

FOR 1st CYCLE OF ACCREDITATION

COLLEGE OF ENGINEERING PUNE

COLLEGE OF ENGINEERING PUNE, WELLESLY ROAD, SHIVAJI NAGAR
PUNE-411005
411005
www.coep.org.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

June 2022

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

College of Engineering, Pune (COEP), established in the **year 1854**, is the second oldest, leading engineering institute of the country.

The very fact that **Bharat Ratna Sir M. Visvesvarayya**, was the alumnus of the COEP, in whose honor "Engineers Day" is celebrated in the country, demonstrates the legacy and importance of College of Engineering Pune.

This legacy is continued by several living legends like Prof Thomas Kailath, Dr. Vijay Kelkar, Prof. S. G. Dhande, LeenaPoonawala, who are illustrious alumni of the institution, honored by "Padma" award. The institution started PG programs and PhD programs in the early 50's when IITs were yet to establish. First Department of Electronics and Telecommunication in the country was established at COEP. It eventually produced first Ph.D in Telecommunications for the country. Academic experiments such as "PG by research", "Sandwich UG programs", "Education in two shifts", "Dual Degree", were successfully practiced at the College of Engineering Pune during 1950-1970. It has experienced a renaissance, the opportunity was given by the Government of Maharashtra to function as a fully autonomous institution from 2003-04. The dramatic transformation COEP has undergone from a state college to a national-level, vibrant, IIT-like institution under the leadership of late Dr. F. C. Kohli, in the last 10-12 years.

Today, it is ranked the **first** affiliated college in the country as per the **N.I.R.F** survey undertaken by MHRD. It is also **first** in the country in terms of the accreditation of the programs by the NBA. The "Swayam" (A pico satellite prepared by the students) is launched by the ISRO in June22nd, 2016. College of Engineering Pune is a cited example by MHRD and World Bank for the TEQIP project and benchmarked for other participating institutions to emulate. COEP's **Governance Model** is recognized by the world bank to be the best in the country. The industry association of the institute is the best in the country, apparent from the fact that it has bagged **CII-AICTE** industry-institute interaction awards **five times** in the last 6 years. **The** institute is **now poised** to take the challenge of functioning as a vibrant **multi-faculty university**

Vision

To be a Value-based Globally Recognized Institution ensuring academic excellence and fostering Research, Innovation and Entrepreneurial Attitude.

Mission

Mission

- To be a student-centric institute imbibing experiential, innovative and lifelong learning skills, addressing societal problems.
- To promote and undertake all-inclusive research and development.
- To inculcate entrepreneurial attitude and values amongst Learners.

- To strengthen National and International, Industrial and institutional collaborations for symbiotic relations.
- To mentor aspiring Institutions to unleash their potential, towards nation building.

Goals: COEP @ 2023

- 1. To be a globally recognized Engineering institution in the top 500 brackets.
- 2. To attain 25 % growth in terms of intake capacity with a UG: PG ratio of 50:50 and 200 % Growth in research leading to PhD's
- 3. To accomplish 200 % growth in research outcomes in terms of Quality Publications in Tier-I journals & conferences, Patents, Sponsored R&D Projects, Technology Products, Books & Monograms etc.
- 4. To establish 5 collaborative Finishing Schools to impart high-end technical skills for enhancing employability and 2 industry-partnered Incubation Centers for encouraging entrepreneurship.
- 5. To have a 25 % of the Student Population opting to be either the First Generation Entrepreneurs and/or pursuing higher studies at Institutes of repute.
- 6. To be a Multi-faculty Campus, establishing 5 multidisciplinary research centres in diversified areas, and 5 interdisciplinary academic programs.
- 7. To be a 100 % self-sustainable campus, wherein accommodation is provided for All students and at least 30% of faculty.
- 8. To attract foreign faculty from reputed Universities/Industries to the tune of 5 % of total faculty strength.
- 9. To design and develop Digital Ecosystem, to collaborate, communicate and connect with stakeholders.
- 10. To mentor 10 aspiring institutes with the potential to transform, towards elite status.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

Strengths:

- 1. Student Intake Quality
- 2. Strong Alumni base
- 3. Location and Infrastructure
- 4. Industry Interaction
- 5. Brand name (History, Heritage)
- 6. Elite, Competent BOG
- 7. Placement

Institutional Weakness

Weaknesses:

- 1. State Policies (recruitment, funding)
- 2. Non-residential campus
- 3. Inadequate space
- 4. Faculty non- cohesive
- 5. PG Education/ Research
- 6. Staff Training

Institutional Opportunity

Opportunities:

- 1. Startups, Industry collaboration
- 2. Defense/PSU Projects
- 3. Role model (benchmarking)
- 4. Consultancy
- 5. Training and Skill Development
- 6. Digital India (Nation centric)
- 7. MOOCs (Hope)

Institutional Challenge

- 1. International/Centrally funded Institutes
- 2. MOOCs (Hype)
- 3. Interventions by State
- 4. Encroachment on space

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

1. The College is offering variety of UG, PG and PhD programs, both in conventional and contemporary branches of Engineering and Science. The college has NINE UG (B.Tech. programs) and TWENTY SIX PG (M. Tech. programs). and ONE MBA (Management) Program. TWO NEW PG programs have been instituted from Academic year 2020-21 and ONE NEW PG Program in 2021-22. All the Departments have PhD programs in the relevant domain verticals. Considering the technological advancements, the curriculum for the undergraduate programs of engineering is shaped in the form of Humanities, Basic and Engineering Sciences, and Skill development courses. The curriculum also includes, Mini projects, laboratory and project work, technical report writing, and training in latest software's and technologies which is offered under technical skills. In professional core courses, students learn critical concepts, while in professional optional courses, they learn more complex topics. Students must take at least one online certification course from SWAYAM, NPTEL, or MOOCs that is at least eight weeks long in order to encourage self-learning. The students are also encouraged to join extracurricular clubs that will help them develop their innate creative abilities, participate in technical symposiums, pursue internships, and engage in technical and non-technical clubs. Post Autonomy, 2003 onward till date, it has consistently innovated on its Curriculum and examination pattern design, with many novel experiments, which endorsed its leadership beyond the legacy. New skill based courses that give students better placement opportunities have also been introduced. Choice based credit system has been implemented in all the programs. The success of curriculum design and development towards employability can be gauged through increase in placements and gradual improvement in the average pay-package, and also by admissions into higher educational institutions both in India and abroad. Through subjects like Human Values and Professional Ethics, Skills Development Courses - Soft Skills, Communication Skills, and Technical Skills, Economics and Finance, and co-curricular activities that train students in all aspects, striving for technological and human excellence, the curriculum imparts transferrable and life skills. Postgraduate engineering programs are designed with advanced core and elective courses along with emphasis on laboratory and research work.

Teaching-learning and Evaluation

The quality of students seeking admission has been improving year on year which is evident by the ranks of the students joining. As they are from diverse backgrounds the institution is providing academic and other support. Remedial classes are conducted for slow learners. Bridge courses are organized for the lateral entry students. The COEP is offering programmes with flexible learning options, such as self-learning modules using modern educational technology. The advanced learners are encouraged to participate in Hackathons/Design contests etc. The institute follows a Mentoring system in which around twenty students are assigned to each faculty and he/she functions as their local guardian.

The institute has a policy of recruiting well qualified and experienced faculty as per AICTE norms and this has contributed to improving the Teaching-Learning process. The institute maintains the requisite teacher-student

ratio. The courses are assigned to the faculty based on their competencies and specializations. Teachers prepare an elaborate course plan, lesson plan and handouts as part of the academic schedule. Innovative processes in Teaching and Learning like ICT tools and modern pedagogical techniques are adopted by the faculty. To bridge the gap between the curriculum and the industry requirements a co-teaching concept was implemented. An expert's faculty from foreign Universities and organizations are invited to guide the students on various opportunities of higher studies and Jobs in foreign countries. Seminars are organized for guiding students aspiring to make careers in civil services. To further strengthen students' domain knowledge guest lectures, workshops, conferences etc. are organized. As an autonomous institute, the examinations and evaluation system follow systematic rules and regulations which are revised from time to time making the system more efficient. The CO and PO mapping is formulated for each course based on OBE approach. Course objectives and outcomes, are prepared for each course following the appropriate levels of Blooms taxonomy. Systematic procedures have also been devised for assessing the attainment of PEOs,POs,PSOs and COs. The appropriate corrective measures are implemented based on the attainment levels perceived every year.

Research, Innovations and Extension

The Institute has a vibrant research environment with linkages to Government, Non Government Institutes, Industry and Consultancy agencies. The Institute has an approved R&D policy document to provide important information to the faculty and staff about R&D objectives, schemes, available resources and financial benefits. The Institute has Dean R&D, who is coordinating the Industry Institute Interaction for promoting the research and consultancy. The faculty gets to share the generated revenue according to defined revenue sharing policy. Original Research work is ensured through a well-publicized plagiarism policy document. The Institute was organized and conducted 568 Continuing Education Programmes (CEP) worth Rs.127 lakhs revenue generated by COEP during the past eight years. The Institute was executed more than 5000 consultancy projects of worth 577 Cr was received to COEP. Institute has 94 functional Memoranda of Understanding (MoU), with various research institutes and industries. More than 55 research projects of Government and non government institutes of worth more than 1192 lakhs are offered to COEP. 407 Crs Sponsored Research Projects Funded by ALUMNI/TEQIP/Industry from last five years of to COEP. The Institute encourages the faculty to undertake research by providing seed money, access to laboratories and research facilities. The Institute provides paid academic leave, for pursuing doctoral work, permission and financial support to attend conferences for paper presentation and Faculty Development Programs (FDP). Faculty members obtained Ph.D. during the last five years. COEP faculty has published 1500 papers in UGC-recognized and scopus journals and 259 in other journals besides 264 papers presented in national and international conferences. COEP faculty have filed 6 patents in the years 2020-21. The activities organized by BHAU Institute of Innovation, Entrepreneurship and Leadership (BIEL) and Innovation centre and E-Cell helps the students to develop their entrepreneurial & leadership skills & come up with new business ideas. The Institute budget for R&D projects is 400 lakhs, Institute budget for funding startups at the institute 50 lakhs and Institute Budget for Entrepreneurship activities/ E cell is 5 lakhs. Apart from the above funding, Eaton supports I2I projects with a funding of about Rs. 10 lakhs every year

