



SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

**DR VITHALRAO VIKHE PATIL COLLEGE OF
ENGINEERING, VADGAON GUPTA (VILAD GHAT) P.O
MIDC, AHMEDNAGAR**

**DR VITHALRAO VIKHE PATIL COLLEGE OF ENGINEERING, VADGAON
GUPTA (VILADGHAT) POST MIDC , AHMEDNAGAR, 414111
414111**

www.enggnagar.com

SSR SUBMITTED DATE: 19-05-2022

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

May 2022

NAAC

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

The Society:

Dr. Vithalrao Vikhe Patil foundation, Ahmednagar is in the service of education since 1986. This foundation is registered under the Bombay public trust Act 1950 dated 5th July 1982, Regn no: MAH/544/ANR/82/BPT/Act-490(Ahmednagar). Dr. Vithalrao Vikhe Patil Foundation is dedicated to provide quality education in the field of Medical, Engineering, Management, Pharmacy, Nursing, Physiotherapy, Agriculture, Industrial training Centre, School and a Junior College too.

The College:

Dr. Vithalrao Vikhe Patil College of Engineering, Ahmednagar established in the year 1983 and approved by AICTE, New Delhi, affiliated to Savitribai Phule Pune University, Pune. Currently the college is offering, six under graduate courses and two post graduate courses and a PhD Research Centre in Mechanical Engineering, out of them four of the undergraduate courses had been accredited by National Board of Accreditation (NBA), New Delhi from 28th Aug 2012 to 27th Aug 2014. Also Accreditation by NAAC New Delhi from 29th Mar 2016 till 28th Mar 2021.

The college has a picturesque campus spread over 21 acres. The college has excellent infrastructure, well equipped laboratories, and a spacious central library with other required amenities. It has a team of well qualified and experienced faculty to impart the knowledge to groom the students into future technocrats. The College is committed to offer excellent engineering education to develop the students with domain knowledge, requisite skills and right attitude. The program educational objectives aim to create students capable of addressing issues related with the respective programs, both in the local and global context, and of providing engineering solutions with concern to economics, environment and ethics.

The college has always envisioned instilling life skills among the students through their participation in various extracurricular activities like NSS, intercollegiate sports and cultural competitions and has won several accolades. Students are sensitized toward social and environment issues through a strong NSS activity. The faculty has put in efforts in pursuing research & development and consultancy activities which have helped them to keep abreast with the latest developments in their respective fields of interest. The institute has encouraged faculty to pursue their doctoral research by deputing them full time.

Vision

To empower the students for academic, professional, and social, enrichment through excellent technical education and promote lifelong learning to serve the nation

Mission

- To impart quality technical education in the domain knowledge with State-of-The-Art infrastructural

facilities.

- To establish an Industry-Institute relationship to abreast with modern technology to inculcate research attitude and lifelong learning
- To prepare graduates with strong managerial and communication skills with strong professional ethics and values along with an understanding of societal, cultural, and environmental issues.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- State -of –Art Infrastructure and Lush Green Campus
- Institute results are consistently atpar of University along with toppers
- Recognized Research Centers in Mechanical Engg. 14 faculty members have secured Ph.D. and 29 are pursuing Ph.D.
- 2(f) Affiliation of UGC
- Customized ERP system for effective administration, data analysis and for collecting feedback
- Democratic participative governance with representation of students, staff & faculty at various levels
- Student centric functioning with the help of mentoring and student counseling through student-mentor functioning with the help of class teacher scheme
- Overall development of students through their participation in curricular and co- curricular activities
- Professional society chapters & technical clubs in the departments along with students association in each department.
- Faculty involvement in BOS, curriculum design, development and implementation of affiliating University
- Faculty is invited as resource persons in Conferences / Seminars / Workshops / Faculty Development Programs organized by other institutes
- Good number of publications in National and International Journals & Conferences
- 7 Patents published and 15 copyrights registered
- Curriculum enrichment through value added courses, contents beyond syllabus
- Strong liaison with Alumni

Institutional Weakness

- Low placement in core companies
- Less number of students progressing for higher education
- Research Centers for all departments
- Less research publications in peer reviewed International Journals having high impact factor / IPR / Patents
- Low consultancy
- Poor Industry-Institute Interaction. Less industry collaboration, internship for student, sponsored U.G & P.G. projects,

Institutional Opportunity

- Explore alumni involvement in academic & placement activities

- Getting academic autonomy for increasing employability skills to cater to the demand for qualified engineers in view of 'Make in India' drive
- Obtaining research and other funding after status of NBA accreditation
- Permanent affiliation of SPPU and 12(B) affiliation of UGC
- Publishing more number of Patents/ copyrights through Institute Research Centre
- Bridging the industry academic gap
- Establishing institute as " Reconized Learning and Research Center " as per NEP 2020

Institutional Challenge

- Attract quality students.
- Rigidity of academic structure & curriculum
- Improving consultancy, Fund Generation, Industry sponsored Research Laboratory
- Diverse socio economic backgrounds of students
- Coping up with rapidly changing technologies
- Strong community engagement activities
- Active Entrepreneur Development Cell with incubation center funded by different agencies

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Dr. Vithalrao Vikhe Patil College of Engineering, Ahmednagar is an institute affiliated to Savitribai Phule Pune University (SPPU) (formerly University of Pune). Many of the senior faculty members of the institution contribute in designing and developing curriculum at University level. With due limitations efforts are taken to develop appropriate need-based curriculum in consultation with experts, based on the feedback from stakeholders. Inputs received from stake holders help in providing academic flexibility and enriching the curriculum.

- The project based learning methodology enables application orientation and enhances the employability
- Laboratory components of the courses and soft skills contribute directly for skill development
- About one third of the credits are chosen by students as electives
- Students have option to earn additional minor and honour credentials
- Faculty and Students can enroll for courses under SWAYAM & NPTEL for credit transfer
- Courses on Ethics & Values and Environmental Studies are part of core courses.
- In the last 5 years, 30 value added courses were offered and students have been benefitted.
- Students are promoted and counselled for Industrial internship. In the AY 2020-21, despite of Covid 19 pandemic 18 No of students undertook Industrial visit / internship and projects .

- Feedback from stake holders are collected, analysed and appropriately implemented.

Teaching-learning and Evaluation

- The College takes efforts to serve students of different back grounds and abilities, through effective teaching-learning experiences.
- Use of different teaching methods and aids, engage students in higher order ‘thinking’ and investigation.
- Although not a part of curriculum, the institute encourages its students for internships and value added training programs.
- Innovative teaching practices such as use of simulation tools, virtual experimentation etc., allow students to learn at their own pace.
- Teachers sent for faculty development programs, conferences, trainings, seminars etc to improve their competencies.
- ICT enabled classrooms, Digital library, Language Lab and ERP system enable faculty members to practice ICT enabled effective teaching.
- About 20 students are assigned to a faculty member for mentoring.
- The Mentors provide academic and personal mentoring and monitor the progress of the students.
- The College has faculty strength of 84 and the faculty-student ratio is 1:19 in the Academic Year 20-21.
- Currently fourteen number of faculty members are with Ph.D. qualification and also thirty of the faculty members are pursuing.
- The average experience of faculty members 12.7 years.
- 16 faculty members and 37 students received awards, recognitions, fellowships at State, National and International level in the last 5 years.
- The institute follows outcome based teaching-learning process.
- The Programme Outcomes, Programme Specific Outcomes and the Course Outcomes are well-defined and are reflected in the teaching methodologies, course delivery and assessments.
- The course and program outcome attainment levels are continuously evaluated; analysed and corrective actions are carried out.
- The overall graduation in the academic Year 202-21 is 100 %.

Research, Innovations and Extension

The Institute always believed that research and education go hand in hand. The research grants have increased steadily with more faculty members participating in R&D activity.

- In the last four years, 02 minor research projects were taken up with a funding of Rs.3.70lakhs,
- Papers published in national conferences, international conferences and international journals,
- 07 patent and 15 copyrights have been published
- Consultancy of worth Rs 18 lakhs was carried out in the last Five years.
- Several partner industries and research institutes have signed for 194 Memorandum of Understanding (MoU).
- The senior faculty members are guiding 04 Ph.D. students and 26 PG students in current academic year 2020-21
- To guide the inspired faculty to actual work, workshops, Faculty Development Programs and Training Programs were conducted. Faculty also attend the training programs outside.
- The institution grants study leave to faculty pursuing Ph.D. in premier institutes like NITs, Universities etc.
- The students also participate in activities dealing with social and environment issues. The National Service Scheme, with strength of 150 students, is a force to reckon with in SPPU due to their vision of giving engineering solutions rather than mere social work.
- Outreach activities under Project Competition, exhibition, and student associations of various departments help spreading awareness amongst students.

Infrastructure and Learning Resources

Dr. Vithalrao Vikhe Patil College of Engineering is known not only for good quality education but for its excellent performance in curricular, co-curricular and extracurricular activities.

- The college campus has sufficient space for all academic, administrative, co-curricular and extra-curricular activities.
- Every department of the institute is well equipped with independent classrooms, laboratories, tutorial rooms, workshop, seminar hall etc.
- The institute ensures that the infrastructure in the institute is comfortable for physically challenged students.
- Hostel facility is provided for boys and girls separately.
- The potable water is provided in the campus for 24 hrs through water purifier fitted to the coolers.
- The solar heaters are provided for supply of hot water in the hostel.
- Medical facility is available for staff and students, during working hours of the institute and even after working hours.
- The students are insured under 'Amartya Sen Scheme' introduced by the affiliating University. Students who need immediate financial help in case of any sort of mishap benefit from this.
- Central library provides reference books, text books, non technical books and e-learning resources (Science Direct, 275 E Journals). Library resources are made available to the students, round the clock.
- OPAC is Online Public Access Catalogue, available on intranet and accessible throughout the campus.

Library management system software is installed to manage repository. Library is a member of DELNET since 2005 and NDL from 2016.

- The institute has Wi-Fi facilities with high capacity and utilizing it for students so that they can have concurrent access with sufficient speed.
- The institute has a well-documented procedure for upkeep of laboratory. In addition, every department carries out of calibration of certain equipment.

Student Support and Progression

- The institution publishes its updated prospectus annually and provides all the information regarding admission, various programs, student facilities and placement information.
- There are students from various backgrounds. To meet the requirements of the students, the students are monitored and administrated through ERP system.
- The students receive financial assistance especially for SC/ST, OBC and economically weaker sections.
- DVVPCOE motivates students to participate in various National & International extra & co curricular activities, entrepreneurial skills are inculcated through EDC.
- The students are supported and guided in preparing for the competitive exams such as GATE etc. Counseling services are made available to the students through Teacher Mentor System and various groups for students have been established.
- The institution has a well- defined structured mechanism for career guidance and placement of its students which provides requisite training and motivates the students for research and higher studies.
- The students are guided and counseled in terms of their personal and career perspective, through mentoring and counseling sessions.
- Remedial lectures are conducted for low performing students.
- The institute encourages the students to participate in various events and sports and strives to interact with alumni for their academic support.
- Continuous feedback is obtained from alumni, graduating students and Advisory Board regarding teaching learning process, placements, internships and entrepreneurial activities. To be relevant in today's global market, this assessment is vital for the success of the institute.

Governance, Leadership and Management

The Vision and Mission statement of the institute were constituted considering needs of rural panorama, socio-economic condition and need for adequate technical skills. The top management including Board of Trustees, Chief Executive Officer, Governing Council (GC), College Development Committee (CDC), Principal and faculty focus on institutional goals. Principal provides effective leadership and administration for planning and implementation of academic, curricular and extra- curricular activities. Principal & authorities essentially form different committees to provide “decentralized administration”. Predefined plans are implemented through active participation of faculty and students in various committees.

The perspective plan for next ten years is prepared by IQAC taking suggestions from all the stakeholders as feedback from all stakeholders play vital role in framing institution policies. This perspective plan is presented in CDC and GC. After detailed deliberations it is been approved. IQAC ensures effective implementation of the perspective plan by smooth conduction of academic activities.

The institute promotes faculties for higher studies, short term courses & financial aid for conferences, workshops and seminars. Group Medical Insurance is provided for all staff. The college follows a systematic Performance Appraisal System for all staff.

The institution annually hires Chartered Accountants for internal and external audits. In addition to this, consultants to give opinion on taxation and legal issues are available.

