0
PG	Male	44	0	0	0	44
	Female	13	0	0	0	13
	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

Page 14/87 31-08-2023 10:19:21

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	67	36	44	45	
	Female	18	10	17	23	
	Others	0	0	0	0	
ST	Male	2	7	1	3	
	Female	0	3	2	1	
	Others	0	0	0	0	
OBC	Male	268	213	171	191	
	Female	112	98	68	53	
	Others	0	0	0	0	
General	Male	462	331	391	327	
	Female	162	125	151	148	
	Others	0	0	0	0	
Others	Male	0	0	0	0	
	Female	0	0	0	0	
	Others	0	0	0	0	
Total	·	1091	823	845	791	

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:

Inter-disciplinary curricula, which allow students to select their preferred options from the spectrum of programmes offered by the Savitribai Phule Pune University, have been recommended as a means of fostering students' overall academic growth. The suggested interdisciplinary curriculum is not a problem because there is a lot of infrastructure and staff available, which means there are no barriers to giving students such freedom. This institution has already suggested and begun building the necessary infrastructure to permit such facilities. The establishment of a multidisciplinary education and research system is required in order to establish technical development centres, incubation centres,

Page 15/87 31-08-2023 10:19:21

	and links between industry and academics. To help students develop their entrepreneurial skills, the institution has already established an entrepreneurship unit.
2. Academic bank of credits (ABC):	The extent to which the institution is ready to implement the Academic Bank of Credits relies on the rules established by Savitribai Phule Pune University. For this reason, a central database is built by SPPU in addition to the college's database to digitally store the academic credits that students have earned from various courses. This will allow the credits that students have already earned to be carried over when they re-enter the programme. We are setting up a suitable technical support system for monitoring ABC.
3. Skill development:	From Semester-III to Semester-VIII in various programmes, the Institution is already offering the skill courses as intended by SSPU. Also, the college has already been offering courses like Soft Skill, Personality Development, Japanese, French and German Language and JAVA Full Stack Development Program under the skill courses. A proper combination between skill development, needs of industry, vocational education, mainstream education, and earned credits is required, and it must happen gradually. This necessitates the development of appropriate facilities in the institution, and this work has already begun building such facilities within the institution.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	The Students Induction program is conducted for the First Year students. The important part of it is to introduce them the great legacy of Indian Knowledge System. The local language, art, and culture must be promoted and integrated into the curriculum through required activities like literary activities, talks, interactions, conferences, etc. The teachers and subject-matter experts of these languages will have more employment prospects as a result of these changes. Regular field trips to nearby exhibitions and heritage places should respect their culture and customs. This will increase the state of Maharashtra's tourism industry and raise student awareness.
5. Focus on Outcome based education (OBE):	The Outcome Based Curriculum programme seeks to standardise the academic programs across all connected colleges with the University of SPPU. It is

	recommended to use a variety of instructional methods, including lectures, seminars, tutorials/workshops/practical and project-based learning field work, technology-enhanced learning internships and apprenticeships, and research projects. It is important to identify the learning outcomes for students in terms of their knowledge, abilities, comprehension, and employability. This institution abides by the rules as and when instructed because it is associated with the affiliating university.
6. Distance education/online education:	This institution is already ready, especially in case of a COVID-19 pandemic. It also uses several online teaching and learning tools, such as the Zoom application, Moodle, What's App, Google Meet, Microsoft Teams, etc. There are digital interactive panels built in classrooms and Wi-Fi is available across the entire college campus, so there are no barriers to online learning. Even a small relief in the COVID-19 pandemic situation and corresponding visits to the institution from far-off places by students and staff members enable the students to study online content for all topics during all semesters. In order to address the challenges of the future, this institution is preparing to make all of the e-content material created by faculty members available to all students online.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Yes. We have established Electoral Literacy Club at APCOER in the AY 2021-22 as guidelines given by Systematic Voters' Education and Electoral Participation (SVEEP), flagship program of the Election Commission of India for voter education.
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?	Students' co-ordinator and co-ordinating faculty members are appointed by the institute. The ELC at APCOER is functional and conducts activities related to Electoral Literacy amongst students and faculty. Electoral literacy typically refers to the knowledge and understanding of the electoral process, including voting rights, electoral systems, political parties, and civic engagement. The ELC have its goal very clear and according to this it organizes activities within the institute for students and faculty.

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.

The ELC of APCOER have conducted some programs for students and faculty members. 1) Poster Exhibition: Exhibition of posters prepared by our students was organized on the occasion of National Voters Day on 25th January 2023 at APCOER. Students' creativity in preparing posters to increase awareness about importance of voting in democracy was observed. 2) Rangoli Competition: Rangoli Competition was organized on the National Voters Day 25th January 2023. Total 29 students participated in this activity. Students expressed importance of a single vote in the democracy through their Rangoli. The students were awarded with participation certificates from District Election Officer, Pune.

- 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.
- Voter Awareness and Registration Program: This program was organized on the 5th December 2022 for new voter registration, voter card updating and linking of voter ID with Aadhaar. A record number of 102 participants took advantage of it. The institute was awarded with a certificate by District Election Office, Pune.
- 5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.

Voter Awareness and Registration Program: This program was organized by institute on 25th January 2019 to celebrate National Voters' Day. The faculty and students not registered as voters are given guidance of the process and their registration forms along with required documents were collected. These applications were sent to District Election Office for the further processing.

Extended Profile

1 Students

1.1

Number of students year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1256	1091	823	845	791

File Description	Document
Upload Supporting Document	<u>View Document</u>
Institutional data in prescribed format	View Document

2 Teachers

2.1

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

Response: 129

9	File Description	Document
	Upload Supporting Document	<u>View Document</u>
	Institutional data in prescribed format	View Document

2.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
84	85	93	68	72

3 Institution

3.1

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

2021-22	2020-21	2019-20	2018-19	2017-18
247.20	183.79	102.51	187.61	211.42

Page 19/87 31-08-2023 10:19:21

File Description	Document
Upload Supporting Document	<u>View Document</u>

Page 20/87 31-08-2023 10:19:21

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1

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

Response:

Response:

According to the academic calendar of SPPU, the institution plans and monitors the activities for the effective implementation of the teaching learning process.

Process for Effective Curriculum Planning:

The institution is affiliated with SPPU, and it follows its recommended curriculum. Before the start of semester, the teaching load is distributed among all faculty members in accordance with guidelines, taking into account their areas of expertise and interest. Academic planning starts with the drafting of an institute academic calendar by using the SPPU calendar as a reference. Before the commencement of the semester, the academic preparation is done by the faculty members. It includes a teaching plan, reference plan, course file, lab manuals, question banks and assignments. Gaps are identified between prescribed curriculum and industry expectations. These are bridged by delivering the contents beyond the syllabus. The gaps are addressed by conducting virtual lab experiments, expert talks, industry visits, projects, internships etc.

Process for Effective Curriculum Delivery:

Course wise Google classrooms are created for sharing the academic resources with the students. Institution provides well maintained class rooms with a smart board, LCD projector and internet connectivity for effective curriculum delivery. NPTEL videos contents from online courses and online learning platforms are used by faculty members to fill the gap between curriculum and industry expectations. Each department assigns a teacher mentor for a batch of students. Mentors monitor performance and attendance of all students and regularly communicate to parents. Library is kept open for all students during institution hours as well as additional hours for reading books, journals, newspapers and issuing books. During the COVID-19 pandemic situation, lectures were conducted using the online platform.

Conduct of Continuous Internal Assessment:

Each department evaluates the performance of students through a continuous assessment process using unit tests, practical, orals, assignments, tutorials, preliminary examination etc. Unit test or quiz is conducted after completion of first two units for each course and corrective measures are taken to improve the score for slow learners. Subject teacher monitors the progress of each student and conducts

Page 21/87 31-08-2023 10:19:21

remedial classes to improve performance of slow learners. During the pandemic, online tests such as unit tests, mock tests, in-semester examinations and preliminary examinations were conducted through online mode. Institution has a pool of ISO and IQAC auditors. Auditors conduct preliminary audits to check preparation and planning of subjects allotted to teachers. Final audit is conducted to check performance of students and CO-PO attainments after declaration of university results. Feedback and course exit surveys are conducted for internal attainment of course outcomes. The institution supports and encourages faculty members to arrange and participate in faculty development activities to enhance their subject knowledge and improve communication among peers at the academic and professional levels.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	<u>View Document</u>

1.2 Academic Flexibility

1.2.1

Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

Response:

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	View Document
Evidence of course completion, like course completion certificate etc. Apart from the above:	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Other Upload Files	
1	View Document

1.2.2

Page 22/87 31-08-2023 10:19:22

Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

Response:

1.2.2.1 Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1091	696	767	58	33

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

1.3 Curriculum Enrichment

1.3.1

Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability in transacting the Curriculum

Response:

In order to integrate the cross cutting issues relevant to gender, environment and sustainability, human values and professional ethics, the College has offered different types of courses in the curriculum given by Savitribai Phule Pune University (SPPU), to enhance professional competencies, inculcate general competencies like social values, human values, environment sensitivity etc., thereby leading to the comprehensive development of students.

The courses on Ethics, Human Values, Human Resources & Organizational Behaviour and Community Outreach (HVCO), Environmental Studies are included in the curriculum of all programmes as audit courses.

1. Gender Sensitivity:

The institute have offered courses related to gender sensitivity included in the syllabus offered by SPPU.

Audit course of Human Behaviour (404196B) was offered to final year Electronics & Telecommunication Engineering students from 2018-19. In this course students have observed change in awareness levels, knowledge and understanding of student, change in attitudes / behaviour of students with regards to their education improved teamwork, institutional leadership and other life skills. Also

Page 23/87 31-08-2023 10:19:22

Improvement in social health and attitude.

Audit course of Humanities and Social Sciences (210250) was offered to second year Information Technology students from 2016-17. On completion of the course, In this course student will be able to making engineering and technology students aware of the various issues concerning man and society. Students will able to understanding major ideas, values, beliefs, and experiences that have shaped human history and cultures.

Audit course of Health & Fitness Management (314459) was offered to third year Information Technology students from 2017-18. On completion of the course, student will be able to Identify the health- and skill-related fitness components. Understand importance of mental fitness along with physical fitness by practicing yoga, meditation and relaxation techniques.

2. Environment and Sustainability:

The institute have offered courses related to Environment and Sustainability included in the syllabus offered by SPPU.

Audit course of Environmental Studies (101007) was offered to First Year Engineering students from 2019-20. On completion of the course, student will be able to demonstrate an integrative approach to environmental issues with a focus on sustainability development. Distinguish between and provide examples of renewable and non-renewable resources & analyse personal consumption of resources. Identify key threats to biodiversity and develop appropriate policy options for conserving biodiversity in different settings.