Infrastructure and Learning Resources

The institute has 53 ICT-enabled classrooms, well-equipped laboratories, sports facilities and good infrastructure spread over 75 acres with lush lawns, beautiful landscape, aesthetic architecture and an eco-friendly environment. The classrooms are well-furnished, spacious with good ventilation and well illuminated. They are maintained as per norms for proper visibility and audibility. The college has two main auditorium

halls, each department has a seminar hall and a conference hall. The main auditorium hall has 1000 capacity. The mini auditorium has 350 capacities, and these are equipped with ICT facilities. Digital boards have been installed at selected locations. The college has an exclusive lecture capturing system established under the support of TEQIP. COEP procured the CISCO-Webex licenses for each faculty to use for teaching remotely in conjunction with the MOODLE platform (free open source LMS) and the faculty continued teaching online mode as per the timetable slotted by the respective Department. About 231 Faculty undertook various courses like "Digital Teaching Techniques" offered by ICT Academy, "Online Teaching-Learning Pedagogies" offered by FICCI, Streamlining Engineering Curriculum for NEP 2020 and Management of Teaching Learning in Online Education" offered by IIT Kharagpur. The college has established a high-speed campus-wide network connecting all departments with 1359 systems. Full access is provided to all staff to access online sources of services and information through three leased lines each of 100 MBps from BSNL and CCTVs installed at strategic places help to monitor the campus activities. The Institution has a power management department to ensure uninterrupted power supply and maintenance of electrical assets. The Institution has a powerhouse installed with three Diesel Generators of ratings 625 kVA, 500 kVA & 125 kVA and solar power with an installed capacity of 200 kW. The maintenance of equipment like Diesel Generator Sets, Power Distribution Systems, Elevators, Air-conditioners, Fire-Fighting Equipment, Drinking water, Water-coolers Solar Panels etc. is undertaken by authorized vendors under an annual maintenance contract(AMC). The Institution provides Cafeteria, Banking/ATM, Books & Stationery and Transport facilities. The institution has a central library. The E-Journals can be accessed through LAN (campus-wide network) and also remote access

Student Support and Progression

The key aspects below describe the steps taken by the institution to provide necessary assistance to the students in terms of academics such as providing meaningful experiences for learning at the campus and facilitating holistic development and progression. It also aims at student performance and alumni engagement and the progression of students for higher education and/or achieving employment. The economically and socially challenged students are provided with financial assistance by State and Central Government Agencies based on certain economic criteria. Choice-based Credit System with Relative Grading and Transparent Evaluation, with Honors and Minor Certifications Schemes (with additional credits) introduced for aspiring Learners. Regular and Major Revision in Curriculum at Structure level after every FOUR years, with Technology Road Map guided by the Department-wise Industry Advisory Board(IAB). Inclusion of MOOCs, Liberal Learning courses, Industry Internships, Mini-project in the curriculum with due credits. Mathematics courses essentially in ALL EIGHT Semesters in UG Programs, Mandatory Program Specifics Mathematics course at ALL PG Programs. Mandatory Courses on 'Innovation' and 'Entrepreneurship' in 2nd year and 3rd year respectively. Strong Focus on Science Fundamentals with courses on Humanities and Management, A special course on Applied Biology-"Science of Living Systems" compulsory for All Undergrads. Inclusion of Skill-based courses at the Undergraduate level, one in each semester. Co-teaching with Industry personnel/IIT faculty for at least a single course in a Semester, in every department. Students Exchange Program effectively implemented for Autonomous Colleges in the State with Credit Transfer Scheme deployed for a Semester. For a student's entire development, the capability enhancement and development programmes include skill development courses, communication skills, soft skills, technical skills, and extracurricular activities are also included in the system. Workshops, seminars, conferences, and training sessions either inside or outside are all encouraged for students to attend. The bridge courses are offered to lateral entry students to fill in the curriculum gaps between their diploma and degree courses. The institute uses a mentorship system in which each faculty member is paired with about twenty students or one batch. The Alumni Association contributes significantly to the development of the institution through financial and non-financial initiatives.

Governance, Leadership and Management

The Board of Governors and Director actively participate in BOG meetings for ensuring that the policy 1. statements and action plans are aligned for attaining the Goals of the institute, disseminating the vision and mission to all stakeholders and involving them in forming the policy statements. All the stakeholders have formulated action plans in consultation with faculty members and all other staff; to review the outcomes from the implementation of action plans through meetings with functional committees and make necessary changes in action plans if required. The BOG regularly takes reviews quality policies and makes amendments in quality policies if required. The action plans are formulated in line with Mission and Vision statements under the leadership of the Director and the same are incorporated into strategic plans for effective implementation. The Director ensure that all stakeholders are involved in different activities. For Reinforcing the culture of Excellence; the vision, mission, short-term and long-term goals, and quality policies are kept wide open to all stakeholders for their suggestions, and necessary training is provided to its faculty and supporting staff for their development through motivation and team building activities thereby creating healthy work culture. Through participative management, all stakeholders are involved in various decision-making bodies of the institute as a whole. The financial requirements are proposed by various statutory committees and the BoG with Director approves it. The staff and other stakeholders help in infusing a positive attitude that leads to increased efficiency, improved communication, heightened morale, motivation and job satisfaction. The BoG also discusses matters related to teaching and administrative staff and decisions are taken at these levels are implemented; Believing in democratic values, the institution has decentralized many day-to-day works involving Faculties and students for participative management. The fruition of this was channelized into the Institute getting good RANKS in Various Surveys and improved NIRF Rankings. Committees with different roles for effective implementation of the various academic and non-academic matters. An IQAC cell looks after the quality aspects of the institute. The IQAC regularly reviews the teaching-learning process evaluation and assessment, structure etc.

Institutional Values and Best Practices

The institution follows all the rules as per the statutory requirements with respect to academics, finance and administration and maintains complete transparency in all its activities. Well documented processes for Procurement, Faculty and Staff recruitment, Consultancy and R & D, Finance and Accounts, Faculty Development/Empowerment Schemes, Gymkhana, Students Development, Staff Welfare etc. Deans and Heads positions by Rotation of THREE years amongst Senior Professors. Delegation of Financial and Administrative powers down the Hierarchy from amongst Deputy Director, Deans, Heads, Administrative Officer, Registrar, Controller of Examination, various Central Port-folios etc., as per role and responsibility. Minutes of Meetings of Board of Governors, Academic Senate, Building & Works Committee etc. available in Public domain on Institute's website www.coep.org.in. Appealing Corporate and Industry to amalgamate in COEP's Development through their CSR, creating state-of-art facility/Labs in ALL Departments. 'I.I.I.' for COEP means 'Industry-Institute-Integration'. Mentoring upcoming Autonomous Institutes in the vicinity, which have the potential and desire to transform. -"Handholding the aspiring Institutes and sharing Best & Next Practices of COEP which is a part of Institute Social Responsibility (ISR) for COEP." All the BoG members contribute at least 100 hours a year towards Institute's development without Conflict of Interest, in various subcommittees of the Board. The students participate in Swachh Bharat activities, conduct blood donation camps, and professional club activities. The students are trained by offering courses on Human Values and Professional Ethics. While the Administrative Manual defines the roles and responsibilities of the various administrative positions, the Code of conduct for students is published on the website

Page 8/137 28-10-2022 02:50:41

1.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	COLLEGE OF ENGINEERING PUNE
Address	College of Engineering Pune, Wellesly Road, Shivaji Nagar Pune-411005
City	PUNE
State	Maharashtra
Pin	411005
Website	www.coep.org.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Director	Bharatkumar B Ahuja	020-25507001	9423582028	020-2550729 9	director@coep.ac.i
IQAC / CIQA coordinator	S. N. Sapali	020-25507924	9423582575	020-0202557 299	sns.mech@coep.ac

Status of the Institution	
Institution Status	Government

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, Prior to the Grant of	01-01-1854
'Autonomy'	

Page 10/137 28-10-2022 02:50:41

Date of grant of 'Autonomy' to the College by UGC

30-09-2003

University to which the college is affiliated				
State University name Document				
Maharashtra	Savitribai Phule Pune University	View Document		

Details of UGC recognition		
Under Section	Date	View Document
2f of UGC	19-12-2007	View Document
12B of UGC	19-12-2007	View Document

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)					
Statutory Regulatory Authority	Recognition/App roval details Inst itution/Departme nt programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks	
AICTE	View Document	14-07-2021	12	Extension of Approval from AICTE for current Academic Year	

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	Yes
If yes, name of the agency	World Bank under Technical Education Quality Improvement Programme of India Program
Date of recognition	30-09-2003

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	College of Engineering Pune, Wellesly Road, Shivaji Nagar Pune-411005	Urban	75.756	83058.89

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Civil Engineering	48	HSC	English	60	60
UG	BTech,Mech anical Engineering	48	HSC	English	120	120
UG	BTech,Electr ical Engineering	48	HSC	English	60	60
UG	BTech,Electr onics And T elecommuni cation Engineering	48	HSC	English	60	60
UG	BTech,Metal lurgy And Materials Science	48	HSC	English	60	60
UG	BTech,Instru mentation And Control Engineering	48	HSC	English	30	30
UG	BTech,Comp uter Engineering	48	HSC	English	120	120
UG	BTech,Manu facturing	48	HSC	English	60	60

	Engineering And Industrial Management					
UG	BTech,B Planning	48	HSC	English	60	5
PG	Mtech,Civil Engineering	24	BE OR B TECH	English	18	18
PG	Mtech,Civil Engineering	24	BE OR B TECH	English	18	18
PG	Mtech,Civil Engineering	24	BE OR B TECH	English	18	18
PG	Mtech,Civil Engineering	24	BE OR B TECH	English	24	24
PG	Mtech,Civil Engineering	24	BE OR B TECH	English	18	18
PG	Mtech,Mech anical Engineering	24	BE OR B TECH	English	36	36
PG	Mtech,Mech anical Engineering	24	BE OR B TECH	English	18	18
PG	Mtech,Mech anical Engineering	24	BE OR B TECH	English	18	13
PG	Mtech,Electr ical Engineering	24	BE OR B TECH	English	18	18
PG	Mtech,Electr ical Engineering	24	BE OR B TECH	English	18	10
PG	Mtech,Electr ical Engineering	24	BE OR B TECH	English	24	16
PG	Mtech,Electr onics And T elecommuni cation Engineering	24	BE OR B TECH	English	18	7

PG	Mtech,Electr onics And T elecommuni cation Engineering	24	BE OR B TECH	English	18	2
PG	Mtech,Electr onics And T elecommuni cation Engineering	24	BE OR B TECH	English	18	0
PG	Mtech,Electr onics And T elecommuni cation Engineering	24	BE OR B TECH	English	18	17
PG	Mtech,Metal lurgy And Materials Science	24	BE OR B TECH	English	18	2
PG	Mtech,Metal lurgy And Materials Science	24	BE OR B TECH	English	18	0
PG	Mtech,Instrumentation And Control Engineering	24	BE OR B TECH	English	18	5
PG	Mtech,Instru mentation And Control Engineering	24	BE OR B TECH	English	18	0
PG	Mtech,Comp uter Engineering	24	BE OR B TECH	English	24	16
PG	Mtech,Comp uter Engineering	24	BE OR B TECH	English	18	18
PG	Mtech,Manu facturing Engineering And Industrial	24	BE OR B TECH	English	18	4