The IQAC was constituted in 2015 even though it was first cycle of NAAC. The IQAC is functional and its main task is to mobilize and direct QMS in the institution. IQAC is coupled with NAAC, NBA to implement QMS and adhere to minimum quality standards set by the institute

Institutional Values and Best Practices

- Energy conservation activities pursued by Institute, is a mark of our commitment to nurture and sustain the environment.
- The institute has adopted several energy saving measures like switching off the lights, fans and electronic equipment when not in use, switching off the inverter of UPS system after office hours, use of electronic ballast for tube lights etc.
- Renewable energy measures such as use of solar panels, solar heaters, are promoted both in the institute and the hostels.
- Rainwater harvesting is implemented with a strong desire to conserve water.
- Beautiful plantation on the campus reduces carbon emission and keeps campus green and pollution free. Composting of organic waste is done efficiently.
- In College, innovations practiced, provide a progressive impact on students and are the key for the overall development and success of the institute.
- Institute promotes innovations in academics as well as in administration. Various other innovative measures have been undertaken such as counseling through mentor tutor system, promotion scheme for toppers , and best award etc.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	Dr Vithalrao Vikhe Patil College of Engineering, Vadgaon Gupta (Vilad Ghat) P.O MIDC, Ahmednagar
Address	Dr Vithalrao Vikhe Patil College of Engineering, Vadgaon Gupta (Viladghat) Post MIDC , Ahmednagar, 414111
City	Ahmednagar
State	Maharashtra
Pin	414111
Website	www.enggnagar.com

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Uday P. Naik	0241-2777296	8554990210	0241-277753 3	principal@enggnag ar.com
IQAC / CIQA coordinator	Shirke A. J	0241-2779496	9822430934	0241-000000 0	shirkeaj@gmail.co m

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details

Date of establishment of the college	01-01-1983
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University to which the college is affiliated/ or which governs the college (if it is a constituent college)

State	University name	Document
Maharashtra	Savitribai Phule Pune University	View Document

Details of UGC recognition

Under Section	Date	View Document
2f of UGC	28-09-2010	View Document
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)

Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	02-07-2021	12	EOA for one Academic Year

Details of autonomy

Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No
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Recognitions

Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Dr Vithalrao Vikhe Patil College of Engineering, Vadgaon Gupta (Viladghat) Post MIDC , Ahmednagar, 414111	Rural	21	28416.6

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Mechanical Engineering	48	HSC CET JEE	English	120	17
UG	BE,Civil	48	HSC CET JEE	English	60	17
UG	BE,Electrical	48	HSC CET JEE	English	60	26
UG	BE,Information Technology	48	HSC CET JEE	English	60	60
UG	BE,Electronics And Telecommunication	48	HSC CET JEE	English	60	60
UG	BE,Computer Science And Design	48	HSC CET JEE	English	60	60
PG	ME,Mechanical Engineering	24	BE GATE	English	24	1
PG	ME,Civil	24	BE GATE	English	24	24
Doctoral (Ph.D)	PhD or DPhil, Mechanical Engineering	36	ME	English	14	4

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	9				14				62			
Recruited	2	1	0	3	4	2	0	6	39	16	0	55
Yet to Recruit	6				8				7			
Sanctioned by the Management/Society or Other Authorized Bodies	6				8				11			
Recruited	5	1	0	6	1	0	0	1	7	4	0	11
Yet to Recruit	0				7				0			

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				57
Recruited	50	7	0	57
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

Technical Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				30
Recruited	28	2	0	30
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD	0	0	0	0	0	0	0	0	0	0
Ph.D.	2	1	0	0	0	0	4	0	0	7
M.Phil.	0	0	0	0	0	0	1	0	0	1
PG	0	0	0	4	1	0	44	15	0	64

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD	0	0	0	0	0	0	0	0	0	0
Ph.D.	5	1	0	1	0	0	0	1	0	8
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	8	4	0	12

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

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

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	1065	0	0	0	1065
	Female	450	0	0	0	450
	Others	0	0	0	0	0
PG	Male	41	0	0	0	41
	Female	11	0	0	0	11
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	3	0	0	0	3
	Female	0	0	0	0	0
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years					
Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	15	36	37	42
	Female	18	19	15	15
	Others	0	0	0	0
ST	Male	0	1	1	2
	Female	0	2	0	1
	Others	0	0	0	0
OBC	Male	53	69	141	120
	Female	35	34	43	50
	Others	0	0	0	0
General	Male	86	94	179	116
	Female	34	40	71	133
	Others	0	0	0	0
Others	Male	29	58	93	71
	Female	20	24	23	40
	Others	0	0	0	0
Total		290	377	603	590

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	<p>A discussion among the faculty members were initiated on the key principles of NEP such as diversity for all curriculum and pedagogy with technological innovations in teaching and learning, encouraging logical decision making and innovation, critical thinking and creativity. All programs are designed in such a way that students get maximum flexibility to choose elective courses offered by other Departments. It can be said that the University is proactively working towards implementation of the suggestions given in the NEP. The institute offers Major and Minor honors courses in emerging areas at Third Year and Final Year level which are interdisciplinary in nature. The choice rests with the</p>
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	<p>learners to undertake honors / minors rendering the scheme totally voluntary. From the academic year 2020-21 following interdisciplinary Major and minor courses have been commenced - Name of Subject and Number of Students Artificial Intelligence and Machine Learning =134 Data Science= 12 Internet of Things=63 Robotics=22 Architecture and Town Planning= 45 The Institution offers Multidisciplinary Projects at Final Year Level where the student groups work on different components of project related with respective department.</p>
2. Academic bank of credits (ABC):	<p>Since the institution is an affiliated institution, there is no scope for creating Academic bank of credits.</p>
3. Skill development:	<p>Realizing the importance and necessity for developing skills among students, and creating work ready manpower on large scale, skill development programs have been conducted by the institute for skill development. The Institute has signed MoUs with industries for training and internships to acquaint students with the skill demands of Industry 4.0 requirements. The institute is also planning to introduce B. Voc. Courses in next years. The focus is towards integrated knowledge acquisition and upgrading human skill towards creating employable youth. The institute also has conducted short term courses under Pradhan Mantri Kaushal Vikas Yojana (Technical) (PMKVY) (T) for students and dropouts and has registered for Deen Dayal Upadhyay Gramin Kaushalya Yojana. The Center of Excellence in association with “Apple” has been established to upgrade skills of faculty who will be trained with advanced programming language to upgrade the skill of students beyond their syllabus and improve their employability. These are steps leading the institution to implement NEP 20.</p>
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	<p>The institute is planning to apply for conduct of undergraduate program in local regional language i.e MARATHI. This shall facilitate students from rural background to go in for Engineering education. The Institute encourages students to learn and imbibe Indian culture by way cultural competition. The institute celebrates national and regional festivals and induction program to inculcate Indian culture. Some faculty have completed Universal Human Value Certification program conducted by AICTE.</p>

5. Focus on Outcome based education (OBE):	University has adopted OBE system of education, Since the institution is an affiliated institution the same has been adopted in the curriculum. Institute has been accredited by NBA New Delhi In following departments 1) Civil Engineering 2) Mechanical Engineering 3) E&TC Engineering Each Department has well defined PEO,s and PSO,s aligning with Institutional Vision and Mission.
6. Distance education/online education:	The institute has in place the required ICT facilities for conduct of online education. And in near future tends to start online certificate courses in various skills.

Extended Profile

1 Program

1.1

Number of courses offered by the Institution across all programs during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
206	206	206	206	206
File Description		Document		
Institutional data prescribed format		View Document		

1.2

Number of programs offered year-wise for last five years

2020-21	2019-20	2018-19	2017-18	2016-17
8	7	7	7	7

2 Students

2.1

Number of students year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
1570	1463	1814	1827	1953
File Description		Document		
Institutional data in prescribed format		View Document		

2.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
303	281	395	423	447

File Description	Document
Institutional data in prescribed format	View Document

2.3

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

2020-21	2019-20	2018-19	2017-18	2016-17
495	421	437	378	518
File Description	Document			
Institutional data in prescribed format	View Document			

3 Teachers

3.1

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

2020-21	2019-20	2018-19	2017-18	2016-17
84	118	122	121	127
File Description	Document			
Institutional data in prescribed format	View Document			

3.2

Number of sanctioned posts year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
85	107	107	147	152
File Description	Document			
Institutional data in prescribed format	View Document			

4 Institution

4.1

Total number of classrooms and seminar halls

Response: 23

4.2

Total Expenditure excluding salary year-wise during last five years (INR in Lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
161.07	224.87	248.83	213.24	344.98

4.3

Number of Computers

Response: 596

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

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

Response:

The institution has developed its own action plans for the effective implementation of the curriculum. The Academic Monitoring Committee (AMC) of the college is constituted for the effective implementation of academics. The entire procedure is as given below:

- The curriculum and academic calendar are designed and published by the SavitribaiPhule Pune University.
- The academic calendar for both the semesters and syllabi are displayed on the web portal of the institute.
- Workload and subject allocations are done in departmental faculty meetings headed by HOD at the beginning of each semester.
- The academic timetable is prepared semester-wise & displayed on the notice board before the commencement of each semester.
- All faculties prepare course files, lesson plans & get approved by HOD.
- Faculty maintain course files that contain the following information:

Academic calendar, individual timetable, syllabus, teaching notes, CO-PO-PSO Mapping, assignment, tutorial questions, ppt/handouts, class test, and university question papers, MCQs, e - contents for delivering online sessions and recording of practical video shooting, etc.

- The academic monitoring committee regularly monitors theory and practical classes and takes the reviews the teaching-learning process.
- Report of syllabus coverage, monthly class attendance, and test marks are submitted to Dean Academics, Principal at the end of every month by HOD.
- Extra classes are conducted for direct second-year admitted students for timely syllabus completion and makeup lectures on the learning process for all the students after class hours.
- Book bank facility is available for all the students through Central Library.
- The Institute library is having an ample number of reference books, textbooks, e-books, e-journals to cope with recent trends and demands of the industry. E-learning facilities are provided to all the faculty members of the institute which helps them ineffective teaching.
- Syllabus completion, monthly class attendance, and test marks are conveyed to students through mentors and communicated to parents by post and through SMS.
- STTP, FDPs are conducted for faculty at the college and department level for higher learning enhancement. The student hands-on training and workshop are conducted for effective teaching-learning.
- Students are motivated by industrial visits, internships, hands-on practice, and sponsoring industry projects to gain experiential learning.

- Academic progress, grievances, feedback from stakeholders are taken and conveyed to the Principal for strengthening curriculum delivery and overall improvement.
- Lab manuals in the form of soft and hard copies are made available to students as per the university curriculum.
- Batches of 15-20 students are made as per university and AICTE guidelines and displayed in the Lab timetable.
- Experimental results are verified with theoretical values in the given time slots.
- A continuous assessment process has been implemented and the depth of understanding of the practice to the students is checked.
- Based on result analysis and attainment of CO, PO, and PSO corrective action are suggested and implemented in the subsequent academic year.

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

1.1.2 The institution adheres to the academic calendar including for the conduct of CIE

Response:

- As per the academic calendar of SPPU, the academic calendar of the institute is prepared at the institute level. Based on the academic calendar of the Institute, all the departments prepare their academic calendar including the events, curricular, co-curricular, and extra-curricular activities.
- The SPPU, Pune proposed the dates for commencement and conclusion of the semester, in-semester, end semester, online examination, TW/ Practical /Oral examinations, and this schedule is reflected in institute's, as well as department academic calendar and this schedule, is strictly followed by all the departments.
- The teaching plan and lesson plan are prepared by each faculty which adheres to the academic calendar. The departmental academic monitoring Committee has a standard procedure for monitoring activities that ensures smooth conduction of lectures and practical sessions.
- Attendance of student is daily observed and filled up in ERP software . The absences of the student are communicated to parents via SMS regularly. If the students having attendance is less than 75%, then he has to attend the make-up classes of respective subjects.
- Status of syllabus completion, defaulter students is reviewed by HOD, class teacher, and Mentor.
- As per academic calendar class test /assignment /seminar / tutorials /guest lectures /industrial visits etc. are conducted. Reports of class tests and assignments are taken as a part of internal evaluation.
- For poor performance or any absentee of students, parents of such students are called for counseling of student and take corrective measures.

- The continuous assessment of Practical/Term work is done based on record conduction and the continuous assessment sheet of the institute.
- Students are encouraged to select the project as per the society need, industry problems, and innovative rural-based projects which help to solve local needs problems.
- Students' feedback is taken once a semester regarding faculty performance, and the report is communicated to the concerned faculty through HOD for continual improvement.
- The learning process is conducted as per the schedule for slow learners as well as advanced learners. Apart from this the remedial classes for the backlog students are conducted along with slow learners.
- If any deviation in the curriculum implementation, it is the responsibility of the concerned faculty to plan and rectify the deviation.
- Continuous improvement is achieved through academic audits and satisfying statutory requirements. A strong teaching learning process is the Academic monitoring committee following IQAC guidelines.

The adherence to these activities is continuously monitored Dean, Academic, and academic monitoring committee in association with IQAC.

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

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 last five years

1. Academic council/BoS of Affiliating university
2. Setting of question papers for UG/PG programs
3. Design and Development of Curriculum for Add on/ certificate/ Diploma Courses
4. Assessment /evaluation process of the affiliating University

Response: B. Any 3 of the above

File Description	Document
Institutional data in prescribed format	View Document
Details of participation of teachers in various bodies/activities provided as a response to the metric	View Document
Link for Additional information	View Document

1.2 Academic Flexibility

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

Response: 87.5

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

Response: 07

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

1.2.2 Number of Add on /Certificate programs offered during the last five years

Response: 26

1.2.2.1 How many Add on /Certificate programs are offered within the last 5 years.

2020-21	2019-20	2018-19	2017-18	2016-17
04	04	11	06	01

File Description	Document
List of Add on /Certificate programs	View Document
Brochure or any other document relating to Add on /Certificate programs	View Document
Any additional information	View Document
Link for Additional information	View Document

1.2.3 Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years

Response: 23.55

1.2.3.1 Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
970	391	326	169	39

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

1.3 Curriculum Enrichment

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

Response:

The present curriculum of the SPPU has ninety-one courses in programs conducted in the institute, which address professional ethics, gender, human values, environment, and sustainability-related issues.

The curriculum has incorporated environmental and sustainability issues in a few courses are as follows:

- Architectural Planning and Design of Buildings: From this course, students learn- to develop optimum planning, utilization of resources, how to use building bye-laws, green building concepts.Rainwater harvesting and waste management system.
- Environmental Engineering: This course highlights the aspects related to air pollution, noise pollution, low-cost wastewater treatment systems.
- Geotechnical Engineering: This course highlights the causes and remedial measures of landslides. It also enables the students to understand the evil effect of subsurface contamination on subsoil and various methods to control subsurface contamination.
- Energy Audit and Management: This course highlights the maximum use of renewable energy sources. Importance of energy conservation and management.
- Material Science: This course increases awareness among students about environment and green technology, nanotechnology, battery, and solar materials and creates an attitude toward a sustainable lifestyle.
- AICTE newly introduce the subject of Environmental Studies in all disciplines to discuss

environmental pollution, science, and technology associated with monitoring and control.

The curriculum has incorporated Human Values issues in a few courses are as follows:

- Industrial and Technology Management: This course highlights management principles on how to create human values such as honesty, discipline, sincerity. To create awareness among students to follow professional ethics, avoid the plagiarism of Patents, IPR, copyright.
- Information and Cyber Security: This course highlights the concept related to digital vulnerability and students should learn to protect data from malicious users or intruders.

The curriculum has incorporated Professional Ethics issues in a few courses are as follows:

- Total Quality Management and Management Information System: To create awareness amongst students to follow professional ethics in the field of Engineering and Technology. Good ethical and professional practices are essential parts of a reputed construction company. Frequently, civil engineering contractors knowingly/ unknowingly may hide mistakes and poor workmanship. In some cases, such defects may lead to the failure of the structure. Considering these issues, it is very necessary to have knowledge of TQM and MIS along with their proper execution and implementation.

Gender equality issues as part of the curriculum are covered in co-curricular activities

- The girls and boys participate equally in various curricular / co-curricular activities such as Project groups, seminars, paper presentations, group discussions, technical quizzes, debate, extempore, etc. through departmental association activities.
- Induction programs are arranged as part of the curriculum on cross-cutting issues. Guest lectures are arranged on human rights and health-related issues.

The aforesaid topics are covered related to cross-cutting issues in a curriculum. All departments conduct various on and above activities related to cross-cutting issues (like freshers' party, farewell, quiz, etc.) under department association and NSS.

