YEARLY STATUS REPORT - 2020-2021

Part A
Data of the Institution

1.Name of the Institution	AKHIL BHARATIYA MARATHA SHIKSHAN PARISHAD PUNE ANANTRAO PAWAR COLLEGE OF ENGINEERING AND RESEARCH
• Name of the Head of the institution	Sunil Bhimrao Thakare
• Designation	Principal
• Does the institution function from its own campus?	Yes
• Phone no./Alternate phone no.	02024218959
• Mobile no	9923217056
• Registered e-mail	prof_sbthakare@rediffmail.com
• Alternate e-mail	abmspcoe@yahoo.com
• Address	S. No. 103, Shahu College Campus, Parvati, Pune
• City/Town	Pune
• State/UT	Maharashtra
• Pin Code	411009
2.Institutional status	
• Affiliated /Constituent	Affiliated
• Type of Institution	Co-education
• Location	Urban

• Financial Status	**Self-financing**
• Name of the Affiliating University	**SAVITRIBAI PHULE PUNE UNIVERSITY**
• Name of the IQAC Coordinator	**Shailesh S. Hajare**
• Phone No.	**02024218901**
• Alternate phone No.	**9422863496**
• Mobile	**9579707373**
• IQAC e-mail address	**iqac@abmspcoerpune.org**
• Alternate Email address	**naac@abmspcoerpune.org**
3.Website address (Web link of the AQAR (Previous Academic Year)	http://abmspcoerpune.org/NACC_AQAR-19-20/AQAR%2019-20.pdf
4.Whether Academic Calendar prepared during the year?	**Yes**
• if yes, whether it is uploaded in the Institutional website Web link:	http://abmspcoerpune.org/Downloads/AC/Academic%20Calender%2020-21%20Sem-I.pdf

5.Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	**B**	**2.35**	**2018**	**16/08/2018**	**15/08/2023**

6.Date of Establishment of IQAC	**03/08/2017**

7.Provide the list of funds by Central / State Government UGC/CSIR/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.,

Institutional/Department /Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Institution	**ISTE REFRESHERS PROGRAMME**	**ISTE**	**2021**	**300000**

8.Whether composition of IQAC as per latest NAAC guidelines	**Yes**

• Upload latest notification of formation of IQAC	No File Uploaded
9.No. of IQAC meetings held during the year	**02**
• Were the minutes of IQAC meeting(s) and compliance to the decisions have been uploaded on the institutional website?	**No**
• If No, please upload the minutes of the meeting(s) and Action Taken Report	<u>View File</u>
10.Whether IQAC received funding from any of the funding agency to support its activities during the year?	**No**
• If yes, mention the amount	

11.Significant contributions made by IQAC during the current year (maximum five bullets)

• Received Grant of Rs.93,000 for Conduction of ISTE Refresher Programme n "Improving Excellence in Teaching" • Initiated process of establishing Incubation centre at APCOER. Applied for Proposal of Rs. 1 crore Tilted as "Incubation Centre under ABSMP APCOER, Parvait, Pune. • Received ISO 9001:2015 certification of Institute. • Implemented LMS (Moodlegnomio/Google Classroom) for Online Teaching Learning Process during pandemic Situation. • Motivate & Encourage faculty members to participate for research grants schemes such as ASPIRE, SERB with R&D Coordinator of our Institute. • To Establish Incubation Centre at APCOER,Pune.

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

Plan of Action	Achievements/Outcomes
Activity Reports during Interim vacation-Preparation of Notes, PPT, Question Bank etc	**1. All faculties are instructed to use Google Meet, Google class room, Zoom Meeting for Conduction of online classes as well as Use of Google classroom, student's emails, Google drive etc for sharing e contents to**

	all students. 2. Conduction of classes of courses has been started in respective department through ZOOM/Google Meet. 3. Syllabus Completion report during works from Home has been collected through email & Needful instruction given towards Online teaching & learning Process.
Attend online Courses/FDP/Webinar during interim vacation	Faculties attended International webinars, Faculty development Progremmes, Created Subjective Quiz at respective department/
Examination form of Savitribai Phule Pune University	All students Examination forms are submitted through online & as per application fees forms were in warded at Institute level.
Scholarship forms submission by Students.	A circular has been issued to students regarding scholarship form submission through email/what's app by Mr.Nitin randive.
COVID-19 Precaution & Support by Institute.	Top level management of Institute will going to take care of faculties in our institute.
AICTE Research Proposal submission	1.FDP on Improvement in Teaching & Learning. 2.FDP on Non Destructive Testing Acknowledgement received & Permitted for Conducting FDP on "Improvement in Teaching & Learning". Said responsibility assigned to Dr.K.H.Mundhe & all Head of Departments.

13.Whether the AQAR was placed before statutory body?	No

- Name of the statutory body

Name	Date of meeting(s)
Nil	**Nil**

14.Whether institutional data submitted to AISHE

Year	Date of Submission
2020	**28/02/2022**

Extended Profile

1.Programme

1.1 Number of courses offered by the institution across all programs during the year	**08**

File Description	Documents
Data Template	[View File]

2.Student

2.1 Number of students during the year	**1091**

File Description	Documents
Institutional Data in Prescribed Format	[View File]

2.2 Number of seats earmarked for reserved category as per GOI/ State Govt. rule during the year	**648**

File Description	Documents
Data Template	[View File]

2.3 Number of outgoing/ final year students during the year	**256**

File Description	Documents
Data Template	[View File]

3.Academic

3.1 Number of full time teachers during the year	**86**

File Description	Documents
Data Template	[View File](#)

3.2 Number of sanctioned posts during the year	**68**

File Description	Documents
Data Template	[View File](#)

4.Institution

4.1 Total number of Classrooms and Seminar halls	**20**
4.2 Total expenditure excluding salary during the year (INR in lakhs)	**138.79**
4.3 Total number of computers on campus for academic purposes	**468**

Part B

CURRICULAR ASPECTS

1.1 - Curricular Planning and Implementation

1.1.1 - The Institution ensures effective curriculum delivery through a well planned and documented process

Anantrao Pawar College of Engineering and Research has a well-defined planning and implementation process for the effective delivery of the Curriculum framed by Savitribai Phule Pune Uiversity (SPPU) to which college is affiliated. The college has a mechanism for effective, documented curriculum delivery. The Academic Committee prepares the academic calendar for every semester in accordance with the university academic schedule, which comprises the duration, internal assessments for theory and lab courses, flagship events such as annual gathering, Annual Day, Sports day,

General Holidays, and disseminates it to the departments. The Heads of Departments (HoD) then allocates the courses (theory and laboratories) to the faculty members by considering their specialization, and expertise besides their preference. The subject teacher prepares the Course Outcomes (CO's) for each course based on Blooms' Taxonomy and maps it with Program Outcomes (PO's) and Program Specific Outcomes (PSO's). The department prepares the timetable for theory, lab courses, and project work based on the credits allotted for each course, along with slots for extra classes, and industry-oriented certification courses. After the review and approval from the HoD, the course subject teacher prepares a comprehensive lesson plan and study materials such as lecture notes, a question bank, PowerPoint presentations, laboratory manuals focusing on Outcome Based Education (OBE), and uploads it to the institute website after review by an external subject expert. The faculty then delivers the course as per the lesson plan using ICT tools and innovative teaching-learning pedagogy. In addition to the course delivery, model-based learning, group discussions, seminars, workshops, industrial visits, and industry-oriented certification courses are conducted for skill development and to bridge the curriculum gaps. The HoD interact with stakeholders to review the effectiveness of course delivery at regular intervals. Further, the course instructor identifies the slow and advanced learners based on their continuous internal evaluation. Remedial classes and counseling support are provided for slow learners as additional support, and advanced learners are encouraged to pursue courses through SWAYAM/NPTEL to facilitate self-learning. The Academic Committee spearheaded by the Principal, along Tutorials are held with mentoring and participative learning encouraged. Internal assessment is done transparently with examined scripts shown to students. Inter-personal skills are enhanced through Value Education. Heads of Departments regularly monitor the course coverage and effective delivery of the curriculum through student feedback and performance.

File Description	Documents
Upload relevant supporting document	[View File](View%20File)
Link for Additional information	http://www.abmspcoerpune.org/Academic_Calender.aspx

1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

Before the commencement of each semester, University notifies an academic calendar for all the programs, which contains the date of commencement, Conclusion Teaching the semester, Holidays and dates for semester-end examinations. APCOER follows the calendar issued by the SPPU strictly and plans all its activities including the conduct of Continuous Internal Evaluation (CIE). The institute prepares an institute-level calendar and every department follows all activities as per calendar. Institute calendar of events includes details like the Internal/Unit Test, Prelim Examination and holidays, INSEM Examination, END Examination dates, Innovation Club Meeting Schedule of Feedback, Academic Audits, Alumni Meet, guest lectures, workshops, and industrial visits, other co-curricular and extra-curricular activities. The academic activities, CIE, and all activities are conducted in adherence to the calendar of events except unforeseen circumstances. The academic calendars help faculty members to plan their respective course delivery research work academic and co-curricular activities. Department heads closely supervise and monitor the completion of the syllabus as per the lesson plan prepared by faculty members. Syllabus coverage for each CIE is decided well in advance and faculty members adhere to it. Internal Assessment such as Unit tests, assignments, quizzes, and seminars, Prelim Examination are part of the Continuous Internal Evaluation (CIE) of students. There is a well-defined process for the conduct of CIE as per the calendar of events. The Subject Teacher prepare Unit Test/Prelim Exam question papers based on the revised Bloom's Taxonomy along with the scheme of evaluation, reviewed by and approved by the department Head. The internal assessment test timetable prepared by the examination coordinator of respective department is communicated to all students and conducted as per the schedule. After Completion of Internal Examination, evaluation of answer book, and calculation of CO-PO/PSO attainment are carried out by respective Subject Teacher. Continuous evaluation and assessments are also done for laboratory course, project work, seminars, and internships. Conduction of laboratory experiments and viva, Submission of records are the major components of laboratory course evaluation. The Principal, through the academic HoD meetings, frequently reviews the semester's progress and provides suitable suggestions. In case of revision of academic calendar by the SPPU , institute's IQAC Cell incorporates the necessary changes accordingly.