Audit Course of Environmental issues and Disaster Management was offered to final year Electronics and Telecommunication Engineering from 2018-19. On completion of this audit course students learned the different environmental issues and disasters and problems associated with environment and effectively handle the disasters.

3. Professional Ethics:

The institute have offered courses related to Professional Ethics included in the syllabus offered by SPPU.

Audit Course of Professional Ethics and Etiquettes (314449) was offered to third year Information Technology students from 2016-17. On completion of the course, student will be able to summarize the principles of proper courtesy as they are practiced in the workplace.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

1.3.2

Percentage of students undertaking project work/field work/ internships (Data for the latest

Page 24/87 31-08-2023 10:19:22

1			``
comp	leted	academic	veari
COLLEGE		acaaciiic	,

Response:

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

Response: 175

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

1.4 Feedback System

1.4.1

Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website

Response:

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

Page 25/87 31-08-2023 10:19:22

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1

Enrolment percentage

Response:

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

2021-22	2020-21	2019-20	2018-19	2017-18
237	218	115	169	164

2.1.1.2 Number of sanctioned seats year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
348	348	348	348	348

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Final admission list as published by the HEI and endorsed by the competent authority	<u>View Document</u>
Document related to sanction of intake from affiliating University/ Government/statutory body for first year's students only.	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:

2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)

Page 26/87 31-08-2023 10:19:22

2021-22	2020-21	2019-20	2018-19	2017-18
32	32	28	28	28

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

2021-22	2020-21	2019-20	2018-19	2017-18
174	174	174	174	174

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	View Document
Copy of communication issued by 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 Student Teacher Ratio

2.2.1

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

Response:

2.3 Teaching- Learning Process

2.3.1

Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences and teachers use ICT- enabled tools including online resources for effective teaching and learning process

Page 27/87 31-08-2023 10:19:22

Response:

The institute believes in the adoption of students centric methods to enhance student involvement as a part of participative learning and problem solving methodology.

In order to enhance teaching learning capacities it is essential for the students and faculties to use and update themselves with latest technologies. The institute uses Information and Communication Technology (ICT) tools in day to day teaching and learning to support the effective delivery of teaching and learning objectives.

1. Experiential Learning:

Project work, Mini project, Project Based Learning and Internship or Field Projects in industry.

For Real time exposure students are encouraged to participate at national and international level competitions/Hackathon.

Field and Industrial Visits: Faculty identifies and organizes academically significant field visits and surveys. Departments plan and organize the industrial visits for students to provide exposure to understand technical knowhow.

Guest Lecture: Guest lectures by eminent experts from industry and academia are organized to supplement the teaching learning process.

2. Participative Learning and Teamwork: Faculty adopt role play method especially in UG and PG technical courses to supplement teaching by way of participative learning.

The institute promote the spirit of teamwork by organizing the activities and participation in NSS camp to bear the institutional social responsibility. The activities includes village adoption, tree plantation, Swatchh Bharat, Unnant Bharat abhiyan, Yoga Day and health awareness camp helps in lifelong learning for the students.

2.3 Group work and problem solving Methodology:

Practicals and workshops in all individual and group work under the guidance of faculties are also conducted. The case study method is adopted in teaching learning process to enhance logical thinking and practical knowledge among the students.

- 3.2. Analysis-Reasoning and Innovation Club:
 - Questions in discussion and examination are based on analysis and reasoning.
 - Major locations in the institute has wi-fi facilities to access the internet.
 - Institute promotes the culture of self-learning through NPTEL and Swayam portal but not limited to the learning sources.
 - Institute believes in the discussion methods in respective expertized available with innovation club members.
 - The students are benefited though the discussion and problem statements given by the innovation

Page 28/87 31-08-2023 10:19:22

club members not only develop analytical and reasoning skills but also helps in shaping the soft and managerial skills, business ideas and adoptions, innovations through technological advancements.

- Research activities are conducted in each department under the guidance of senior faculty and innovation club members where the students of different semesters get knowledge about emerging area and help them to promote in research and innovation aptitude.
- 1. Computers are available at departmental computer Labs and faculty location in the institute along with projectors at classrooms and smart screens at seminar hall.
- 2. Multifunction printers with scanners are available at accessible locations in the institute. Dedicated copier available at library.
- 3. Interaction through- Zoom meeting, Google Meet, Microsoft Team, Google Classroom
- 4.MOOC Platform (Swayam, NPTEL, Coursera, Edx etc) and Digital Library resources (J-Gate, NDEL etc)

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

2.4 Teacher Profile and Quality

2.4.1

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

Response:

2.4.1.1 Number of sanctioned posts year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
84	85	93	68	72

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Page 29/87 31-08-2023 10:19:22

2.4.2

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

Response:

2.4.2.1 Number of full time teachers with NET/SET/SLET/Ph. D./ D.Sc. / D.Litt./L.L.D year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
9	6	8	7	2

File Description	Document
List of faculties having Ph. D. / D.Sc. / D.Litt./ L.L.D along with particulars of degree awarding university, subject and the year of award per academic year.	View Document
Institution data in the prescribed format	<u>View Document</u>
Copies of Ph.D./D.Sc / D.Litt./ L.L.D awareded by UGC recognized universities	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

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

Response:

Assessment Mechanism of internal

The continuous evaluation of students is carried out by faculty for the theory lectures, laboratory practical evaluation, assignments, and unit tests.

The term marks are allotted based on defined strategies such as timely submission, presentation and understanding of the concept or topic. The assessed marks are displayed on notice board and communicated to the students during respective subject class. Query if any is discussed with faculty and HoD.

Page 30/87 31-08-2023 10:19:22

The in-semester examination is plan and scheduled by the Savitribai Phule Pune University (SPPU). The question papers are distributed for the in semester examination by SPPU. The evaluation of in semester answer sheets are done by the examiners appointed by the CEO.

Assessment Mechanism of external

SPPU uploads timetable on its website and CEO of institute distribute and displays it on notice board for information to students and staff. The confidential invigilation schedule is prepared and communicated to staff through mail and office order. Internal senior supervisor, custodian, etc. are appointed by Principal as per university guidelines. External Senior Supervisor for theory and examiners for practical are appointed by university for smooth, efficient, transparent and time bound conduct of examinations. University uploads the question paper on university exam portal 1 hour before on the day of examination, OTP is received on mobile of CEO and Principal to download Question paper. CEO confidentially downloads question paper in exam control room in presence of senior supervisor and hand overs question papers to respective invigilators at the time of examination. University squad gives surprise visits to exam centre during examinations. After examination, sealed bundles of answer sheets are sent to respective central assessment program centre for evaluation.

Institute Level

The Examination Department also deals with mistakes/errors related to internal assessment of the students promptly. All internal examinations are conducted adhering to the norms of SPPU. Internal marks are given considering unit test, assignments, practical work, tutorials etc. The system of internal marks is very effective and transparent. The students are given opportunity to redress their grievances concerning internal marks if any.

The CEO can intervene and seek opinion of another course teacher. The grievances are resolved by showing his/her performance in the answer sheet or the answer sheet is reassessed by the faculty once again in his presence. Any corrections in the total of marks or assessment of answer books are immediately done by the faculty members. The result of redressal is given by the university within 10-15 days after application received by the student with duly signed by the head of department.

Redressal of grievances at University level:

Any queries with respect to results, evaluation of answer sheet, corrections in mark sheets, and other certificates issued by university are handled at SPPU.

Students are allowed to apply for photocopy of answer sheet, revaluation, recounting by paying necessary processing fee to university if they are not satisfied with the university evaluation through the institute. The result of revaluation is given by the university within 30- 45 days of the application.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

Page 31/87 31-08-2023 10:19:22

2.6 Student Performance and Learning Outcomes

2.6.1

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

Response:

- **Program Outcomes (POs):** It represent the knowledge, skills and attitudes so that the students on the successful course completion of their respective engineering program will achieve the lifelong learning attitude.
- Course Outcomes (COs): The fruitful reflection of the learning through the acquired knowledge and learning to implement it into the engineering skill sets. The new and innovative engineering and scientific developments are the reflections of the cumulative knowledge and skills acquired at the end of selected course.
- **Program Specific Outcomes (PSOs):** The factual and crystalized learning to apply the acquired cum cultivated knowledge in science and technological domain including social empowerment. The PSOs helps in cultivation of ethical practices and contribution towards the sustainable development of the society.

Communication mechanism:

To Chairman and Heads:

POs, PSOs and COs are approved by the Board of studies of respective departments from Savitribai Phule Pune University (SPPU). The drafted and finalized POs, PSOs and COs are communicated to respective subject chairman and published in the syllabus copy.

To the students:

Once the academic activities begins the POs, PSOs and COs are discussed during the first few lectures and sessions. At appropriate interval selected by the faculties and respective class teachers the revision on POs, PSOs and COs is carried out.

To the stakeholders:

The and POs, PSOs and COs of respective department are discussed during the induction programme and subsequent parent teacher meetings. All POs, PSOs and COs of respective department along with Vision and Mission of Institute and department are displayed on the institutional web page.

Implementation:

After allotment of the subject as per the subject choice given by the faculties. The POs, PSOs and Cos taken from the syllabus for allotted subject and discussed during the meeting of head of department.

Execution

Page 32/87 31-08-2023 10:19:22

The course outcomes and their mapping with program outcomes and program specific outcomes are elaborately discussed and derived by the faculty members. The mapping and attainment is done by the subject teachers. The attainment tools includes prelim, assignments, and activities. The session 1 and session 2 for 30, 70 marks. All COs are coded with CO followed by the serial numbers available in the syllabus. The three level as L1, L2 and L3 are setted for 40%, 50% and 60% passing above the average marks gained by full class.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

2.6.2

Attainment of POs and COs are evaluated.

Explain with evidence in a maximum of 500 words

Response:

Anantrao Pawar College of Engineering and Research, Parvati, Pune strives for OBE as its main goal. Programme Outcomes (POs), Programme Specific Outcomes (PSOs), and Course Outcomes (COs) are all created as part of OBE compliance. The twelve characteristics of engineering graduates are referred to as Programme Outcomes (POs). Programme Specific Outcomes (PSOs) are defined by each programme in accordance with its vision and mission. Every course has specific course chairman and team, who define the course outcomes (COs).

Program Outcomes (POs): At the time of completing an engineering programme, students should have the knowledge, set of technical skills and attitudes represented by these.

Course Outcomes (COs): It provides the knowledge and skills the student ultimately acquires at the conclusion of each course. It defines the cognitive functions that a course offers. The course objectives have been defined in accordance with each course's syllabus (units). For each course that is provided, four to six course outcomes are typically defined.