File Description	Document
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	View Document

1.3.2 Average percentage of courses that include experiential learning through project work/field work/internship during last five years

Response: 39.22

1.3.2.1 Number of courses that include experiential learning through project work/field work/internship year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
83	81	81	80	79

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship	View Document

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

Response: 49.68

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

Response: 780

File Description	Document
List of programmes and number of students undertaking project work/field work/ /internships	View Document
Any additional information	View Document

1.4 Feedback System

1.4.1 Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders 1) Students 2)Teachers 3)Employers 4)Alumni

Response: A. All of the above

File Description	Document
Any additional information (Upload)	View Document
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	View Document
URL for stakeholder feedback report	View Document

1.4.2 Feedback process of the Institution may be classified as follows: Options:

- 1.Feedback collected, analysed and action taken and feedback available on website
- 2.Feedback collected, analysed and action has been taken
- 3.Feedback collected and analysed
- 4.Feedback collected
5. Feedback not collected

Response: A. Feedback collected, analysed and action taken and feedback available on website

File Description	Document
Upload any additional information	View Document
URL for feedback report	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 66.55

2.1.1.1 Number of students admitted year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
290	377	603	590	645

2.1.1.2 Number of sanctioned seats year wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
606	563	793	846	894

File Description

Document

Institutional data in prescribed format

[View Document](#)

Any additional information

[View Document](#)

2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)

Response: 79.29

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

2020-21	2019-20	2018-19	2017-18	2016-17
170	243	353	341	375

File Description

Document

Average percentage of seats filled against seats reserved

[View Document](#)

Any additional information

[View Document](#)

2.2 Catering to Student Diversity

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

Response:

Response:

It is a well-acknowledged fact that in every year diversified students from different backgrounds join the institute. The ability and extent of learning of the students are highly influenced by their social and economic background as well as their personal abilities and other attributes. The institute has developed a structured mechanism for assessing the learning levels of the students and continuously monitors the same for improving their academic as well as overall Performance.

Efforts to identify the students' learning levels:

- Students are made aware of the subjects and their pre-requisites by the faculty members. The initial informal interaction during Induction Programme just after the entry into the institute, coupled with continuous evaluation (through Quiz, Debate, Group Discussion, etc.) helps the teachers to assess the learning level of the students and identify and differentiate the slow learners and advanced learners in the classroom.
- The performance of the student in the first Continuous Assessment (CA1) enables the faculty members to identify the Advanced Learners and the Slow Learners.
- During the progress of semesters, the advanced learners and slow learners are identified based on their overall performance of previous semesters, orientation towards academics, and feedback from subject teachers.
- Mentees' learning ability is identified by the Mentors based on their academic performance, behavior, social and psychological aspects during the individual interaction session.

Program for slow learners:

- Each mentor is assigned with a group of students per year to provide one to one counseling for overall improvement.
- The different departments of DVVPCOE conduct remedial classes and Extra laboratory classes and provide course notes for students who are slow learners..
- Personality Development programs are conducted for students who have good technical skills but are unable to express their knowledge.

Program for Advanced learners:

- Distinction with embossing the names of the departmental toppers, i.e. Advanced Learners in the entrance of the main administrative building making visible to all.
- Best Outgoing and Best Achiever Awards for final year students of B.Tech, M.E. separately
- Advanced learners are encouraged to attend workshops, symposia, seminars, etc. and publish papers.

- Advanced learners are motivated to participate in technical competitions to gain knowledge of the latest developments of technology.
- Advanced learners are encouraged to be members of various student chapters like IEEE, CSI, ECell, etc.
- Students are encouraged to inculcate research orientation by involving them in innovative projects and research work which is time to time presented in different exhibitions of academics and industry.
- Students are encouraged to enroll themselves and get certified in MOOCs courses and courses offered through SWAYAM.
- Students are encouraged to participate in competitive examinations e.g. GATE, GRE.

File Description	Document
Upload any additional information	View Document

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

Response: 19:1

File Description	Document
Any additional information	View Document

2.3 Teaching- Learning Process

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

Response:

Response:

Teaching-Learning is a phenomenon where both the teacher and the students are learning. The teacher is refining his/ her subject knowledge and effective teaching skills, whereas the student finds it easier to understand the subject and its application. Traditional teaching has been replaced with more innovative and creative ways of disseminating, sharing, and facilitating knowledge development in students. Institute adopts following student-centric methods which are central to the Outcome-Based Education (OBE) system. The faculty has integrated several student-centric teaching-learning processes into their regular Course delivery in order to improve the attainment of Course Outcomes, Program Outcomes, and Programme Specific Outcomes.

Course Delivery Methods:

- Group discussions
- Relevant videos Seminars
- Mini projects
- Technical Reports/ Case studies PPTs
- Simulations and experimental exercises Lab experimental work
- Class Assignments/Quizzes

Individual learning:

·E-learning platforms like NPTEL videos, SWAYAM, Coursera, Project, etc. are provided to facilitate independent learning where in students can access course contents online which also bridge the gap from classroom learning, and also supplement advanced learning

·Students are strongly encouraged to enroll and get certification for such add-on online courses for self-paced self-learning

Experiential learning (learning through hands-on experiments)

Student-centric learning is provided in the practical sessions.

- Lab Experiments to practically test the concepts which are theoretically
- Learned in the Classroom Students write the experiment/program in their observation book and record the result, which is documented in the Record Book.
- Internships/ Vocational training usually for one month
- Group Projects – Final year projects of all branches through which Experiential learning achieved Technical Fest & Workshops
- Short Visit to nearby industries and research labs
- Students are provided seed funds/ project funding for undertaking innovative R&D
- projects involving the application of emerging technologies to solve engineering and social problems

File Description	Document
Upload any additional information	View Document

2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

Response:

Response:

The faculty effectively uses Information and Communication Technology (ICT) enabled teaching learning methodologies and advanced technology for content delivery and learning. The institute has adequate facilities for providing interactive, engaging, flexible and convenient ICT enabled learning environment for the learners detailed as below.

- i) The institute has Class rooms and Seminar halls are equipped with LCD/OHP projectors, Internet/Wi-Fi Connectivity and portable public address systems for the delivery of Digital/multimedia Contents.
- ii) The institute encourages the teachers to use modern teaching aids.
- iii) The program-wise class routine includes the details of the regular classes to be conducted through ICT enabled tools.
- iv) Faculty members prepare PowerPoint Presentations (PPTs) and other materials like relevant videos and animations, etc. to deliver the lectures to create the best learning environment for the students
- v) Central library of the institute is ICT enabled with multimedia PCs, internet connectivity, access to institutional repository of class notes, e-Books, e-Journal subscriptions, audio- visual section and library OPAC system.
- vi) Online Examination System developed internally can be accessed by the students inside the Campus through LAN as well as through the internet outside the campus
- vii) Video recordings containing demonstration of the laboratory experiments are made available to the students through institute repository.
- viii) The institute conducts online Multiple Choice Question (MCQ) based tests through Google classroom platform.
- ix) Microsoft Teams and Google Classroom are used by faculty to provide assignments and for sharing the learning resources.
- x) Invited expert talks, guest lectures, training programs, seminar, workshops and webinars are conducted regularly using ICT facilities.
- xi) The institute uses the integrated academic management system of the university to manage the entire academic process. In addition to this, the institute has implemented an ICT enabled system for student admission and on-line payment of semester fees and hostel charges.
- xii) These innovative teaching techniques help the learning experience of students effective, enjoyable, attentive, interactive and communicative.

File Description	Document
Upload any additional information	View Document

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

Response: 22:1

2.3.3.1 Number of mentors

Response: 70

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll.	View Document
mentor/mentee ratio	View Document
Circulars pertaining to assigning mentors to mentees	View Document

2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Response: 97.8

File Description	Document
Year wise full time teachers and sanctioned posts for 5years(Data Template)	View Document
List of the faculty members authenticated by the Head of HEI	View Document
Any additional information	View Document

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

Response: 10.67

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

2020-21	2019-20	2018-19	2017-18	2016-17
15	14	13	9	7

File Description	Document
List of number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. and number of full time teachers for 5 years (Data Template)	View Document
Any additional information	View Document

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

Response: 12.75

2.4.3.1 Total experience of full-time teachers

Response: 1070.65

File Description	Document
List of Teachers including their PAN, designation, dept and experience details(Data Template)	View Document
Any additional information	View Document

2.5 Evaluation Process and Reforms

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

Response:

Response:

The institute prepares its own academic calendar well in advance before the commencement of the semester based on the Academic Calendar notified by the University. It includes specific dates for completion of syllabus coverage, the conduct of Continuous Assessments (CAs) for theory, sessional and laboratory papers. The internal assessment process is communicated to the students by the respective faculty in the first week of the semester as well as during the orientation program for the first-year students. Further, changes in schedules, patterns, methods if any, are immediately notified to the students through classroom briefing by the concerned subject teachers and the department notice board.

Transparency in the mechanism of internal assessment:

The internal assessment process is carried out transparently as a part of teaching learning process for internal evaluation of laboratory term work and seminars. Though not a part of university curriculum, additionally Unit tests and preliminary examination are introduced by institute to have continuous learning and evaluation. An examination committee has been constituted to coordinate and communicate the internal examination activities to the students, teachers and administrative staff.

Internal assessment of Unit tests and Preliminary examination-

1.Schedule of Unit Test-1, Unit Test-2, Prelim exam for First, Second Year and Mock Insem, Prelim Exam for Third Year and Last Year is included in academic calendar and communicated to student at the time of commencement of semester.

2.It is a practice of the college to show internally evaluated answer books to the students in the class for discussion and students are counselled regarding areas for improvement.

3.The internal assessment marks of Unit tests and prelim exams are displayed on the notice boards and also circulated in class for students' information and acknowledgement

Internal assessment of laboratory work/term work-

1.Two internal examiners are appointed for each subject Term work assessment to evaluate final internal marks. Institute also notifies the criteria for allocation of term work marks through class counselling.

2.Continuous assessment for all Laboratory term work is done in presence of the students. The laboratory work evaluation is the basis for the award of term work marks. The evaluation is based on Attendance and Conduction-Oral ,journal evaluation.

3.Final term work marks are displayed at the end of each semester for student information.

4.Students are free to interact with the teacher to resolve grievances if any regarding the assessment.

5.At the end of each semester, HOD and Principal approve the internal marks for all the students.

File Description	Document
Any additional information	View Document

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

Response:

Response:

Internal examination related grievances-

The Central Examination Cell is headed by a faculty member as appointed by the authority and well equipped with other faculty and staff members. The Examination Cell continuously keeps in touch with the university. Centralized Roving Committee headed by the Director consisting of all Heads of the Departments, Senior Professors and Registrar monitor the total examination system during the semester examination. The college follows strictly the guidelines and rules issued by the affiliating university while conducting internal tests and semester-end examinations.

The answer scripts of all Internal Assessments are shown to the students after evaluation. If they come across any doubts, clarification is given which enables them to fare better in the future. The checked copies of the class tests are discussed with the students in the classes and in case of any problem, the subject teacher tries to resolve the same. However, if the grievance remains unresolved, a committee is formed by the Head of the Institute to address the issue.

External examination related grievances-

Theory Examinations:

External (University) examination grievances are addressed by examination section as per the process laid down by the SPPU. Institute follows a time bound, efficient and transparent process for the examination related grievances of the students. An exclusive display of detail processes to be followed for grievance redress is provided at examination section and website. In addition, the College Exam Officer (CEO) is appointed by the institute as per university guidelines for the smooth conduction of University exams and addressing exam related grievances as per the University rules and regulations. A separate team of four

senior faculty members is appointed as 'internal squad' that takes care of students difficulties like loss of hall tickets, locating the exam hall, identity card issues etc. and monitor examination process.

Online Examinations-

During online examination if the student finds any discrepancies in the question, he/she has an option to mark that particular question as an invalid question. The committee of subject experts appointed by the University assesses the queries related to the invalid questions. If the claim is found to be correct a decision is taken by the committee to award appropriate marks to concerned students.

File Description	Document
Any additional information	View Document

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.

Response:

Response:

The institute follows an outcome-based evaluation system following the guidelines of the National Board of Accreditation (NBA). Program outcomes and course outcomes of the all the programmes and courses are stated and communicated to the students through institute website and displayed at prominent places of the institute.

The process of CO framing for all courses in all programs is discussed below:

University specifies the semester wise syllabus for each programme. Course Outcomes (COs) of some courses are provided by the University in the syllabi. The Institute is following the COs as specified by the University for particular courses. However, in case the COs is not specified by the university, then the same is identified following the guidelines as specified by NBA at each programme level.

- For every course 5 to 6 intended learning outcomes are stated as Course Outcomes (COs).
- Unit wise course contents from the course syllabus forms the basis for framing CO statements.
- CO statements address appropriate Blooms Taxonomy (BT) levels by considering proper abilities and skills to be acquired by the learners.
- The COs are mapped with POs and PSOs having correlation levels of either 1- Slight (Low), 2-Moderate (Medium) and 3- Substantial (High).
- The process of mapping of CO's with PO's and PSO's give CO-PO and CO-PSO matrices respectively.

POs, PSOs, and COs are disseminated to the stakeholders through the following channels:

Digital Media

- Institute Website
- Internal ERP System

Print media

- Course file
- IQAC Audit form
- Prospectus for new admission

Outdoor Boards at prominent places

- At each department
- Inside each laboratory

COs are made available for the ready reference of the students through Course Material,lab manuals.

File Description	Document
Upload COs for all Programmes (exemplars from Glossary)	View Document
Upload any additional information	View Document

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

Response:

Response:

The attainment levels of the course outcomes, program outcomes and program specific outcomes are very important parameters for the outcome-based education system. This helps in creating an academic environment for achieving excellence. The efficiency and effectiveness of the process is continuously monitored, assessed and improved by taking inputs from the decision taken in the meetings of the Department Academic Council (DAC) and in the meeting of the Academic Council of the Institute. IQAC Cell also closely monitors the assessment and attainment process.

- The institute follows Outcome Based Education (OBE) philosophy for the measurement of levels of attainment of Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs).
- Program outcomes describe what students are expected to know and be able to do by the time of graduation.
- Curriculum, teaching-learning processes and assessment methodologies are designed to align with POs and PSOs.
- The COs for individual courses are framed having an appropriate mapping with POs and PSOs. The

process of mapping gives CO-PO and CO-PSO matrices.