File Description	Documents
Upload relevant supporting document	**No File Uploaded**
Link for Additional information	**Nil**

1.1.3 - Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year. Academic council/BoS of Affiliating University Setting of question papers for UG/PG programs Design and Development of Curriculum for Add on/ certificate/ Diploma Courses Assessment /evaluation process of the affiliating University	`B. Any 3 of the above`

File Description	Documents
Details of participation of teachers in various bodies/activities provided as a response to the metric	[View File](#)
Any additional information	**No File Uploaded**

1.2 - Academic Flexibility

1.2.1 - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

1.2.1.1 - Number of Programmes in which CBCS/ Elective course system implemented

25

File Description	Documents
Any additional information	[View File](#)
Minutes of relevant Academic Council/ BOS meetings	**No File Uploaded**
Institutional data in prescribed format (Data Template)	[View File](#)

1.2.2 - Number of Add on /Certificate programs offered during the year

1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement

for year: (As per Data Template)

0

File Description	Documents
Any additional information	**No File Uploaded**
Brochure or any other document relating to Add on /Certificate programs	**No File Uploaded**
List of Add on /Certificate programs (Data Template)	View File

1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

1091

File Description	Documents
Any additional information	View File
Details of the students enrolled in Subjects related to certificate/Add-on programs	View File

1.3 - Curriculum Enrichment

1.3.1 - Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum

Human Values & Professional Ethics is a very relevant subject of today's environment of conflicts and stress in the profession, with obligations to be met by one person in many directions. The following activities will certainly improve one's ability and judgment and refine one's behavior, decisions, and actions in performing the duty to the family, organization, and to the society. A person who is offered quality education will be able to serve the region, the state and the nation through resourceful education programmes. Quality-based education therefore helps improve the growth of the individual, which in turn claims to support the development of the organization. Anantrao Pawar College of Engineering & Research is committed to impart Quality Education, Professional ethics and Human values to create a unique approach, solely devoted to improving the life skills needed to succeed.

OBJECTIVES

Human Values & Professional Ethics

(a) To understand the moral values that ought to guide the Engineering profession,

(b) Resolve the moral issues in the profession, and

(c) Justify the moral judgment concerning the profession. It is intended to develop a set of beliefs,

attitudes, and habits that engineers should display concerning morality.

The objectives of the study on Professional Ethics may be listed as:

(A) Improvement of the cognitive skills (skills of the intellect in thinking clearly)

1. Moral awareness (proficiency in recognizing moral problems in engineering)

2. Cogent moral reasoning (comprehending, assessing different views)

3. Moral coherence (forming consistent viewpoints based on facts)

4. Moral imagination (searching beyond obvious the alternative responses to issues and

being receptive to creative solutions)

5. Moral communication, to express and support one's views to others.

(B) To act in morally desirable ways, towards moral commitment and responsible conduct

6. Moral reasonableness i.e., willing and able to be morally responsible.

7. Respect for persons, which means showing concern for the well-being of others, besides

oneself.

8. Tolerance of diversity i.e., respect for ethnic and religious differences, and acceptance

of reasonable differences in moral perspectives.

9. Moral hope i.e., believe in using rational dialogue for resolving moral conflicts.

10. Integrity, which means moral integrity, and integrating one's professional life and

personal convictions.

HUMAN VALUES

A value is defined as a principle that promotes well-being or prevents harm. Values are our core principles for our success-our framework of what is acceptable. Human action depends on the characters that define the identity, the values, and the belief. Human values include morality, integrity, peaceful life, respect for others, honesty, caring, kindness, courage, sharing, time-management, self-confidence, commitment, spirituality and service-learning a teaching method that combines community-based learning with academic instruction as it focuses on critical, reflective thinking and civic responsibility.

PROFESSIONAL ETHICS

Ethics is the word that refers to morals, values, and beliefs of the individuals, family or the society. The word has several meanings. Basically it is an activity and process of inquiry. Secondly, it is different from non-moral problems, when dealing with issues and controversies. Thirdly, ethics refers to a particular set of beliefs, attitudes, and habits of individuals or family or groups concerned with morals. Fourth, it is used to mean 'morally correct'. Ethics is an activity which concerns the investigation of moral values in moral matters. As for the Engineer, he / she should have both an ethical and a social responsibility towards himself, his / her subordinates and his / her society. The standards and guidelines adopted by professionals are called Professional Ethics. The set of ethical standards applicable to the engineering profession is known as Engineering Ethics. Formal Code, Focus, Precedence, Restriction, Two-Dimension and Role Morality are some of the important features of professional ethics.

Institutional View:

In our college we also conduct programs related to Human Values and Ethics to enhance the character of the students.

CROSS CUTTING ISSUES /GENDER

Women still experience patriarchy and hegemonic masculinity that manifests itself in various forms of discrimination. Moreover, when rigid cultural gender roles are strong and gender equality mainstreaming is slow or absent, higher numbers of women do not translate into a decrease in gender-based bias, stereotyping and violence. The gender gap in APCOER has tilted in favor of women as a result of increased access and inclusion of women in higher education. This does not mean, however, that gender equality – equal status between men and women and personal empowerment – has been achieved in APCOER. We at APCOER empower women to protect, maintain and strengthen their dignity by developing human capabilities through quality education based on social values and make them responsible citizens who can work for the advancement of the society. The cultural activities conducted mainly focused on the necessity of women to the society as a mother, wife and daughter. Sports events and the sports day give equal values to both genders. At APCOER, women students and staff are primarily viewed as women and there is no discrimination in security and safety at the college for both of them. For women students, a Common Room has been built in the premises that act as a haven for them for various reasons, personal and professional. No discrimination is mete out when providing students with opportunities and equal participation, at 50 percent, is ensured at all levels of activity in the college. Any such discrimination noticed is met with sever action and reprimanding. Similarly, women staff are treated with the same amount of diligence as students. No discrimination is encouraged or mete out in terms of opportunities and growth for lady staff. Promotions and leadership opportunities are based only on the capability and performance of the member in review barring gender. Appropriate hiring practices are also put in place, so that male-female ratio is maintained among staff, and no partiality or bias is made based on gender. The security and safety of women staff is a matter of utmost importance At APCOER women are foremost pillars, and we ensure that they are taken care of.

Girl's Common Room

There are common rooms in the college premises, for girls and for boy's students. These serve as an open space for relaxation, socializing and entertainment. Both Girls' and Boys' common rooms are spacious and airy. The College maintains separate rooms for the rest and recreation among girl students. The common room is provided with indoor games, chairs and tables and reading materials to suit various needs. The common room has attached washroom facilities, incinerators for sanitary pad disposal, water purifier to provide drinking water, both cold and normal. The Girls Common room has a lady peon deployed for its maintenance and surveillance.

Boy's Common Room

One of the major attractions among the students of this college is the common room for boys. In between the class hour they are using this as their relaxing and refreshment time. Boy's common room is well maintained and equipped with some indoor games facilities. Usually a student is selected for the post of Boys common room Secretary by the students union.

Environmental Safety

APCOER believes that an understanding of nature will give each individual a better perspective of the world. The awareness about the present status of the environment has become very important in view of the precarious situation due to pollution, deforestation, Global Warming, Ozone layer depletion, consequent major changes in climatic conditions, erratic monsoon. The APCOER believes that nature teaches life's lessons in its own subtle ways and enables our youth to share their responsibilities in maintaining a healthy environment and to take steps to avoid environmental degradation in their individual capacity as well as in a group. In APCOER College we seek to live, work, and play in such a way that we enhance the environmental, economic, and social well-being of our communities, minimize use of natural resources and reduce its impact on our environment. Educate ourselves and others about the duties and responsibilities of citizens to ensure sustainable development for the future generation. To achieve this, we believe one needs to collectively and individually think, act, and interact to encourage change in the students' outlook and to take initiatives and organize campaigns to achieve its objectives. as well as in a group. In APCOER College we seek to live, work, and play in such a way that we

enhance the environmental, economic, and social well-being of our communities, minimize use of natural resources and reduce its impact on our environment. Educate ourselves and others about the duties and responsibilities of citizens to ensure sustainable development for the future generation. To achieve this, we believe one needs to collectively and individually think, act, and interact to encourage change in the students' outlook and to take initiatives and organize campaigns to achieve its objectives. To give enhancement to this aspect trees inside the campus are highly protected to create a green environment. A horticulture team helped the gardeners to maintain a green campus.

The curriculum includes compulsory subjects like Environment Studies for all branches under Savitribai Phule Pune University to stress the importance of Environmental Safety.

Professional Ethics

Professionalism requires a person to utilize their professional skills with relevant ethics. Certain ethical principles are fundamental to all professions. The most prominent among them are:

honesty, trustworthiness, loyalty, being law-abiding, no sinister motives, socially responsible, respect, fairness to all, accountability.

NSS National Service Scheme

The National Service Scheme (NSS) is a Central Sector Scheme of Government of India, Ministry of Youth Affairs & Sports. It provides opportunity to the student youth of 11th & 12th Class of schools at +2 Board level and student youth of Technical Institution, Graduate & Post Graduate at colleges and University level of India to take part in various government led community service activities & programmes.The sole aim of the NSS is to provide hands on experience to young students in delivering community service. The vision is to build the youth with the mind and spirit to serve the society and work for the social uplift of the down-trodden masses of our nation as a movement. The National Service Scheme has been functioning with the motto "NOT ME BUT YOU" in view of making the youth inspired in service of the people and hence NSS Aims Education through Community Service and Community Service through Education.

Broad Objectives of the service scheme are

- **Understand the community in which they work**

- **Understand themselves in relation to their community**

- **Identify the needs and problems of the community and involve them in problem solving process**

- **Develop among themselves a sense of social and civic responsibility**

- **Utilize their knowledge in finding practical solution to individual and community problems**

- **Develop competence required for group living and sharing of responsibilities**

- **Gain skills in mobilizing community participation**

- **Acquire leadership qualities and democratic attitude**

- **Develop capacity to meet emergencies and natural disasters and Practice national integration and social harmony**

- **Practise national integration and social harmony**

File Description	Documents
Any additional information	**No File Uploaded**
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	View File

1.3.2 - Number of courses that include experiential learning through project work/field work/internship during the year

0

File Description	Documents
Any additional information	**No File Uploaded**
Programme / Curriculum/ Syllabus of the courses	View File
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View File
MoU's with relevant organizations for these courses, if any	**No File Uploaded**
Institutional Data in Prescribed Format	View File

1.3.3 - Number of students undertaking project work/field work/ internships

0

File Description	Documents
Any additional information	**No File Uploaded**
List of programmes and number of students undertaking project work/field work/ /internships (Data Template)	View File

1.4 - Feedback System

1.4.1 - Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders Students Teachers Employers Alumni	D. Any 1 of the above

File Description	Documents
URL for stakeholder feedback report	https://drive.google.com/file/d/1jvGw6LxygViPeLI1JO-RdbeoDJsG9J-S/view?usp=sharing
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	**No File Uploaded**
Any additional information	View File

1.4.2 - Feedback process of the Institution may be classified as follows	**C. Feedback collected and analyzed**

File Description	Documents
Upload any additional information	View File
URL for feedback report	https://drive.google.com/file/d/1jvGw6LxygViPeLI1JO-RdbeoDJsG9J-S/view?usp=sharing

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment Number Number of students admitted during the year

2.1.1.1 - Number of students admitted during the year

1091

File Description	Documents
Any additional information	View File
Institutional data in prescribed format	View File

2.1.2 - Number of seats filled against seats reserved for various categories (SC,   ST, OBC, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of supernumerary seats)

2.1.2.1 - Number of actual students admitted from the reserved categories during the year

562

File Description	Documents
Any additional information	View File
Number of seats filled against seats reserved (Data Template)	View File

2.2 - Catering to Student Diversity

2.2.1 - The institution assesses the learning levels of the students and organizes special Programmes for advanced learners and slow learners

Support for "Slow learners"

In the academic term, every department collects the feedback from Class teachers in initial days and allocation is done for mentor and mentee.