	Management					
PG	Mtech,Manu facturing Engineering And Industrial Management	24	BE OR B TECH	English	18	5
PG	Mtech,Manu facturing Engineering And Industrial Management	24	BE OR B TECH	English	18	9
PG	Mtech,Manu facturing Engineering And Industrial Management	24	BE OR B TECH	English	18	13
PG	MPlan,B Planning	24	BE B TECH B PLANNING	English	31	31
PG	MBA,Applie d Sciences	24	BE OR B TECH	English	30	29
Doctoral (Ph.D)	PhD or DPhil,Civil Engineering	36	ME OR MTECH	English	16	16
Doctoral (Ph.D)	PhD or DPhi l,Mechanical Engineering	36	ME OR MTECH	English	11	11
Doctoral (Ph.D)	PhD or DPhi l,Electrical Engineering	36	ME OR MTECH	English	10	10
Doctoral (Ph.D)	PhD or DPhi l,Electronics And Teleco mmunication Engineering	36	ME OR MTECH	English	5	5
Doctoral (Ph.D)	PhD or DPhi l,Metallurgy And	36	ME OR MTECH	English	5	5

	Materials Science					
Doctoral (Ph.D)	PhD or DPhi l,Instrumenta tion And Control Engineering	36	ME OR MTECH	English	5	5
Doctoral (Ph.D)	PhD or DPhi l,Computer Engineering	36	ME OR MTECH	English	6	6
Doctoral (Ph.D)	PhD or DPhi l,Manufactur ing Engineering And Industrial Management	36	ME OR MTECH	English	8	8

Position Details of Faculty & Staff in the College

				Te	aching	g Facult	y					
	Prof	essor			Asso	ciate Pr	ofessor		Assis	Assistant Professor		
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				40				60				119
Recruited	33	3	0	36	29	10	0	39	62	57	0	119
Yet to Recruit				4				21				0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				0				0				0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0			1	0		l		0

Page 16/137 28-10-2022 02:50:41

		Non-Teaching	Staff	
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				261
Recruited	117	56	0	173
Yet to Recruit				88
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				91
Recruited	39	0	0	39
Yet to Recruit				52
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

Qualification Details of the Teaching Staff

Page 17/137 28-10-2022 02:50:41

]	Perman	ent Teach	ers				
Highest Qualificatio n	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	32	3	0	28	9	0	42	21	0	135
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	1	0	0	1	1	0	20	36	0	59
UG	0	0	0	0	0	0	0	0	0	0

			ŗ	Гетрог	ary Teach	iers				
Highest Qualificatio n			Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	8	5	0	13
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	18	16	0	34
UG	0	0	0	0	0	0	0	0	0	0

				Part Ti	me Teach	ers				
Highest Qualificatio n	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties	_	V		
Number of Visiting/Guest Faculty	Male	Female	Others	Total
engaged with the college?	18	0	0	18

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

Page 19/137 28-10-2022 02:50:41

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	457	18	6	1	482
	Female	206	6	5	0	217
	Others	0	0	0	0	0
PG	Male	239	3	0	0	242
	Female	130	2	0	0	132
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	30	5	0	0	35
	Female	41	0	0	0	41
	Others	0	0	0	0	0
Diploma	Male	134	2	0	0	136
	Female	25	1	0	0	26
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years					
Category		Year 1 Year 2		Year 3	Year 4
SC	Male	99	88	80	98
	Female	37	41	50	39
	Others	0	0	0	0
ST	Male	35	26	36	47
	Female	12	13	17	22
	Others	0	0	0	0
OBC	Male	217	204	178	190
	Female	74	82	64	75
	Others	0	0	0	0
General	Male	446	323	444	377
	Female	176	148	162	158
	Others	0	0	0	0
Others	Male	109	217	108	134
	Female	46	67	40	53
	Others	0	0	0	0
Total		1251	1209	1179	1193

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Applied Sciences	<u>View Document</u>
B Planning	View Document
Civil Engineering	View Document
Computer Engineering	<u>View Document</u>
Electrical Engineering	View Document
Electronics And Telecommunication Engineering	View Document
Instrumentation And Control Engineering	<u>View Document</u>
Manufacturing Engineering And Industrial Management	View Document
Mechanical Engineering	<u>View Document</u>
Metallurgy And Materials Science	View Document

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	The institute offers many avenues of opportunities for Under Graduate (UG) and Post Graduate (PG) students for interdisciplinary learning. Multidisciplinary learning is promoted in the UG programmes in Engineering by offering 1) mandatory three Interdisciplinary Foundation courses in the 3rd, 4th and 5th semesters 2) choice-based Interdisciplinary Open courses in the 6th and 7th semesters and 3) Choice-based Minor certification schemes in the 3rd and 4th years. A presenter department offers an Interdisciplinary Foundation course to all students of a taker department. Interdisciplinary Open courses are provided by the presenter department to the students in one or more taker departments based on the choices of courses opted by each student. Minor schemes are an additional avenue for passionate bright learners to specialize in additional courses in another engineering discipline. PG students are offered with a choice-based Interdisciplinary Open course in the 2nd
	semester of their study.
2. Academic bank of credits (ABC):	Academic Bank of Credits (ABC): All the courses offered by our institute for the UG and PG programmes are credits based. The Academic Bank of Credits system enables students to register or

Page 22/137 28-10-2022 02:50:41

	transfer credits belonging to courses within the institutes offering the scheme. Our institute is a registered member institute with the National Academic Depository (NAD) to offer the ABC scheme
3. Skill development:	Skill development: Our institute believes that encouraging a proactive exchange of ideas is the way to success and the many clubs of the institute resonate with this philosophy and provide the students with the much-cherished opportunity to come together to discuss and exchange ideas with like-minded people. A few examples are: the Astronomy Club for the Astro-enthusiasts, the Boat Club Quiz Club for quizzing enthusiasts, Debating Club for its ability to make a point and to make it well With separate groups for Marathi and English, Robot Study Circle is the robotics club, environmental club, Janeev in promoting awareness about not just the environment but also about the social development of the less-fortunate etc
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	Appropriate integration of Indian knowledge system (teaching in Indian language, and culture using online courses): Our institute offers Liberal Learning Course LLC in the 7th semester to all the students of engineering disciplines of UG and 2nd semester of PG. The LLC includes various courses on topics like Agriculture, Business, Defence, Corporate Culture, Painting, Clay Art and Pottery, German, Holistic Health, French, Music (Vocal), Music (Instrumental), Political Science, Geography, Photography, Interior Design, Computerized Modern Film Making, Wood and Metal Art etc
5. Focus on Outcome based education (OBE):	• Focus on Outcome-Based Education (OBE): The curriculum for UG and PG programmes is designed to promote performance-based education and to measure the effectiveness of student learning outcomes through observable and measurable rubrics-oriented assessments. To implement OBE, Course Outcomes (CO) are defined for all courses and Program Specific Outcomes (PSO), Programme Outcome (PO) and Programme Educational Objectives (PEO) are defined for each programme of UG and PG. COs are analyzed after completion of the evaluation of each course at the end of the semester and PSO and PO are analyzed after completion of the finite duration of each programme. Later, after a few

	years of passing out from the programme, the expected achievements of the graduates, PEO are analysed based on their performance in their careers
6. Distance education/online education:	Distance Education/online education: The institute conducts a PG Diploma course in "Data Science and AI" as an online education programme. It is planning to offer many more courses in the near future



Extended Profile

1 Program

1.1

Number of programs offered year-wise for last five years

2020-21	2019-20	2018-19	2017-18	2016-17
35	33	33	34	34

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

1.2

Number of departments offering academic programmes

Response: 10

2 Students

2.1

Number of students year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
4092	4057	4086	4077	4094

F	File Description		Docun	nent	
I	nstitutional data ir	n prescribed format	View 1	<u>Document</u>	

2.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
1267	1188	1219	1182	1212

File Description	Document
Institutional data in prescribed format	View Document

2.3

Number of students appeared in the examination conducted by the Institution, year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
4092	4057	4086	4077	4094

File Description	Document	
Institutional data in prescribed format	View Document	

2.4

Number of revaluation applications year-wise during last five years

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

3 Teachers

3.1

Number of courses in all programs year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
1348	1262	1183	1104	798

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

3.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
257	253	236	245	243

File Description	Document
Institutional data in prescribed format	View Document

3.3

Number of sanctioned posts year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
510	506	392	392	392

File Description	Document
Institutional data in prescribed format	View Document

4 Institution

4.1

Number of eligible applications received for admissions to all the programs year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
249990	249990	249990	249990	249990

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

4.2

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
550	550	550	525	540

File Description	Document
Institutional data in prescribed format	View Document

4.3

Total number of classrooms and seminar halls

Response: 53

4.4

Total number of computers in the campus for academic purpose

Response: 1650

Page 27/137 28-10-2022 02:50:41

4.5

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

2020-21	2019-20	2018-19	2017-18	2016-17
54.32	57.05	47.03	53.33	58.45



4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

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

Response:

The undergraduate and postgraduate curricula have been developed in compliance with AICTE rules, affiliating university guidelines, stakeholder feedback, and are in line with the Institution's vision and goal to address the local, national, regional, and global developmental needs of society. The institute aims to produce high-quality engineers to suit the needs of a variety of industries, including infrastructure development, manufacturing, and information technology. As Program Outcomes, the Graduate Attributes are used. Each program's Program Specific Outcomes have been developed to ensure the acquisition of domain-specific knowledge and skills in relation to course outcomes. The curriculum is developed in accordance with the POs and PSOs, and it is revised on a regular basis by the Boards of Study of each Program. Humanities, Basic and Engineering Sciences, Professional Core subjects, Open and Professional Electives, skill development courses, mini-projects, laboratory work, and project work are all part of the curriculum. Writing technical reports and using the Language Lab help students improve their written and oral communication abilities. Fundamental principles in basic sciences are studied so that students may comprehend and apply them to engineering problems.

Students learn a variety of important concepts in professional core topics as well as advanced concepts in professional optional areas, all of which help them improve their analytical and problem-solving abilities. Open electives from different engineering disciplines create the path for an interdisciplinary approach to learning. The students' understanding of the practical applications of numerous academic concepts is enhanced by laboratory practice. Students submit mini-projects in order to assist them consolidate and apply their conceptual grasp of diverse subjects. Seminars help students improve their presentation skills. The final-year project work/internship allows students to consolidate their knowledge, produce and deliver technical reports, and discover the value of teamwork. Students are encouraged to serve as interns on projects.