- For each course, attainment level of all course outcomes is obtained based on the student's performance in the internal and external examinations.
- This in turn helps in arriving at the PO/PSO assessment as each CO is mapped with certain POs/PSOs.
- Besides this, the exit survey is taken from students for indirect assessment of the PO's.
- Overall PO attainment is assessed based on direct assessment of CO's and indirect assessment of PO's.
- The assessment methodologies and the process of measuring attainment levels is summarized below.

Direct Assessment Methodologies

Direct assessment methodology have two components viz- internal assessment (20% weightage) and external assessments (80 % weightage). Internal assessments are carried out for Class Tests and Prelim examination, External assessments are carried out for in-semester, end-semester examination, oral/practical examination and term work evaluation of laboratory work.

Direct assessment Rubrics used for Course Outcomes (COs) are:

Attainment Level 1

Attainment Level 2

Attainment Level 3

CO attainment is calculated with 80 % weightage to external assessments and 20 % weightage to internal assessment.

CO Attainment = $0.8 \times \text{Attainment Level of External Assessment} + 0.2 \times \text{Attainment Level of Internal Assessment}$

Indirect Assessment Methodologies for Program Outcomes (POs):

Indirect assessment methodologies for PO's is carried out based on alumni feedback, exit survey and employer feedback.

Overall PO attainment is calculated with 80% weightage to direct attainment and 20 % weightage to indirect attainment.

Overall PO Attainment = $0.8 \times \text{attainment through direct assessments} + 0.2 \times \text{attainment through indirect assessment}$.

File Description	Document
Upload any additional information	View Document

2.6.3 Average pass percentage of Students during last five years

Response: 88.88

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

2020-21	2019-20	2018-19	2017-18	2016-17
495	421	437	378	518

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

2020-21	2019-20	2018-19	2017-18	2016-17
514	445	528	448	600

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View Document
Upload any additional information	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response:

File Description	Document
Upload database of all currently enrolled students (Data Template)	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

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

Response: 34.35

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

2020-21	2019-20	2018-19	2017-18	2016-17
1.53306	2.94273	6.528	5.35	18

File Description	Document
List of endowments / projects with details of grants	View Document
e-copies of the grant award letters for sponsored research projects / endowments	View Document
Any additional information	View Document

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

Response: 4.76

3.1.2.1 Number of teachers recognized as research guides

Response: 4

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

3.1.3 Percentage of departments having Research projects funded by government and non government agencies during the last five years

Response: 56

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

2020-21	2019-20	2018-19	2017-18	2016-17
1	2	4	3	4

3.1.3.2 Number of departments offering academic programmes

2020-21	2019-20	2018-19	2017-18	2016-17
5	5	5	5	5

File Description	Document
Supporting document from Funding Agency	View Document
List of research projects and funding details	View Document
Any additional information	View Document
Paste link to funding agency website	View Document

3.2 Innovation Ecosystem

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

Response:

Response:

Institute has created an opportunity for rural based graduate and post-graduate students to explore their new ideas and sharing of knowledge with other like minded in their areas of interest. The Research and Development Cell inculcate research culture among the students and encourage for continual excellence in engineering education.

Objectives

- To identify the newer, multidisciplinary and innovative topics related to the programs.
- To motivate the faculty and student for research and to develop research culture in the Institute.
- To organize conferences, workshops, seminars and symposiums to address the development and research.
- To create the awareness about various research funding schemes of Government, university, AICTE, and other agencies
- To motivate the staff to pursue Ph.D. & Post-doctoral program.
- To create the awareness about research papers, patent, and IPR.

- To encourage the consultancy in related areas.

The new and innovative ideas are collected by the faculty by direct communication with students, local problems, seminars, mini projects, projects and themes of various competitions. These ideas then processed at department level and the most appropriate ideas are forwarded to Dean, Research and Development, where the decision about quantum of funding for such project is decided, depending upon the nature of the topic, resource persons, travelling, its practical application as well as the available and required instrumentation.

The faculty and students are guided for approaching the various funding agencies and providing necessary documents. Required instruments are purchased from the funds received from various agencies and the institute contribution. They are allowed to contact resource persons and visits to other institutions, if required. The work is then carried out by guiding the concerned for writing research papers, creating start-ups and register IPR and providing monetary assistance for the same as per regulations of the R&D cell.

Faculty members seeking higher studies are encouraged by offering study leaves for their course work. The research scholars are free to use institute resources for required experimentation and resources from the library.

With this well-defined system, the students and faculty members attend seminars and workshops, present papers, participate in competitions and exhibitions. This leads in widening of visions of the concerned, due to exposure to outside world and studying burning issues in those areas. The final outcome of this process is, new and innovative ideas transferred to successive batches, changing mindset of their counterparts and guidance to the juniors. The faculty members and students with increased intellectual level acts as lighthouses enlightening others, resulting in overall quality enhancement, more career opportunities as well as overall growth of the institute.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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

Response: 10

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

2020-21	2019-20	2018-19	2017-18	2016-17
3	3	1	2	1

File Description	Document
Report of the event	View Document
List of workshops/seminars during last 5 years	View Document
Any additional information	View Document

3.3 Research Publications and Awards

3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years	
Response: 6	
3.3.1.1 How many Ph.Ds registered per eligible teacher within last five years	
Response: 12	
3.3.1.2 Number of teachers recognized as guides during the last five years	
Response: 2	
File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
Any additional information	View Document
URL to the research page on HEI website	View Document

3.3.2 Number of research papers per teachers in the Journals notified on UGC website during the last five years

Response: 2.76

3.3.2.1 Number of research papers in the Journals notified on UGC website during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17
48	62	66	49	91

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document
Any additional information	View Document

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

Response: 1.4

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 last five years

2020-21	2019-20	2018-19	2017-18	2016-17
20	29	31	25	55

File Description	Document
List books and chapters edited volumes/ books published	View Document
Any additional information	View Document

3.4 Extension Activities

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

Response:

Response:

The faculty and students of the institute are connected with society by addressing issues like, agriculture, water supply, transportation, solid waste management, social issues, power crisis and environment. The major initiatives are as follows. .

- **National Service Scheme (NSS) -**

The institute has two units of NSS (150 students per unit) and aims at 'Education and Service' to the community. Various activities are carried out under the banner of NSS like,

- Save Water Save Life, Clean India Green India, Swachhata Abhiyan.
- Blood Donation Camp, Blood Group And Hemoglobin Checkup Camp, HIV-AIDS Awareness. Yoga Day Celebration
- Save Girl Child, Woman Health Awareness Camp

- Education To Rural India, Computer Literacy, Road Safety Awareness,
- Energy Conservation & Awareness,

Through these programs, students get sensitized about importance of social issues of the community like segregation of wet and dry garbage, saving water, blood donation, tree plantations and energy conservation etc. They learn to act as active group leaders and members. Every year approximately 100 blood units are donated to the Dr. Vikhe Patil Memorial Hospital and college vilad ghat ,Ahmednagar.

- **Renewable energy and Recycling of water**

The pioneering efforts of the institute on environment and renewable energy sources, set example for other institute and cooperative institutions. Roof top solar power plant, solar water heaters to all hostels.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

3.4.2 Number of awards and recognitions received for extension activities from government/ government recognised bodies during the last five years

Response: 12

3.4.2.1 Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17
1	6	1	1	3

File Description	Document
Number of awards for extension activities in last 5 year	View Document
e-copy of the award letters	View Document
Any additional information	View Document

3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

Response: 60

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

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

2020-21	2019-20	2018-19	2017-18	2016-17
05	15	19	15	06

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	View Document
Any additional information	View Document

3.4.4 Average percentage of students participating in extension activities at 3.4.3. above during last five years

Response: 43

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 last five years

2020-21	2019-20	2018-19	2017-18	2016-17
325	964	1050	900	415

File Description	Document
Report of the event	View Document
Average percentage of students participating in extension activities with Govt or NGO etc	View Document
Any additional information	View Document

3.5 Collaboration

3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year

Response: 314

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

2020-21	2019-20	2018-19	2017-18	2016-17
36	87	69	87	35

File Description	Document
e-copies of related Document	View Document
Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/ internship	View Document
Any additional information	View Document

3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

Response: 194

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

2020-21	2019-20	2018-19	2017-18	2016-17
43	76	32	23	20

File Description	Document
e-Copies of the MoUs with institution/ industry/corporate houses	View Document
Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years	View Document
Any additional information	View Document

Criterion 4 - 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.

Response:

Response:

The Institute creates and enhances infrastructure as per the norms laid by the All India Council for Technical Education, Directorate of Technical Education, and Savitribai Phule Pune University and ensures that required facilities for effective teaching-learning process, co-curricular and extracurricular activities are made available. The facilities are enriched by addressing the needs of the curriculum, advanced technology, and R&D activities.

The physical infrastructure consists of 22 classrooms, 05 tutorial rooms, 77 laboratories, 1 seminar hall, 1 central computing lab, 1 central library, and departmental libraries. Besides, the institute has supported academic and administrative rooms for undergraduate and postgraduate programs. Classrooms and seminar halls are well furnished, ventilated and illuminated, and equipped with LED projectors. Laboratories are well-equipped and are regularly maintained and updated. The charts, models, and cut-sections are displayed in laboratories for better understanding. The ICT tools and audio-video facilities further strengthen the infrastructure of the institute.

- The central workshop is equipped with different facilities for mechanical-based practicals like a machine, fitting, carpentry, welding, blacksmithy and tin smithy shops. The workshop facility is made available for extended hours to manufacture the vehicles for different SAE competitions, and academic and innovative projects.
- All faculties prepare course files, and lesson plans & get approved by HOD.
- The institute has a very good infrastructure for internet access and computing purpose, having a good network of 626 computers with 50 Mbps bandwidth. The institute has 01 central computing facilities which are made available. Some computer laboratories like CAD/CAM are equipped with computers having higher configurations. A sufficient number of peripherals including printers, plotters, and scanners for online teaching are provided. The system and required application software are available in respective departments.
- SackInfo, the customized ERP, is deployed for effective academic planning, reporting, and monitoring. Library functions are automated through SOFTLIB (V.5.5.). The library has a compilation of text and reference books, general and competitive examination-related books, data books and standards, hard copy, and e-journals. A reading room in the main library and at the ladies' hostel is made available for extended hours.

- Work Compliance System is also deployed for effective academic planning, reporting, and monitoring.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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

Response:

Sports:

Separate sports area available for indoor and outdoor games. The playground is available for outdoor games like cricket, volleyball, Football, kho-kho, kabaddi, athletics, etc.

Gymkhana:

The Gymkhana is having capacity of more than 500 seats. Gymkhana Hall is used for Indoor games like badminton, table tennis, carom, chess, etc. A qualified and approved physical director is appointed by the institute for coaching the students.

Cultural Activities: Seminar Hall

Seminar Hall and Auditorium are available as a platform to find hidden talents in the students.

Yoga and fitness

1 Yoga and fitness class for the students are conducted by experts invited by the Institute.

2 Different programs are organized by the Institute for stress relaxation of staff & students on the premises.

Few faculty members serve as instructors for Yoga Club. The institute celebrates 21 June, International Yoga Day, on a large scale.

Sports and extracurricular activities have been playing a vital role in the overall development of the students. Students have earned applauses in the various competitions at zonal, district, and university levels in solo and team events. TA/DA is paid for participation in various sports and cultural events.

File Description	Document
Upload any additional information	View Document
Upload any additional information	View Document
Paste link for additional information	View Document

4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)

Response: 69.57

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 16

File Description	Document
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View Document
Upload any additional information	View Document
Paste link for additional information	View Document

4.1.4 Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years(INR in Lakhs)

Response: 30.83

4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
27.19	29.48	217.45	52.65	41.59

File Description	Document
Upload Details of budget allocation, excluding salary during the last five years (Data Template)	View Document
Upload audited utilization statements	View Document
Upload any additional information	View Document

4.2 Library as a Learning Resource

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

Response:

Response:

The library is fully automated using library management software 'SOFTLIB (V.5.5.)' Since 2006 to Jan 2022. The ILMS details are given below:

Sr. No.	Name of the ILMS Software	Nature of Automation	Version	Year of Automation
1	SOFTLIB	Fully	V.5.5	2002

This software has modules like Acquisition, cataloging, Circulation, Serial Control, Article Indexing, Administration, and statistical data presentation. Acquisition modules & Cataloging Module is utilized for generating and placing orders, master record-keeping, graphical analysis of inventory, and catalog search through OPAC and is fully bar code enabled. The circulation module maintains the status of various items and circulation transactions. It also helps in stock verification and recording. Subscriptions and checks on the arrival of issues are monitored through serial control. An administrative module is used to create the users and work allotment. The graphical reports on various operating and usage parameters are prepared.

The library has subscribed to e-Journals and scientific databases such as Elsevier Science Direct and DELNET. These Journals can be accessed in Digital Library Section and through the institute network. The institutional repository which contains MCQ, a question bank, and videos of practical conduction is available online (<http://10.0.0.4>).

File Description	Document
Upload any additional information	View Document
Paste link for Additional Information	View Document

4.2.2 The institution has subscription for the following e-resources

- 1.e-journals
- 2.e-ShodhSindhu
- 3.Shodhganga Membership
- 4.e-books
- 5.Databases
- 6.Remote access to e-resources

Response: A. Any 4 or more of the above

File Description	Document
Upload any additional information	View Document
Details of subscriptions like e-journals, e-ShodhSindhu, Shodhganga Membership , Remote access to library resources, Web interface etc (Data Template)	View Document

4.2.3 Average annual expenditure for purchase of books/e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

Response: 13.42

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

2020-21	2019-20	2018-19	2017-18	2016-17
8.03	7.85	8.27	21.01	21.92

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

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

Response: 27.09

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

Response: 448

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

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

Response:

The institution has adequate IT infrastructure, which is updated and upgraded continuously as per the curriculum requirements and changing technology. Wi-Fi zones are provided at various locations such as reading halls, hostels, and department corridors. The computer labs are connected through LAN with internet facilities. ICT facilities are available in all the departments. Necessary system and application software are available in all respective laboratories.

The institute is using the Internet connectivity of 50 Mbps by Jio ISP.

The maintenance of computers, Internet Wi-Fi networking, and installation of software and maintenance and up-gradation of hardware is done by System Department.

1. Network **Security:** The college campus has completely switched, to a high availability network. The network is secured by a firewall integrated with the router.