The subject teacher in coordination with class teacher identifies the slow learners and motivates them to upgrade to good learner by using suitable tools and techniques.

The extra attention and efforts is made by conducting sessions encouraging solving assignments, and opening discussion with mentors.

Digital books and other essential reading materials are provided through digital access for the library.

Support for "Advanced learners"

For the overall development of advanced learners institute is encouraging students to get involved in GATE, Spoken tutorials (IIT Bombay), Intershala programs

After the completion of each unit, assignments containing a range of easy to complex problems are given to the students, based on the student's ability to solve and upgrade the learning level.

Advanced learners are tutored to secure rank at different stages of academics and events.

Placement training programmes are arranged for students who show good promise.

Advanced learners are encouraged to enroll for additional certification courses, write technical papers, participate in

technical events, and carry out literature reviews which broadens their knowledge base.

File Description	Documents
Paste link for additional information	**Nil**
Upload any additional information	View File

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

Number of Students	Number of Teachers
1091	**85**

File Description	Documents
Any additional information	View File

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

Our institute believes in the adoption of students centric methods to enhance student involvement and performance as a part of participative engagement in learning and problem solving methodology like - Teamwork, Seminars and case studies specifically Students centric Teaching Methods are reflected in project work, Field Visit, Industrial visit & guest lectures.

Specifically the students centric methodology include

1. Experiential Learning

1.1.1 Through Project work

? Project work is organized in two phases

1) Project stage I includes the brief about the research idea and methodology

2) Projects stage II this is an essential element of each programme

? Internship or Field Projects in industry

1.2 Participation

? The exposures of students are encouraged by motivation for participation in National and International Level competitions including conferences and publication of research articles in journals of repute.

1.3 Field and Industrial Visits

? Faculty identifies, plan and propose academically and research significant industries to provide exposure to industrial and research work culture and plans field visits and surveys.

1.4 Guest-Expert Lecture

? Guest-Expert lectures by eminent experts from industry and from academics across the world are organised to supplement the teaching process and provide experiential learning.

1.5 Teamwork and Role play

All Departments organize students' activities to promote the spirit of Teamwork. The activities and Camp of NSS, institutional social responsibility through, Village Adoption, Tree plantation. Swachh Bharat and Health awareness camp and celebrating memorial day of national heroes to help the students to learn art of living in a team for Social and community welfare. Teachers adopt role play methods especially in engineering and Post Graduate engineering courses to supplement teaching by way of participative learning.

In addition the practicals and workshops in all individual and group work under the guidance of teachers are conducted. The group discussion is carried out in many of the subjects where students are required to come with their different opinions and views so that the learning process gets justified in the way of discussion with learning.

File Description	Documents
Upload any additional information	No File Uploaded
Link for additional information	Nil

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

Anantrao Pawar College of Engineering and Research, encourages intensive use of ICT enabled tools including online resources for effective teaching and learning process. The faculties use LCD Projectors, Video Conferencing, Apple Tabs, A-view, Google quiz, MOOCS and E-learning tools. In addition, for effective delivery the institute has an infrastructure enabled with Leased line, Multimedia Projectors, Public address system, Document camera, Computers, Laptop, Wifi ,LAN connected system are also used by the faculty. The laboratories Seminar Halls, Auditorium, Central Board Room and other conference rooms are well equipped with ICT facilities.

The general ICT Tools are Using by Anantrao Pawar College of Engineering and Research facilities includes Desktop and laptops, Projector, Digital cameras, Printer, Photocopier, tablets, Pen Drive, Scanners, Microphones, interactive white board, DVDs and CDs, Flash discs and online meeting tools like Zoom meeting, Google meet and Microsoft Teams for effective delivery of online lectures.

File Description	Documents
Upload any additional information	[View File](#)
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	[View File](#)

2.3.3 - Ratio of mentor to students for academic and other related issues (Data for the latest completed academic year)

2.3.3.1 - Number of mentors

85

File Description	Documents
Upload, number of students enrolled and full time teachers on roll	[View File](#)
Circulars pertaining to assigning mentors to mentees	[View File](#)
Mentor/mentee ratio	[View File](#)

2.4 - Teacher Profile and Quality

2.4.1 - Number of full time teachers against sanctioned posts during the year

85

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	View File
Any additional information	No File Uploaded
List of the faculty members authenticated by the Head of HEI	View File

2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year

10

File Description	Documents
Any additional information	No File Uploaded
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year (Data Template)	View File

2.4.3 - Number of years of teaching experience of full time teachers in the same institution (Data for the latest completed academic year)

2.4.3.1 - Total experience of full-time teachers

4

File Description	Documents
Any additional information	No File Uploaded
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	View File

2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode.

Write description within 200 words.

According to the academic calendar, a student has to appear in 2-unit tests, 1 insem examinations and 1 end semester examination. The schedule of the examination is planned at the beginning of the academic calendar as per the schedule of Savitribai Phule Pune University.

As per the academic calendar, a faculty has to conduct a unit test, which may be in the form of a written test, power-point presentation, and quiz on the subject or any other suitable method. The marks of unit tests are communicated to students. They can observe their submitted test copies/responses and record the obtained marks.

In semester/term work/oral/practical examination the marks of model examination is uploaded and submitted through university mark entry portal confidentially for both undergraduate and postgraduate students.

The internal marks are communicated to students by displaying the common sheet on notice board after approval from institute examination cell and IQAC. This method of release marks helps the student to boost up self-confidence and motivates them to show improvement in studies.

File Description	Documents
Any additional information	[View File](#)
Link for additional information	http://collegecirculars.unipune.ac.in/sites/documents/Syllabus%202019/Rules%20and%20Regulations%20F.E.%202019%20Patt_10.012020.pdf

2.5.2 - Mechanism to deal with internal examination related grievances is transparent, time- bound and efficient

The institute has complete transparency in the internal assessment. The criterion adopted is as directed by the Savitribai Phule Pune University. At the beginning of the semester, faculty members inform the students about the various components in the assessment process during the semester. To ensure proper conduct of formative tests, an invigilator is assigned to each hall. Evaluation is done by the course handling faculty members within stipulated time from the date of examination.

Redressal of grievances:

Departmental Level: The continuous evaluation of students is carried out by faculty regarding theory lectures, labs, assignments, unit tests. The midterm marks are allotted based on defined strategies and displayed on the notice board. Query if any is discussed with faculty and Head of department.

Institute Level: The Institute appoints a Chief Exam Officer(CEO) for smooth conduction of examinations of APCOER. If students are facing any problems, they are solved by the institution's Chief Examination Officer. The grievances during the conduction of online/theory examinations are considered and discussed in consultation with the Principal and if necessary forwarded to the university by institute examination section

University level: The queries related to results, corrections in mark sheets, and other certificates issued by university are handled at the SPPU examination section after forwarding such queries through the institute examination section. Students are allowed to apply for revaluation, recounting and challenge evaluation by paying necessary processing fees to the university if they are not satisfied with the university evaluation through the institute .

File Description	Documents
Any additional information	[View File](#)
Link for additional information	http://www.unipune.ac.in/university_files/examination_information.htm

2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

Mechanism of Communication:

The institute adopts Outcome based education rather than input oriented bell shaped curve of learning. The following mechanism is followed by the institution to communicate the learning outcomes to the teachers and students.

- **Graduate attributes are described to the first year students at the commencement of the programme.**

- Learning Outcomes of the Programs and Courses are observed and measured periodically.

- Soft Copy of Curriculum and Learning Outcomes of Programmes and Courses are uploaded on the Institution website for reference.

- The importance of the learning outcomes has been communicated to the teachers in every IQAC Meeting and Staff Meeting.

- The students are also communicated about the Programme outcomes, Programme Specific Outcomes and Course outcomes through Tutorial Meetings.

- Identify the most relevant concepts that arise in everyday life, and devise a strategy in order to arrive at the solutions in the respective subjects and are made to understand the connection between key concepts and applications.

- Use software tools and coding at a level necessary to perform mathematical operations, statistical analysis and simulations in solving complex problems.

- Use basic laboratory equipment correctly and effectively in order to conduct measurements, and analyze and interpret the results, including a quantitative understanding of uncertainties.

- Locate existing scientific research relevant to a given topic, and evaluate its accuracy.

- Communicate the results of scientific work effectively, making use of clear and well organized writing and presentation skills, and employ equations and visualization tools as needed.

File Description	Documents
Upload any additional information	View File
Paste link for Additional information	http://www.abmspcoerpune.org/Downloads/Course_Outcomes/MECH_BE_CO.pdf
Upload COs for all Programmes (exemplars from Glossary)	View File

2.6.2 - Attainment of Programme outcomes and course outcomes are evaluated by the institution.

Anantrao Pawar College of Engineering and Research, Pune offeres 5 Under Graduate and 2 Post Graduate programs additional courses under the Faculty Science and Technology of Savitribai Phule Pune University.

For these programs and courses, the institute follows the curriculum designed by our affiliated university. The Programme outcomes (POs), Programme specific outcomes (PSOs) and Course outcomes (Cos) are evaluated by the institution and the same are communicated to the students in the formal way of the discussion in the classroom and departmental notice board.

After measuring attainment of POs , PSOs and COs, it has been observed that the strength of the students as well as passing percentage of the students is increasing progressively. Besides, students' progression to the higher studies that is from Under Graduate to Post Graduate seems to be increasing consistently and rapidly in the last five years.

In a similar way, the ratio of students' placement is also increasing. We took utmost care of measuring the level of attainment of POs, PSOs and COs and followed formal as well as informal mechanisms for the measurement of attainment of the outcomes. Even we took feedback from all the stakeholders in this respect and tried to take necessary steps accordingly.

Subsequently, the institute took care of the attainment to measure the POs, PSOs and COs and implemented the mechanism as follows:-

- The institute followed the Academic Calendar of our affiliated university.

- All the subject teachers maintained an Academic Diary in every

academic year.

- All the subject teachers prepared Semester-Wise evaluation Reports.

- Internal examination committee analyzed evaluation reports of results.

- Institute considered Feedback from all Stakeholders for the attainment of PO, PSO and CO.

- The Placement committee took the review of the Students' Progression to Higher Studies and their Placement.

The Program outcomes of Bachelor of Engineering and Post graduate Engineering are as follows:

PO1: The students understood the fundamentals of science and engineering.

PO2: The students' knowledge in engineering and research is enriched.

PO3: Interdisciplinary approach amongst students has been developed.

PO4: Sense of scientific, technological responsibilities, social and environment awareness have been inculcated among the students.

PO5: Students built-up a progressive and successful career in academics, industry and research.