Co-curricular and extra-curricular activities aim to inculcate these qualities in order to bring about the holistic personality development of students. Students are also encouraged to participate in technical competitions and ideation contests as part of co-curricular activities. They also participate in sports activities on a regular basis. Training in technical and soft skills has been imparted to the students under finishing school. Soft skills involve training in communication skills, quantitative reasoning, logic and aptitude. This training ensures better employability for the students. Training in the latest software and technologies is offered to the students under technical skills. With a view to promoting self-learning, students are required to clear at least one online NPTEL/ MOOCS certification examination. Postgraduate engineering programs are designed with advanced core and elective courses along with an emphasis on laboratory and research work. The curriculum of postgraduate courses also deals with all the aspects outlined above. The success of curriculum design and development can be gauged by enhanced employability, increased placements and students securing admissions into higher education institutions,

Page 29/137 28-10-2022 02:50:41

both in India and abroad.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

1.1.2 Percentage of Programmes where syllabus revision was carried out during the last five years.

Response: 100

1.1.2.1 Number of all Programmes offered by the institution during the last five years.

Response: 169

1.1.2.2 How many Programmes were revised out of total number of Programmes offered during the last five years

Response: 169

File Description	Document
Minutes of relevant Academic Council/BOS meeting	View Document
Details of program syllabus revision in last 5 years(Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.1.3 Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the last five years

Response: 26.54

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development yearwise during the last five years..

2020-21	2019-20	2018-19	2017-18	2016-17
310	395	280	300	220

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Average percentage of courses having focus on employability/ entrepreneurship(Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.2 Academic Flexibility

1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.

Response: 27.04

1.2.1.1 How many new courses are introduced within the last five years

Response: 1540

1.2.1.2 Number of courses offered by the institution across all programmes during the last five years.

Response: 5695

File Description	Document	
Minutes of relevant Academic Council/BOS meetings	View Document	
Institutional data in prescribed format	<u>View Document</u>	
Any additional information	View Document	
Link for Additional Information	View Document	

1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).

Response: 100

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

Response: 35

Page 31/137 28-10-2022 02:50:41

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for 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 College of Engineering Pune has been concentrating on the students' entire development. Several courses, including Biology, Human Values, Professional Ethics, and Environmental Studies, have been made necessary for all engineering programmes to address topics such as gender equality, sustainability, and human values and ethics, Disaster management, non-conventional energy resources, and other courses are available as core and open electives.

Human values and professional ethics:

To instil Moral, Social and Ethical values, the college has introduced Liberal Learning courses on Human Values and Professional Ethics as credit courses during 3rd/4th and 5th / 6th semesters for all B. Tech programs. These courses help students gain a worldview of the self, society and profession. It emphasizes on a holistic understanding of ethical human conduct, and trustful and mutually satisfying human behaviour. The college also conducts Blood Donation Camp, Swacch Bharath, and Gender equality awareness programs in the nearby institutes to promote National Integrity, Human values, and Communal Harmony.

Environment and Sustainability:

Environmental Studies is an interdisciplinary course. The course is offered as a mandatory course for all the U.G programs. The course includes the study of natural resources with emphasis on renewable energy resources, the importance of conserving the present ecosystem, promoting biodiversity, perils of environmental pollution and raising awareness on environmental and social issues.

Open Elective courses under CBCS:

Disaster Management is offered as an open elective to understand various types of natural and man-made disasters, their occurrences, effects, mitigation and management systems in India, the role of Geographical Information Systems (GIS), and Remote sensing technology in disaster mitigation and management. A

course on Green buildings and Air conditioning is also offered to emphasize the significance of ecofriendly materials, green building rating systems, etc. A course on "Non-conventional Energy sources" is offered to explain the generation of electricity from various non-conventional sources of energy such as solar, wind, ocean and geothermal energies and acquire knowledge of their principles and utilization. Pollution and its control" is offered to explain the effects of uncontrolled emissions from industries understand the various disposal methods and minimize pollution.

National Service Scheme

The college also has a vibrant NSS wing which encourages student participation in programmes like Haritha Haram (tree plantation), Swacch Bharat Abhiyan and bringing awareness on renewable energy sources, conservation of water and electricity. The "Janeev Club" of the college conducts guest lectures on environmental awareness and celebrates Eco Week annually highlighting the importance of environmental conservation.

Gender Sensitization

'Human Values and Professional Ethics' course includes a unit on Social responsibility inculcating civic sense and virtues highlighting issues related to the dignity of women at home and workplace. Discussions, debates and guest lectures pertaining to gender sensitization are arranged. International Women's Day is celebrated every year with active student participation. Also, special talks are arranged to encourage women to explore opportunities in science and technology. The student counsellor counsels students on gender equality and other related issues. An exclusive committee consisting of women faculty and girl students is also functioning related to gender equality issues.

File Description	Document
Upload the list and description of the courses which address the Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.3.2 Number of value-added courses for imparting transferable and life skills offered during last five years.

Response: 3025

1.3.2.1 How many new value-added courses are added within the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
605	840	800	580	200

File Description	Document
List of value added courses (Data Template)	<u>View Document</u>
Brochure or any other document relating to value added courses	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.3.3 Average Percentage of students enrolled in the courses under 1.3.2 above.

Response: 29.62

1.3.3.1 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
1216	1205	1182	1197	1245

File Description	Document
List of students enrolled	View Document
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

1.3.4 Percentage of students undertaking field projects/ internships / student projects (Data for the latest completed academic year)

Response: 29.69

$1.3.4.1\ \textbf{Number of students undertaking field projects}\ /\ \textbf{internships}\ /\ \textbf{student projects}$

Response: 1215

File Description	Document	
List of programs and number of students undertaking field projects / internships / student projects (Data Template)	View Document	
Any additional information	View Document	
Link for Additional Information	View Document	

1.4 Feedback System

1.4.1 Structured feedback for design and review of syllabus – semester-wise / year-wise is received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni

Response: A. All 4 of the above

File Description	Document	
Any additional information	View Document	
URL for stakeholder feedback report	View Document	
Link for Additional Information	View Document	

1.4.2 The feedback system of the Institution comprises of the following:

Response: B. Feedback collected, analysed and action taken

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 100

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

2020-21	2019-20	2018-19	2017-18	2016-17
1123	1105	1105	1105	1105

2.1.1.2 Number of sanctioned seats year wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
1123	1105	1105	1105	1105

File Description	Document	
Institutional data in prescribed format (Data Template)	View Document	
Any additional information	View Document	
Link for 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: 114.75

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

2020-21	2019-20	2018-19	2017-18	2016-17
658	655	605	600	598

Page 36/137 28-10-2022 02:50:41

File Description	Document	
Institutional data in prescribed format	<u>View Document</u>	
Any additional information	View Document	
Link for 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:

Post Autonomy, the Curriculum has been revised at the Structure level by the Senate FOUR times (2003, 2007, 2011 and 2015). The curriculum revision cycle is thus of FOUR years. In 2007 for the second iteration the institute switched to UG program credits of 176 to 184 with now RELATIVE grading applied to the course evaluation. In both these iterations, the concept of Institute level OPEN ELECTIVES was deployed to bring Multi-disciplinary flavour to the learners. With credits frozen at 180 uniformly for ALL departments, the 2011 iteration was a major breakthrough, since the Institute introduced various categories of courses such as Liberal learning (LLC), Mandatory learning (MLC), Humanities, Social Sciences and Management (HSMC) with broad spectrum opportunities for the learners through baskets of program-specific, Department-level and Institute level Elective courses.

The students admitted into this institution are from diverse social, economic, cultural and vernacular backgrounds, with disparate levels of knowledge and skills; hence their learning needs are different. As soon as students are admitted a four-week Induction program in two phases is to be conducted to orient the students towards professional courses like application of mathematics, physics and chemistry towards engineering courses. Also give information on Yoga, Meditation, Heartfulness, and Test on the day's activity. The students are also given orientation towards communication and improving their language skills. In addition, the slow learners are identified based on the analysis in the qualifying examination. After four weeks of commencement of the class work, a pre-assessment test is conducted to assess the learning levels of the fresh undergraduate students. Based on their proficiency and competency levels the students are given assistance in the form of extra coaching. Furthermore, from the I semester to the VI semester, the students are given remedial classes based on the following.

Re-examination for failed students. Summer Term for the academically weak students. The PG programs in the first three iterations were 80 credits, which were reduced to74 in the fourth iteration. A program-specific Maths course and a compulsory course on Research Methodology are special features of the PG structure. For backlog, students Provide additional classes for the respective course and to avoid the year also exam cell conduct the summer and winter term examination as a special case. For each class, two faculty advisors and one Mentor for each practical batch are assigned by the department. The mentor monitors the progress of each student. Also, he will counsel the students. The slow learners are given more practice sessions and exercises to work on in the class as well as at home. The mentors also mentor the slow learners on a periodic basis to improve their academic performance. Advanced learners are encouraged to participate in inter-college technical and non-technical contests. Internship: VII semester students are offered internships through campus recruitment. In addition, the advanced learners, from V to

Page 37/137 28-10-2022 02:50:41

VII semesters, are encouraged to take up Honors and Minors courses in their semester.

File Description	Document	
Any additional information	View Document	
Link for Additional Information	<u>View Document</u>	

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

Response: 15.92

File Description	Document	
Any additional information	View Document	
Link for Additional Information	<u>View Document</u>	

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:

Learning is a procedure where the teacher and the learner is an active participant in knowledge acquisition. Hence in this process the college implements and practices innovative/ interactive methods. In order to achieve outcome-based education, various student-centric methods are adopted. The teacher has to use different methodologies to provide students with sufficient information. The following are the methodologies: We employ of illustration and special lectures, field studies, case studies, project-based methods, group learning methods and Powerpoint presentations apart from pedagogic techniques. The campus is internet-connected and Wi-Fi enabled. All the expert lectures on E-Learning resources are made accessible to all. Group discussions are conducted as a part of activity-based education. Task-based discussions to improve the perception level to the high end and foster the same for posterity. Experimental Learning is practised to enhance the employability and entrepreneurship skills among the students. Timely and periodical industrial visits are scheduled. We encourage our Faculty and students to use online lectures and online courses like MOOCs, NPTEL and other Websites. Each lab/workshop is furnished with an appropriate layout design & maintained as per AICTE norms and check that lighting, ventilation & furniture have a conducive ambience. Laboratories are equipped with experimental set-ups, computers & peripherals. Qualified lab instructors/technicians are hired for its smooth functioning. Special care is taken to ensure that all the experiments as per the curriculum are covered. A few experiments beyond the curriculum are also practised. We conduct regular assignments on every covered topic to test the immediate listening outcome and continuous assessment of learning ability and conducting group

discussion are a regular part of teaching. Distinguished lectures and hands-on workshops by professionals and industry experts are arranged to keep our students abreast of the latest technological developments. Students are encouraged for internships and to participate in state and national technical competitions like BAJA, Robotics, Hackathons and such similar activities. For smooth conducive of the above practices, daily and monthly reports, and weekly cumulative time management report of all activities from each department is updated to the Director. Hobby clubs (Gymkhana, Boat club, Janiv club etc.) are a part and parcel of our student holistic development programme

In addition to the traditional teaching-learning methods, the institute is providing innovative student-centric methods such as Hackathons, Workshops, Seminars, the development of a Virtual Lab, the use of software for modelling and simulation, paper presentation and for review of web literature, Activity-based learning, take NPTEL/ MOOCS /Flipped Classroom courses. Guest lecture, Professional practice school, Project-based learning, and real-time case studies, take live industry projects, involve in research projects, participate in poster presentation competitions, to encourage participative in problem-solving and experiential learning. Institute encourages students to participate in various clubs.