The SPPU provides the syllabus and the course outcomes. The course coordinators modify and reframe the course outcomes in accordance with the requirements. Course Outcomes are communicated to the students during the introduction class itself. The course outcomes are also a main topic of conversation during the course discussion.

Program Specific Outcomes (PSOs): At the time of graduation, students should be able to accomplish these. Each programme has two to three outcomes that are unique to that programme.

Distribution

Page 33/87 31-08-2023 10:19:22

The Vision, Mission, COs, POs and PSOs, PEOs are displayed on the Institute website

It is also displayed at prominent locations of the campus for staff, students.

It is communicated to employers and alumni.

It is communicated to parents during the Parent Teacher Meeting (PTM).

It is attached in the course files, lab. manuals, journals, seminar reports and project reports etc.

CO-PO Evaluation

The course coordinator prepares a matrix of CO-PO & CO-PSO mapping.

The justification of CO-PO & CO-PSO mapping is also provided.

The tools for attainment of CO are defined for each course.

The attainment of CO, PO, PSO is calculated by using various tools.

Execution

The faculty members have in-depth discussions and draw conclusions on the course outcomes and how they relate to programme outcomes and program-specific outcomes. The subject teachers map and assess student progress. Prelim examination, assignments, and activities are all part of the achievement tools. Sessions 1 and 2 are rated 30, 70 marks each. The serial numbers listed in the syllabus are followed by CO for all COs. The three levels, L1, L2, and L3, are intended to pass at 40%, 50%, and 60% above the overall average score for the class.

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

2.6.3

Pass percentage of Students during last five years (excluding backlog students)

Response:

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

Page 34/87 31-08-2023 10:19:22

2021-22	2020-21	2019-20	2018-19	2017-18
329	256	222	241	189

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

2021-22	2020-21	2019-20	2018-19	2017-18
334	259	229	261	209

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Certified report from Controller Examination of the affiliating university indicating pass percentage of students of the final year (final semester) eligible for the degree programwise / 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:

File Description	Document
Upload database of all students on roll as per data template	View Document

Page 35/87 31-08-2023 10:19:22

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1

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

Response:

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

2021-22	2020-21	2019-20	2018-19	2017-18
4.73	8.40	1.75	00	2.75

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

3.2 Innovation Ecosystem

3.2.1

Institution has created an ecosystem for innovations, 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:

Institute has established Innovation Club of highly experienced Academicians and Industrialists. Club members motivates faculties for innovations. This innovation ecosystem transfers new ideas of students/faculties into reality through facility and financial support.

Faculties have applied for research grants to various agencies like DST, SERB, SPPU, RGS&TC, STP-Nidhi Prayas and AICTE. Out of which SPPU, SERB, STP-Nidhi Prayas sanctioned grants for various research projects of institute.

Our faculties and students are working on EV platform which is need of today. Institute have developed certain models for technology transfer like EV bicycle.

Our innovation ecosystem provides access to resources required for startups and flow of information for stakeholders. Outcome of it is, the institute has operational Incubation Centre APCOER TBI with eight

Page 36/87 31-08-2023 10:19:22

active startups. Major focus of innovation is in Agriculture sector. Awareness given to students for developing small ideas/projects which cater need of Farming technologies in India. Following are some of the startups registered under APCOER TBI:

- 1. Bricks of tamarind (different sizes) helps to increase shelf life, maintain color; quality for longer period (room temperature)
- 2. Asra- Stick with seat foldable and lightweight walking aid, which suitable for older people to handle
- 3. Web Viva- Service provided for Digital marketing, website development
- 4. Sharadchandra Tech Venture- Software company develops software products
- 5. Cover Blocks; provides specified concrete cover to the reinforcement used in RCC construction both before & during construction
- 6. Mini Vita, mini bricks used in colleges like engineering, architecture for explaining the bonds & as a toys for children's
- 7. APCOER Balaji Phenyl
- 8. Smart Helmet provides the user with high level safety and full access to its phone while driving motor bike or bicycle.

Institute developed project for mercury recovery from brunt fluorescent tubes and lamp by recycling technology followed by recovery which includes the valuable material such as ceramic, metal and glass. This startup has got many prizes at National & State Level.

To develop various Agriculture based technologies, Institute has its own polyhouse built in campus in association with Jain Irrigation-

- IT & Comp department jointly working on Iot Polyhouse projects on cloud platform:
- 1. Agro-Data machines equipped with sensors that measure data in environment used for machines' behavior
- E&TC Department working on IoT polyhouse projects:
- 1. Agro Soil Sensing: various sensors are used for sensing data from different peripherals
- 2. Agro Position: Collect Sensed Data i.e. position, length, Speed from Arduino microcontroller, sending to RPi through Bluetooth
- Mechanical Engineering developed structure:
 - 1. Agrowbot: Multipurpose agriculture Gantry Robot for surveillance, watering, pesticide spraying, disease detection a
 - 2. Vertical farming for Strawberry farming
 - 3. Drone technology for pesticide spraying and disease detection

Institute have taken initiatives to develop awareness about IPR through various activities conducted under Institute Innovation Cell (IIC). With these efforts, faculties and students filled fifteen patents.

The knowledge of primitive technologies developed & used by ancient Indians is revisited and conveyed to students as Indian knowledge system (IKS). The awareness of this is given in the induction programs of first year students.

Page 37/87 31-08-2023 10:19:22

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

3.2.2

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

Response:

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

2021-22	2020-21	2019-20	2018-19	2017-18
9	16	7	7	7

File Description	Document
Upload supporting document	<u>View Document</u>
Institutional data in the prescribed format	View Document

3.3 Research Publications and Awards

3.3.1

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

Response:

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

2021-22	2020-21	2019-20	2018-19	2017-18
36	14	14	38	14

Page 38/87 31-08-2023 10:19:22

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

3.3.2

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

Response:

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

2021-22	2020-21	2019-20	2018-19	2017-18
05	02	01	175	238

File Description	Document
List of chapter/book along with the links redirecting to the source website	View Document
Institutional data in the prescribed format	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 Extension Activities

3.4.1

Outcomes of Extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues for their holistic development during the last five years.

Response:

Extension activities are carried out in the neighborhood community:

Van Mahotsav week is celebrated in the first week of July and plantation drives are carried out across the country. India has taken a target of creating additional 2 billion carbon sequestration by 2030. Tree plantation drive organizes under NSS within neighboring area.

For Sensitizing neighborhood community HAR GHAR TIRANGA on the occasion of 75th Independence Day of India was celebrated with a rally of faculty and students in Laxmi Nagar near Institute.

During pandemic situation the college has extended the facility of Vaccination to faculties, staff and students. The oxygen supply audit of Covid Hospitals was carried out by faculties in the Pune City order received from District Collector.

NSS team donated clothes and needy stuffs to flood affected people in Sangali District. Also donating the cloths to poor needy peoples, reduce demand for resource-hungry new clothes, and have a real impact in making fashion more sustainable to the needy peoples through NGO.

Community Service Projects: Encourage students to participate in community service projects such as volunteering at local charities or non-profit organizations like Nirmal Wari, Ganesh Visarjan; allows to understand needs of the community and develop empathy for others.

Awareness Campaigns: Organize awareness campaigns on social issues such as child labor, gender equality, and drug abuse; allows students to understand root causes of issues and develop sense of responsibility to make positive change in society.

Community Clean-up Drives: Organize community clean-up drives to promote environmental conservation and develop a sense of responsibility towards environment.

Sensitizing students to social issues:

State level street play; Street play acts shown problems faced by the "Trans-genders" community in day to day life.

'Anti-Ragging Awareness Programme' aimed making students aware of laws of country with respect to ragging and how it affects the lives of people victimized by it.

Swachhta Pakwada; Central Government had initiated 'Swachhta Hi Seva' Campaign result in India is open defecation-free, homes have toilets, houses have access to clean and drinkable water and our cities are getting cleaner each day.

Girl students and women faculties are empowered by training and awareness of self-defense and women

Page 40/87 31-08-2023 10:19:22

safety in association with SPPU by SDO.

In remembrance of all the Indian revolutionary leaders all days are celebrated along with students and faculties to nurture their thoughts to develop institute culture.

Vigilance Awareness Week; Central Vigilance Commission (CVC) to spread awareness against corruption. CVC's theme; "Corruption in India" with emphasis on spreading awareness in fight against corruption to all sections of Society.

Social Entrepreneurship Projects: Encourage students to develop; address social issues in community; allows students to develop entrepreneurial skills, creativity, and problem-solving abilities while making positive impact on society.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

3.4.2

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

Response:

Voter Awareness and Registration Program program organized on 5th December 2022 for new voter registration, voter card updating and linking of voter ID with Aadhaar. A record number of 102 participants took advantage of it. Institute awarded with a certificate by District Election Office, Pune.

Siddharth Thopate selected for SPPU Kho-Kho (Mens) secured 4th position from West Zone and qualify for All India Inter-University Championship held at Central University, Himachal Pradesh.

Akshada Gogawale (ME Environment Engineering Student) awarded first prize for Ideation Drive in Health & Allied Sciences-2021 organized by DST Technology Enabling Center & Institutions Innovations Council, NITTE (Deemed to be University), Mangaluru for mercury recovery from brunt fluorescent tubes and lamp by recycling methodology followed by recovery which include the valuable material such as ceramic, metal and glass.

Nishant Pujari (ME Environment Engineering Student) from Team Recovery 2021 for being selected as the Winner at TCS Sustainathon Pune 2021 for an innovative approach, convert organic waste into efficient alternative source to burn the dead bodies at cremation center.

Akshada Gogawale (ME Environment Engineering Student) awarded Second prize for Swachh Technology Challenge-2022 organized by Pune Municipal Corporation, Pune.

Page 41/87 31-08-2023 10:19:22

Prof. Sayali Kokane awarded as Best Chapter Chairman 2021 from Indian Society for Technical Education (ISTE) Maharashtra & Goa Section.

Prof. Sneha Salvekar received screening device award in Medical Device Hackathon (eMEDHA) 2021 by BETIC IIT Bombay.

Prof. Sagar Gawande awarded as International Scientist Award 2021 from V.D. Good Professional Association, Goa for his contribution in Engineering, Science & Medicine. In addition to that Prof. Gawande has received the grant in terms of awards & recognition as 4.73 Lakhs from Science & Technology Park, Ganeshkhind, Savitribai Phule Pune University, Pune for the Project "Design & Development of Efficient Bulb Crushing System to Recover Value Added Material".

Blood Donation Camps organized by Institute for the noble cause as to support the Government Blood Banks so that Donated Blood will be provided to needy peoples in Association with Acharya Anandrishiji Pune Blood Bank.

Institute got appreciation from NSS Unit of SPPU for contribution towards dedicated service as COVID WARIORS, PARYAVARN SWACCHATA DOOT, Blood Directory, **Blood Donation** & Awareness Program.