2. Software **Asset Management:** We categorize the software assets as open-source software assets and proprietary software assets. The proprietary system software is purchased at the Foundation level and further distributed to different units. Application software is purchased for individual departments as per their curriculum and research requirements.

3. Open-Source **Resources:** To reduce the dependence on propriety software and tools, we strongly promote open-source software, tools, and applications for supporting computer-assisted learning, teaching, and design. Currently, the institute supports various versions of the Ubuntu operating system. Some open-source software tools used are JDK, Star UML, Mysql server and client, etc.

Green Computing: the Institute strives hard to reduce the carbon footprint. Most of the administrative activities pertaining to faculty, staff, and student are handled through the ERP. All the news feeds are displayed through LED TVs. The use of printers and printed materials is discouraged. The power reduction is managed by replacing the older and power-intensive technology /devices with less power consumption devices, like the replacement of CRT monitors with LED monitors.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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

Response: 3:1

File Description	Document
Upload any additional information	View Document
Student – computer ratio	View Document

4.3.3 Bandwidth of internet connection in the Institution

Response: A. 750 MBPS

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

4.4 Maintenance of Campus Infrastructure

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

Response: 13.3

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

2020-21	2019-20	2018-19	2017-18	2016-17
17	13	87	25	12

File Description	Document
Upload any additional information	View Document
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View Document
Audited statements of accounts	View Document

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.

Response:

Laboratory, library, sports complex, computers, classrooms, and other physical, academic, and support

facilities have set processes and procedures for maintaining and using them. The institute has standardized and created methods and procedures for sustaining the physical, mental, and emotional well-being of its students. Concerning divisions and committees are in charge of various areas of maintenance and utilization. It is assured that facilities are built, maintained, and updated in order to support successful teaching-learning processes in a conducive academic environment and students' overall growth. The institute's physical facilities are properly maintained with appropriate annual financial resources.

The following procedures are adopted in this regard:

Maintenance of Physical and Support Facilities:

Civil infrastructure:

General civil maintenance and upkeep of civil infrastructure are carried out by the Civil Maintenance Department' at the institute level. The workshop department helps in executing minor repairs.

Electrical Maintenance:

Electrical maintenance is handled by an institute-appointed electrical maintenance department, with the majority of the work being outsourced to local specialized agencies.

Water supply:

The RO plants are installed and water is distributed through coolers as well as taps. The quality of drinking water is maintained and recorded daily. Required plumbing work on the campus is done in-house.

Garden and landscape:

A 'Garden In-charge' is appointed by the Institute. Different areas of the campus are outsourced to different agencies. They are entrusted with the maintenance of lawns, shrubs, trees, and plants. Sufficient trees are planted regularly and have covered the maximum area.

Housekeeping:

The housekeeping is outsourced to an external agency by awarding an annual contract including the sanitary materials and taking care of the cleaning of all the utilities.

Gymkhana:

The equipment and sports material are maintained by an attendant. Any major work is carried out by an external agency. Students and staff are availing of the facility in the early morning hours and evening sessions.

Maintenance of Records and documents:

The documents pertaining to the student section, accounts, and administrative importance are preserved by stacking them properly in a separate room. Other documents and stationery are preserved for five years and then shredded and disposed of.

Maintenance of Academic Facilities:

Repair and maintenance of laboratory equipment, instruments, kits, and machinery are initiated as needed by the respective Laboratory In-charge and Technical Assistant (TA). The request is handled by the HOD and the Laboratory In-Charge, and maintenance is completed by the appropriate external equipment experts. Calibration of measuring instruments is performed on a regular basis. The laboratory is in charge, and the TA ensures that all equipment and machinery are in good working order. Based on Lab's recommendations, The committee in charge inspects the working condition of the equipment and approves the 'written-off'. The laboratories are used according to the timetable for demonstrations and practicals. Lab facilities are also made available to students and staff upon request for research and allied work. Computer and peripherals: The institute has an adequate number of computers with internet connections and required software is distributed to respective offices, laboratories, libraries, departments, etc. Department computer labs and central computing facilities are connected through proper networking and internet access. The computing facilities are utilized for academic, training, value-added courses, research, and allied usage as per timetable, special requirements, and beyond working hours as well.

Classrooms:

Housekeeping of classrooms and surrounding area is outsourced to an external agency, while laboratories and important utilities are taken care of by internal staff. Repair work of classroom and laboratory furniture is done internally.

Library:

The upkeep of the books and periodicals is done by library assistants. The bookbinding and other related work are outsourced. The library provides reprographic facilities and is maintained and repaired by the external agency as per requirement. The library timings are 9:00 am to 5:00 pm on working days, while the reading room is kept open for extended hours and even holidays on students' requests.

Website:

A team of faculty members is appointed for updating the information on a regular basis. The website and digital media maintenance are covered under annual maintenance.

Safety and security:

Emergency exits and firefighting systems are provided to counter situations like fire hazards and natural calamities. Fire extinguishers are provided in laboratories and strategic locations. The security persons and TA have been trained to handle the fire hazards.

Vehicles and transportation:

A fleet of vehicles like ambulances, cars, and buses is looked after by Foundation Office. Transport in-charge and his team take care of maintenance and repair. The ambulance is available on a 24X7 basis.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

NAAC

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during last five years

Response: 78.65

5.1.1.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2020-21	2019-20	2018-19	2017-18	2016-17
1226	1175	1438	1441	1498

File Description	Document
upload self attested letter with the list of students sanctioned scholarship	View Document
Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template)	View Document

5.1.2 Average percentage of students benefitted by scholarships, freeships etc. provided by the institution / non- government agencies during the last five years

Response: 3.61

5.1.2.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2020-21	2019-20	2018-19	2017-18	2016-17
31	78	66	60	75

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

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

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

Response: A. All of the above

File Description	Document
Details of capability building and skills enhancement initiatives (Data Template)	View Document
Any additional information	View Document
Link to Institutional website	View Document

5.1.4 Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years

Response: 67.1

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

2020-21	2019-20	2018-19	2017-18	2016-17
1924	1067	1125	806	662

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document
Any additional information	View Document

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

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

Response: A. All of the above

File Description	Document
Upload any additional information	View Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document
Details of student grievances including sexual harassment and ragging cases	View Document

5.2 Student Progression

5.2.1 Average percentage of placement of outgoing students during the last five years

Response: 17.57

5.2.1.1 Number of outgoing students placed year - wise during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17
106	59	78	65	90

File Description	Document
Upload any additional information	View Document
Self attested list of students placed	View Document
Details of student placement during the last five years (Data Template)	View Document

5.2.2 Average percentage of students progressing to higher education during the last five years

Response: 11.72

5.2.2.1 Number of outgoing student progression to higher education during last five years

Response: 58

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education (Data Template)	View Document
Any additional information	View Document

5.2.3 Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Response: 80

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	3	4	8	8

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	3	4	8	8

File Description	Document
Upload supporting data for the same	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years (Data Template)	View Document
Any additional information	View Document

5.3 Student Participation and Activities

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

Response: 37

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) year-wise during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17
0	5	9	10	13

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/ national/international level during the last five year	View Document
e-copies of award letters and certificates	View Document
Any additional information	View Document

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

Response:

Response:

The aim of promoting students representation and engagement in various administrative, co-curricular and extracurricular activities is to involve the students in policy making process as well as maintaining the transparency in the system. It helps in comprehensive development of the students. Various committees are formed at institute/department level and majority of them are given below.

1. Students' Council: Under section 40(3) of Maharashtra Universities act, 1994, this council is established every year in the Institute and it performs its prescribed duties.
2. Student Grievance and Redressal: This committee addresses student grievances and maintains harmony and discipline among the students.
3. Gender Equality: The broad mandate of the cell is to provide an integrated and interdisciplinary approach to understanding social and cultural constructions of gender that shape the experiences of women and men in society.
4. Equal Opportunity : To oversee the effective implementation of policies and programmes for

disadvantaged groups, to provide guidance and counselling with respect to academic, financial, social and other matters and to enhance the diversity within the campus.

5. Ant-Ragging: This committee ensures zero ragging incidents in the institute and also spreads awareness among students against any type of ragging activities.

6. Cultural Activities: This committee co-ordinates various cultural activities and events throughout the year.

7. Sports Activities: This Committee organizes interdepartmental sports event. Our students actively participate in various sports in intercollegiate, interuniversity, state, national and International level.

8. Department/ College Magazine: 'Indradhanush' is our annual magazine published by Magazine committee at college level. Students express their talent in the form of articles, poetry, interviews of eminent personalities etc. Each department publish their own magazine where student committees play active roles in magazine publishing process.

9. Extension Activities: The students are involved in all extension activities such as NSS, Blood donation Camp, Swachha Bharat Abhiyan, Yoga day, Tree plantation camps, Marathi Bhasa Sanvardhan, Jayanti Mohatsav.

10. Department Students Associations: In each department of the institute "students associations" are formed. They are "association of the students, by the students, for the students". The curricular and extracurricular activities are carried out under students associations.

11. Internal Quality Assurance Cell (IQAC): The student representative is involved in IQAC. The student representative can present his/her ideas and put up suggestions in regular meeting of IQAC. Thus, he/she is also active member in policy making process of IQAC.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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

Response: 45.4

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

2020-21	2019-20	2018-19	2017-18	2016-17
1	27	65	76	58

File Description	Document
Upload any additional information	View Document
Report of the event	View Document
Number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions (Data Template)	View Document

5.4 Alumni Engagement

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

Response:

Response:

We are very proud to share that our alumini are occupied various positions like vice presidents, Director, Entrepreneurs, plant heads at various MNC's, Public sector and Government organizations at global, national level and state level. To strength the alumini network, the institute registered an Alumni Association during the year 2009 with registration number is 55924 Dated 20/11/2009, MH/727/2009/Ahmednagar. The purpose of the association is to bring together all the alumni in single platform, to share their experiences. The special pravara alumni network portal is designed for alumni registrations. At present active alumni strength is 7250. The institute organize alumini meet every year. On an average of 200 to 300 alumini participate in the event. During the meet they interact with the students, faculties, management and share their ideas for improvement of overall progress of the institute. Apart of the regular event, the alumini visit the department to provide guidance through guest lectures, seminars, workshops and, supports for industry visits, internships, and placement drives etc. throughout the academic year. Alumni provide feedback on infrastructure development and other academic related matters of the college and suggest gaps in syllabus considering current demands of industry. The alumini of the institute supports the students for financial help during their project work, or any competitions. Also they provide infrastructure facilities at their own end wherever the technological need arises. Alumni voluntarily involve in mentorship for current first year and second year students of institute through Buddy scheme a unique feature. In this each alumini connect with the individual students. Alumini interact with students through phone, email, and social media. Alumini guide the students for academics, skill development, psychological development and career development. He inspires and motivates the student to infuse confidence level by quoting his journey, deep career to achieve the excellence. In this scheme the alumini supports till he graduates with career prospects.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

5.4.2 Alumni contribution during the last five years (INR in lakhs)

Response: E. <1 Lakhs

NAAC

Criterion 6 - Governance, Leadership and Management

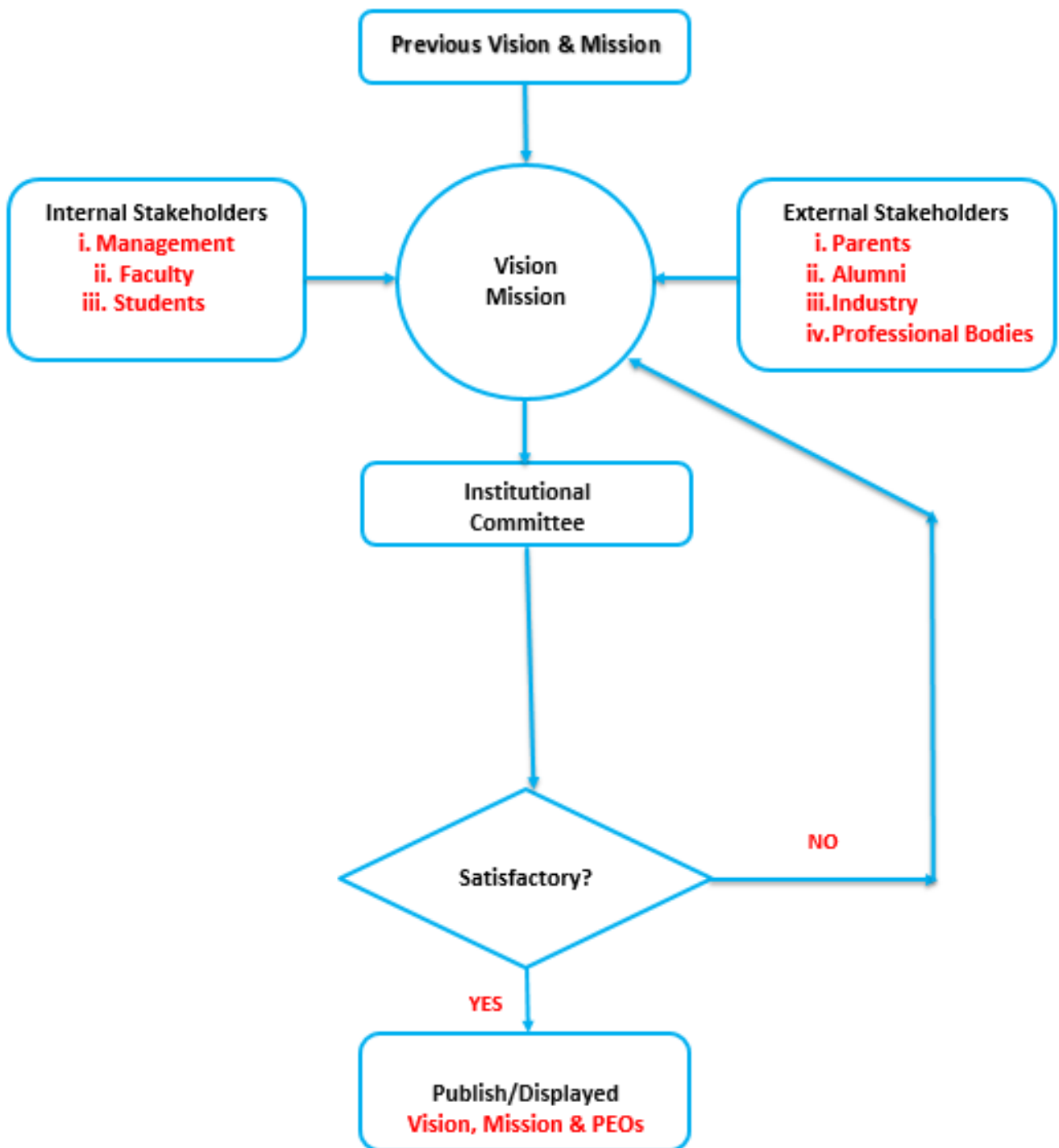
6.1 Institutional Vision and Leadership

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

Response:

Establishment of Vision and Mission of the Institute was undertaken to create new development space for students – complement and enhance their presentation, activation and cognitive capacities, support young people's creations and creativity in regard with the 21st century where technologies are in transition phase. All the stakeholders were involved in defining the vision and mission. To achieve this tremendous task following steps were taken;

- a. Guidelines from previous Institute Vision and Mission were considered as a base for defining new Vision and Mission.
- b. The Institutional Committee drafted a feedback system for defining the Vision and Mission.
- c. Data was collected from all the stakeholders Internal and External like Management, Students, Faculty, Industry, Parents, Alumni.
- d. Brainstorming sessions were carried out by a committee to analyze and review the draft and to check its consistency with the vision and mission of the institution as a whole.
- e. The final draft of Vision and Mission was approved by the Institutional Committee.
- f. In case of grievances the format is again made available for brainstorming and the process is repeated.