Students Exchange Program effectively implemented for Autonomous Colleges in the State with Credit Transfer Scheme deployed for a Semester. "A Bilateral Students Exchange among Autonomous Institutes in the State, with Credit Transfer, adds value to the aspirants in terms of Experiential Learning". Student Exchange Program with Ostfalia University, Germany

File Description	Document	
Any additional information	<u>View Document</u>	
Link for Additional Information	View Document	

2.3.2 Teachers use ICT enabled tools including online resources for effective teaching and learning process.

Response:

By the end of March 2020, due to Covid Pandemic, the regular offline lectures/practicals were discontinued and students were sent to their home town. Keeping in mind the social distancing issues, to safeguard the health and safety of our students and by adhering the notifications from the statutory bodies, the Academic Plan for -AY:2019-20 onwards was revised to ensure timely completion of teaching and evaluation process.

Although "Technology cannot replace Teachers", academics of half of the last semester was conducted online including examinations and the ongoing odd semester of the academic year has thoroughly been planned online owing to the pandemic. We started imparting lectures in an online mode from 3rd August 2020 onwards with the relentless efforts of our faculty, dedicatedly working to enable a semblance of the regular semester for our students.

Our alumni and industry have been supporting the institute by empowering around 175 financially challenged deserving students with reasonably high-end configuration laptops with data cards. With such

enablement, students shall be able to take online theory classes, submit weekly quizzes/assignments, take in-sem and end-sem examinations and also participate effectively in some simulation mode/programming type of lab courses. There has been an empowering policy of the Board of the Institute, to equip every full-time teacher on campus with a state-of-art desktop computer or a laptop, with a wired or wi-fi internet connection when on campus for facilitating lectures and practicals of the students in an online mode.

COEP procured the CISCO-Webex licenses for each faculty to use for teaching remotely in conjunction with the MOODLE platform (free open source LMS) and the faculty continued teaching online mode as per the timetable slotted by the respective Department. The training sessions were scheduled on the use of MOODLE and shared recorded videos on the ease of use of MOODLE. The required hardware such as laptop/ desktop, web camera, digital whiteboards etc., for taking classes online, was provisioned to each faculty in the department.

To overcome the issues related to network connectivity glitches and power cuts that may interrupt online sessions, more so experienced by our students at their end, every lecture and online interaction were recorded and made available to students on Moodle. In addition to regular continuous assessments, faculty used to take weekly assessments (e.g. low-weightage quizzes/assignments which can be submitted within a day) to ensure students were continuously engaged.

About 231 Faculty undertook various courses like "Digital Teaching Techniques" offered by ICT Academy, "Online Teaching Learning Pedagogies" offered by FICCI, Streamlining Engineering Curriculum for NEP 2020 and Management of Teaching Learning in Online Education" offered by IIT Kharagpur.

File Description	Document	
Any additional information	View Document	
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	View Document	
Link for 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: 16.11

Response: 254

Page 40/137 28-10-2022 02:50:41

File Description	Document	
Upload year wise, number of students enrolled and full time teachers on roll	View Document	
Circulars pertaining to assigning mentors to mentees	s View Document	
Any additional information	View Document	
Link for additional information	View Document	

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

Response:

A detailed academic calendar indicating all activities be performed by students and faculty members is being prepared well in advance and then is discussed, modified (if required) and then approved in the academic program evaluation committee and finally in the academic council. The approved academic calendar is uploaded on the institute's website and displayed on the institutional/departmental notice board to enable all students to aware of all academic activities before/at the time of commencement of the academic year.

The following innovative processes are adopted by the institution in Teaching and Learning:

- 1. Encouraging and motivating the usage of ICT.
- 2. Providing training on pedagogy and assessing its impact on teaching-learning.
- 3. Conducting training programs on the latest technologies.
- 4. Introduction of "Value-Added Content" beyond the curriculum in the professional and thrust areas
- 5. Course coordinators for sections are appointed to take the responsibilities including: Monitoring the teaching-learning process of each subject of that Semester. Monitoring the schedules: Assisting every faculty of the concerned subject on delivery methods after consulting Internal/external experts' suggestions in that subject.

It also includes:

- A) Instructive & Informative based Method: This Instructive method is used to the extent of 60 to 75 % to explain the essence and conceptual parts of the subject, which demands critical thinking and analysis. The teacher displays the relevant data and diagrams through talk-walk mode/ chalkboard mode.
- B) Communicative & Interactive based method: This method enhances both teacher and student learning quality consequently enriching the academic milieu.
- (C) Hands-on & Project-Based Learning: These techniques are widely used for the improvement of the self-learning ability of students and also to reinforce knowledge received during the lecture. Students are

asked to prepare projects involving the application of the concepts, principles or laws. The teacher guides the students at various stages of developing the project to give timely inputs for the development of the model.

- D) Seminar & Productive Method: The teacher involves the proactive students in this process, every student is advised to come to prepare on pre-assigned topics and present a seminar before the faculty and students. This method is very effective to motivate students to undertake extensive reading and develop communication and presentation skills.
- (E) ICT & E-Learning method: This method is one of the effective methods in the teaching and learning process, particularly in core subjects. It is used for visualizing, analyzing and understanding complex topics and in the interpretation of large data.
- (F) Feedback analyzed and implemented for the improvement of teaching: The Institution has been collecting feedback from the students on teaching and teachers. Any deficiencies are rectified and grievances are redressed to make the teaching process more productive. This is to channel for effective teaching
- (G) Faculty orientation programs are conducted every Wednesday from 3.40 pm to 4.45 pm on current technical developments and similarly Departmental wise (any day of the week) on subject enhancement and teaching methodologies. This is to facilitate the teacher in appropriate discourses.

File Description	Document	
Upload Academic Calendar and Teaching plans for five years	View Document	
Any additional information	<u>View Document</u>	
Link for Additional Information	<u>View Document</u>	

2.4 Teacher Profile and Quality

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

Response: 57.02

File Description	Document	
Year wise full time teachers and sanctioned posts for 5 years(Data Template)	View Document	
List of the faculty members authenticated by the Head of HEI	View Document	
Any additional information	View Document	
Link for 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: 49.7

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

2020-21	2019-20	2018-19	2017-18	2016-17
140	135	125	116	98

File Description	Document	
Institutional data in prescribed format (Data Template)	View Document	
Any additional information	<u>View Document</u>	
Link for Additional Information	<u>View Document</u>	

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: 13.94

2.4.3.1 Total experience of full-time teachers

Response: 3582

File Description	Document	
Institutional data in prescribed format	View Document	
Any additional information	View Document	
Link for Additional Information	View Document	

2.5 Evaluation Process and Reforms

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

Response: 2.6

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

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

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

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

Response: 0

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

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

File Description	Document
Number of complaints and total number of students appeared year wise	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.5.3 IT integration and reforms in the examination procedures and processes including Continuous

Page 44/137 28-10-2022 02:50:42

Internal Assessment (CIA) have brought in considerable improvement in Examination Management System (EMS) of the Institution

Response:

The institute supports a credit-based continuous evaluation system. The lecture plan, evaluation scheme, grading policies and tentative dates of Continuous Internal Evaluation (CIE) to be conducted during the semester are announced well in advance (first lecture) by the course teacher.

- 1. The Continuous Internal Evaluation (CIE) component has been enhanced from 2003 onwards year on year for UG and PG students and currently stands at 40 Marks. The number of assignments and Quizzes to be conducted has been enhanced to keep pace with the enhanced CIE component. Setting up of question papers (internal and Semester end) duly following the Bloom's Taxonomy levels and mapping with Cos and Pos for each course as part of Outcome-Based Education (OBE) Choice has been eliminated in the internal examinations to ensure that the student prepares for the complete course content.
- 2. End Semester- Examination (ESE), is conducted by the course teacher (sometimes an external examiner as a paper setter), which includes a written examination for theory courses and practical/design examination with built-in oral part for laboratory courses.
- 3. Both CIE and ESE have 40:60 weightage. A student's performance in a course is judged by taking into account the results of CIE and ESE together.
- 4. The records of both CIE and ESE are maintained by the examination section and also by the department.
- 5. The evaluation of the project work is based on sectional work assigned by the project supervisor, project report and assessment by Project Evaluation Committee (PEC).
- 6. The performance of students at every stage of the CIE is announced by the concerned subject teacher within a fortnight of the date of the particular assessment. The course teacher also present course assessment and CO, PO attainment of his/her course. After this the final result of the course is submitted to the Controller of Examinations through the Head of the Department.
- 7. The end semester reexamination is arranged for the student with FF grade and the result is announced immediately. The quality of question papers and grading for reexamination is same as that for ESE.
- 8.CIE, is conducted on Moodle supported with Cisco-WebEx platform. Automated process of examination system using Moodle software.
- 9. The college follows the relative grading procedure. Based on the student's performance, he is awarded a letter grade with its corresponding grade point. Based on this, the student's Semester Grade Point Average (SGPA). Students, who acquired a minimum of 70% credits out of the total assigned First Year credits shall register for all courses of the Second Year and pending courses of the First Year. Students who acquired a minimum of 70% credits out of the total assigned Second Year credits and have CGPA ? 5.0 after completing the Second Year, shall register for all courses of the Third Year and pending courses of the Second Year. Students who acquired a minimum of 70% credits out of the total assigned Third Year credits and have CGPA ? 5.0 after completing the Third Year shall register for all courses of the Forth Year and pending courses of the Third Year. In case of overlapping of lectures in the timetable, students shall be permitted to register for the equivalent MOOC course as approved by the concerned Head of the department and Dean Academics. By following the "Year Down Concept", for the transition to (N+1)th year, all backlogs of (N-1)th year must be cleared (where, N = 2 nd year or 3rd year) by the students. For the lateral entry admitted UG students in the 3 rd semester of the Second Year, the "Slow Learners

Track" shall be started from Second year and the "Year Down Concept" in the Final Year.

Promotion Eligibility

Promotion to year	First Year Entry	Second year Lateral Entry
SY	Minimum of 70% credits out of the total	•
	assigned FY credits	
TY	1.Received DD grade and above for all courses	Minimum of 70% credits out of the total
	in FY	assigned SY credits
	2. Minimum of 70% credits out of the total	CGPA ? 5.0 after completing the SY
	assigned SY credits	Final
	3. CGPA ? 5.0 after completing the SY	
Final	1. Received DD grade and above for all	1. Received DD grade and above for all
	courses in SY 2. Minimum of 70% credits out	courses in SY
	of the total assigned TY credits	
		2. Minimum of 70% credits out of the
		total assigned TY credits
		3. CGPA ? 5.0 after completing the TY

Positive Impact:

- 1. The students are now taking the examinations with seriousness. Improvement in knowledge and grades.
- 2. Adherence to academic Calendar and timely publication of results
- 3. Parents are able to access data available on the website.
- 4. The opportunity is given to internal faculty in improving their skills for paper setting.
- 5. The quality of question papers has improved.
- 6. These measures ensure continuous learning.