Pranjal Tathawade (Student) got prizes (Third, Runner-Up, and Winner) in Swimming Free Style Relay, Medley Relay from Association of Indian Universities, Delhi at Punjab University, Chandigarh.

NSS Camp organized in association with SPPU & Grampanchayat of Village to create awareness amongst students & faculties of the Institute. The appreciation & recognition of our 7 days camp work will be always done by Grampanchayat & SPPU.

Pratik Yashwant Jabade (Student) got Second prize in Kick Boxing State Federation for Wako State Kickboxing Championships at Mumbai

Received the fourth prize for Bhavya Half Pitch Cricket Spardha organized by Maitri Pratishthan, Mangdewadi, Pune.

Secured Safe & Secure Ganesh Mandal Award for Safety & Security of Institute by Fire and Safety Association of India, MIG Cricket Club Mumbai.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

3.4.3

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

Page 42/87 31-08-2023 10:19:22

Response:

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
04	09	12	32	20

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	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

3.5 Collaboration

3.5.1

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

Response:

Self Study Report of AKHIL BHARATIYA MARATHA SHIKSHAN PARISHAD PUNE ANANTRAO PAWAR COLLEGE OF ENGINEERING AND RESEARCH

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

Page 44/87 31-08-2023 10:19:22

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1

The Institution has adequate infrastructure and other facilities for,

- teaching learning, viz., classrooms, laboratories, computing equipment etc
- ICT enabled facilities such as smart class, LMS etc.

Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)

Response:

An adequate infrastructure is provided at APCOER as per the norms specified by AICTE, New Delhi and Savitribai Phule Pune University (SPPU) to facilitate effective teaching and learning to the students of all the streams. Modernization and updating of infrastructure resources is carried out from time to time. The Institution provides modern infrastructure like smart classrooms, updated laboratories, and library with reading room, hostel, and internet facilities for students and staff in the campus. The Institution continuously upgrades infrastructural facilities according to changes in the syllabus provided by the Savitribai Phule Pune University (SPPU).

Classrooms & Laboratory: Classrooms are provided with LCD Projectors, Smart Board with adequate infrastructure facilities. All the laboratories are well equipped with necessary equipments as per SPPU requirements. Department of Computer Engineering EduSkills Lab have Industry Center of Excellence and Department of Mechanical Engineering have DST PRAYAS Shala as Center of Excellence.

Computing Facilities Institute has 551 computers on the campus. A separate Computer Center with 61 computers is provided other than departmental laboratories. Wi-Fi facility is provided in campus by installing sufficient number of access points. All computers are connected to a broadband internet connection having speed (300 MBPS). A firewall system is installed to secure computers from any malware and restrict access to unwanted sites to students.

Cultural activities: For the overall development of the student, Institute organizes different cultural activities and Cultural events. Sparktech is organized under ISTE student Chapter. Different event and activities are organized such as:

- 1. Garba (Navratri week Celebration)
- 2. Children's Day Celebration
- 3. Yin kala Mohotsay
- 4. Swar-Rang inter Collegiate Youth Festival etc.
- 5. Technical events are organized such as Technothon, Engineers Day etc.
- 6. Annual cultural event includes Singing, Dance, and Drama etc. performance by students.

These events are conducted for Cultural, Holistic Development of students. Institute has an open cultural event facility at ground floor with stage and audio-visual systems arranged as and when required.

Page 45/87 31-08-2023 10:19:22

Sports activities:

Institute organizes Sports competitions and different cultural events for students to showcase their dormant talent and cultivate leadership qualities and team spirit in them. To encourage students' Sports and Cultural activity prizes & Certificates were distributed every year. A Sports Director is appointed to guide and motivate students. Institute has adequate facilities for outdoor games such as Cricket, Volleyball, Throw ball, Football, Kabaddi, Tug of War and other Throwing – Jumping activities. Students are provided with the necessary sports equipment to use. Students are encouraged to participate in intercollegiate and University level sports events.

Yoga centre:

Open space is available at different locations for the promotion of Yoga and meditation events. Annual Sports events are organized to enhance the physical and psychological strength of the students. International Yoga Day (21st June) is celebrated every year for students and staff members.

Gymnasium:

The Gym instruments available in the sports room are as follows: Trade mill, home gym machine, electronic weighing machine, height measurement instrument, multi-station machine etc.

File Description	Document	
Upload Additional information	<u>View Document</u>	
Provide Link for Additional information	View Document	

4.1.2

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

Response:

4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
82.89	13.59	2.37	20.11	17.09

Page 46/87 31-08-2023 10:19:22

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	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:

Library is the biggest knowledge resource that insures adequate services to its users. The library has a varied collection comprising of books, journals, magazines, CDs/DVDs, NPTEL Videos, etc. Library also hosts the digital library with e-resources, e-books, and e-journals. Currently, the library has 11708 print books. 52 journals/ periodicals and 9 daily newspapers are made available in the library. Library is situated on the ground floor and first floor with a spacious area of 468.7 Sqm .The library is divided into different sections like Issue-Return, Stacking Area, Reading Hall, Newspaper and Periodical Section, Digital Library to search information on internet. The Library conduct orientation program to newly admitted students regarding its use. Display new arrival books, Provide Content Service, Plagiarism checking Facility, Newspaper clippings service, Open Access to staff and students. Computer and internet facility for downloading and printing. Generate ID card of Students & Faculties. The Barcode technology has been implemented for library attendance. Institute has formed a library committee to support the library system.

Integrated Library Management System: Integrated Library Management System is used to manage different functions of library. VRIDDHI Library Module Version 2.0 is used for functions and automation. Software is purchased from Hindustan Computers with online and offline support and annual maintenance contract since 2017-18.

Important Features of VRIDDHI ILMS -

- Entry of new admitted students
- Accessioning of Books and Periodicals
- Circulation of Books and Periodicals
- Online Public Access Catalogue (Web OPAC)
- Barcode of Books

Page 47/87 31-08-2023 10:19:22

- Generate Various Reports
- User Tracking System
- Generate User Id Card

Library web OPAC link is provided on college website under online admission page https://apcoer.vriddhionline.com/DataCenter 03OnlineOPACSearchBooks.aspx to students and faculty for searching library materials. Digital Library Collection, open Sources books, previous year question papers, College News, and daily online newspaper are made available for students and faculty through Library web The link is available through College Website page. on https://www.abmspcoerpune.org/Library_Details.aspx

Library is using open source Google sites platform for provide remote access for e-books, previous question Papers etc. The link is https://sites.google.com/view/apcoerlibraryportal?pli=1

Subscription to e-Resources: APCOER Library is well equipped with the 10 machines having multimedia facilities. A 24x7 access to subscribed e-resources of J-Gate & DELNET etc. is available. Also, it has Digital Library Memberships with the National Digital Library of India (NDLI). Login ID and Password provided to user for remote access. Total Rs.73, 660/- spent on Renewal of J-Gate for every years. Library Member of DELNET (Developing Library Network) this has thousands of free e-books in 687 categories, Number of Full Text E-Journals, Thesis, Dissertations, Vision portal for Video Library, Inter Library Loan. For remote access Login ID and Password provided to all users. Total Rs.13, 570/- spent on Renewal of DELNET for every year.

Extended Activities: Apart from routine library services library is also engaged in extended activities like the Celebration of various commemorative days and Vachan Prerna Din, World Book & Copyright Day, Marathi Bhasha Din, Librarian Day etc.

File Description	Document	
Upload Additional information	<u>View Document</u>	
Provide Link for Additional information	View Document	

4.3 IT Infrastructure

4.3.1

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

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

Response:

The components of IT infrastructure are made up of interdependent elements, and the two core groups of

Page 48/87 31-08-2023 10:19:22

components are hardware and software. Hardware uses software—like an operating system—to work. And likewise, an operating system manages system resources and hardware. Operating systems also make connections between software applications and physical resources using networking components. Hardware components include Desktop computers, Servers, Data centers, Hubs, Routers, Switches, Facilities. Institute has 551 computers on the campus. All computers have updated windows licensed copies of operating systems. In addition to regular use, computers used in laboratories, a separate dedicated lab called Computer Center lab with 61 computers. Sufficient number of computers is allocated to all departments with necessary software and hardware configuration. The speed of data can also be manually adjusted as per requirement of a specific department for bifurcation of bandwidth and management.

Software components can include Operating systems, Web servers. Network are comprised of Sophos firewall, switches, routers and servers. All computers are well maintained and LAN connected through a dedicated leased line. Wi-Fi facility is provided to all departments by installing sufficient number of access points. All computers are connected to a broadband internet connection having speed (100 MBPS). Switches connect network devices on local area networks (LAN) like routers, servers and other switches. Routers allow devices on different LANs to communicate and move packets between networks. Server core hardware component needed for IT infrastructure is a server. These are essentially computers that allow multiple users to access and share resources. Server room/data center house multiple servers in rooms called server room or data centers. A central server room is maintained to look after connectivity of all computers and cyber security related issues. Data are the core of most networks. Licensed firewall in all the systems help to secure computers from any malware and restrict access to unwanted sites to students. Sufficient number of Surveillance cameras throughout the campus help to maintain a safe and secure atmosphere in campus. Face recognition system is used to record the daily attendance of all the staff members. Vriddhi is used for admission process.

File Description	Document	
Upload Additional information	<u>View Document</u>	
Provide Link for Additional information	View Document	

4.3.2

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

Response:

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

Response: 551

Page 49/87 31-08-2023 10:19:22

Self Study Report of AKHIL BHARATIYA MARATHA SHIKSHAN PARISHAD PUNE ANANTRAO PAWAR COLLEGE OF ENGINEERING AND RESEARCH

File Description	Document
Purchased Bills/Copies highlighting the number of computers purchased	<u>View Document</u>
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

4.4 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 (INR in Lakhs)

Response:

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

2021-22	2020-21	2019-20	2018-19	2017-18
83.47	72.60	8.48	33.11	43.13

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for maintenance of infrastructure should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Page 50/87 31-08-2023 10:19:22

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:

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

2021-22	2020-21	2019-20	2018-19	2017-18
861	713	522	495	422

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
Upload policy document of the HEI for award of scholarship and freeships.	View Document
Institutional data in the prescribed format	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

5.1.2

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)
- 4.ICT/computing skills

Response:

Page 51/87 31-08-2023 10:19:22

File Description	Document
Report with photographs on Programmes /activities conducted to enhance soft skills, Language and communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)	View Document
Report with photographs on ICT/computing skills enhancement programs	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.1.3

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

Response:

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

2021-22	2020-21	2019-20	2018-19	2017-18
751	497	583	225	318

File Description	Document
Upload supporting document	<u>View Document</u>
Institutional data in the prescribed format	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:

Page 52/87 31-08-2023 10:19:22

File Description	Document
Proof w.r.t Organisation wide awareness and undertakings on policies with zero tolerance	<u>View Document</u>
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 motioning the activities and number of grievances redressed to prove timely redressal of the 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:

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

2021-22	2020-21	2019-20	2018-19	2017-18
256	163	101	145	85

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

2021-22	2020-21	2019-20	2018-19	2017-18
329	256	222	241	189

Page 53/87 31-08-2023 10:19:22

File Description	Document
Number and List of students placed along with placement details such as name of the company, compensation, etc and links to Placement order(the above list should be available on institutional website)	View Document
List of students progressing for Higher Education, with details of program and institution that they are/have enrolled along with links to proof of continuation in higher education.(the above list should be available on institutional website)	View Document
Institutional data in the prescribed format	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 during the last five years

Response:

5.2.2.1 Number of students qualifying in state/ national/ international level examinations year wise during last five years (eg: IIT/JAM/NET/SLET/GATE/GMAT/GPAT/CLAT/CAT/ GRE/TOEFL/ IELTS/Civil Services/State government examinations etc.)