PO6: Students are motivated to contribute in the development of Nation and community. Attainments of CO's are calculated by using university examination results. Attainment levels are finalized at institute level and conveyed to IQAC.

File Description	Documents
Upload any additional information	View File
Paste link for Additional information	http://www.abmspcoerpune.org/NAAC_Downloads.aspx

2.6.3 - Pass percentage of Students during the year

2.6.3.1 - Total number of final year students who passed the university examination during the year

260

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View File
Upload any additional information	View File
Paste link for the annual report	http://www.abmspcoerpune.org/NAAC_Downloads.aspx

2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a weblink)

http://www.abmspcoerpune.org/Downloads/SSS%202020-21.pdf

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 year (INR in Lakhs)

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

6.55

File Description	Documents
Any additional information	**No File Uploaded**
e-copies of the grant award letters for sponsored research projects /endowments	View File
List of endowments / projects with details of grants(Data Template)	View File

3.1.2 - Number of teachers recognized as research guides (latest completed academic year)

3.1.2.1 - Number of teachers recognized as research guides

1

File Description	Documents
Any additional information	View File
Institutional data in prescribed format	View File

3.1.3 - Number of departments having Research projects funded by government and non government agencies during the year

3.1.3.1 - Number of departments having Research projects funded by government and non-government agencies during the year

3

File Description	Documents
List of research projects and funding details (Data Template)	View File
Any additional information	**No File Uploaded**
Supporting document from Funding Agency	View File
Paste link to funding agency website	http://bcud.unipune.ac.in/Template_Aspire/

3.2 - Innovation Ecosystem

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

Institute is having active Innovation Club with the personalities with great experience their technological fields, who are motivating

the faculties for Innovations. The technology and knowledge transfer to Industry/Society is prime motto for research in Institute. The faculty data sheets are prepared with their expertise and guided for work in that particular area to bring out solution to specific problem. Innovation ecosystem is developed by transforming new ideas of students/faculties into reality through facility and financial investment.

Institute is developing the Incubation Centre for innovation in Agriculture sector with various Agencies, Associations and Ministries also. The awareness of same given to all faculties for developing small ideas/projects which will cater the need of Farmers in India. Following are some of project to note related to Agriculture:

1. Agriboat: Multipurpose agriculture Gantry Robot for surveillance, watering, pesticide spraying, disease detection and many more works can be possible through it.
2. Remotely Quality checking of strawberry.
3. Drone technology for pesticide spraying and disease detection

The other technology forefront in India is EV sector and institute is developing certain models for technology transfer. The EV bicycle model is developed and made available for nearby area for Bicycle conversion. Faculties and students are working on EV platform, which is at design phase.

The value of an innovation ecosystem lies in the access to resources for the startups and the flow of information for the ecosystem's stakeholders. This information flow creates more investment opportunities for the right institutions to connect with the right ideas for their businesses and portfolios, at the right time, for the right reasons.

The civil environmental engineering department has developed the project for mercury recovery from brunt fluorescent tubes and lamp with following objectives:

1. To find out the poisonous content in the vehicular bulb such as mercury and lead.
2. To stop environmental pollution arising from mercury emission during recovery process and eventually develop a waste to wealth method that will eliminate the potential hazard to the environment especially ground water and ecosystem.

Recycling is one of the solution to the large quantities generated

every year and recycling is followed by recovery which include the valuable material such as ceramic, metal and glass. The focus will be on the process that can be applied for the efficient recovery of mercury from phosphor powder, in the hope of determining a viable and profitable procedure that can be scale up to an industrial process.

The computer Engineering and Information Technology department is jointly working on IotPolyhouse projects:

1. Agro-Data - Agro Data technologies are playing an essential, reciprocal role in this development: machines are equipped with all kind of sensors that measure data in their environment that is used for the machines' behavior. This varies from relatively simple feedback mechanisms (e.g. a thermostat regulating temperature) to deep learning algorithms (e.g. to implement the right crop protection strategy). This is leveraged by combining with other, external Agro Data sources such as weather or market data or benchmarks with other farms.
2. Smart Agrico – is the project involving taking real time images of plant stem, storing them on cloud and processing them to find about the plant diseases that could be on plant.

E&TC Engineering Department is jointly working on IoTpolyhouse projects:

1. AgroSense: Agro sense is a part of IoTpolyhouse Project, in which various sensors are used for sensing data from different peripherals.
2. Agro Position: Collect Sensed Data i.e. position, length, Speed from Arduino

microcontroller, and sending to RPi through Bluetooth.

E&Tc Department is also working on various innovative projects like Sensor based agriculture automation for crops like strawberry etc.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	http://www.abmspcoerpune.org/RD_EI.aspx

3.2.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year

3.2.2.1 - Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during the year

0

File Description	Documents
Report of the event	**No File Uploaded**
Any additional information	**No File Uploaded**
List of workshops/seminars during last 5 years (Data Template)	<u>View File</u>

3.3 - Research Publications and Awards

3.3.1 - Number of Ph.Ds registered per eligible teacher during the year

3.3.1.1 - How many Ph.Ds registered per eligible teacher within the year

1

File Description	Documents
URL to the research page on HEI website	<u>http://www.abmspcoerpune.org/RD_PhD_Thesis.aspx</u>
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc (Data Template)	<u>View File</u>
Any additional information	<u>View File</u>

3.3.2 - Number of research papers per teachers in the Journals notified on UGC website during the year

3.3.2.1 - Number of research papers in the Journals notified on UGC website during the year

32

File Description	Documents
Any additional information	View File
List of research papers by title, author, department, name and year of publication (Data Template)	View File

3.3.3 - Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year

3.3.3.1 - Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during year

0

File Description	Documents
Any additional information	No File Uploaded
List books and chapters edited volumes/ books published (Data Template)	View File

3.4 - Extension Activities

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

During pandemic situation the college has extended the facility of Vaccination to faculties, staff and students. The oxygen supply audit of Hospitals is carried out by faculties of institute. The overall development of students and faculties is prime importance.

NSS reflects the "Not Me But You", essence of democratic living and upholds the need for self-less service. NSS helps the student's development & appreciation to other person's point of view and also show consideration towards other living beings. The philosophy of the NSS is a good doctrine in this motto, which underlines on the belief that the welfare of an individual is ultimately dependent on the welfare of the society as a whole and therefore, the NSS volunteers shall strive for the well-being of the society.

Safety Measures Of COVID-19 webinar provides information on what is coronavirus? What are the symptoms of corona virus? How to contact if corona virus symptoms are observed? What precautions should be taken to not get infected because of corona virus? How to contact helpline for corona virus? Also webinar focus on the Aarogya Setu

is a mobile application developed by the Government of India to connect essential health services with the people of India in our combined fight against COVID-19.

As Maharashtra launches its 'Mission Begin Again' with further relaxations, As part of relaxations, the state government allowed inter district travel, more workforce in private and government offices, operation of hotels and lodges at the full strength. To avoid the spread of Corona virus's guidelines session was organized for Staff members of Anantrao Pawar College of Engineering and Research Parvati Pune. The Vigilance Awareness Week 2020 was observed from 27th October 2020 to 2nd November 2020, under the auspices of Central Vigilance Commission (CVC) to spread awareness against corruption. CVC's theme for this year's Vigilance Awareness Week is "Corruption in India" with emphasis on spreading awareness in fight against corruption to all sections of Society. In line with the letter and spirit of the theme and in accordance with the directives of CVC, several activities were organized covering a wide spectrum of society, with the aim of spreading awareness and sensitizing the public about ways and means to fight corrupt practices. We could muster the support of the print media also, which gave wide publicity to our run?up activities, ahead of the Vigilance Awareness Week.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

3.4.2 - Number of awards and recognitions received for extension activities from government / government recognized bodies during the year

3.4.2.1 - Total number of awards and recognition received for extension activities from Government/ Government recognized bodies year wise during the year

3

File Description	Documents
Any additional information	No File Uploaded
Number of awards for extension activities in last 5 year (Data Template)	View File
e-copy of the award letters	View File

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

**3.4.3.1 - Number of extension and outreach Programs conducted in collaboration with industry,
community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc.,
during the year**

18

File Description	Documents
Reports of the event organized	View File
Any additional information	View File
Number of extension and outreach Programmes conducted with industry, community etc for the during the year (Data Template)	View File

3.4.4 - Number of students participating in extension activities at 3.4.3. above during year

**3.4.4.1 - Total number of Students participating in extension activities conducted in
collaboration with industry, community and Non- Government Organizations such as Swachh
Bharat, AIDs awareness, Gender issue etc. year wise during year**

18

File Description	Documents
Report of the event	View File
Any additional information	View File
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	View File

3.5 - Collaboration

**3.5.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/
internship during the year**

**3.5.1.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/
internship year wise during the year**

6

File Description	Documents
e-copies of related Document	View File
Any additional information	No File Uploaded
Details of Collaborative activities with institutions/industries for research, Faculty	View File

3.5.2 - Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year

3.5.2.1 - Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the year

9

File Description	Documents
e-Copies of the MoUs with institution./ industry/corporate houses	View File
Any additional information	No File Uploaded
Details of functional MoUs with institutions of national, international importance, other universities etc during the year	View File

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.

The institute has up to the mark the infrastructure required by AICTE, DTE as well as SPPU. The institute has well defined guidelines for creation and enhancement of the infrastructural facilities in advancement of requirements.

The institute has policy as follows:

- To provide all necessary infrastructural facilities well in advance for effective teaching learning process. The requirements from all departments regarding need of creating new civil and electrical work, laboratory development, teaching aids, faculty rooms (seating arrangements) and furniture are collected according to increase in intake and

revised syllabi. These requirements are forwarded to management to approve all budgetary provisions.

- To carry out preventive maintenance of all laboratory equipment before the commencement of every semester under the departmental internal audit system.
- To provide all necessary audio visual aids in the classrooms.
- To provide all necessary support in the library, classrooms, laboratories, cafeteria and parking such as internet and Wi-Fi facility for easy accession of all learning resources.
- To follow VRIDDHI-ERP system for library.
- To keep all academic information such as timetable, attendance of students, teaching plans, study material moodle-E-learning Portal for providing and accessing academic information to faculty and students.
- To develop excellence centers and clubs to motivate the students for participating in AVISHKAR, National/International Conferences, model making competitions and Robotics Activities etc.
- To promote students towards internship programs and industrial training so as to augment their employability.
- To have well equipped seminar halls with adequate seating capacity for smooth conduction of events like conferences, seminars and yoga- meditation camp etc.
- To have collaboration with industry for development of state of the art laboratories.
- To have collaboration with other reputed institutes for sharing state of the art laboratories and learning resources.

File Description	Documents
Upload any additional information	[View File]()
Paste link for additional information	Nil

4.1.2 - The Institution has adequate facilities for cultural activities, sports, games (indoor, outdoor), gymnasium, yoga centre etc.