Institutional Vision and Leadership

Vision: To empower the students for academic, professional and social enrichment through excellent technical education and promote lifelong learning to serve the nation.

Mission: Dr. Vithalrao Vikhe Patil College of Engineering, Ahmednagar is committed to impart excellent technical education to the students abide by the statements below;

MI 1: To impart quality technical education in the domain knowledge with State-of-The-Art infrastructural facilities.

MI 2: To establish an Industry-Institute relationship to abreast with modern technology to inculcate research attitude and lifelong learning.

MI 3: To prepare graduates with strong managerial and communication skills with strong professional ethics and values along with an understanding of societal, cultural and environmental issues.

- Nature of Governance

The top management team, which includes the Board of Trustees, Governing Council, College Development Committee, Chief Executive Officer, Foundation Officers, Principal, Department Advisory Board and faculty is focused on the following institutional goals: -

- Principal is directed by top management, who is focused on the institution's vision and goal.
- The Principal adheres to top management policies in order to realize the vision with the help of the workforce.
- The Principal, the IQAC Director, the Deans, the Registrar, and the Heads of Departments organize several committees to provide "decentralized management" in order to meet the institution's aims and goals.
- With the help of IQAC, the institution is committed to adhering to the quality framework.
- Preparation of an action plan for all operations and integrate it into the organization's strategic plan:

The Principal in consultation with Academic Dean and Head of Department plans well in advance:

Academic Planning: Considering University academic calendar, Semester wise academic calendar is prepared which includes all curricular, co curricular, extracurricular activities.

Financial Planning: According to the prospective plan, a budget is required in the academic year.

It comprises the provision of resources (people, machines, software, and so on) in accordance with the new curriculum, as well as an increase in the number of students enrolled.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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

Response:

Participative Management:-Involvement of stakeholders (GC (Governing Council), CDC (College Development Committee), IQAC, DAB (Department Advisory board), DMC (Department monitoring Committee), Department association, student council etc.)

The college encourages a participatory management culture. As a result, the committees are formed to carry out predetermined strategies that prioritize active stakeholder participation, as detailed below.

- Top Management Level
- Governing Council
- College Development Committee
- Principal's Administration
- Dean academics, Dean R&D
- IQAC
- HoDs Level/ In-charge/ Coordinator Level
- Faculty Level
- Students Council
- Students Association
- Cultural and sport and other activities

Top Management Level: (Governing Council, Chief Executive Officer and Officers of the Foundation, CDC) provide directions and guidelines focusing vision and mission of the institution.

Principal's Administration: This is the essential node that handles academic ,college-level administration and delivers effective administration.

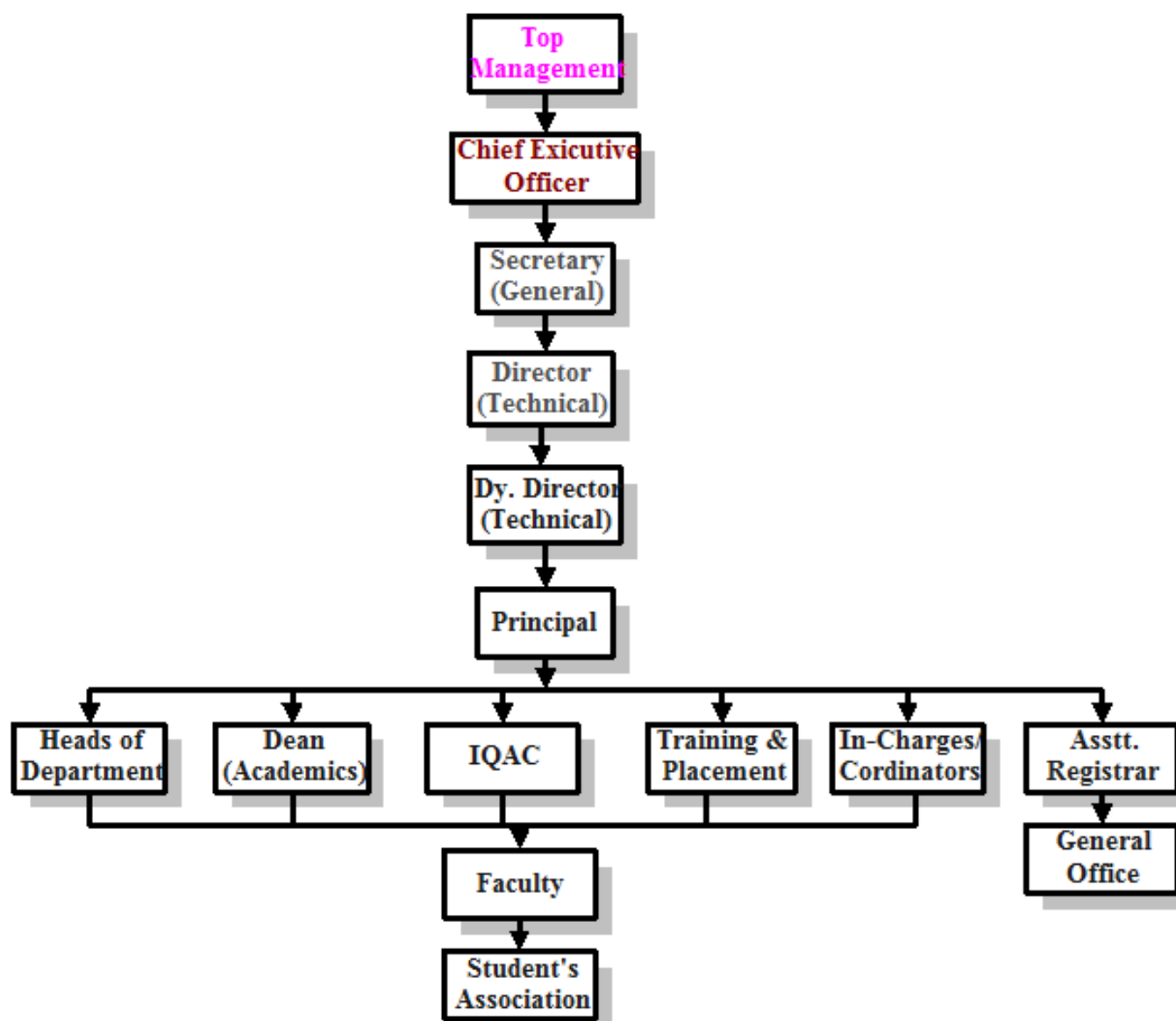
In-charge / Coordinator Level: They can take the required steps to ensure that their corresponding committee / cell is properly controlled and monitored.

Top Management
Principal's Administration
In-charges / Committee Coordinators
H.O.D
Faculty
Students Associations

Head of the department (HoD) Level: HoDs have adequate leeway to prepare for the department's overall progress. They can take the necessary steps to ensure the department's overall supervision and monitoring.

Faculty level: Every department has its own departmental advisory Board. Class teachers have the authority to propose and implement a wide range of technical and non-technical curricula. Workshops, lectures on topics of interest to students, alumni interactions, hands-on practice, industrial projects, implant training, and industrial training etc. conducted for the students . Faculty by their choice can take the initiative and organizes seminars ,workshops Expert lectures.

Following chart shows, the leadership distribution and flow of power;



File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

A strategic plan describes how goals will be achieved through the use of available resources. Our prespective plan includes certain salient metrices for achieveing the desired result effectively and those are as following;

- (a) Accreditation.
- (b) Horizontal Expansion.
- (c) Vertical Expansion.
- (d) Research and Consultancy / MOUs with Industry.
- (e) IRG Schemes
- (f) Alumni Contribution.

Details of these can be found in the following attachment.

File Description	Document
Upload any additional information	View Document
strategic Plan and deployment documents on the website	View Document
Paste link for additional information	View Document

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

Response:

The organization's administrative structure is well-organized with the Governing Council serving as the highest decision-making body, followed by the CDC, as well as many other functional groups and committees.

Service rules, Procedures, Recruitment and Promotional Policies:

Within the framework of the AICTE, the State Government and the affiliating institution, the Institute has a set of well-established rules, policies and regulations that have been authorised by the Institute's Governing Council. The institute's rules and regulations were published and are updated on a regular basis. To raise awareness among staff and students the documents are published and made available in the institution library and other departments. The same information can be found on the college website(www.enggnagar.com). All staff members (both teaching and non-teaching) are given copies of the institute's Administrative Manual, which contains service regulations, procedures, recruitment and promotion policies.

File Description	Document
Upload any additional information	View Document
Link to Organogram of the Institution webpage	View Document

6.2.3 Implementation of e-governance in areas of operation

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

Response: A. All of the above

File Description	Document
Screen shots of user interfaces	View Document
ERP (Enterprise Resource Planning) Document	View Document
Details of implementation of e-governance in areas of operation, Administration etc	View Document
Any additional information	View Document

6.3 Faculty Empowerment Strategies

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

Response:

- According to the staff's provident fund legislature all eligible staff are enrolled. The institution contributes Rs. 1800/- per month per staff as an employer's contribution for EPF scheme and the same amount from salaries of individual staff. It is to note that out Rs. 1800/- from employer's share Rs. 550/- is deposited towards provident fund and Rs. 1250/- contributed to pension scheme. College also provides gratuity as per rules and regulations.
- Teaching faculty members are accounted for 15 days of casual leaves, also eligible faculty are entitled for 10 days of medical leaves per year. Non teaching staff's avails 12 days of casual leaves as well 10 days medical leave per year. Also teaching and technical non teaching staff are entitled for summer and winter vacation of 30 and 20 days per year respectively. Non vocational staff are benefited with 30 days earn leave against vacation. Also vocational staff are benefited with earn leave, if their services are required during vacation period in the ratio of 3:1. Maternity leave are sanctioned for female staff as and when required. Study leaves are granted for higher education. Also if any work is to be carried out during holiday the compensatory off is provided to that staff as and when required. (e.g. Admission work, anniversary celebration of legendary). Average 17 to 20 public holidays are given.
- Residential facilities for staff are made available within institute premises.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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

Response: 32.04

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	47	56	52	40

File Description	Document
Upload any additional information	View Document
Details of teachers provided with financial support to attend conference, workshops etc during the last five years	View Document

6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

Response: 12.6

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

2020-21	2019-20	2018-19	2017-18	2016-17
10	17	12	15	09

File Description	Document
Upload any additional information	View Document
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff	View Document

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

Response: 25.32

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

2020-21	2019-20	2018-19	2017-18	2016-17
35	54	19	19	10

File Description	Document
Upload any additional information	View Document
Details of teachers attending professional development programmes during the last five years	View Document

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

Response:

The institution / management evaluates teachers based on teaching, research and participation in development activities and due importance is given to all the activities. The institution evaluates non-teaching staff based on performance in technical support and administration related activities, co-curricular, professional, development related activities, academic contributions, general conduct and qualities. A structured “Self-Appraisal Form” is used by each faculty member for this purpose, wherein he/she gives the details of his/her performance and participation in all the activities assigned to him/her by the department /college. Performance appraisal system is evaluated in six categories namely teaching learning, co-curricular activities, research activities, academic performance- evaluated from the feedback from students, expert review feedback and management feedback.

The management evaluates the faculty members and staff by merit rating based on their performance during the period of evaluation. They are recognized and awarded for academic performances, research proposals, consultancy, patents and publications, results, project guidance’s, peer reviewed publications, funded research, patents developed, recognition by professional bodies and contribution towards achieving institutional goals. In case of non – teaching staff, increment is released based on their performance in the department, their urge to learn new technologies, interpersonal behavior and punctuality towards the work done in department and institute. The above methodology of merit rating has helped the institution to identify and reward meritorious employees and to positively motivate them.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Internal Audit: Internal audit is conducted by KSS Co. Office address A101, Ingale Arcade, Sarjapura, Ahmednagar. During internal audit examining of records, reports, operating practices and documentation is done. In Internal audit checking student fees and reconciliation is done on a regular basis. Check Banking Reconciliation Quarterly basis. Checking Exam, Cash book Cash verification, Creditors payment is also done. Internal audit helps to understand the exact financial situation of the Foundation.

External Audit: External audit conducted by Kadam Co. Office address : Vedant” 8/9, Viraj Estate Opp: Tarapur Bus Stand, Ahmednagar Audit Institute at the end of every financial year. Checking of the Vouchers and transaction on tally simultaneously. The procedures selected depend on the auditor's judgment who review the accounts of organizations to ensure the validity and legality of their financial records. Review of financial statements often provided by the Institute accounting team along with reviewing the financial books for quality. Validate Banking Reconciliation every month at the end of the financial year.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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

Response: 0

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	0	0	0	0

File Description	Document
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the last five years	View Document

6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Response:

The Institute has a transparent, well organized and distinct mechanism to monitor functioning of available resources. College seeks proposals from concerned departments in an academic year under different heads of account i.e. capital budget, maintenance budget, recurring, non-recurring and developmental budget. After assessing the projected income for an academic year, the college allocates a budget to each department and college with minute details. After the allocation, the departments can avail the financial resources within the sanctioned limit. Purchases will be made with the recommendations of duly constituted purchase committee. The amounts withdrawn from the banks will follow a systematic mechanism of obtaining the approval at various levels. If any expenditure is made beyond budget sanction, reallocation of budget is suggested to an approved member by Secretary of college development committee that is secretary general of Dr. Vithalrao Vikhe Patil Foundation. Institutions should explicitly mention financial powers delegated to the Principal, Heads of Departments and relevant in-charges.