2021-22	2020-21	2019-20	2018-19	2017-18
6	3	2	5	7

File Description	Document
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	View Document
Institutional data in the prescribed format	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

5.3 Student Participation and Activities

Page 54/87 31-08-2023 10:19:22

5.3.1

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

Response:

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

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	4	0

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

5.3.2

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

Response:

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

2021-22	2020-21	2019-20	2018-19	2017-18
23	08	23	25	15

Page 55/87 31-08-2023 10:19:22

File Description	Document
Upload supporting document	<u>View Document</u>
Institutional data in the prescribed format	View Document

5.4 Alumni Engagement

5.4.1

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

Response:

The Alumni Association of Anantrao Pawar College of Engineering & Research was registered on 23/08/2018 with the Registration Number MH/1146/2018/PUNE with Charity Commissioner Pune adhering to the Rules and Regulations from the said competent authority. Formation of Alumni Association As per the norms laid by Savitribai Phule Pune University, Pune to develop a strong bond between the alumni, institution and the students.

The main objectives of the alumni association are:

- 1. To mentor the students of the college for higher education, development of professional ethics and social awareness.
- 2. To encourage the students of college and members of the association for research and development work in various fields of engineering.
- 3. To arrange the support in placement activities for students.
- 4. To promote industry-institute interaction to bridge the gap between industry requirements and education offered and enhanced students' employability.
- 5. To encourage and guide the students of the college on self employment to become successful entrepreneurs.
- 6. To provide Scholarships to deserving students and for the purpose of Education and Sport.

The formation of an alumni association contributes to the development and strengthening of long-term relationships with our alumni, the Institute, and current students. The alumni association promotes participation in campus activities and utilizes alumni members knowledge and expertise to assist current students. Alumni members contribute to a variety of activities, including technical seminars, webinars, guest lectures, mentors for events, and judges for various technical activities. Alumni network has a real life benefit for current students. Alumni donate their valuable time to offer career support and valuable guidance to current students. This enhances the students' experience and gives them that competitive edge in today's demanding job market. Alumni associated with the Alumni Association are always keen to promote and recommend job opportunities available to the current aspiring students of the institute.

Page 56/87 31-08-2023 10:19:22

Self Study Report of AKHIL BHARATIYA MARATHA SHIKSHAN PARISHAD PUNE ANANTRAO PAWAR COLLEGE OF ENGINEERING AND RESEARCH

Every year, the college hosts an Alumni Annual Meeting to encourage interaction among management, faculty members, and alumni. During the meeting, department coordinators enquires about recent industry trends as well as solicited feedback on the scope of improvements in infrastructure, research labs, sponsored projects, and internships. Alumni students working in different areas like production, research and development, quality assurance, marketing come together via alumni meets, mails and social media to make aware of the job opportunities, corporate requirements and competitive examination the students can appear for.

Institute keeps the updated database of alumni to keep them informed about campus activities and institute's progress through Email alerts and social media accounts. As per the Alumni Association meetings we planned and conducted a few Seminars / Webinars under the APCOER-Alma connected "SPOT LIGHT series". In this program the association invited various alumni in and outside India who shared their success stories and experiences to guide and encourage the students of APCOER in their career as well as education. Alumni monitory and intellectual contribution is increasing each year.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide 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 OF THE INSTITUTION:

• Committed to comprehensive development of students through quality technical education.

MISSION OF THE INSTITUTION:

- To provide state of art infrastructure that shall create ambience to encourage novel ideas, research activities and consultancy services.
- To inspire students in creation & entrepreneurship.
- To create future technocrats with intelligence, technical skills & good ethical moral values so as to serve needs of society & industries.
- To provide healthy Teaching Learning environment that will cultivate contemporary research activities, innovations & inventions.
- To develop center of excellence in technical education

The institute works under the management of Akhil Bharatiya Maratha Shikshan Parishad (A.B.M.S.P.) whose motto is "Bahujan Hitay Bahujan Sukhay".

In order to carry out the institution's stated vision and mission, they are displayed at different locations, including all departments and the principal's office.

The governance of the institute is steered by the College Development committee (CDC). CDC provides guidelines for planning and effective implementation of academic and administrative activities. The major decisions are taken in a participative manner.

Internal Quality Assurance Cell (IQAC) is also constituted with senior faculty members, office superintendent, students representative, alumni representative, who work together for preparing academic calendar of institute in tune with university academic calendar and also schedule academic and administrative audits.

Anti-Ragging Committee to ensure compliance with the provisions of regulations as well as the prevention of ragging in the institution.

Page 58/87 31-08-2023 10:19:22

Grievance redressal committee for the purpose of redressal of grievances of the students, parents and others.

Internal Compliant Committee (ICC) is constituted to prevent the sexual harassment of women at workplace.

Scheduled Castes (SC) and Scheduled Tribes (ST) cell has been established to support and to bring students from such communities in the main stream with the purpose to empower them.

Inter-disciplinary curricula, which allow students to select their preferred options from the spectrum of programs offered by the Savitribai Phule Pune University.

The extent to which the institution is ready to implement the Academic Bank of Credits relies on the rules established by Savitribai Phule Pune University.

From Semester-III to Semester-VIII in various programs, the Institution is already offering the skill courses as intended by SSPU.

The Outcome Based Curriculum programme seeks to standardize the academic programs across all connected colleges with the University of SPPU.

For the sustainable growth we provide consultancy services and work on research project to generate revenues.

The college involves all the stakeholders in the decision-making process for framing guidelines, rules & regulations to ensure smooth and systematic functioning of the institute.

Principal and faculty design the quality policy in line with the vision and mission. The Principal creates an effective environment conducive for learning. He ensures that quality education is imparted to the students that foster the comprehensive development of the students and execution of strategic plans.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide 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 is

Page 59/87 31-08-2023 10:19:22

effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc

Response:

The functioning of Institutional bodies is executed based on all policies in concern with administrative setup, appointment and service rules, procedures. Institution focuses on providing quality education for the welfare of students. Institution has formulated different policies related to academics and administration and has a well-defined strategic plan. Continuous review of the policies is taken by the members of the College Development Committee. Regular meetings of IQAC are conducted to decide the strategic action plan for smooth functioning and the same are communicated to the staff members of the institution. Review meetings set objectives and action plans for academic and administrative activities as well as financial needs and its utilization. Decentralization, participative management and decision making is followed through IQAC, College Development Committee and the Principal of Institute.

Policies formulated by the institution incorporate strategic planning and execution strategy of the same. It includes different policies such as Academic, State-of-the art infrastructure, R & D, innovation and entrepreneurship, improvement of quality management system. Quality policy is well defined for smooth execution of overall development of Institution. Quality policy of the Institution is deployed and reviewed through continual feedback from all stakeholders. Management provides continuous support for timely infrastructure enhancement for the benefit of stakeholders.

Quality improvement strategies are implemented by imparting training to faculty and staff. Various activities are taken for Teaching and Learning, R & D, community engagement and innovation and entrepreneurship. Institution has established IQAC (Internal Quality Assurance Cell) to ensure quality and higher standards. IQAC is constituted by a team of representatives from community, Industry, Principal, Faculty and Alumni. IQAC monitors all the activities and suggests quality improvement related to academics and administration. Institution follows a strategic approach for development and involves all stakeholders in deployment.

Academic planner and calendar are prepared at the start of every semester which includes a schedule of various activities. The department of Civil Engineering and Mechanical Engineering has a PG and PhD research center. Faculty members are motivated to do research work. Students are also involved in various community engagement activities under NSS, student Development and ISTE.

Institution believes in faculty upgradation. All appointments are done on the basis of qualification and rules as per AICTE norms, service rule and procedure. Appointments of non teaching staff, office technical staff and supporting staff are done by Akhil Bharatiya Maratha Shikshan Parishad sanstha rules and regulations. Service rules and procedure are defined in ISO administrative manual. ISO Awareness Session are taken by ISO Coordinator for newly joined faculty members. Institution follows the practice of industry institution interaction. With this, students are benefited in industrial training and internships, invited talks, job opportunities etc.

The institution has signed MoU with various industries to promote skill development and training courses for students and the faculty members.

Page 60/87 31-08-2023 10:19:22

File Description	Document
Upload Additional information	<u>View Document</u>
Institutional perspective Plan and deployment documents on the website	View Document
Provide Link for Additional information	View Document

6.2.2

Institution implements e-governance in its operations

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

Response:

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:

The institute provides effective welfare schemes to create efficient, healthy, loyal and satisfied work for the institution. The institute promotes the staff to enhance their skills and academic standard by attending various professional developmental activities.

Page 61/87 31-08-2023 10:19:22

- The welfare schemes like Group Insurance by ICICI Lombard Gic. Ltd. is provided to the staff.
- Employees Provident Fund (EPF) facility for Teaching and Non-Teaching Staff is being Provided
- Maternity Leaves -This facility is provided to all the staff.
- Medical Leaves- This facility is provided to Teaching and Non-Teaching staff.
- Earned Leaves This facility is provided to Teaching and Non-Teaching staff.
- Encouragement & Motivation: The institute encourages & motivates the teaching staff for orientation / refresher / short term courses, like STTP etc./Workshop / seminar / conferance and provides them duty leaves.
- Encouragement and Motivation for Higher Studies: The institute always encourages & motivates the teaching staff for their doctoral, post- doctoral studies, for their academic improvement and provides infrastructure facilities like Library, internet, laboratory, research journal to all the departments for smooth functioning of day-to-day academic activities and for personal research of the faculty members and also provides duty leave to carry out their higher education, also No Objection Certificate is provided by the Institute for their higher studies also.
- Funded Research Projects: The institute always encourages & motivates teaching staff to undertake research projects in reputed institutes and provides them duty leaves to carry out their project work. The financial assistance is being provided by the Institute to the facilities those who are performing innovative work in the research work.