File Description	Document	
Any additional information	<u>View Document</u>	
Link for 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:

The following tools and processes shown in the table are being used by this institute for the assessment of the attainment of the POs, PSOs and COs.

The following tools are used for the assessment of the programme objectives of the programme

- 1. The attainment of the CO is prepared in a statistical manner using result analysis of Test 1 (T1), Test2 (T2), and End Semester Examination (ESE) of each course. The PO attainment was obtained after calculating the course outcome of each of the courses.
- 2. The feedback of the students during the semester, and at the end of the semester is obtained through the well-established online feedback system of the institute.
- 3. Feedback of the alumni is also obtained to understand the satisfaction level of the students once they start their professional careers. This too is further quantified.
- 4. The PO attainment is finally obtained considering an average PO attainment through the abovementioned tools of assessment of POs.

Tools and Processes:

- Students' Regular Academic Evaluation Schemes: A continuous assessment comprising of three tests round-the-semester examinations (Test-1, Test-2 and End-Semester Examination) is carried out for each student for every theory and laboratory course. For assessing the hands-on skill of a student, an industry expert is appointed optionally, whereas, the project work/dissertation is mandatorily assessed by an external examiner.
- The formal feedback process from younger alumni, parents/guardians, and employers are being done. Optional third-party audits, from eminent educationists and organizations, have been conducted in the past. Making this a regular practice may accelerate the attainment of certain outcomes.

Two types of attainment tools are used for the calculation of CO attainment

Direct Assessment Tools:

The Institute supports a credit-based Continuous Evaluation system. Continuous Evaluation (CE) is normally conducted by the subject teacher throughout the semester; this includes Test-1, mid-semester examination (MSE), Test-2 and End-sem examination. Also, homework assignments, problem-solving, group discussions, quizzes, seminars, mini-project and other means can also be used as optional tools for Test-1 and Test-2. The course teacher announces the detailed methodology for conducting the various segments of CE together with their weights at the beginning of the semester.

Page 47/137 28-10-2022 02:50:42

Examination Name	Weig	Schedule
	htage	
Test-1 or Surprise test or Quiz or	20	Generally in the 4th or 5th week after start of the
Assignment	Marks	semester
Mid Semester Examination	20 Marks	Generally in the 8th or 9th week after start of the semester
End Semester Examination	60 Marks	Generally in the 16th or 17th week after start of the semester
	100	
	Marks	

Two methods of CO attainment calculation are used based on

- 1. Based on the average marks entered as shown above
- 2. Based on the average marks secured by all students

Net attainment is considered as a maximum of the above two

2. Indirect Assessment Tool

It is calculated from the Course Exit Survey conducted after completion of every course where students give their feedback. 10% weightage is given

File Description	Document
Upload COs for all courses (exemplars from Glossary)	View Document
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

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

Response:

The process of synthesizing POs has been formulated in the department through brainstorming meetings of DPPC and the feedback received from various stakeholders. The various committees shoulder the responsibility of deciding the academic deliverables in terms of curriculum, evaluation schemes, examiner panels, industry interaction and education logistics, in general. In view of the preparation of SAR for NAAC, the task of framing POs was delegated to these committees. The POs are outcomes of such

brainstorming deliberations. The POs drafts have been approved by the Academic Senate of the Institute (the apex academic body) in this regard

Pertaining to the category of a course the teacher chooses to go for a typical blend of the above-mentioned styles of instruction. Though it is difficult to map an outcome with the delivery mode on a one-to-one basis, some of the outcomes are attained through interactive teaching mode deployed for lab instruction, software tools learning and behavioural/psychological training. The conventional core and elective courses are delivered to attain outcomes. The webinars and state-of-art seminars through video conferencing enable the interaction of learners with external experts and enrich them in terms of content beyond the syllabus.

1. Direct Assessment Tools:

Continuous Evaluation (CE) is normally conducted by the subject teacher throughout the semester; this includes Test-1, mid-semester examination (MSE), Test-2 and End-sem examination. Homework assignments, problem-solving, group discussions, quizzes, seminars, mini-project and other means can also be used as optional tools for Test-1 and Test-2. The course teacher announces the detailed methodology for conducting the various segments of CE together with their weightages at the beginning of the semester.

• End Semester Examination (ESE) is conducted by the course teacher, preferably jointly with an external examiner; this includes a written examination for theory courses and a practical / design/drawing examination with a built-in oral part for laboratory/design / drawing courses.

• 2. Indirect Assessment Tools:

- Program level statistics: At the end of every academic year, an annual report containing the statistics of students who have participated in extracurricular and co-curricular activities is prepared. This analysis is considered to indirectly assess the POs.
- For every theory and laboratory course, all the registered students are appealed to give feedback about the course teachers on a scale of 1-5 on certain attributes, twice a semester. The scores are used to improve the skills of concerned teachers towards learner satisfaction.
- The industries which visit campus for placements of students are requested to give written feedback about the quality of job seekers, the skills/knowledge they lack etc. The feedback is passed on to the departments for modification of curriculum as per the needs of the industry. Special programs are designed for underperforming candidates for soft skill improvement, to enhance employment percentage.
- The formal feedback process from alumni, parent/guardians, and employers is being in place and used for the assessment of the attainment of targeted outcomes.
- Third-party audits from eminent educationists and organizations have been conducted in the past to enhance the assessment of attainment.
- Surveys conducted by different agencies/magazines/organizations are used for self-assessment.

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File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.6.3 Pass Percentage of students(Data for the latest completed academic year)

Response: 91.81

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 1177

2.6.3.2 Total number of final year students who appeared for the examination conducted by the Institution.

Response: 1282

File Description	Document	
Upload List of Programmes and number of students passed and appeared in the final year examination(Data Template)	View Document	
Any additional information	<u>View Document</u>	
Link for the annual report	View Document	
Link for additional information	View Document	

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.22

File Description	Document
Upload database of all currently enrolled students	<u>View Document</u>
Upload any additional information	<u>View Document</u>
Link for any additional information	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

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

Response:

Consultancy projects above Rs. 2 lakhs shall be accepted only after approval through the proper channel. All consultancy projects to be taken up by various departments of the institute shall be examined from the point of view of its S&T content and its likely benefit to the academic and R&D activities at the Institute, which can in turn, influence the quality and standard of the academic work at COEP. For this purpose, every project proposal would be examined and approved by an Institute Level Committee, before it is accepted for being conducted as Type-I or Type-II project. The committee shall consist of: • Dean (R and D) Convenor • Concerned HOD Member • Senior professor/faculty from concerned department Member • Technical expert(s) in subject area Member(s) (nominated by the Director) The Faculty Member(s) proposing to take up the consultancy project will be invitee(s) at the Meeting and they will be required to make a presentation on the proposal. In case of testing work, concerned faculty may present the case.

For Departmental Consultancy Projects, the Principal Investigator will be judiciously decided by the Head of the Department in consultation with the R&D coordinator of the Department. As expertise and experience are both necessary for a consultant to play an effective role in the assignment, it is desirable to set a lower limit of the level and the number of years of experience for the consultant. A senior Lecturer with about 5 years of experience should preferably be considered while identifying the PI. In exceptional cases, the above-mentioned members should take the decision in consultation with the Dean (R&D) / Director of the institute.

All fees/charges in connection with consultancy projects should be received in the name of the Director, College of Engineering, Pune to be deposited in the IRG account of the institute. The Dean R and D office shall disburse consultancy funds into Research and Development Fund, Staff Development Fund, and Departmental Development Fund and retain the balance in the IRG fund, appropriately as per guidelines provided later. Director's approval shall be obtained wherever necessary, in case of deviations.

File Description	Document	
Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	View Document	
Any additional information	View Document	
URL of Policy document on promotion of research uploaded on website	View Document	

3.1.2 The institution provides seed money to its teachers for research (average per year, INR in Lakhs)

Page 51/137 28-10-2022 02:50:42

Response: 19.61

3.1.2.1 The amount of seed money provided by institution to its faculty year-wise during the last five years (INR in lakhs).

2020-21	2019-20	2018-19	2017-18	2016-17
26	55.30	6.18	0.58	10

File Description	Document
Minutes of the relevant bodies of the Institution	View Document
List of teachers receiving grant and details of grant received	View Document
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	View Document
Any additional information	View Document

3.1.3 Percentage of teachers awarded national / international fellowship for advanced studies/research during the last five years

Response: 2.43

3.1.3.1 The number of teachers awarded national / international fellowship for advanced studies / research year wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
5	4	5	8	8

File Description	Document
List of teachers and their international fellowship details	View Document
e-copies of the award letters of the teachers	<u>View Document</u>
Any additional information	View Document

3.2 Resource Mobilization for Research

3.2.1 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: 2802.87

3.2.1.1 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
95.45	660.05	220.85	885.84	940.68

File Description	Document
List of project and grant details	<u>View Document</u>
e-copies of the grant award letters for research projects sponsored by government and non- government	View Document
Any additional information	View Document

3.2.2 Percentage of teachers having research projects during the last five years

Response: 12.24

3.2.2.1 Number of teachers having research projects during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
29	40	19	27	36

File Description	Document
Names of teachers having research projects	<u>View Document</u>
Any additional information	View Document
Link for additional information	View Document

3.2.3 Percentage of teachers recognised as research guides

Response: 33.85

3.2.3.1 Number of teachers recognized as research guides

Page 53/137 28-10-2022 02:50:42

Response: 87		
File Description	Document	
Upload copies of the letter of the university recognizing faculty as research guides	View Document	
Any additional information	<u>View Document</u>	
Link for additional information	View Document	

3.2.4 Average percentage of departments having Research projects funded by government and non-government agencies during the last five years

Response: 108.89

3.2.4.1 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
10	10	10	10	10

3.2.4.2 Number of departments offering academic programes

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

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

3.3 Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations, creation and transfer of knowledge supported by dedicated centers for research, entrepreneurship, community orientation, Incubation etc.