Adequacy of budget allocation

Budget proposals with justification for each financial year are prepared generally in the month of February of the preceding financial year based on the requirements raised by the laboratory in- charges and faculty members of the department and discussion in the Department faculty meeting. The proposal is submitted to Principal. Principal calls for an interaction meeting with the HoD to seek clarifications if any. The proposal

is then approved and the budget is sanctioned.

Utilization of allocated funds

The allocated funds are utilized fully by the Department by procuring all the non-consumables and consumables. The gap between the sanctioned and utilized budget largely arises because the actual price of the non-consumables is not exactly known at the time of submitting the budget proposal and a higher amount is thus proposed.

File Description	Document
Upload any additional information	View Document

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

Response:

Response:

- The IQAC has made significant contributions for framing and implementation of the quality assurance strategies and processes.
- At the beginning of the year IQAC and staff council in their meeting chalk out an action plan for quality assurance in academic and administration activities.
- The various committees including IQAC provide the requisite mechanism for effective implementation and operationalization of quality assurance of academic and administrative activities.
- The college is quality conscious and strives hard to initiate, sustain and enhance the quality. The college has developed various mechanisms for quality assurance within the existing academic and administrative system. These are as follows:

1. Standard Operating Procedure
2. Academic Monitoring Committee
3. Feedback from Stakeholders
4. Suggestion Box

5. Committees

1. Standardized Processes:

The college has developed standardized processes for academic and administrative work. These processes are followed to ensure quality assurance. Standard Operating Procedures Policy Manual.

2) Academic Monitoring Committee:

The college has established Internal Quality Assurance Cell (IQAC) i.e. academic committee.

It is responsible for:

- Quality Initiatives
- Quality Sustenance
- Quality Enhancement

3) Feedback from Stakeholders

The college obtains feedback from the stakeholders. This feedback is used in quality enhancement. Various feedbacks taken by college are:

- a) Feedback from Students about Curriculum and Faculty
- b) Feedback from Alumni
- c) Feedback from Employers/ Industry
- d) Feedback from Parents

4) Suggestion Box

The suggestion box is maintained by the college. The students are free to give suggestions related to curriculum, teaching learning process, administration, library, placements etc. the suggestion box is checked by respective HOD . If any suitable suggestion is found, the HOD/ Principal takes a decision on the same for improving the quality of the system.

5) Various Committees:

The College has set up various committees for ensuring smooth functioning.

a) **Anti Ragging Committee:** The College follows zero tolerance policy towards ragging. So the College has established Anti – Ragging Committee as per the directive of the Government and the University. This

committee handles issues regarding the same.

b) **Hostel Committee:** The College has established Hostel Committee for the smooth functioning of the Hostels. This committee handles issues regarding the same and improves the quality of services.

c) **Internal Complaint Committee:** It handles grievances of the students and staff. The Cell also suggests the corrective actions. The decisions are implemented with permission of the management.

File Description	Document
Paste link for additional information	View Document

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities (For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives)

Response:

Response:

Teaching-learning processes, methodologies and learning outcomes are periodically reviewed by the IQAC. The effectiveness of the implementation of these initiatives is monitored periodically by conducting academic audits.

Various reforms and quality initiatives undertaken post first cycle of accreditation and during the last five years by IQAC are elaborated:

1. Enhancement in the usage of innovative pedagogy techniques

The IQAC and Academic committee encourage faculty to increase the usage of innovative pedagogy techniques. It is made mandatory for the faculty to include their strategy for adopting innovative pedagogy techniques in their teaching plans. The faculty has adopted innovative pedagogy techniques such as online quizzes, practical videos, hands-on practices, learning through fun games, etc. during the teaching-learning process and also in department associations' activities. The IQAC and ISO cell ensure effective usage of innovative pedagogy techniques during periodic academic audits.

2. Enhancement in the usage of ICT tools

The IQAC periodically takes the review of ICT tools usage by the faculty and also ensures the adequacy of ICT infrastructure for the teaching-learning process. During the last five years ICT enabled facilities are strengthened in the classrooms and seminar halls are equipped with ICT tools.

3. Implementation of Outcome Based Education (OBE), periodic review of learning outcomes/course

outcomes and their attainments

IQAC has contributed significantly to the implementation of OBE. IQAC monitors and undertakes periodic review of program outcomes, course outcomes and their attainments. The faculty revises intended course outcomes as per the revisions in the curriculum and also with respect to the broad context of technological changes in the respective subject domains.

4. Strengthening of the ERP system

IQAC has proactively played its role in continuously updating the features and modules in the institute ERP system. ERP system is used effectively for monitoring student performance in the internal examinations, student's attendance, syllabus coverage and student feedback on various curricular aspects. IQAC was instrumental in introducing MCQ exam module in the ERP system which is being used by the faculty to conduct MCQ based exams.

The Institute always believes in continual improvement and strive to get a quality assessment by various agencies. To testimony this, Institute programs are accredited one time by the National Board of Accreditation (NBA), New Delhi and have applied for the next cycle of accreditation in 2021.

With reference to the previous NAAC gradation report, there was a scope of improvements in the area of Research and Development, Governance and distinctiveness. Institute has taken the cognizance and the following are some of the measures taken:

- Institute has fulfilled AICTE norms for faculty by appointing faculties with PG qualification. To improve the number of PhD faculty, management supported and implemented the policy for study leaves and other facilities as suggested by IQAC.
- A separate R&D cell has been established to focus research activities by involving students and staff. It has set procedures and norms for publishing papers and research projects etc.
- A strong alumni network is established through the Alumni Committee where 6500 alumni are actively connected. Alumni are involved in guest lectures, sponsored projects, project guidance, placement guidance and alumni interactions etc.
- Placement improvements: A separate Training and Placement Officer (TPO) appointed and Placement Cell at par with corporate infrastructure is established. The TPO organizes internship, sponsored projects, various skill development programs and company-specific training for 360-degree development of students. This has enhanced the placement percentage and entrepreneurship over the period of the last five years.

File Description	Document
Upload any additional information	View Document

6.5.3 Quality assurance initiatives of the institution include:

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

Response: B. 3 of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Upload details of Quality assurance initiatives of the institution	View Document
Upload any additional information	View Document
Paste web link of Annual reports of Institution	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity during the last five years.

Response:

Our institute is committed to provide healthy, friendly, gender equality and social equality environment to the all students in the institute to achieve academic and overall excellence in the field of engineering. The Institute ensures that the prescribed curriculum has a thrust on promoting value based education, women empowerment, gender sensitization, socialization of men and women, etc. It caters to the needs of Society.

Following are the policies of the college with regard to gender sensitization:

Internal Complaint Committee (ICC) has been constituted for prevention and redressal of sexual harassment of women at workplace. It promotes awareness through Website, brochures, Board in college campus, to promote awareness of Gender sensitivity in college campus, to conduct programs concerning women's welfare and deal with the Cases of Gender Discrimination/Sexual Harassment Awareness programs like personality development programs for girl students, fearless girls campaign (NirbhaykanyaAbhiyan), importance of human rights, Rights of Women in Domestic problems to be organized periodically by Internal Complaint Committee.

Safety and security of students while in campus:

For welfare of Students the Institution has enrolled all the students under "Amratya Shiksha Yojana policy" and Students Insurance Policy by UGC, which covers students against accidental deaths and related disabilities if any.

CCTV cameras are strategically placed at various places in the campus to ensure the safety and well-being of both the students and the staff.

Security doors with strong iron frame surmounted on top of the wall encompassing the campus which cannot be scaled easily.

Security guards are deployed (including lady guard at kaveri Hostel) at the entrance to check and register unknown visitors with their Identity cards.

Anti-ragging Squad works vibrantly to ensure no unexpected incident takes place within the campus, especially safeguarding the first year students.

Fire extinguishers are affixed at important points within the campus to ensure safety during fire accidents.

Students are provided with Identity cards to ensure safe entry into various organizations and the details on the identity card like blood group, phone numbers and address help them in crisis.

Hostel warden for each hostel safeguard the inmates by having a close watch and security checks within the hostel periodically. The hostel in time and out time is strictly followed. (Out time 7.00 am, In time 7.00pm)

Purified drinking water is made available to all students.

Sanitary Napkin Vending Machines are available in Ladies Hostel.

Our campus hospital facility is available 24X7 on call in case any emergency arise.

Student's Counsellor Committee:

Institute has "Student's Counsellor Committee" for advising the students for their personal problems, guiding the students regarding their career decision and helping them to understand their potential and provides help to pursue their goals.

Common Room: Common room is provided for students to relax during the break hours. This room contains all the facilities for taking rest when the students are sick. These rooms also used to refresh during cultural events or other occasions.

Safety and security of the students while off the campus for study tour/industrial visits:

Faculty accompany the students when they are deputed to attend technical visits and off campus programmes like competitions, cultural activities etc.

Students are allowed to carry mobile phones and are instructed to remain in constant touch with their parents / guardians to facilitate casualty handling and communication in the event of an emergency.

File Description	Document
Link for specific facilities provided for women in terms of: a. Safety and security b. Counselling c. Common Rooms d. Day care center for young children e. Any other relevant information	View Document
Link for annual gender sensitization action plan	View Document

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

- 1.Solar energy
- 2.Biogas plant
- 3.Wheeling to the Grid
- 4.Sensor-based energy conservation
- 5.Use of LED bulbs/ power efficient equipment

Response: A. 4 or All of the above

File Description	Document
Geotagged Photographs	View Document
Any other relevant information	View Document
Any other relevant information	View Document

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

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

Response:

The location of the Institute inspires inhabitants to remain eco-friendly. Devoid of congested city environment, the staff and students enjoy the nature intimately on this campus. The institute has taken conscious efforts to enhance and nurture the eco-friendly environment and always strives for sustainable environment in the campus. A dedicated team of gardeners and sweepers take care of lawns, gardens and planting maintenance to maintain the green environment in the campus in a regular manner. All possibilities of enriching environment are constantly explored and implemented in planned way. The Institute has taken all initiatives in line to sensitize its student and staff through different activities e.g. seminar, webinar, NSS cell etc. Also the college took several initiatives to properly dispose waste and maintain eco-friendly environment in and around the campus.

Waste Management mechanisms followed by the Institute are as follows:

Solid waste management:

Institute practices the segregation of Solid Waste and its effective management in the campus. The solid waste generated in the campus includes plastics, food

wastes, cardboard materials, paper wastes, metals, wood etc. The collected waste is segregated at the source of the generation. The dry waste bins are placed in laboratories, library, classrooms, etc. The single side papers are re-used for writing and printing circulars in all departments. The waste which is fit to recycle is given to recycler. Metal and wooden waste is stored and given to authorized agent for further processing.

Liquid waste management:

Liquid waste mainly consists of waste water from laboratories, wash rooms and mess. This waste water is transported through sewerage system of underground pipes. The liquid waste is treated before discharging to natural stream.

Biomedical waste management:

The institute is not involved in any clinical experiments directly, hence no biomedical waste is generated.

Hazardous chemicals and radioactive waste management:

Hazardous Chemicals are kept separately in the store room away from the reach of students. Lab Incharge takes care of the chemicals and the safety norms in the laboratory are strictly followed. Keeping in view of safety of students as well as protection of environment, the concentrations of solutions is kept very low such that the drained liquid waste does not require any prior treatment before it is disposed. In view of the extremely dilute form of acids and other solutions used by the students in the laboratory, the waste water is drained out directly.

E-waste management:

The minimization of e-waste is given high priority. The e-waste obtained in the institute comprises of batteries, UPS, discarded input devices like mouse, key boards, wires and cables. The e-waste is re-used in case of repairable and brought to make use of them again. They are dumped only when they are broken completely which is very less in our campus. The cartridges of laser printers are reused through refilling by the vendors from outside the college campus. UPS Batteries are recharged and repaired by the suppliers. Institute now have taken a policy for using LCD monitors for all new procurements which will help in reducing e-waste.

File Description	Document
Any other relevant information	View Document
Link for Relevant documents like agreements/MoUs with Government and other approved agencies	View Document
Link for Geotagged photographs of the facilities	View Document

7.1.4 Water conservation facilities available in the Institution:

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

Response: A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	View Document
Any other relevant information	View Document
Link for any other relevant information	View Document

7.1.5 Green campus initiatives include:

- 1.Restricted entry of automobiles
- 2.Use of Bicycles/ Battery powered vehicles
- 3.Pedestrian Friendly pathways
- 4.Ban on use of Plastic
- 5.landscaping with trees and plants

Response: A. Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Geotagged photos / videos of the facilities	View Document
Any other relevant documents	View Document
Link for any other relevant information	View Document

7.1.6 Quality audits on environment and energy are regularly undertaken by the Institution and any awards received for such green campus initiatives:

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

Response: A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document
Certification by the auditing agency	View Document
Any other relevant information	View Document
Link for any other relevant information	View Document

7.1.7 The Institution has disabled-friendly, barrier free environment

- 1.Built environment with ramps/lifts for easy access to classrooms.
- 2.Divyangjan friendly washrooms
- 3.Signage including tactile path, lights, display boards and signposts
- 4.Assistive technology and facilities for 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

Response: A. Any 4 or all of the above

File Description	Document
Policy documents and information brochures on the support to be provided	View Document
Geotagged photographs / videos of the facilities	View Document
Any other relevant information	View Document
Link for any other relevant information	View Document

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

Response:

Dr. Vithalrao Vikhe Patil College of Engineering (DVVPCOE) is famous for its alertness towards academic excellence, also for its various policies of responsiveness towards societal consciousness, and harmonious relationship with its culture and sensitivities.

Culturally, our students are from different parts of India. We celebrate each other's' festivals, music, and art. We wish each other on our respective religious and social occasions. DVVPCOE celebrates traditional occasions and birth anniversaries of Dr.Vithalrao Vikhe Patil (Founder of First Sugarcane Industry in Asia), and Honble Balasaheb Vikhe Patil in the campus through cultural programs, speeches, and talk sessions. For mental and physical wellbeing, DVVPCOE also conducts regular Yoga Camps and Workshops in campus.

National Yoga Day is also celebrated with enthusiastic participation from all the students. Holidays and vacations are formulated keeping in mind regional occasions. Drama which lightens the burning issue of suicides of farmers was-practiced by participation of students to aware the students and society about real time situation of farmers their day to day life and how they get attracted towards suicides.