The financial assistance is also provided by the management to the facilities for their journal paper

publication in the reputed journals etc. Total amount funding for 9 Project is 17.63 lakh

- Encouragement and Motivation for Academic Performance : Every year the faculties are encouraged and motivated in 5th september function
- i.e. In Teachers Day function for their academic performance staff are felicitated and and Awarded

in the form of Certificates, Book, and Pen drives etc.

• Cultural Activities: For overall development of staffs are also reflected through the cultural performance like Garbha, Dandiya, Deepawali participation in spark tech etc. The almost the cultural activities are carried out by the participation of the student as well as staff.

Page 62/87 31-08-2023 10:19:23

• The institution has adopted a performance based appraisal system for Teaching and Non-Teaching staff and accordingly promoted to the staff. This form is being filled by the staff in detail and accordingly the contribution during that year is filled by all the teaching and non-teaching faculty and is to be submitted to the office through signing and remark by the respective Head of the department.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	<u>View Document</u>

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:

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

2021-22	2020-21	2019-20	2018-19	2017-18
84	21	49	24	12

File Description	Document
Policy document on providing financial support to teachers	View Document
Institutional data in the prescribed format	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 / workshop s and towards membership fee for professional bodies	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Page 63/87 31-08-2023 10:19:23

6.3.3

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

Response:

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

2021-22	2020-21	2019-20	2018-19	2017-18
09	79	21	28	60

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

2021-22	2020-21	2019-20	2018-19	2017-18
23	22	26	16	29

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	<u>View Document</u>
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

Institution has strategies for mobilization and optimal utilization of resources and funds from

Page 64/87 31-08-2023 10:19:23

various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)

Response:

Response:

The major resources of income for the institute are tuition and development fees from the students. The other resource of funds is schemes and grants received from university as well as government and non-government organizations. These funds are utilized for recurring and non-recurring expenses.

Institute has following procedure for utilization of financial resources effectively.

Institute has a well-defined budgeting system which includes regular expenses like staff payments, academic expenses, maintenance and etc.

The institute has strategies for mobilization of funds and its optimal utilization of resources through the following mechanism.

- The annual requirements of non-recurring and recurring expenditure are prepared by the HOD's with the help of faculty and laboratory assistant. The details are given to the Principal in prescribed format for every financial year.
- The departmental budget is discussed with the Principal and put it into the institutional budget and put up to the management.
- Regular procedure of quotations, comparative, analysis, delivery, payment after commissioning is carried out for effective and efficient use of available funds.
- Budget allocation is done for various expenditure heads, and they are as follows,
- Non-recurring expenses
 - Recurring expenses like Salary of teaching and non-teaching staff

and Other recurring expenses.

- There may be some situations where expenses other than budget allocation are done. At that time the original budget allocation is revised.
- The procurement procedure for lab consumables, equipment, and upgradation is initiated by departments.
- Budget is prepared in March/April whereas the syllabus revision, Admissions and fees allocation is done in June/ July. So, there may be some deviation in utilization and budgeted amount.

Institute has appointed Internal and external auditors. The Internal and External audit is held in every financial year.

Mechanism for Internal Audit:

- The College Development Committee appoints internal auditors for conducting internal audit.
- The Accounting auditor looks after the internal audit to verify that actual expenses are not exceeded the budgeted amount and it is presented to the certified Chartered Accountant.
- The Principal and accountant take care of doing compliance of the objections raised if any.
- Internal audit is carried out by internal auditors.

Mechanism for External Audit:

- The board of management appoints external auditors for conducting external audit of the institutes.
- The statutory audit is conducted by registered Chartered Accountant firm.
- This audit includes examining, on a test basis, evidence supporting amounts and disclosures in the financial statements.
- Audit also includes accessing the accounting principle used and significant estimates made by management, as well as evaluating the overall financial statements.
- No minor and/or major objections have been raised in the external audit.
- The statutory audit is conducted by registered Chartered Accountant firm.

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

6.5 Internal Quality Assurance System

6.5.1

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

Page 66/87 31-08-2023 10:19:23

Response:

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes in APCOER. The IQAC committee is formed at the institute level, by following the norms of NAAC. IQAC committee prepares the academic calendar for the institute as per the guidelines received from Savitribai Phule Pune University before the start of every semester. IQAC committee conducts meetings twice in a year and in some cases more than that as per the requirements. All the curricular, co-curricular, and extra-curricular aspects of the students, faculty & staff members are discussed in the IQAC meetings.

The academic calendar is finalized by incorporating the planning of events, workshops, seminars, unit test of students, display of defaulter students list, prelim examination, preliminary and final academic and administrative audit at institute as well as department level. Once the academic calendar is circulated in the institute, the various departments run all the academic activities as per the schedule declared by the IQAC in the academic calendar.

The quality assurance strategies and processes are discussed and formed in the IQAC committee meeting and action taken report is generated after the meetings as an outcome of it. Strategies and procedures like conducting academic audit of all departments twice in a semester by appointing auditors for each individual faculty members to ensure the standard quality of academics delivery to the students. The auditors conduct audit as per the schedule given by IQAC head, and completes the audit in the form of a report. Those audits completed reports are available with all individual faculties in their course files, with the departmental ISO coordinators, and with IQAC team as well.

Timely student feedback and generating action taken report are the important milestones to ensure the quality of teaching are maintained by the IQAC.

In addition to this, the IQAC conducts various programs at the institute level for students as well as faculty. The programs for students include Entrepreneurship awareness camp, Personal finance management, Career cracker talent hunt, Future disruptive technologies, Python, Electromagnetics, Arduino, Opportunities in Canada for higher education and immigration, SpecTronics Quiz 2020, Turbo Charge Industry 4.0 Via IoT, 21st Century Skills for Engineers, Study abroad options for engineering students, robotic design, Project based learning and Innovation and Alma-Connect Program of alumni students. The programs for faculty include Introduction to virtual laboratory, Recommendations for examination reforms, Moodle learning management system, AICTE-ISTE online Induction/Refresher Program on Improving Excellence in Teaching", Phase-I, II, and III, NBA awareness lecture series for faculties like SWOT analysis- PQR and SAR.

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

6.5.2

Quality assurance initiatives of the institution include:

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); quality improvement initiatives identified and implemented
- 2. Academic and Administrative Audit (AAA) and follow-up action taken
- 3. Collaborative quality initiatives with other institution(s)
- 4. Participation in NIRF and other recognized rankings
- 5. Any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA etc.

Response:

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	<u>View Document</u>
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date.	View Document
Link to Minute of IQAC meetings, hosted on HEI website	View Document
Provide Links for any other relevant document to support the claim (if any)	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:

As a conscious society we all know that gender equity promotes balanced development and sustainable society. Gender equality has been conclusively shown to stimulate economic growth, which is crucial for developing countries. Gender sensitization presides over gender sensitivity, the modification of behavior by raising awareness of gender equality concerns. The concept of gender equity refers to "fairness of treatment for both women and men, according to their respective needs Gender equity is the process of being fair to women and men. To ensure fairness, strategies and measures must often be available to compensate for women's historical and social disadvantages that prevent women and men from otherwise operating on a level playing field. Equity leads to equality. Equity is the fundamental principle of our constitution. Being an academic institute we appreciate, encourage and implement such equity in our day to day practices. Our institution is preferentially known for such equal opportunities to all in various manners. Gender equality is our specially focused area by practice. Our institution has adopted several policies and designed some activities to encourage Gender Equity in our institute. In our institute Gender Equity is shown through organizing various programs including male-female students as well as teachers.

Objectives-

- 1.To Introduce students with concept of gender Equity
- 2. To conduct various activities to bring gender sensitization among students
- 3. To Conduct activities to enrich the thoughts and mindset of students.
- 4.To empower women by making them involved in various activities.
- 5. To create social awareness about the problems of women and to develop

their self confidence of the women

In curricular activities such as practical batches, girl students are equally distributed and given freedom to get accommodated in batches as per their choice. Students choose their own project group members which can be a combination of girls and boys. Girl students are visiting industries for mini projects, internships, and or technical events.

College provides equal opportunity to male & female staff and students for all extra- activities such as

Page 69/87 31-08-2023 10:19:23

sports, deputation to courses, programs, higher studies, committees, placement, NSS, sports, ISTE student chapter and cultural events which provide equal opportunities for girl students to participate..

For girl students and staff, we have facilities such as security guards, CCTV, Anti – Ragging committee, Grievance Redressal Committee, and a girl's common room.

We have been recognized by AICTE, affiliated by Savitribai Phule Pune University and governed by DTE, Maharashtra, as a **Co-educational Institute**. As per provisions in Government Resolution No. GEC-1000/ (123/2000)/ Tech. Edu.-1, dated 17th April, 2000, 30% seats are reserved for female candidates.

Constitution Day is regularly being celebrated and observed in our institute.

Nirbhay Kanya Training: The main objective of this training is to develop a critical mind, self-confidence and a commitment to society. The lady students are given training in health, law, and social activities.

Self-defense training is a life skill that helps girls to be more aware of their surroundings and be prepared for the unexpected at any time.

Women's Day: International Women's Day is annually held on March 8 to celebrate women's achievements throughout history and across nations.

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

7.1.2

The Institution has facilities and initiatives for

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

Response:

Page 70/87 31-08-2023 10:19:23

File Description	Document
Policy document on the green campus/plastic free campus.	View Document
Geo-tagged photographs/videos of the facilities.	<u>View Document</u>
Circulars and report of activities for the implementation of the initiatives document	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

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

- 1. Green audit / Environment audit
- 2. Energy audit
- 3. Clean and green campus initiatives
- 4. Beyond the campus environmental promotion activities

Response:

File Description	Document
Report on Environmental Promotional 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

7.1.4

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of

Page 71/87 31-08-2023 10:19:23

students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

Response:

Institutional initiatives aimed at providing an inclusive environment with tolerance and harmony towards cultural, regional, linguistic, communal, and socioeconomic diversity, as well as sensitization of students and employees to their constitutional obligations, values, rights, duties, and responsibilities.

Tolerance and harmony towards cultural and regional diversity in an institute refer to the presence of an environment that is welcoming and respectful of individuals from different cultural and regional backgrounds. Institute celebrates cultural and regional diversity by hosting events and activities that promote cultural exchange and understanding. This can include cultural festivals, music, dance performances such as flash mob.

Institute celebrated linguistic diversity by hosting events and activities that promote language learning and cultural exchange. This included Marathi Bhasha Din and language-related competitions.