Anantrao Pawar College of Engineering and Research Parvati, Pune (APCOER) is under the aegis of Akhil Bharatiya Maratha Shikshan Parisha's, Pune and has access to the state-of-the- art infrastructure, which encourages students to participate in varied Extra-Curricular activities. The Institute believes in the all-round development of its students. It constantly encourages them to take part in extra-curricular activities and thus extend a platform to show case their dormant talent and cultivate leadership qualities

and team spirit in them. Institute has adequate facility for outdoor games such as Cricket, Basketball, Volleyball, Throw ball, Football, Kabaddi, Ball badminton, Tug of War and other Throwing - Jumping activities. Students are provided with the necessary sports equipment. The Sports ground is maintained regularly, especially during the execution of the annual Sports events. The space for Indoor games such as Chess, Table Tennis, and Carom, Badminton etc. is available for students. Students are encouraged to participate in inter collegiate and University level sports events. The girls' hostel has a well-equipped gymnasium for the inmates. Open space is available at different locations for promotion of Yoga and meditation events. Annual Sports events are organized to enhance the physical and psychological strength of the students. Sports help in building the values of leadership and team spirit among the students. It also inculcates the habit of winning and competitive Spirit among the students which is very important in today's competitive world. Large numbers of students participate in annual sports event and the major use of sports facilities is on weekends, holidays and during inter-collegiate event.

International Yoga Day is celebrated every year for students and staff members for empowering spiritual and mental health.

The Objectives behind conducting sports activities at Institute level are

1. To develop team spirit amongst Students.

2. To enhance physical and mental ability of students.

3. To ensure the awareness among students about physical fitness and sport.

4. To encourage the students to participate at University level and Inter State sports Competition.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

4.1.3 - Number of classrooms and seminar halls with ICT- enabled facilities such as smart class,

LMS, etc.

22

File Description	Documents
Upload any additional information	**No File Uploaded**
Paste link for additional information	http://www.abmspcoerpune.org/ENTC_TimeTable.aspx
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View File

4.1.4 - Expenditure, excluding salary for infrastructure augmentation during the year (INR in Lakhs)

4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)

183.798

File Description	Documents
Upload any additional information	**No File Uploaded**
Upload audited utilization statements	View File
Upload Details of budget allocation, excluding salary during the year (Data Template	View File

4.2 - Library as a Learning Resource

4.2.1 - Library is automated using Integrated Library Management System (ILMS)

VRIDDHI Library automation Software is loaded with some important library functionalities like software helps to keep track of all the existing books, Book Accession, Periodical Accession, and Disc Accession. After accessioning, the books and periodicals are ready for circulation. Books reservation functionality is also part of library management software. Daily/monthly/yearly reports can be generated from the library management software. Report can be extracted item wise like report will explain how many items are issued, available etc. Member wise report can also be generated. For

example if you want to generate a report for a particular member for some specific period. You can print Accession Register, Membership Register, book Issue Register, Reservation Register, Binding Register, Fine & Write-Off Registers. Book Card, Title wise, Author wise, subject wise, Class no. wise & Budget wise are available in library automation software. Bar code will help in Issue-return functionality. While issuing a book, librarian will scan the barcode in Library Management software and an entry will be made into the library automation software for the specific book against the specific student or faculty member.This software generate user identity card, generate member barcode, material barcode and also provides OPAC facility to access catalog provides search option for student by Title, Author, Accession Number Publisher, Edition Year, and Subject. This will help to reduce the manual work (on papers) to maintain member's records.The librarian manages the entire stock of the library very quickly and conveniently.

File Description	Documents
Upload any additional information	View File
Paste link for Additional Information	https://apcoer.vriddhionline.com/DataCenter_01OnlineOPAC.aspx?UniqueID=SHAHU_ENGG

4.2.2 - The institution has subscription for the following e-resources e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access toe-resources	B. Any 3 of the above

File Description	Documents
Upload any additional information	View File
Details of subscriptions like e-journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	View File

4.2.3 - Expenditure for purchase of books/e-books and subscription to journals/e- journals during the year (INR in Lakhs)

4.2.3.1 - Annual expenditure of purchase of books/e-books and subscription to journals/e-journals during the year (INR in Lakhs)

3.59

File Description	Documents
Any additional information	View File
Audited statements of accounts	View File
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	View File

4.2.4 - Number per day usage of library by teachers and students (foot falls and login data for online access) (Data for the latest completed academic year)

4.2.4.1 - Number of teachers and students using library per day over last one year

12

File Description	Documents
Any additional information	View File
Details of library usage by teachers and students	View File

4.3 - IT Infrastructure

4.3.1 - Institution frequently updates its IT facilities including Wi-Fi

The details of computer and internet facility made available in campus are as follows.

A provision for submission of assignments online by the students is made through ICT. Online exams are conducted through the ICT facility on moodle e-learning portal. Students are encouraged to apply for scholarship online. Online Feedback System is available for improvement of teaching and learning which in turn benefits student development.

Following are the key features of ICT facility in the institute

- Resource sharing
- Student assessment
- Extra –curricular learning support
- Online attendance marking for teachers and one click record generation.
- Assignment Preparation
- All time open access to lectures and resource material to students as well as faculty.

Computer facility:In addition to departmental laboratories, a central computing facilityof 55 computers with internet facility is made available to the students.

All PCs are secured since open source Operating System is used.

Internet facility:The institute provides 48 Mbps dedicated 1:1 leased line for internet facility.Wi-Fi Facility to the faculty and students to meet connectivity requirements.Cyber roam Firewall is used for security. Due to the high speed internet facility sharing of information becomes speedy and responsive. Students can have access to e-learning resources in and out of campus. Thus an era of supporting the need of skilled engineers is brought into existence through all the ICT facilities.

The Bandwidth of the leased line is gradually upgraded as per requirement and feasibility. Initially a leased line of 2MBPS was installed and successively upgraded to 48 MBPS.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	**Nil**

4.3.2 - Number of Computers

468

File Description	Documents
Upload any additional information	**No File Uploaded**
List of Computers	View File

4.3.3 - Bandwidth of internet connection in the Institution	B. 30 - 50MBPS

File Description	Documents
Upload any additional Information	View File
Details of available bandwidth of internet connection in the Institution	View File

4.4 - Maintenance of Campus Infrastructure

4.4.1 - Expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the year (INR in Lakhs)

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

72.796

File Description	Documents
Upload any additional information	**No File Uploaded**
Audited statements of accounts	View File
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View File

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

All the classrooms, benches, laboratories, washrooms and seminar halls are cleaned on regular basis, All the Laboratory equipment is verified and checked by Laboratory Incharge or Laboratory assistant at the starting of every semester. Under the same process it is recorded whether it is OK or needs any maintenance or repair and the needful is done through recorded documentation. Routine process of maintenance is carried out for preventive maintenance of equipment like workshop machines etc. Calibration (As applicable) as per plan is also carried out on a timely basis.

In case of breakdown, repair the fault internally and / or with the help from external agencies.

A record of breakdown maintenance is carried out. Further analysis is done and necessary actions are initiated to eliminate recurrence.

Library maintenance and preservation is done on regular basis to avoid dust accumulation and other spoiling of books or library equipment. Internal Stock verification of books is done once in a year and untraceable books are identified, there is regular

identification of number of books Lost, damaged, and weeded out. The report of this stock verification is forwarded to higher authority for further actions. Book which is not available for three consecutive verifications will be treated as missing and further actions by higher authority consent is initiated.

There is regular plan and execution of Annual Maintenance Contracts of VRIDHI library software, D.G. Genset, R.O. Plant & House Keeping. Records of the maintained are checked and audited in internal Audits according to ISO 9001:2015 Standard.

Student property, official confidential documents and other important documents are stored in different locked cupboards with names assigned for each section. Students are issued back with their documents on application basis if required and after completion of course as well.

The sports grounds are cleaned mowed and watered on regular basis. Sports equipment is also maintained and kept in store with the physical director under his observation. A record is maintained so as to issue sports equipment to students.

Overall cleanliness and hygienic environment are maintained in the campus for all activities.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	Nil

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

5.1.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

697

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	[View File]()
Upload any additional information	**No File Uploaded**
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	[View File]()

5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

5.1.2.1 - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

2

File Description	Documents
Upload any additional information	[View File]()
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	[View File]()

5.1.3 - Capacity building and skills enhancement initiatives taken by the institution include the following: Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) ICT/computing skills	**A. All of the above**

File Description	Documents
Link to Institutional website	http://www.abmspcoerpune.org/NAAC_5.1.3.aspx
Any additional information	[View File]()
Details of capability building and skills enhancement initiatives (Data Template)	[View File]()

5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

45

5.1.4.1 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

45

File Description	Documents
Any additional information	View File
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	View File

5.1.5 - The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees	**A. All of the above**

File Description	Documents
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View File
Upload any additional information	**No File Uploaded**
Details of student grievances including sexual harassment and ragging cases	**No File Uploaded**

5.2 - Student Progression

5.2.1 - Number of placement of outgoing students during the year

5.2.1.1 - Number of outgoing students placed during the year

45

File Description	Documents
Self-attested list of students placed	View File
Upload any additional information	View File
Details of student placement during the year (Data Template)	View File

5.2.2 - Number of students progressing to higher education during the year

5.2.2.1 - Number of outgoing student progression to higher education

6

File Description	Documents
Upload supporting data for student/alumni	View File
Any additional information	No File Uploaded
Details of student progression to higher education	View File

5.2.3 - Number of students qualifying in state/national/ international level examinations during the year (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)

5.2.3.1 - Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year

2

File Description	Documents
Upload supporting data for the same	View File
Any additional information	No File Uploaded
Number of students qualifying in state/ national/ international level examinations during the year (Data Template)	View File

5.3 - Student Participation and Activities

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

5.3.1.1 - 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 year.

0

File Description	Documents
e-copies of award letters and certificates	No File Uploaded
Any additional information	No File Uploaded
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national/international level (During the year) (Data Template)	View File

5.3.2 - Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms)

Student council is formed in the Institute as per norms laid by Government of Maharashtra and Student Development Department of SPPU. Student Council comprises of Chairman, Student Development Officer, N.S.S. Coordinator, Director of Physical Education, Students Nominated from Sports, NSS, Cultural activities and Female Student members are nominated by Principal and other faculty

members. The motive to form the Student Council is to involve and motivate students to participate in academic, co-curricular extracurricular activities. This increases student's qualities like planning, organizing, analyzing, estimating and executing along with trouble shooting which help in their overall development which will help students to excel in future life. Institute always provides support to the council members in organizing and coordinating events.

The institute has formed ISTE (Indian Society for Technical Education).ISTE student chapter established in our institute in year 2014 also we are institutional member of the Indian society for technical education. We conducted various events like SPARKTECH technical events, Engineers day etc. All the cultural and technical

activities are executed under the umbrella of the ISTE. Constitution of the ISTE 1. President 2. Vice President 3. Heads of different committees such as Promotion, advertising. 4.Volunteers. The committee of the ISTE is formed by the transparent selection process and as per the norms laid by the ISTE. The Selection Committee comprises of Principal, ISTE Faculty coordinators, Student Development Officer, all the Head of the Departments and PG Coordinators. Cultural events such as Chocolate day, Traditional day mismatch day are organized and technical events such as Gaming Competitions Robo war, Seminars, Paper Presentations and Poster Presentation are part of the annual technical and cultural event SPARK TECH. Students take active participation in these events and the ISTE team takes the lead in smoothly organizing all these events.