- As a part of Beti Bachao – Beti Padhao Abhiyan Oath to save the girls is given to students so that they can aware about significance of girls in society.
- The NSS Cell of the college, operational since 2007, has undertaken many socially responsible drive in the areas of charity initiatives towards the underprivileged in society.
- Socio-Economic divides are undoubtedly existent. Not everyone belongs to the same social or economic strata. However, while at work, these divides blur as we become DVVPCOE'ians joined together for a common cause on a common platform. Our goals homogenize us. Our economics are directly proportional to the organizations.
- The other inclusivity credentials that college is conscious sensitization to different / differently-abled persons. Differently-abled students, staff or teachers are supported with ramps and equipped toilets, even special assisting staff members designated. Group Discussions on Awareness of Rights and Empowerment are made normal, accepted topics of discourse in the Soft Skills Sessions for every student. This is done to remove at the very outset of hostel life, misgivings and apprehensions among students, and encouraging sensitization and inclusivity of approach towards campus life.

File Description	Document
Link for supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document
Link for any other relevant information	View Document

7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).

Response:

Dr. Vithalrao Vikhe Patil College of Engineering (DVVP COE) is completely aware of its noble role as shapers and influencers in the creation of next generation of India. It is framed and put up in the pride of place to ensure the expression of the value DVVPCOE Collective puts on it. The end goal of all education is to create the country's future citizens. DVVP COE is well aware of its constitutional roles and responsibilities. There is no law greater than that enshrined in our constitution. We are committed to the philosophy espoused by the Indian Constitution, in word and spirit. All special occasions are commenced with inaugural speeches that mention and laud our forefathers' vision document. On Constitution Day, DVVP COE Collective renews its pledge to the Constitution by repeating aloud, word for word, the Preamble. Students are reminded and tasked to exhibit assignments/projects enshrining constitutional values as part of their Values and Ethics classes embedded in their curricula. DVVP COE is a responsible organization that vows its allegiance to the most important religion in a democracy – the Constitution. Some specific instances where DVVP COE has proactively promoted awareness of one's constitutional roles and responsibilities may be enumerated as follows:

- On the Republic Day and Independence Day, students and faculty activity participate in flag hoisting ceremony.
- As part of the curriculum of ME (Mechanical Engineering-Design Engineering) as well as a non-credit offering, teachers at DVVP COE engage students in The Constitution of India/Essence of Indian Knowledge & Traditions. In keeping with the values and ethics of Community Service, DVVP COE routinely conducts Swachh Bharat and Swasth Bharat Abhiyaans.
- In association with NGOs, Public awareness program on the occasion of World Donation Day are conducted where Organ Donation Pledge Workshops are organized in every year under National Service Scheme (NSS) to acquaint the students of DVVP COE with the pressing need for more individuals to become Organ Donors. As an Engineering College, DVVP COE celebrates every year Engineers' Day with debates, projects, and models on sustainable development and eco-friendly models of economic growth.
- World Environment Day is celebrated by all at DVVP COE with great enthusiasm by planting trees to keep the campus green.
- Blood Donation Camp is also organized on various occasions in the campus of DVVP COE Voter's Awareness Program was conducted so that students can aware about To Cast the Vote as their social responsibility.

File Description	Document
Link for details of activities that inculcate values necessary to render students in to responsible citizens	View Document
Link for any other relevant information	View Document

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

1. The Code of Conduct is displayed on the website
2. There is a committee to monitor adherence to the Code of Conduct
3. Institution organizes professional ethics programmes for students, teachers, administrators

and other staff

4. Annual awareness programmes on Code of Conduct are organized

Response: A. All of the above

File Description	Document
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 Document
Code of ethics policy document	View Document
Any other relevant information	View Document

7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

Response:

Our institution celebrates and organizes national and international commemorative days, events and festivals with enthusiasm so as to inculcate in students an attitude of communal harmony, patriotism and ignite the young minds with thoughts of great personality.

Commemorative Days:

1. **National Youth Day** is celebrated every year on 12th January to mark the birth anniversary of Swami Vivekananda. We arrange a seminar of eminent personality to enlighten the students and staff with the thoughts of Swami Vivekananda.

2. **Republic Day** is celebrated on 26th January in our institution every year to honor the date on which the constituent of India came into effect.

3. **Independence Day** is celebrated on **15th** Aughast in our institution every year.

4. **World environment day** is celebrated every year on 5th June in our institution for encouraging awareness and action for the protection of our environment. Tree plantation drive is carried out in the campus by the students and faculty on this date.

5. **World Yoga Day** is celebrated on 21st June in our institute to encourage people about the physical, mental and spiritual benefits that can be derived by practicing yoga.

Events:

1. **Teachers day** is celebrated in our institution every year on 5th september to commemorate the birth anniversary of the country's former President, scholar, philosopher and Bharat Ratna awardee, Dr. Sarvepalli Radhakrishnan.

2. **Engineer's Day** is celebrated at our institution every year on 15th september. Lecturers from eminent personalities are organized to create awareness among students and staff about past accomplishments of engineers and to glorify the future trends in engineering.

3. Our Institute celebrates **National Service Scheme day** every year on 24th september which helps the student's development & appreciation to other person's point of view and also show consideration towards other living beings.

Festival:

1. **Ganesh Festival:** Every year, our institute celebrates Ganesh Chaturthi in the campus. For five days, the students and faculty members celebrated the festival with gaiety and grandeur.

2. **Chhatrapati Shivaji Maharaj Jayanti** is celebrated on 19th February every year to honour the great Emperor & one of the bravest, progressive and sensible monarchs of India. Through this event students apprehend the importance of qualities like Tactical management, Acute management, Administrative skills, leadership, confidence and courage for personality improvement.

3. **Dr. Vithalrao Vikhe Patil Jayanti** : On the day of Narali Pournima Institute celebrate Late Padmashree Dr. Vithalrao Vike Patil Jayanti is celebrated every year.
4. **Annual Social Gathering** : RYTHM- Youth cultural festival is celebrated every year at grand level all students from institute participate in this festival. Such a celebration enhances the involvement of students in organizing the events which improves their Team work, event handling ability and confidence. Singing ,dancing ,fashion show, drama, traditional day, sports, Rangoli competition, art exhibition are the parts of RYTHM festival.
5. **Farewell** : Send off function for final year students is organized by student association of respective departments.
6. **Convocation** : Degree distribution ceremony is celebrated every year in the institute.
7. The students are also motivated to participate in various intercollegiate and university level competitions.
8. Many other events conducted under NSS like Street Plays focusing on Social Causes (Blood donation camp, awareness of Cancer , Swach Bharat Abhiyaan, Women's Day,)

File Description	Document
Link for Geotagged photographs of some of the events	View Document
Link for any other relevant information	View Document
Link for Annual report of the celebrations and commemorative events for the last five years	View Document

7.2 Best Practices

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

Response:

Academic Monitoring System

Goal : Improve the quality education with the help of regular, in time teaching and learning process in depth. The goal is achieved with the help of following parameters Teaching aids Individual attention for the students by the respective teachers

Depth of teaching and understanding for the student with the help of technical discussion with the help of reference books and magazines related with syllabus framed by the university

Case studies for the technology, if possible continuous visits to industries and sites to open the subjects and creates the interest in the subject as the students are weak in the academics and they cannot imagine theoretical concepts, presented the books by the respective author.

The context: The problems of understanding and clarity in the subject were raised by the students. In this context, committee analyzed the problems of students because the faculty was quite senior and expert in the subject.

In this situation, we advised the faculty members to open the subject with the models, kits, equipments and visualized the things from the real ground, in order to improve conceptual thinking of the students.

The practices:

- Surprise visit in the classes (theory and practical)
- Conducting the meetings with students of all department and discussing their difficulties, For improvement and necessary action we are advising to

head of the department and reporting to head of the institute for necessary action.

- Conducting the meeting of all departments in order to motivate and realize the responsibilities of the teacher from the academic point of view.

Evidence and Success:

- Attendance of the subject is improved
- Discipline is improved

Problems Encountered:

- We raised questions in the class in connection with understanding of subjects as well as methodology used in teaching, depth of technical knowledge and exercise in connection with University examinations but, however, students are not responded as per our expectations.
- Though the attendance of student is improved but certainly it below the average level in all classes of all the departments.
- Few faculties taught the subject in Marathi language.
- Shortage of reference books.

Resources Required:

- Every class room must have overhead projectors and LCD projectors.
- Teaching aids should be improved.
- More emphasis should be on communication skill.
- Summer school and winter school programs should be concentrated in our institute so that interaction between our faculties as well as other University faculties will be enhanced in order to improve technical and logical knowledge.

Notes (Optional):

The best practice emphasized a creation of a system/ mechanism for the improvement of quality education. This system did not have momentary response. For the same, faculties should be trained for improvement.

Tutor-Ward System: Mentoring System

Goal: To improve the students' attendance and to improve academic performance.

The context: To improve the conceptual thinking and basic fundamentals of the subject along with crystal clarity, this system has been adopted. It also aims to develop analytical minds related to engineering subjects of all departments. To achieve above goals, institute arranges the meetings with students frequently and solves personal as well as college level problems.

The practices:

- All mentors have maintained the file containing the detailed information as well as all records of concern student. Same record is communicated to parents timely.
- In this regards, parents are also involved to know the progress of their wards.
- We are giving justice to all the students through mentor system to improve their academics performances.

Evidence and Success:

- Attendance improvement.
- Result improvement.

Problems Encountered:

- Initially, only 10-15% personal problems were shared by the students.
- Initially, we have observed that many students have not given proper contact numbers of their parents.
- Some of the parents have not responded properly and they have not supported to mentor system.

Resources Required: Parents telephone number entered in the data base are inefficient

Notes (Optional): The best practice emphasized a creation of a system/ mechanism for the mentoring system. This system did not have momentary response. For the same, need extra efforts for improvement.

File Description	Document
Link for Best practices in the Institutional web site	View Document
Link for any other relevant information	View Document

7.3 Institutional Distinctiveness

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

Response:

Institutional Distinctiveness: Inclination towards Research Activities Involvement of Engineering students in technical research is imperative for the future of technology. Several factors influence engineering student's inclination towards research: the college experience, exposure to research article reading and writing, and knowledge of research. This study follows up engineering students at time of graduation to explore changes in their inclination towards research and pursuing a research career compared to their inclination at time of entry into engineering. Due to this reason we have decided to shape and incline our students approach towards research activity. From academic year 2018-19 2019-20 we have planned "Inclination towards Research Activity" as our distinctiveness of our college. For academic year 2018-19 and 2019-20 each faculty member has been allotted with two group 6 students of BE. It was expected that the concern faculty member should actively encourage and guide the students for Research Work. Also in each academic year as mentioned above his students should at least publish one research article in UGC approved Journal and two presentations in workshops / conferences / seminars. As result of this distinctiveness there was remarkable improvement in the research aptitude of our teachers and UG/PG students. Inclinations towards research activities have been greatly benefiting the college. The staff members and students are working on the novel research projects and various innovative ideas. Institute has made available most of the required instruments to carryout various research projects. It has designed a well equipped sophisticated instrument laboratory, machine room with various instruments used for formulation and development.

File Description	Document
Link for appropriate web in the Institutional website	View Document
Link for any other relevant information	View Document

5. CONCLUSION

Additional Information :

Institution has adopted innovative and creative teaching learning practices which encourage teachers and students to explore, research and use all the tools to uncover new activities like Hands on practice, MCQ's practices to understand and analyze the concepts.

Unique features of the College:

- The institute has collaborated with Indian Army (Armoured Corps Centre and School, Ahmednagar) for Impart of Tank technology course for their young officers. The Course has been designed, developed and is being delivered by our faculties selected and approved by authorities of Indian Army.
- The Institute has established Centre of Excellence in collaboration with Apple Inc. USA for impart of three certificate courses for delivery of Swift coding language. The initiative is to see the young Engineers are groomed to face the ever competitive software industry.
- The students are encouraged to take up minor industrial projects with the help of increasing Memorandum of Understanding with various industries. The students are also motivated to take part in national level competitions.
- Institute is nodal center for conduct of TCS National Qualifier Test and encourages students for getting placed into Indian Defense Services .
- Second International Conference on Advances in Material Science (ICAMS) 2021 is organized by Dr. Vithalrao Vikhe Patil College of Engineering, Ahmednagar, India in association with, Technology Research and Innovation Centre, India IEEE Nanotechnology Council Chapter, South Africa and College of Engineering, Covenant University, Ota on 16-17 December, 2021
- Department of Mechanical Engineering has organized Mega ATV Championship 2017, between March 13- 16 ,2017 in association with Auto Sports India.
- The Foundation (Parent Trust) has centralized best in class sports facilities like Olympic size swimming pool, indoor badminton court, lawn tennis turfs and multi gym facilities for boys and girls.

Concluding Remarks :

Institute has been striving hard for past 38 years with a proactive approach in order to fulfill its mission of creating self-disciplined, physically fit, mentally robust and morally strong engineers and technocrats who can serve the mankind and nature.

With diligent effort of positive and participative Management, the academic growth is sustained and harmonious relationship is maintained among the faculty, students and management which remains as a key to success.

The vision of the founder to propagate professional education amongst the rural and needy, and ultimately boosting the socio economic progress of the rural environment The Institute is continuously concentrating on excellence in technical education.

The systematic and well planned efforts of the Institute in this regard are reflected in activities conducted throughout these years that resulted in owning lot of recognitions and credentials.

The governance comprises of boards of trustees, chief executive officer, CDC, DAB, IQAC, Academic Monitoring Committee and various institute level committees. This plays a considerable role in the evolutionary reforms towards positioning the Institute in the preferred list of all stake holders.

The academic infrastructure is equipped with best facilities to enhance the quality of teaching and learning process.

Adequate budgetary provisions are made to maintain and augment the existing Infrastructure. Institute has well established organizational structure to execute smooth functioning of administrative and academic processes.

The institute hosts Alumni meet frequently. Alumni extends support to students in placement, MoUs , Industrial visits and expert talks to help them better their career.

The IQAC monitors academic and administrative aspects. The institute caters its Best practice in order to enables different types of learners to adopt them for overall academic and co curricular development of the students. With all credentials and experience demonstrated over these years in technical education so far and in line with new education policy, institute is setting 'Excellence Centres' in association with industries, reckoning in NIRF and planning to go for Academic Autonomy in near future.