Socioeconomic diversity in an institute addressed by several steps like financial aid through scholarships to students from lower-income families, reducing financial barriers and allowing more students to access education. By addressing communal socioeconomic diversity, institute created an environment that allows students from different communal and socioeconomic backgrounds to interact with and learn from each other, promoting understanding, empathy, and a sense of community. It includes fund raising activities to Snehghar orphanage (Shivajinagar), flood victim donation drive, Blood donation, Constitution day, Azadi Ka Amrut Mahotsav etc.

Institution conducted sensitization programs that educate students and employees about the importance of uniformity and inclusion. Institute developed policies that promote diversity and inclusion, which is communicated to all stakeholders of the institution. These policies are regularly reviewed and updated to ensure their effectiveness and consistency across all departments and levels.

Sensitizing programs for students and employees about constitutional obligations is arranged by inviting guest speakers who are experts in civic education. These speakers provide valuable insights and share their experiences. This also includes promoting respect for diversity, encouraging civic engagement and supporting community service initiatives by celebrating Unity Day, voters Day and by conducting Swachhata Oath, Voter's Registration camp, Voters awareness Program, competition related to voter awareness.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	<u>View Document</u>

7.2 Best Practices

Page 72/87 31-08-2023 10:19:23

7.2.1

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

Response:

Best practice - I

Title: Well-functioning Innovation Club

Objective

The Objective of Innovation Club is to build cognizance, educate, cultivate and inculcate a culture of innovation amongst students & faculties to empower them to generate new ideas and turn out to be more inventive. Provoking students to move and think in the direction of upcoming technological trends and innovations thereby giving a variety scope for their projects development during their academic curriculum.

The Context

Looking towards emerging trends, innovation is need of an hour, for the progress of institution. hence, people qualified with deep technical knowledge about various fields of Engineering, through their relevant experiences, are identified as mentors for upcoming & ongoing research Projects. These mentors are procured as Innovation Club members, who nurture the students & faculties of APCOER. Innovation Club is based on core 4 Elements viz; Association, Ideation, Execution and Value Establishment, which is useful to set the institution in a different paradigm in order to identify new opportunities and the best approaches to solve existing problems.

The Practice

Innovation Club organizes periodic meetings of the club members, students & faculties to produce new notions and detect innovations. Stakeholders may be invited to share their innovative ideas and skills to portray their innovative products/projects. Organizing various seminars, webinars, expert talk or conferences to elicit invention, revolution, design alive and bloom them in students. To inaugurate awareness campaigns, activities and competitions like quiz, debates, posters, dramas etc on creativity and innovations within APCOER, engaging innovative activities, workshops, training and programs.

Evidence of Success

Various innovative projects were executed successfully beneath Polyhouse like agrownet viz; Field Educational platform for agriculture arena comprising of drone, plant health monitoring, phenyl

production, e-campus vehicle, agrosense, agrorain, agrofan, agrobot, one touch sensor testing, for farmers etc, also, including "Stick with Chair" for senior citizens & "Balaji phenyl" for cleaning, disinfecting various types of surfaces in public places like hospital, Nursing homes, drains, toilets etc. Among which, first "Stick with Chair" commercial order is distributed to senior citizens & the product is in demand, so production is in progress in the college workshop. Phenyl is prepared & distributed amongst APCOER staff & nearby restaurants.

Problem Encountered and Resources Required.

Researching and supervising resources & data required to evaluate the existing opportunities. Fetching internal and external investors, participants, stakeholders to cooperate on crucial challenges & prospects. Testing of chair for particular strength/weight carrying capacity of senior citizens was biggest challenge in the Project "Stick with Chair". In case of "Balaji Phenyl", different chemicals were screened for cleaning, testing & solubility of chemicals were examined based on trial error & basis, usage of water soluble, oil soluble flavors. Utilized pine oil based substances, emulsifying agents in the preparation of "Balaji Phenyl". In case of agrorain & agrofan faced connectivity issue of IOT, Sensor Caliberation, utilized rain & temperature sensors, ESP32 board, LCD. One touch sensor faced problems due to environmental conditions. Drone faced problems such as, Drone frame sustainability & material Selection, Embedded Software for calibration of drone, no company entertained them for knowledge transfer. They require good & capable team, need of high end machines to manufacture components & testing facility.

Best practice - II

Title: ISTE Student Chapter

Objective

The major objective of ISTE is to provide quality training program to teachers and administrators of technical institutions to update their knowledge and skills in their fields of activity and to assist and contribute in the production and development of top quality professional engineers and technicians needed by the industry and other organizations as well as to provide comprehensive development of students.

The Context

To create future technocrats with intelligence, technical skills & good ethical moral values to serve needs of society & industries, to encourage students in innovation, creativity & entrepreneurship. To deliver healthy Teaching-Learning environment which will cultivate advanced research activities, creativity & invention. To promote center of excellence in technical education, ISTE student chapter established in our institute in year 2014. In addition, we are institutional member of the Indian society for technical education. Various events like SPARKTECH technical events, Engineers day etc. were conducted.

The Practice

In view of the objectives of ISTE, it has always been a priority for APCOER to encourage and support our staff and students to organize, participate in various conferences, symposiums and trainings. The institute is actively involved in numerous activities at intra-college and or inter-college levels, whereupon students and staff interact with each other, which brings upon useful inputs and outputs which aids development and betterment of technical education.

Evidence of Success

Our College has received ISTE Best Chairperson award for the Academic Year 2021-2022. Best Engineering Teacher, Outstanding Student (Engineering), Best Innovative Research Work (Engineering) for the Academic Year 2022-2023.No. of Student participation is approximately 500(2017-18), 518(2018-19), 590(2019-20), 518(2021-22),906(2022-23).

Problem Encountered and Resources Required.

To recognize the diversity of students and seek to meet their individual needs was a challenge. To deal reasonably and objectively with students regardless of their social, economic, regional and religious background. Following best practices of sustainable implementation, ed tech holds huge potential to improve learning and teaching practices. To meet the requirements of the challenges we are developing new frameworks for sustainable integration of technology into teaching learning such as various Clubs under ISTE such as heritage Club, Coding Club, talent hunt, participation in various University level programs. Engage students in exploring real-world issues and solving authentic problems using digital tools and resources.

File Description	Document
Best practices as hosted on the Institutional website	View Document
Any other relevant information	<u>View Document</u>

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:

The ABMSP's APCOER, Pune distinguishes itself from peer institutions by offering an affordable, highly personalized, student-centered quality technical education to diverse students. It was established in 2012 and comprises students, faculty, and staff who possess differing attributes based on race, ethnicity, gender, sexual orientation, disability status, age, religion, and other characteristics. Diversity grounds intellectual pursuits and provides us with opportunities for discovery and ways to integrate all individuals and groups into the larger community, respecting and valuing their uniqueness while simultaneously advancing the Institute's historical tradition. APCOER was named after keeping in mind the research outcomes and the broader mission of its visionaries. The prime objective of the institute is to promote students and staff to publish their work in reputed Conferences, Symposiums, and International Journals. The faculty members who are full-time engaged in teaching are also urged to come up with their findings, and experiments and show their competencies and research potential to encouragement in research domains to other faculties and students as well. The UG and PG Students are assigned a guide for their project ideas and various domains. Students are encouraged to file patents and as a result, several patents are published by students. Along with students, every faculty member publishes their research findings in various Journals and Conferences throughout the Year. Agriculture projects like AgroBot, AgroSense, AgroMON, AgroZone, AgroData, AgroNet, and AgroAIML are in progress where students and faculties are working in different aspects of the projects listed. Smart Poly House is set up on the premises of the institute for research purposes. A drone project is ongoing for pesticide spraying in Agriculture Applications. The civil environmental engineering department has developed the project for mercury recovery from burnt fluorescent tubes and lamps. Individual faculty have received BCUD research grants of Rs. 3,00,000.00, Rs. 1,15,000.00, and Rs. 2.40,000.00 from Savitribai Phule Pune University (SPPU) for a two-year project (2019-2021). Institute has started the Technology Business Incubator (TBI) Center to inculcate entrepreneurship and the creation of enterprises on knowledge-based innovation. The main objective of the technology business incubators is to produce successful business ventures that create jobs and wealth in the region. Eight new startups have been registered where the faculty of APCOER are founders along with students. Students and staff have participated in the Rotary Club Skill & Start-up Expo in April 2023. Also in 2021-2022, PG Student of APCOER registered a startup as COPORR APEC PRIVATE LIMITED Company which is working on patentable technology to process and recover the value-added products from waste. COPORR APEC has two aspects first with social, from which we protect waste workers from hazards like mercury poisoning and injuries due to broken glass, creates job opportunities in the recycling sector, and second aspect environmental, which is helpful to the soil, prevents leaching of mercury from landfill into soil and groundwater, reduces

Page 76/87 31-08-2023 10:19:23

dumping into rivers, thereby protecting aquatic & human life. Considering the requirement of bilingual engineers in various Japanese and German companies. All the students and faculties are studying German, Japanese, and French language in daily timetable hours as an additional skill development. APCOER has a student chapter of the Indian Society for Technical Education (ISTE) The objective of ISTE is to encourage and support our staff and students to organize and participate in various conferences, symposiums, and training, whereupon students and staff interact with each other which brings development and betterment in technical education.

Awards received:

- ? Best Teacher, Best Research, and Best Innovation in the year 2022-2023
- ? Best chapter chairman Award in the 51st ISTE National Annual Faculty Convention in 2021-2022 NIDHI PRAYAS Center, '

Prayas Shala'- a Fabrication Lab has been set up at ABMSP's Anantrao Pawar College of Engineering and Research as host institute, to realize the product idea into a prototype. The facility has all the necessary machines, equipment to manufacture, experiment and finalize the prototype. Apart from the financial support in form of prototyping grant-in-aid, PRAYASEEs - candidates selected under this programme receives the following Benefits powered by Science and Technology Park team members and their connects: ? Guidance from experienced, innovative and highly successful entrepreneurs on the business concept, strategy or venture and insight into specific industries or markets. ? Best practices for starting a business and broadening the professional network. Co-working space for developing the idea into a marketable product. Summary proving distinctiveness of APCOER: Institute has established an Innovation Club of highly experienced Academicians and Industrialists. This innovation ecosystem transfers new ideas of students/faculties into reality through facility and financial support. Faculties have applied for research grants to various agencies like DST, SERB, SPPU, RGS & TC, STP-Nidhi Prayas and AICTE. SPPU, SERB, STP-Nidhi Prayas sanctioned grants for various research projects of the institute. Our faculties and students are working on the EV platform which is needed today. Institutes have developed certain models for technology transfer like EV bicycles. Our innovation ecosystem provides access to resources required for startups and flow of information for stakeholders. Institute has an operational Incubation Centre APCOER TBI with eight active startups. Major focus of innovation is in the Agriculture sector. Awareness given to students for developing small ideas/projects which cater to the needs of farming technologies in India.