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 conference, 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.

File Description	Documents
Paste link for additional information	http://www.abmspcoerpune.org/ISTE_Home.aspx
Upload any additional information	View File

5.3.3 - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)

5.3.3.1 - Number of sports and cultural events/competitions in which students of the Institution participated during the year

6

File Description	Documents
Report of the event	[View File](#)
Upload any additional information	**No File Uploaded**
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions (Data Template)	[View File](#)

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

APCOER organizes and supports a comprehensive array of initiatives for students, as well as alumni. These programs are developed to enhance student-to-alumni and alumni-to-alumni bondings. "Recall, Relink, and Rejoice" is the motto of every alumnus get together functions.

The alumni association regularly organizes get together events that enable APCOER students and alumni to connect with each other, as well as the faculty members, and staff. The events are fueled by experience sharing, futuristic approach, business updates followed by entertainment programs with high tea and refreshments. Alumni also take turns to regale students, faculty, and staff by sharing their memories of APCOER days, work experiences, etc. and promote industry- institute interaction to bridge the gap between industry requirements and academics so that industry ready engineers from the institute can be absorbed in desired industries. They not only guide the students but also help them to get higher education in and

outside India. 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 association meetings we planned and conducted few Seminars / Webinars under APCOER-Alma connect "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.

File Description	Documents
Paste link for additional information	http://www.abmspcoerpune.org/Alumni.aspx
Upload any additional information	View File

5.4.2 - Alumni contribution during the year (INR in Lakhs)	**E. <1Lakhs**

File Description	Documents
Upload any additional information	View File

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

Colleges are community agencies whose prime concern is teaching and learning. As learning communities, Colleges must be concerned for the well-being of young people for whom they are responsible. Student welfare is therefore a basic aspect of the work of all involved in education. To guide individual development in the social context within and beyond the College is a major aim of education. It is therefore important for Colleges to establish policies and practices which provide for the pastoral care and welfare of all student. This need is particularly important today because of the social problems which have emerged in a society of rapid change.

As mention in our mission and vision statement we worked for overall development of our student through quality technical education as well as social activities. A range of student welfare services including developmental, preventative and remedial measures allstakeholders have a continuing role in student welfare. The contribution of Colleges is made in partnership with the homes and communities in which students live.

Hence a workshop on disaster management is organized in our institute. As the activity under Student Development Department for student. After participating in this workshop our students got awareness regarding disaster management, now they are able to make other peoples aware. This change overall social behavior of students.

ISTE the Indian Society for Technical Education (ISTE) is the leading National Professional non-Profit making Society for the Technical Education System in our country with the motto of career Development of Teacher and Personality Development of Students and overall development of our Technical Education System. Under ISTE 'AICTE-ISTE INDUCTION RFRESHER PROGRAMME (ONLINE ON IMROVING EXCELLENCE IN TEACHING is organized from 8/2/2021-13/2/2021. To organize this event, first we put a proposal to AICTE—ISTE, once we get approval from AICTE-ISTE then permission is taken by principal from management. Faculty representative and coordinators are decided by Workshop Coordinator, ISTE faculty coordinator all heads of department and principal. When all internal arrangement have been made we had to select speakers, for that we have contacted various eminent personalities to check for their availability as a speaker. After finalizing speakers, we have scheduled six days programmed and sent this schedule to AICTE, then workshop has been conducted successfully as per schedule. On daily basis feedback have been taken from participant. On last day of workshop we have conducted exam and distributed certificates to participant. So all Stakeholders worked hard for the success of this workshop. Such a technical workshop is always helpful to improve excellence in teaching learning process which directly benefits students .

File Description	Documents
Paste link for additional information	http://www.abmspcoerpune.org/SWO_msg.aspx
Upload any additional information	View File

6.1.2 - The effective leadership is visible in various institutional practices such as decentralization and participative management.

National level online project, paper & poster competition "APCOER TECHNOTHON 2021" is organized on 21st and 22nd May 2021 in association with Maharashtra State Board of Technical Education (MSBTE) for diploma students.

The basic purpose of event is to provide National Level platform for diploma students to present their technical innovations and exchange their ideas with graduate students to make continuous improvements and propagate research culture among them. It is expected that certain ideas will be extended further by graduate students in partnership with diploma students to witness advances in the field of Engineering and Technology.

To arrange this event we have requested to Maharashtra State Board of Technical Education (MSBTE).MSBTE accepted our request then permission is taken by principal from management. Faculty representative and departmental coordinators are appointed by all heads of department and principal.

Responsibility of publicity is given to all staff members. Entries from participant have received at central level and then distributed to departmental coordinators. Respective department finalized the schedule for activities and also finalized the panel to conduct activities as per schedule. Inauguration ceremony was held online in the presence of Management, Principal, Head of Departments, teaching non-teaching staff and participants.

Under TECHNOTHON 21, we have organized two event i.e. National level Project competition and National level paper and poster competition. To get involvement of students from all over Maharashtra we have Invited Principal's and Faculty members of Various Diploma Engineering colleges from Maharashtra. After two days of event we have finalized the three winners from project as well as paper and poster competitions for each department. Participation Certificate given to all participants and winning certificates given to winners. Valedictory function also takes place online at end of second day. Every Individual worked hard for the successful conduction of this two days national Level Event.

File Description	Documents
Paste link for additional information	http://www.abmspcoerpune.org/Downloads/Technothon21/TECHNOTHON-2021.pdf
Upload any additional information	View File

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

Admission of students

- The institutions follow DTE norms and rules for admission of students.
- Institute admits candidates through the Centralized Admission procedure (CAP).
- The stages of CAP as stated below-

1. . The Information Brochure shall be published on the website

of the Competent Authority.

2. Filling Online Application Form by Candidate for participation in the Centralized Admission Process.

3. Document Verification at Facilitation Centre by the Candidate. Display or Publishing of Provisional merit list, Submission of grievances, if any, and Display or Publishing of Final Merit Lists;

4. Display of Category wise Seats (Seat Matrix) available for respective CAP Rounds.

- Filling up and confirmation of online option form having preferences of Information Brochure for Admission to Under Graduate Technical Courses
- College level Admission committees are formed to work accordingly.
- Organizing technical and non-technical Events in our institute.

Curriculum Development

- College follows Syllabus and Curriculum of Savitribai Phule Pune University. Principal addressing to all HOD's and coordinators..
- Time table is finalized as per load distribution. Commencement of Teaching as per time table.
- Student's feedback was taken twice in a semester.
- Unit test and Prelim Examination was scheduled and remedial action taken based on result analysis.
- Department wise Academic monitoring and IQAC Meeting was conducted.
- SPPU in SEM Examination was taken as per SPPU time table.
- IQAC-Internal Academic and Administrative audit was conducted.

- Feedbacks from Alumni, Industry experts and visiting faculty are taken for development of curriculum.
- Content beyond syllabus and Experiments beyond syllabus are also conducted.
- Final SPPU Practical, Oral and Theory Exam were conducted.

Examination and Evaluation

- In Semester and End Semester Examinations were conducted and

evaluated as per the norms of Savitribai Phule Pune University.

- In addition to theory exams, practical examinations are also conducted.
- Class tests are also taken.
- Unit test and Prelim Examination was scheduled. Result analysis has been done. Based on result analysis, remedial action was taken.
- The evaluation is done by continuous assessment conducted by institution. Continuous assessment helps in identification of slow learner. Counseling is imparted to slow learners to enable them to perform better.
- Term work evaluation is based on theory attendance, practical attendance, unit test marks, Prelim marks, Practical Performance, Teacher opinion and timely submission.
- After declaration of University result, result analysis was taken. Based on result analysis, letters were issued to faculty having less result for improvement of result.

Human Resource Management

- Recruitment process is carried out as per rule and regulations laid down by regulating authorities.
- Code of conduct and policies are incepted in appointment order for awareness.
- Roles and responsibilities of every entity are well defined in ISO process manuals to make optimal utilization of resources.
- Welfare measures for faculty and staff to ensure healthy work environment.
- Relieving process is defined in ISO process manuals to ensure proper handover of responsibilities.

Industry Interactions and Collaboration

- All department carry out industrial visit as a part of curriculum
- T.E. and B.E. students undergo internship.
- Institute has sign MOU's with Reputed Industries to build strong connect for placement
- Institute has innovation club for guiding students about recent technologies.

- Institute is providing guidance for career opportunity to students through Industry and professional interaction.
- Institute has signed MoU with science and Technology Park to develop Atal incubation Centre for promoting research and testing center for electrical vehicle components.
- Institute has developed IoT lab to promote students and faculty research in the upcoming technology.
- All departments carry out industrial visit as a part of curriculum.
- T.E. and B.E. students undergo internships.
- Institutes has signed MoU with reputed industries to build strong connect for placement.
- Institute has innovation club for guiding students about recent technologies.
- Institute is providing guidance for career opportunity to students through industry and professional interaction.
- Institute has developed IoT lab to promote students and faculty research in the upcoming technology.

Library, ICT and physical infrastructure

- As per syllabus revision and faculty recommendation, library is enriched with new 4357 text books, 5511 Subject reference books, 331 reference books, 43 magazine, 9125 e-journals and 1 database. Digital Library has been set up to refer E-journals and NPTEL video
- Subscription of DELNET and JGATE has been started along with startup and Innovation report.
- Classrooms are equipped with LCD projectors and internet facility Internet facility with 48MBPS (1:1) kiosk facility for information sharing online GATE coaching session aired via satellite from KONGO educational services IOT Lab with continue platform has been developed internet and wifi facility is available in entire building.

Research and Development

- Active Research and Development cell promotes research culture among faculties and students.
- Faculties and students are constantly encouraged topresent and

publish research papers in international and national Journals /conferences.
- RD cell promote faculties to pursue higher education
- The institute provides a platform for faculty to take up research endeavors through its MOUs with prominent research organizations.
- Training programs conducted for the staff for knowledge upgradation.
- Research resources are available through DELNET facility.
- Students have participated in SPPU Avishkar Project Competition.
- Faculties have applied and received research grants.

Teaching and Learning

- Effective teaching methods are adopted to create interest in the students.
- Remedial classes are offered for slow learners.
- Assignments are given on theory and practical.
- Mentoring and counseling of slow learners are part of teaching and learning process.
- Unit wise question banks and model answer sheet of university old question papers prepared by respective faculty are discussed.
- Student's chapters help the students to get industry exposure.
- Faculties are encouraged to attend FDP's, workshops and industrial training to upgrade their knowledge which helps in teaching learning process.
- Subject expert are invited to conduct sessions for the students and faculties.