Response:

An ecosystem has been created in the institution to promote innovation, transfer of knowledge and entrepreneurship. The Bhau's Entrepreneurship Cell of the College of Engineering, Pune was established in 2006. Bhau's E-Cell aims to foster the entrepreneurship culture among the students and epitomize the power of innovation. Since its inception, E-Cell has been primarily responsible for stimulating, sustaining and supporting entrepreneurial endeavours within the campus, providing them with necessary assistance and resources. With dedicated and full-fledged support from Bhau Institute of Innovation, Entrepreneurship and Leadership, E-cell organises keynote lectures, workshops, competitions, and several such events to help the students build their own innovative ideas and ingrain an Entrepreneurial mindset within them. One of the major events organised by E-Cell is Pune Startup Fest. The very first edition of Pune Startup Fest was successfully organised in 2019. Pune Startup Fest arranges a Start-up Expo which furnishes numerous Startups and internship opportunities for interested students. Pune Startup Fest in its future editions will continue to give students similar but greater opportunities. Pune Start-Up Fest (PSF) is the annual entrepreneurial festival organized by I&E-Cell of COEP. It arranges a Start-up Expo which furnishes numerous Startups and internship opportunities for interested students. Startups and students are given huge opportunities to develop by giving them access to entrepreneurial resources and networks throughout the community. A variety of events are organised during the fest. Keynote lectures and many speeches by prominent personalities are arranged to motivate aspiring entrepreneurs. As part of this initiative, Ideation contests were conducted every year. The students participated in large numbers and showed enthusiasm toward innovation and its practice. The institute provided necessary facilities and financial support up to Rs.5.00 lakh to carry out each of these projects. A committee consisting of experts from diverse fields representing industry, banking and other allied areas are involved in the shortlisting of innovative ideas for pursuing further.www.punestartupfest.in

Innovators of India (I2I) is a movement organized by the BHAU Institute of Innovation, Entrepreneurship and Leadership [BIEL] at the College of Engineering, Pune. I2I is a unique initiative that aspires to reach out to students across India and provide them with an opportunity to become social entrepreneurs and bring about small but significant changes in the world around. https://www.coep.org.in/content/ignitedinnovatorsofindia

Students are encouraged to take up industrial projects at various reputed research organizations and industries, as part of their project work. Students are encouraged to take up and participate in code development activities such as Hackathons and Coding contests etc., which train the students towards innovation. Faculty are encouraged to conduct research activities and make publications in the journals of repute for knowledge sharing. The faculty have been encouraged to take up Intellectual Property rights as an initiative toward innovation and knowledge sharing. The faculty delivers guest lectures and expert lectures to other institutions as part of knowledge sharing. The eight departments in the institute have been recognized as Research Centers to conduct research activities leading to innovation through research scholars.

File Description	Document
Upload any additional information	<u>View Document</u>
Paste link for additional information	View Document

3.3.2 Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development during the last five years.

Response: 188

3.3.2.1 Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development year-wise during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17
22	13	16	53	84

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

3.4 Research Publications and Awards

3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the following: 1. Inclusion of research ethics in the research methodology course work 2. Presence of Ethics committee 3. Plagiarism check through software 4. Research Advisory Committee

Response: A. All of the above

File Description	Document	
Any additional information	<u>View Document</u>	
Link for additional information	View Document	

3.4.2 Number of Ph.D's registered per teacher (as per the data given w.r.t recognized Ph.D guides/supervisors provided at 3.2.3 metric) during the last five years

Response: 5.81

3.4.2.1 How many Ph.Ds are registered within last 5 years

Response: 465

3.4.2.2 Number of teachers recognized as guides during the last five years

Response: 80

File Description	Document
List of PhD scholars and their details like name of the guide, title of thesis, year of award etc	View Document
URL to the research page on HEI web site	View Document

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

Response: 1.6

3.4.3.1 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
95	50	45	70	136

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

3.4.4 Number of books and chapters in edited volumes / books published per teacher during the last five years

Response: 1.99

3.4.4.1 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
122	42	80	63	185

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

3.4.5 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed

Response: 4.8

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

3.4.6 Bibliometrics of the publications during the last five years based on Scopus/Web of Science - hindex of the Institution

Response: 23.5

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

3.5 Consultancy

3.5.1 Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

Response: 3867.03

3.5.1.1 Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).

2020-21	2019-20	2018-19	2017-18	2016-17
365.200	1006.95	1091.24	875.59	528.05

File Description	Document
List of consultants and revenue generated by them	View Document
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	View Document
Any additional information	View Document

3.5.2 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs).

Response: 235.82

3.5.2.1 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
47.800	48.58	29.19	54.04	56.21

File Description	Document
List of training programmes, teachers and staff trained for undertaking consultancy	View Document
List of facilities and staff available for undertaking consultancy	View Document
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	View Document
Any additional information	<u>View Document</u>

3.6 Extension Activities

3.6.1 Extension activities are carried out in the neighbourhood community,-sensitising students to social issues, for their holistic development, and impact thereof during the last five years

Response:

Extension activities are encouraged to be taken up by the students in order to fulfil the aspirations of the Vision and mission statements of the institution. Holistic development of the individual is the aim with which the students are encouraged to participate in extension activities through agencies such as NSS, clubs and societies. Every year the college organizes a Technical fest called Mindspark and in this connection, it is a customary practice to invite students from nearby institutes and showcase the activities of the departments for the benefit of society under the banner of "Inspire and Ignite". In addition, these students are trained in developing the small robots, models and displays during the technical fest. Further, the institution encourages students to participate in curricular, co-curricular and extracurricular activities. The institution has an active NSS wing which takes up projects like keeping the college clean and green, doing community service by conducting awareness drives through street plays to educate people on literacy and cleanliness, organizing blood donation camps and the like. Our students actively participated in cleaning Pune city and the nearby village as part of Swatch Bharat initiatives. COEP Janeev Club (previously COEP Environment Club) had evolved from an environmental project initially undertaken by a

Page 59/137 28-10-2022 02:50:42

group of Civil Engineering students. The club realized that all environmental and social issues are interconnected, and do not exist in isolation. Thus, it was decided to transform the club with a view to increasing its scope by working on social issues as well. In the year 2011, the Environment Club was transformed into Janeev Club (Marathi: ?????, meaning: consciousness) as the socio-environmental club of COEP. The club aims at sensitizing students about various social and environmental issues and enhancing their knowledge regarding the same. The club conducts various activities like lectures and seminars by intellectuals and activists, documentary screenings, classic film screenings, discussions, street plays, awareness campaigns, tree plantation, poetry recitation, etc.

Spandan is an initiative by COEPians, started in 2003. Ever since Spandan has touched the lives of many underprivileged people such that they look back at their painful past as an ephemeral one. Some of the activities which we conduct include a celebration of Rakshabandhan in orphanages, spending time in old age home, making blind-school students self-employed, village camps, Blood Donation Camps and much more. Times have changed now. Spandan is changing its agenda. In addition, to help the underprivileged to burgeon, the members of Spandan are going to put, the Engineering and Technical Skills. In line with the annual schedule, Spandan will make simple technological prototypes which can ease the lives of the people. Spandan is on its way to becoming one of the very few Techno Social NGOs.

Our students participate in NGO activities such as street causes. Medical camps are organized in the neighbourhood for the benefit of society as part of NSS activities. People in and around the institute, students and staff of the institute got benefitted through this program.

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

3.6.2 Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government recognised bodies during last five years

Response: 68

3.6.2.1 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
7	6	7	9	39

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

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

Response: 41

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

2020-21	2019-20	2018-19	2017-18	2016-17
02	04	14	11	10

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

3.6.4 Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years

Response: 10.63

3.6.4.1 Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17
085	255	654	583	593

File Description	Document
Reports 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

3.7 Collaboration

3.7.1 Number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

Response: 50.2

3.7.1.1 Total number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on -the-job training/ project work

2020-21	2019-20	2018-19	2017-18	2016-17
022	68	88	46	27

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	View Document
Any additional information	View Document

3.7.2 Number of functional MoUs with institutions of national, international importance, other institutions, industries, corporate houses etc. during the last five years (only functional MoUs with ongoing activities to be considered)

Response: 367

3.7.2.1 Number of functional MoUs with institutions of national, international importance, other Institutions, industries, corporate houses etc. year wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
125	092	61	47	42

File Description	Document
e-copies of the MoUs with institution/ industry/ corporate house	View Document
Details of functional MoUs with institutions of national, international importance, other Institutions 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:

4.1.1 The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc

College of Engineering has a beautiful landscape, aesthetic architecture, eco-friendly environment, spacious classrooms, well-equipped laboratories and good infrastructure spread over 24 acres. Classrooms: The Institute has well-furnished, spacious and well-ventilated classrooms which are also well illuminated. Classrooms are maintained as per norms for proper visibility and audibility. The classrooms are equipped with adequate furniture, blackboard, projectors, fans, lights and power backup. 95% of the classrooms are provided with LCD projectors and LAN / Wi-Fi connectivity.

COEP has 84 Classrooms, 145 Labs + 52 Computer Labs, Mechanical Workshop -01, Electrical Workshop -01, Technical and No-Technical Clubs - 48, and Center of Excellence - 04.

Library of COEP is equipped with 5800 e-Journals, 12,806 e-books and 7045 international Journals (e-Journals). National/International Journal Subscription - 83 (Hardcopy), Total Number of Books for UG and PG 1,41,730 (Hardcopy).

Laboratories: The Institution has domain-centric laboratories as per the regulations of AICTE and SPPU University. Adequate and well-maintained equipment to conduct experiments is provided. The laboratories are kept open beyond the working hours depending on the need of the students. Sufficient safety measures have been incorporated and are displayed at strategic locations in the laboratories. COEP has well-equipped Industry supported laboratories. Virtual labs were also developed by COEP.

Seminar Halls: In COEP each department has a seminar hall which is used to conduct seminars, conferences, guest lectures, and workshops for students and faculty. All seminar halls have adequate seating capacity, and these are equipped with LCD projectors, whiteboards, raised platforms and a public[1]address system with an internet facility. Web-based Teaching and Learning Hall The college has two Auditoriums equipped with two LCD projectors and two screens, audio systems, whiteboards and a computer with Internet connectivity for conducting institute functions having a seating capacity of more than 1000. Three classrooms in each department have been provided with digital boards for supporting the teaching-learning process.

IT Infrastructure at COEP: Institute has provided well-maintained IT infrastructure to students and faculties. Institute has Well equipped Data Center. The data centre of COEP has High-end Cisco core switches - Cisco Catalyst 6800 provides mobility, pervasive video, collaboration, and resiliency and the resulting challenges of scale, security, and management, making it the ideal switch for campus backbone deployments. The institution has 1668 computers. Every department has separate computer labs for conducting programming & simulation experiments to enhance the skills of the students. All the teaching faculties are provided with desktops and Laptops with fast Broadband and WIFI internet

Page 64/137 28-10-2022 02:50:42

connectivity.

Learning Management System (LMS): Moodle is a learning platform that is made available to students and faculties to provide Faculty and Students to create personalised learning environments. There is a dedicated server for Moodle. Every student and Faculty of the Institute is provided with an account for the Teaching and Learning Process.

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, yoga, games and sports (indoor & outdoor); (gymnasium, yoga centre, auditorium, etc.,)

Response:

Ground:-

- 1. Actual ground:- COEP has a wide ground of nearly 7 acres. It has Basketball, Volleyball, Cricket, Kho Kho, Kabaddi, Handball, Football, Baseball, Hockey, and Ball Badminton Grounds. The ground has a separate pavilion.
- 2. Badminton court: COEP has a Badminton court and Table Tennis court near the Mula-mutha river coast above the boat club canteen.