Following are some of the startups registered under APCOER TBI:

- ? Bricks of tamarind (different sizes)
- ? Asra- Stick with seat foldable
- ? Web Viva- Software company
- ? Sharadchandra Tech Venture- Software company
- ? Cover Blocks
- ? Mini Vita

Self Study Report of AKHIL BHARATIYA MARATHA SHIKSHAN PARISHAD PUNE ANANTRAO PAWAR COLLEGE OF ENGINEERING AND RESEARCH

? APCOER Balaji Phenyl

? Smart Helmet

A project for mercury recovery from burnt fluorescent tubes and lamps which includes valuable material such as ceramic, metal and glass. This startup has got many prizes at National & State Level. Institute has developed, Institute Innovation Cell (IIC), faculties and students filed fifteen patents.

File Description	Document
Appropriate web in the Institutional website	View Document
Any other relevant information	<u>View Document</u>

Page 78/87 31-08-2023 10:19:23

5. CONCLUSION

Additional Information:

- APCOER has a student chapter of the Indian Society for Technical Education (ISTE).
- Best Teacher, Best Research, and Best Innovation Award in the ISTE National Annual Faculty Convention in the year 2022-2023.
- Prof. Sayali Kokane awarded as Best Chapter Chairman 2021 from Indian Society for Technical Education (ISTE) Maharashtra & Goa Section.
- Individual faculty have received BCUD research grants of Rs. 3,00,000.00 and Rs. 3,55,000.00 from Savitribai Phule Pune University (SPPU) for a two-year project (2019-2021).
- Institute has an operational Incubation Centre APCOER TBI with eight active startups.
- Institute has established an Innovation Club of highly experienced Academicians and Industrialists.
- Most of the students and faculties are studying German, Japanese, and French language in daily timetable hours as an additional skill development.
- NIDHI PRAYAS Center, 'Prayas Shala'- a Fabrication Lab has been set up at APCOER as host institute, to realize the product idea into a prototype.
- APCOER teachers and students have filed and published 14 patents in Mechanical, Civil and Electronics domains.
- APCOER have conducted 46 workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years.
- APCOER NSS unit is very active and organizes extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues for their comprehensive development.
- Siddharth Thopate, selected for SPPU Kho-Kho (Mens) secured 4th position from West Zone and qualified for All India Inter-University Championship held at Central University, Himachal Pradesh.
- Nishant Pujari (ME Environment Engineering Student) from Team Recovery 2021 for being selected as
 the Winner at TCS Sustainathon Pune 2021 for an innovative approach, converting organic waste into
 an efficient alternative source to burn the dead bodies at the cremation center.
- Prof. Sneha Salvekar received a screening device award in Medical Device Hackathon (eMEDHA) 2021 by BETIC IIT Bombay.
- Pranjal Tathawade (Student) got prizes (Third, Runner-Up, and Winner) in Swimming FreeStyle Relay, Medley Relay from Association of Indian Universities, Delhi at Punjab University, Chandigarh.
- Pratik Yashwant Jabade (Student) got Second prize in Kick Boxing State Federation for Wako State Kickboxing Championships at Mumbai.
- APCOER is very keen about environmental awareness.

Concluding Remarks:

Akhil Bharatiya Maratha Shikshan Parishad (A.B.M.S Parishad), an educational trust was founded by a team of renowned educationists and social reformers. It was established in 1907 with the slogan "Bahujan Hitay, Bahujan Sukhaya". In the first half of the 20th century A.B.M.S. Parishad made a commendable contribution of awakening and inspiring the masses who were deprived of education for generations.

Anantrao Pawar College of Engineering and Research is situated in the area of 10 acres of land surrounded by beautiful landscape of Sahyadri Hills of Western Ghat nearing to famous Parvati Hills. The institute was established in 2012 having 8 UG, 4 PG courses and a PhD research center for Mechanical and Civil

Page 79/87 31-08-2023 10:19:23

Self Study Report of AKHIL BHARATIYA MARATHA SHIKSHAN PARISHAD PUNE ANANTRAO PAWAR COLLEGE OF ENGINEERING AND RESEARCH

Engineering, affiliated to SPPU, Pune. Institute is on creating versatile engineers who can apply their knowledge and skills in any field across the globe. Highly qualified faculty members, well equipped laboratories, industry - academia interactions all serve to make engineering education at APCOER campus a unique and enriching experience. APCOER is proud to host a one of a kind Innovation Club and Incubation Center for the upcoming startups. The institute has a strong industry connect through several avenues like MoU and research collaboration. APCOER students have been working with industry in the form of internships and sponsored projects for a long time. APCOER has also taken an initiative for training the students in Japanese, French and German Language in association with Rajashri Shahu Academy. The institute has a strong alumni network which is evident through regular alumni interactions through several activities including judging Hackathons, Sparteck (technical competitions), guiding the students in terms of project development and placement preparations. Alumni are delivering sessions as per their expertise. APCOER also encourages and helps students to participate and organize different cultural, technical, sports and social activities and events.

The NAAC accreditation has helped the institute to achieve several milestones till date and its re-accreditation will further motivate and guide it to scale to new heights and improve continuously in all dimensions to mark itself as a global brand in the academic and research community.

Page 80/87 31-08-2023 10:19:23

6.ANNEXURE

1.Metrics Level Deviations

Wietife 1D	but Questions and I his wers before and after D V V critication
1.2.1	Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM,
	NPTEL etc. (where the students of the institution have enrolled and successfully completed
	during the last five years)

Answer before DVV Verification : Answer After DVV Verification :26

Metric ID Sub Questions and Answers before and after DVV Verification

Remark: DVV has made changes as per the report shared by HEI.

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

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

Answer before DVV Verification: 459 Answer after DVV Verification: 175

Remark: DVV has made changes as per the report shared by HEI.

- 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
 - 2.1.2.1. Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
156	115	62	75	73

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
32	32	28	28	28

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
174	174	174	174	174

2021-22	2020-21	2019-20	2018-19	2017-18
174	174	174	174	174

I	2021-22 85	ber of sanct	<u> </u>	s year wise 2018-19	•		·	
	Answer be 2021-22 85	fore DVV V 2020-21	Verification:	2018-19		last five	years	
	2021-22 85	2020-21	2019-20	2018-19	2017-18			
		86	94					
	Answer Af			68	72			
		ter DVV V	erification:					
	2021-22	2020-21	2019-20	2018-19	2017-18			
	84	85	93	68	72			
	Remark : DV	V has made	changes as	per the repo	ort shared by	HEI		
I	Pass percentage	of Student	s during la	st five year	s (excludin	g backlog	g students)	
	2.6.3.1. Num l	her of final	vear stude	nts who na	ssed the uni	versity e	vaminatio	n vear wise
Ġ	luring the last f		year stude.	nus who pa	ssca the am	versity c	Aammauo	i year wise
	O	•	Verification:					
	2021-22	2020-21	2019-20	2018-19	2017-18			
	329	260	221	210	195			
	Answer Af	ter DVV V	erification :					
	2021-22	2020-21	2019-20	2018-19	2017-18			
	329	256	222	241	189			
	2.6.3.2. Num l		•	nts who ap	peared for 1	he unive	ersity exam	ination year
	vise during the	-						
v	_		v ermeation:					
V	Answer be		2019-20	2018-10	2017-18			
V	Answer be 2021-22	2020-21	2019-20	2018-19	2017-18			
V	Answer be		2019-20	2018-19	2017-18			
	Answer be 2021-22 334	2020-21						
	Answer be 2021-22 334	2020-21	221					

Page 82/87 31-08-2023 10:19:23 endowments in the institution during the last five years (INR in Lakhs)

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
4.73	8.40	1.75	0	2.75

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
4.73	8.40	1.75	00	2.75

Remark: DVV has made changes as per the report shared by HEI.

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

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
149	101	71	100	14

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
36	14	14	38	14

Remark: DVV has made changes as per the report shared by HEI.

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

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
5	2	2	220	291

2	021-22	2020-21	2019-20	2018-19	2017-18

05	02	01	175	238	
----	----	----	-----	-----	--

Remark: DVV has made changes as per the report shared by HEI.

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

3.4.3.1. Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
27	48	15	18	5

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
04	09	12	32	20

Remark: DVV has made changes as per the report shared by HEI.

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.

Answer before DVV Verification:

Answer After DVV Verification:86

Remark: DVV has made changes as per the report shared by HEI.

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
258	163	101	145	85

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
256	163	101	145	85

5.2.1.2. Number of outgoing students year wise during the last five years Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
299	229	188	207	170

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
329	256	222	241	189

Remark: DVV has made changes as per the report shared by HEI.

- 5.2.2 Percentage of students qualifying in state/national/international level examinations during the last five years
 - 5.2.2.1. Number of students qualifying in state/ national/international level examinations year wise during last five years (eg: IIT/JAM/NET/SLET/GATE/GMAT/GPAT/CLAT/CAT/GRE/TOEFL/ IELTS/Civil Services/State government examinations etc.)

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
6	2	1	5	6

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
6	3	2	5	7

Remark: DVV has made changes as per the report shared by HEI.

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
15	6	3	12	11

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	4	0

COLLEGE OF ENGINEERING AND RESEARCH Remark: DVV has made changes as per the report shared by HEI 5.3.2 Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions) 5.3.2.1. Number of sports and cultural programs in which students of the Institution participated year wise during last five years Answer before DVV Verification: 2021-22 2020-21 2019-20 2018-19 2017-18 48 8 34 45 39 Answer After DVV Verification: 2021-22 2020-21 2019-20 2018-19 2017-18 25 23 08 23 15 Remark: DVV has made changes as per the report shared by HEI. 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 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 Answer before DVV Verification: 2017-18 2021-22 2020-21 2019-20 2018-19 90 21 55 25 12 Answer After DVV Verification: 2020-21 2021-22 2019-20 2017-18 2018-19 84 21 49 24 12 Remark: DVV has made changes as per the report shared by HEI. 6.3.3 Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years 6.3.3.1. Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years Answer before DVV Verification:

2021-22

2020-21

2019-20

2018-19

2017-18

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
09	79	21	28	60

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
23	22	26	16	29

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
23	22	26	16	29

Remark: DVV has made changes as per the report shared by HEI.

2.Extended Profile Deviations

ID	Extended Questions
1.1	Number of teaching staff / full time teachers during the last five years (Without repeat count):
	A 1 C DYNAY 'C' 4' 122

Answer before DVV Verification: 133 Answer after DVV Verification: 129

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
85	86	94	68	72

2021-22	2020-21	2019-20	2018-19	2017-18
84	85	93	68	72