File Description	Documents
Strategic Plan and deployment documents on the website	View File
Paste link for additional information	http://www.abmspcoerpune.org/NAAC/6.2.1_Institute_Strategies.pdf
Upload any additional information	No File Uploaded

6.2.2 - The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.

The functioning of institutional bodies is effective and efficient as visible from the policies which is implemented and the administrative set up for the execution of the administration of the organization. For effective decentralization, the procedure like appointment of the staff and the service rules for them is defined by the institute. Accordingly the governing body is formed and required actions are executed.

File Description	Documents
Paste link for additional information	http://www.abmspcoerpune.org/About_Body.aspx
Link to Organogram of the institution webpage	http://www.abmspcoerpune.org/Org_Chart.aspx
Upload any additional information	View File

6.2.3 - Implementation of e-governance in areas of operation Administration Finance and Accounts Student Admission and Support Examination

C. Any 2 of the above

File Description	Documents
ERP (Enterprise Resource Planning)Document	View File
Screen shots of user inter faces	View File
Any additional information	**No File Uploaded**
Details of implementation of e-governance in areas of operation, Administration etc(Data Template)	View File

6.3 - Faculty Empowerment Strategies

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

APCOER has effective welfare measures in place for its teaching and non-teaching staff.

The various welfare schemes for teaching staff are as follows:

1.   Maternity

2.   PF

The various welfare schemes for teaching staff are as follows:

1.   PF

File Description	Documents
Paste link for additional information	http://www.abmspcoerpune.org/Downloads/Code_of_Conduct.pdf
Upload any additional information	View File

6.3.2 - Number of teachers provided with financial support to attend conferences/ workshops and towards membership fee of professional bodies during the year

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

0

File Description	Documents
Upload any additional information	**No File Uploaded**
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	View File

6.3.3 - Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year

6.3.3.1 - Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff during the year

1

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	**No File Uploaded**
Reports of Academic Staff College or similar centers	View File
Upload any additional information	**No File Uploaded**
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	View File

6.3.4 - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)

6.3.4.1 - Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year

File Description	Documents
IQAC report summary	**No File Uploaded**
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	**No File Uploaded**
Upload any additional information	View File
Details of teachers attending professional development programmes during the year (Data Template)	View File

6.3.5 - Institutions Performance Appraisal System for teaching and non- teaching staff

APCOER strictly follows the UGC Regulations on Minimum Qualifications for Appointment of Teachers and other Academic Staff in Universities and Colleges and Measures for the Maintenance of Standards in Higher Education-2010" (Regulation No. F.3-1/2009 dated June 30, 2010), together with all amendments made therein from time to time, for its teaching and non-teaching staff.

File Description	Documents
Paste link for additional information	http://www.abmspcoerpune.org/Downloads/FORMS/6.3.5-supportive.pdf
Upload any additional information	View File

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

Management of Akhil Bharatiya Maratha Shikshan Parishad, Parvati, Pune appoints internal and external auditors for regular financial audits every year. Generally the financial audit is held in the month of August and September every year. The mechanism for internal and external audit is as follows:-

Mechanism for Internal Audit:

The auditor audits the system in financial aspect as per the standards of internal audit. The audit report is submitted to Principal and management. The Principal, accountant and office supritendent take care of compliance of the objections raised if any. Due to covid-19 pandemic situation, the internal audit was not conducted for the A.Y 2020-21. However, external audit was conducted for the A.Y 2020-21.

Mechanism for External Audit:

The statutory audit is conducted by registered Chartered Accountant firm. External Auditor:- Mr. K. B. Salunkhe & Co. B. Com (Hons.) FCA, B – 301, Bharat Bhavan, 1361, Shukrawar Peth, Behind sarswati mandir, Pune-411002. Year of Audit:- 2020-21.

File Description	Documents
Paste link for additional information	**Nil**
Upload any additional information	<u>View File</u>

6.4.2 - Funds / Grants received from non-government bodies, individuals, philanthropers during the year (not covered in Criterion III)

6.4.2.1 - Total Grants received from non-government bodies, individuals, Philanthropers during the year (INR in Lakhs)

534126

File Description	Documents
Annual statements of accounts	<u>View File</u>
Any additional information	<u>View File</u>
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the year (Data Template)	<u>View File</u>

6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

Due to COVID pandemic situation there was no mobilization of funds.

File Description	Documents
Paste link for additional information	**Nil**
Upload any additional information	**No File Uploaded**

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

Internal Quality Assurance Cell (IQAC) has contributedsignificantly for institutionalizing the quality assurance strategiesand processes. The IQAC committee is formed at the institute level, by following the norms of University Grants Commission. The quality assurance strategies and processes are discussed and formed in the meeting of IQAC committee. 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.

In addition to this, the IQAC conducts various programs at the institute level, which includes recommendations for examination reforms, NPTEL awareness workshop, formation of foreign language club, Virtual lab awareness workshop, and recently in the academic year 2020-2021 Alma-Connect Program of alumni students.

File Description	Documents
Paste link for additional information	http://www.abmspcoerpune.org/IQAC_Home.aspx
Upload any additional information	View File

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

Internal Quality Assurance Cell (IQAC) has contributedsignificantly for institutionalizing the quality assurance strategiesand processes. The IQAC committee is formed at the institute level, by following the norms of University Grants Commission. The quality assurance strategies and processes are discussed and formed in the meeting of IQAC committee. 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.

IQAC prepares the academic calendar for the institute as per the guidelines received from Savitribai Phule Pune University. Once the academic calendar is circulated in the institute, the various departments run all the academic activities as per the schedule declared by IQAC in the academic calender. Timely student feedback, internal academic audit are the important milestones to ensure the quality of teaching maintained through IQAC.

The auditors conduct audit as per the schedule given by IQAC head, and completes the audit in the form of a report. Those audit completed reports are available with all individual faculties in their course files, with the departmental ISO coordinators, and with IQAC team as well.

File Description	Documents
Paste link for additional information	http://www.abmspcoerpune.org/IQAC_Home.aspx
Upload any additional information	View File

6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)	**B. Any 3 of the above**

File Description	Documents
Paste web link of Annual reports of Institution	http://www.abmspcoerpune.org/IQAC_Home.aspx
Upload e-copies of the accreditations and certifications	View File
Upload any additional information	View File
Upload details of Quality assurance initiatives of the institution (Data Template)	View File

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

The institution acknowledges the fact that today India is the youngest nation in the world with 69 percent of its population between 18 to 35 years of age. This demographic dividend that India achieved has to be harnessed for the progress of the nation. The institution is very keen on identifying the desires and aspirations of the new generation and the measures to enrich the abilities and professional skills of both boys and girls, without any discrimination.

a. Safety and Social Security:

The institution accords utmost priority to the safety and security of not only the students but also of the staff, and ensures a fool proof vigilant system so that every student, especially girl students, will feel secured and protected to pursue their educational endeavours. In this regard myriad initiatives have been taken by the institution to foster gender equality and gender sensitization programs, thereby to ensure safety of girl students. To have a hawk eye, the institution installed CC (Close Circuit) cameras at key places in the campus. The institution has different committees such as Anti – Ragging Committee, Students Grievance Committee and Discipline Committee which are on heels to provide quick relief to the students and to ensure the maintenance of decent and moral atmosphere within the campus. The institution feels that the security of the students not only includes physical security, rather it includes emotional security of the students too. In this regard, the institution is providing counselling to the students who are prone to depression.

b. Counselling:

The institution's relentless effort is to build confidence among the students to bring out the innate talents hidden in them. The institution identified that counselling can make a profound impact on the psyche of the students and helps them to navigate difficult life situations. To pursue this avowed objective, the college adopted 'Guardian faculty member' system as the first step towards confidence building among the students. Each faculty is assigned with specific number of students to cater to their psychological and emotional needs. Students are ensured that the counselling shall be one – to – one and complete confidentiality will be maintained. Counselling provides not only an opportunity to the teachers to fathom student's attitudes, weakness and challenges, but also to provide the tools and insights to manage depression and distress. Besides providing personal counselling to the students, the Counselling Cell organizes Personality Development classes to all the students in general.

C. Common Room:

 A Common Room is the primary facility required for the girl students to meet to their personal needs. As such the institution has provided a spacious Common Room to the girl students with

adequate seating facility. Comfortable environment is maintained at the girls in the common room. Besides the common room for the girls, there are separate wash room for girls, boys and staff.

D. Maternity leaves for ladies faculties

Female employees gets maternity leave, child care leave and are also entitled to avail leave on adoption of child.

E. Fostering safe working environment to all

The institute ensures that posters promoting gender equity & sensitization are placed on the common areas. A Complaint Box is placed at the entrance of college. Telephone / Mobile numbers of the various committee Chairperson and members are made available in the college premises& Website. Strict confidentiality is maintained by the institute to encourage to lodge complaint without fear.

Specific facilities provided for ladies in terms of:

- **Girls common room**
- **Sports facilities for girls**
- **Separate ladies hostel with CCTV Surveillance facility.**
- **Sanitary napkin dispenser.**
- **Special separate gym time for girl students.**
- **Female hostel supervisor and supporting staff.**

File Description	Documents
Annual gender sensitization action plan	Nil
Specific facilities provided for women in terms of:a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	Nil

7.1.2 - The Institution has facilities for alternate sources of energy and energy	B. Any 3 of the above

conservation measures   Solar energy Biogas plant Wheeling to the Grid   Sensor-based energy conservation Use of LED bulbs/ power efficient equipment

File Description	Documents
Geo tagged Photographs	View File
Any other relevant information	**No File Uploaded**

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

Solid Waste Recycling System-Vermicomposting

The solid waste generated in the institute premises by dry tree leaves, raw kitchen waste (from canteen) etc. have been treated to make compost fertilizer. We have prepared 6 dumping pits of 5 feet deep and 3.5 feet wide area where the waste is dumped on daily basis. Each bore is assigned a day name plate, where the solid waste is collected and dumped with another layer of soil along with water for the decomposition process and ensuring proper aeration by regularly turning the mixture. After complete decomposition of this material as compost fertilizer is use in our garden.

E-waste management

Keeping in mind the global hazards of electronic waste, we are sincerely trying and putting our best foot forward to deal with any electronic waste that will be generated in future. We have collaborated with a renowned foundation called "SwaCH", for the proper disposal of e-waste. Students and staff are encouraged to deposit the e-waste generated at a specific location in every department, dedicated for collection of e-waste.

File Description	Documents
Relevant documents like agreements / MoUs with Government and other approved agencies	**No File Uploaded**
Geo tagged photographs of the facilities	View File

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

`C. Any 2 of the above`

File Description	Documents
Geo tagged photographs / videos of the facilities	[View File](#)
Any other relevant information	[View File](#)

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows:

1. **Restricted entry of automobiles**
2. **Use of bicycles/ Battery-powered vehicles**
3. **Pedestrian-friendly pathways**
4. **Ban on use of plastic**
5. **Landscaping**

`C. Any 2 of the above`

File Description	Documents
Geo tagged photos / videos of the facilities	[View File](#)
Various policy documents / decisions circulated for implementation	[View File](#)
Any other relevant documents	`No File Uploaded`

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

7.1.6.1 - The institutional environment and energy initiatives are confirmed through the following 1.Green audit 2. Energy audit 3.Environment audit 4.Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities

`B. Any 3 of the above`

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	View File
Certification by the auditing agency	No File Uploaded
Certificates of the awards received	No File Uploaded
Any other relevant information	No File Uploaded

7.1.7 - The Institution has disabled-friendly, barrier free environment Built environment with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment 5. Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading

C. Any 2 of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	View File
Policy documents and information brochures on the support to be provided	View File
Details of the Software procured for providing the assistance	No File Uploaded
Any other relevant information	No File Uploaded

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 200 words).

The institution believes in equality of all cultures and traditions as is evident from the fact that students belonging to different caste, religion, regions are studying without any discrimination. Though the institution has diverse socio-cultural background and different linguistic, we do not have any intolerance towards

cultural, regional, linguistic, communal socio economic and other diversities. With great fervour the national festivals, birth anniversaries and memorials of great Indian personalities are celebrated in the institute every year. The institution organizes two days Youth and Cultural festival. NSS Units of our college participate in various programmes related to social issues organized by the colleges.

Motivational lectures of eminent persons of the field are arranged for all-round development of the students for their personality development and to make them responsible citizens following the national values of social and communal harmony and national integration. Besides academic and cultural activities, we have built up many strong infrastructures for a variety of sports activities for the physical development of the students. In this way the institute's efforts/initiatives in providing an inclusive environment for everyone with tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic, and other diversities.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View File
Any other relevant information	No File Uploaded

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

To equip students with the knowledge, skill, and values that are necessary for sustaining one's balance between a livelihood and life by providing an effective, supportive, safe, accessible, and affordable learning environment. Institute undertakes different initiatives by organizing various activities to sensitize students and employees to the constitutional obligation: Values, Rights, Duties and responsibilities of the citizens. The students are inspired by participating in various programs on culture, traditions, values, duties, and responsibilities by inviting prominent people. The institute conducted awareness programs on the ban on plastics, cleanliness, Swachh Bharat, etc. involving students. The college establishes policies that reflect core values. Code of conduct is prepared for students and staff and everyone should obey the conduct rules. The affiliating University curriculum is framed with mandatory courses like Professional ethics and human

values, Constitution of India, Essence of Indian Traditional Knowledge, as a small step to inculcate constitutional obligations among the students. NSS Units of our college participate in various programmes related to social issues organized by other colleges, details of the activities conducted in last year are as follows.

File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	http://www.abmspcoerpune.org/Downloads/NSS%20REPORT%202020-2021.pdf
Any other relevant information	**Nil**

7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff 4. Annual awareness programmes on Code of Conduct are organized	**C. Any 2 of the above**

File Description	Documents
Code of ethics policy document	View File
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	View File
Any other relevant information	**No File Uploaded**

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

To maintain harmony and healthy work atmosphere and to make the learners aware of the national pride and rich cultural heritage, the National/International commemorative days are regularly being celebrated and observed in our institute.

26th January Republic Day –

Republic Day is celebrated every year on January 26 to commemorate the adoption of our constitution. Various formal events including flag hoisting and march-past are organized on this day, which are followed by "constitution awareness program" in which students and staff members are made aware of their duties towards our nation and rights given to them by our constitution.

06th May World Environment Day

This program celebration aim to raising awareness on environmental issue such as marine pollution, human overpopulation, global warming, sustainable consumption and wildlife crime.

15th August Independence Day –

It is celebrated every year on August 15, and is a grand event marked with the flag hosting by the Chief Guest and well-practiced march-past by many teams of our sister institutes. Cultural activities related to independence movement are exhibited.

5th September (Dr.SarvpalliRadha Krishnan Birth Anniversary)

On 5th September, we celebrate Dr.Radhakrishnan's birthday as Teacher's Day with great fervour. The students organize a program for the teachers.

15th September Engineers day (Birth Anniversary of Sir Visvesvaraya)

We celebrate this day on 15th September consistently as an exceptional tribute to the best Indian Engineer Bharat RatnaMokshagundamVisvesvaraya.

2nd October Mahatma Gandhi Birth Anniversary

- A standout amongst the mostmainstream events in India and one of the three national occasions, Gandhi Jayanti ispraised in our Institute on 2nd October of consistently to stamp the birth commemorationof Mahatma Gandhi. The day is announced as a national occasion and all institutes andworkplaces are closed on this celebration. The standards of truth, peacefulness andtrustworthiness are recalled and generally plugged among the students of the institute.

31st October EkataDivas(Birth Anniversary of Sardar Patel)

It is celebrated asNational Unity Day.

26th Nov Constitution day celebration

This program aim to promote Constitution values among citizens. Constitution Day of India aims to bring awareness on the importance of the Indian Constitution and its architect, Dr. B. R. Ambedkar.

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	View File
Geo tagged photographs of some of the events	View File
Any other relevant information	**No File Uploaded**

7.2 - Best Practices

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

Best practice - I

Title : Community Service through quality testing of material used in Civil engineering structure and third Party Audits

Objective

The prime objective behind the practice is to engage in and be relevant to the community by providing technical services. Besides education, we employ economically feasible, technically viable, advanced design and testing solutions in quick turnaround time which will be recognized by its quality.

The Context

Consultancy as an opportunity for faculty members to share insights with practitioners and contributes to experimentation and new learning by clients. Consulting research brings the faculty in contact with real-life managerial problems, and thus greatly enriches teaching and research.

The Practice

The college receives letters towards specific services from various

agencies like Municipal councils, PWD, Irrigation Department, Forest Department etc. Reports and testing charges are submitted to the respective agency for payment.

Evidence of Success

The success of the practices can be observed by the regular incoming new service requests, payments and the work completion certificates received from the respective agencies.

Problem Encountered and Resources Required.

Advanced techniques and tools like UTM, Total Station, Core Cutter, NDT, Triaxial Testing Machine, Impact Testing Machine are incorporated. Skilled labor and technicians which are very essential while carrying out the practice. Calibration of major equipment's charges are high in practice. Currently, agencies prefer the National Accreditation Board for Testing and Calibration Laboratories(NABL). Agencies pay the consultancy charges very late to the institute. Compression testing Machine is required for more research on newly developed and upcoming high strength Concrete.

Best practice - II

Title : Technological Coupling via Innovation Club

 Objective of the Practices

        Provoking students to move and think in the direction of upcoming technological trends and innovations thereby giving a variety scope for their projects development to convert them into startups.

The Context

        To harness the creative potential of youth for developing startups through APCOER incubation centre along with faculty and Innovation Club members. A vibrant knowledge network has to be created across various domains across technology.

The Practice

By keeping the Agriculture development in forefront various project are started in all the departments such as AgroBot, AgroSense ,AgroMON, Agro Zone, AgroData, Agro Net, Agro AIML The students and faculties are working in every other aspect of the projects listed.

Evidence of Success

Individual faculty have received BCUD research grants of Rs. 3,00,000.00, Rs. 1,15,000.00, Rs. 2.40,000.00 from Savitribai Phule Pune University (SPPU) for a two year project (2019-2021) where in research is still in progress. A Smart Poly House is setup in the premises of institute for research purpose. The civil environmental engineering department has bragged the prize at national level for the project of mercury recovery from brunt fluorescent tubes and lamp.

Problem Encountered and Resources Required.

The problems faced or the challenges the team comes across is the inefficient funds for the hardware suggested at students level, which teaches them a lot in cost cutting and get stable through available resources.

File Description	Documents
Best practices in the Institutional website	http://www.abmspcoerpune.org/NAAC_AQAR20-21.aspx
Any other relevant information	http://www.abmspcoerpune.org/NAAC_AQAR20-21.aspx

7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

The ABMSP's Anantrao Pawar College of Engineering and Research at Parvati, Pune distinguishes itself from peer institutions by offering an affordable, highly personalized, student centered quality education to diverse students. It was established in 2012 comprised of 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 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 Institutes historical tradition.

Anantrao Pawar College of Engineering and Research was named after keeping in mind the research outcomes and the broader mission by it's visionaries. The prime objective of the institute is to sow the seeds of research among the graduate and post graduate students along with faculty members to publish their work in reputed Conferences, Symposiums and International Journals. The faculty members who are full time engaged in teaching also urge to come up with their findings, experiments and show their competencies and research potential to encouragement in research domains to other faculties and students as well.

The Undergraduate and Post-Graduate Students are assigned a guide towards their project ideas and various domains. The students are asked to publish a survey paper after the completion of their literature survey. In the later section towards their experimentation/ analysis and Conclusion, they are expected to publish a Research Findings paper or Result paper in reputed International Journals. Every student has at-least one research paper on his/her name at the Course in reputed Journal. They have also been encouraged to file patents and as a result a number of patents are published by students. In accordance with students, every faculty member publishes their research findings in various Journals and Conferences throughout the Year.

To harness the creative potential of youth for developing startups through APCOER incubation centre along with faculty and Innovation Club members. By keeping the Agriculture development in forefront various project are started in all the departments such as AgroBot, AgroSense ,AgroMON, Agro Zone, AgroData, Agro Net, Agro AIML The students and faculties are working in every other aspect of the projects listed. A Smart Poly House is setup in the premises of institute for research purpose. Drone project is ongoing for pesticide spraying in Agriculture Application.

The civil environmental engineering department has developed the project for mercury recovery from brunt fluorescent tubes and lamp.

Individual faculty have received BCUD research grants of Rs. 3,00,000.00, Rs. 1,15,000.00, Rs. 2,40,000.00 from Savitribai

Phule Pune University (SPPU) for a two year project (2019-2021) where in research is still in progress.

Apart from research, institute has also marched in the direction of freelancing consultancy, Skill Based courses, where departments are trying to contribute with their technology expertise.

File Description	Documents
Appropriate web in the Institutional website	[View File](#)
Any other relevant information	No File Uploaded

7.3.2 - Plan of action for the next academic year

Institute is planning :

• To build IoT enabled Polyhouse and IoT laboratory to promote research in the field of smart agriculture system. Institute is planning to develop various modules of the project in upcoming year.

• To start startup cell/ Incubation centre under Institute industry interaction cell for projects like Electric Vehicle and drone Manufacturing

• To submit proposals to various agencies like SERB, SPPU, AICTE, ISTE to get fund for research activities, conduction of workshops and programs.

• To submit a proposal for starting new program in emerging technology (Artificial Intelligence and Data Science).

• To provide consultancy in the field of software development and IoT.

• To promote research in the field of Blockchain technology.

• To adopt NPTEL/ATAL/SWAYAM courses as a curriculum enrichment program for faculties as well as students under IQAC.

• To conduct Alma connect program under Alumni association under which institute will organize and conduct seminars/webinars of alumni.