Facilities:-

We have many facilities. The institute has two auditoriums, one auditorium with around 950 capacities, and another has 200 people capacity, hostel campus with modern amenities like two gymnasiums separate for Boys and Girls and facilities. We have a separate team for each sport. We have nearly 20 events. And provide each and every facility to each team. Event list given below:

Handball, Hockey, Baseball & Ball badminton, Kho-kho, Lawn Tennis, Chess, Badminton, Rifle Shooting, Volleyball, Basket Ball, Carrom, Yoga, Athletics, Table tennis, Archery, Kabaddi, Cricket, Swimming Team, Fencing, Yoga Club.

We provide each type of Ball i.e. basketball, volleyball, football etc. For cricket:- COEP provides bats, balls, stump and guards also.(as much as required)

For Yoga:- COEP provides yoga mats to each and every interested student.

For the sports like kabaddi and kho kho COEP has well-maintained ground. As the sports like kabaddi and kho kho require watering of the ground every single day, College fulfills this requirement also. College provides cones, jerseys and stopwatches also. For athletes, our college provides hurdles and whichever

thing is required.

Indoor Games: Carrom and chess, the college provides a carrom board, stand for the board, carrom coins, chess board and stopwatches. Basically, in spite of being an engineering/technical institute, COEP wants to inculcate the sports spirit in every single student/player.

COEP has a Fencing club. Fencing is a group of three related combat sports. The three disciplines in modern fencing are the foil, the épée, and the sabre (also saber). Fencing is a sport that includes two people with swords. This year Four players from COEP fencing Team were selected for Zonal at Pune Intercollegiate Fencing Tournament on 25th of December and they presented Pune City Zone at the Zonal level on 26 the of December.

Boat Club: COEP is fortunate to be situated along the banks of the Mula river and holds extreme pride in being one of the few colleges in the world to have its own Regatta and it is also recognized by The Limca Book of World Records as "The Longest Running Event by an Institute" in the year 2019-20. The name itself suggests that Regatta is a series of boat races. The event comprises of five shows, namely Arrow Formation, Shell Games. Kayak Ballet.

COEP has a big ground in front of COEP Hostel. The ground is evenly levelled and is perfect for athletics events and practice. It has a circumference of 350m. For various throwing events, COEP's Athletics team has Javelins, Shotputs, hammers, and disks.

Institute has a permanently marked cement basketball court with a compound. COEP has been a great performer in the last couple of years in Basketball.

File Description	Document	
Upload any additional information	<u>View Document</u>	
Geotagged pictures	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: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 53

Page 66/137

File Description	Document
Upload any additional information	<u>View Document</u>
Institutional data in prescribed format	View Document
Paste link for additional information	View Document

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

Response: 188.72

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
114.54	106.13	91.34	97.12	99.58

File Description	Document	
Upload Details of Expenditure, excluding salary during the last five years	View Document	
Upload audited utilization statements	View Document	
Upload any additional information	<u>View Document</u>	
Link for 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:

COEP Library is using SLIM21 software developed by Algorithms Consultants Pvt.Ltd., Pune for library automation. Initially, the library implemented SLIM 2.0 (DOS version). Then in the Year 2003, we upgraded it to SLIM++. As academic libraries need to upgrade not only their collections but also the technology from time to time to provide readers coming from diverse engineering streams, we have shifted to SLIM21 from SLIM++ in the Year 2008.

SLIM21 is a comprehensive library automation package customized to perform all the operations and activities of a fully electronic library. It supported WebOPAC, Catalog maintenance, Circulation, Serial Management, Acquisition, Processing and MARC Cataloguing.

COEP library follows the cataloguing procedure through SLIM 21 software. Enter an ISBN number of 10 or 13 digits to fetch the bibliographic information from various websites/databases like Google Books, LOC and ISBNDB etc. It fetches all information about books along with their cover images, abstracts etc. Ultimately, it saves manual data entry efforts and the time of library staff.

COEP library uses the Dewey Decimal Classification System.

Librarian classifies books with DDC 21 series and gives the right number to each book. Enter class number along with author mark and accession number in the book as well as in softwareSLIM21. Its cataloguing module is specially designed for entering multilingual data in the Unicode script. Cataloguing of Multilingual books along with English with special reference to Hindi and Marathi books has been made extensively possible by using SLIM21 Software.

The circulation module provides everything that any library needs- easy front desk operations, spine label & barcode label printing, stock taking and automated daily transaction and overdue reminders. The system is integrated with the RFID system faster & accurate issue/returns. Smart cards provided to students are integrated with the Circulation module.

A variety of daily transaction reports and statistics are available which helps us in understanding the usage of the library, which automatically helps us build our collection and improves staff efficiency & service standard.

WebOPAC module enables all students and faculties quick and easy access to the library resources-both physical and digital. Using simple search and advancedsearch options, students search library resources through OPAC in different ways are as follows:-

Along with search results, circulation details are also displayed. If any book is out of stock, then students can reserve the books online and whenever that book is available; a collection notice is sent from SLIM21. Digital contents/files (PDF, DOC, PPT, Video, Audio, etc.) are attached in support of the bibliographic record.

Moreover, it offers personalized services like checking current and previous loans, Renewing books, Check Reservation Status, and so on.

SLIM Serials Control system easily controls and maintains our library's periodicals and magazines in the most efficient way. It manages traditional and complicated subscriptions, e-databases, e-journals, Bound volumes and many more resources.

To conclude, SLIM Software was introduced in COEP Library almost 25 years ago is now proved to be a milestone in accessing the department-wise collection, quenching the thirst for knowledge for hundreds of students.

File Description	Document
Upload any additional information	<u>View Document</u>
Paste Link for additional information	View Document

4.2.2 Institution has access to the following: 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
Institutional data in prescribed format	<u>View Document</u>
Details of subscriptions like e-journals, e-books, e-ShodhSindhu, Shodhganga Membership etc	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: 154.75

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
179.31	136.40	139.10	159.76	159.20

File Description	Document
Details of annual expenditure for purchase of and subscription to journals/e-journals during the last five years	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: 3.79

Page 69/137

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

Response: 165

File Description	Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution has an IT policy covering wi-fi, cyber security, etc., and allocated budget for updating its IT facilities

Response:

College of Engineering Pune is having 2Gbps (1:1) Internet leased line connectivity from BSNL and 1Gbps NKN connectivity.

College of Engineering Pune has developed a full-fledged campus wide network using latest technology blade Servers, rack servers, Cisco router, switches, Wireless access points and wireless controller. This involved upgrading to 10Gbps fiber cable, installation of 11.4 Tbps and 2 Tbps switches in data center and hostel campus, having 1800 plus LAN nodes. Overall computing facility consist of approximately 1600 computing machines inclusive of desktop, laptop and workstations. Provisioning 100 latest desktops for computing centre in hostel.

Institute is having 1Gbps (1:1) Internet leased line connectivity from BSNL and 1Gbps NKN connectivity.

Institute IT infrastructure is strengthened with state-of-the-art link load balancer, firewall, anti-virus, content filtering, video streaming, video conferencing and digital library server systems. Each student in the institute and hostel campus now has uninterrupted internet and intranet access via wired as well as wireless connectivity.

COEP reinforced their state of the art data centre with 6800 series catalyst switches.

COEP is running 10GE backbone over Cisco catalyst 6800 series switch acting as a Virtual Switching System that translates to a system capacity of up to 22.8 Tbps. Cisco Adaptive Security Appliances (ASA) series firewall and wireless controller are incorporated into the switch. Wired/Wireless LAN Controller is used for controlling LAN /wireless network access.

In addition, Seqrite's Secure Web Gateway (SWG) solution is used to secure IT environment of institute.

Radware Alteon 5208S Link load balancer is deployed in data centre to terminate Internet link from different ISPs. COEP also uses Cisco catalyst 3600, 4500, 2900 series switches, HP and and Huawei 10G Switches across the campus for access.

The wireless service module 2 (WiSM2) supports higher client density with advanced wireless security. Video streaming technology for optimized video performance is also implemented.

The entire campus is Wi-Fi enabled with high speed of internet throughout the campus to allow students to connect anywhere in the college premises like class room, library, Auditorium, cafeteria and Hostel with Aironet 2700 and Aironet 2800 series Access points Dual-band, controller-based 802.11a/g/n/ac.

High capability networking and cloud services running over the data center deliver quality services and the performance that students, researchers and faculty require.

Softwares running on latest technology servers are Ansys 19, Matlab 22a, Hypermesh, Gate Software, SSPS, Esite, DFMA, ISM 6, Tally, Minitab etc.

Institute is having Microsoft campus agreement, which allows downloading Microsoft products for academic purpose.

Impartus Lecture capture software is used for lecture recording purpose. Cisco WebEx software and Microsoft Teams software is used for conducting online lectures, seminars and workshops. Slim software for library, MIS server, DHCP server DNS, Proxy and LDAP severs are deployed at institute.

- Rack Server HP- HPE Proliant DL 380 GEN 9
- HP Blade System c7000
- 2 Way Blade Servers with Dual processor HP-HPE Proliant BL 460C Gen 9
- Unified Storage Array solution with Dual Active-Active controllers HPE 3PAR 7200 c
- Storage Area Network Switch HPE 8/24 SAN Switch

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: 2.48

4.3.3 Bandwidth of internet connection in the Institution.

Response: ?50 MBPS

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

4.3.4 Institution has the following Facilities for e-content development

1. Media centre

Page 71/137 28-10-2022 02:50:42

- 2. Audio visual centre
- 3. Lecture Capturing System(LCS)
- 4. Mixing equipments and softwares for editing

Response: C. 2 of the above

File Description	Document	
Upload Additional information	<u>View Document</u>	
Institutional data in prescribed format	View Document	
Link for Additional information	View Document	

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the last five years

Response: 2269.96

4.4.1.1 Expenditure incurred on maintenance of 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
1130	996	995	1662.4	1338.99

File Description	Document
Upload any additional information	<u>View Document</u>
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:

There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc in COEP. For Central Facilities an Online System is developed. Faculties and Students can send a booking request using the following link (http://foss.coep.org.in/mrbs15/web/day.php) to book the venue for regular, occasional, academic or extracurricular activities. All the Laboratory facilities for carrying out experiments and testing facilities of all the departments are made available to the students and Faculties of the institute, free of cost. Central

Facilities like Scanning Electron Microscope, X-ray Diffractometer, and other Testing Facilities are available to the outsiders with nominal charges for carrying out experiments and Testings, however, the preference is given to the students and Faculties of COEP while fixing the appointment. For placement activities whenever computer labs, auditorium etc. are required are made available on advance booking and on a priority basis. Classrooms are also made available for academic or extracurricular activities out of office hours. Booking of the Auditoriums, Sports complex and boat club facilities are taken care of by the gymkhana staff centrally.

General maintenance is handled by a second cell called the Maintenance Cell. BWC and EWC work committees exist within COEP. The professionals in the institute's HVAC maintenance are from the mechanical engineering departments. The team is in charge of maintaining the cleanliness of the campus's grounds, athletic facilities, structures, classrooms, labs, furniture, seminar rooms, conference rooms, staff and student hangout areas, cafeteria, etc. The maintenance of elevators, water coolers, water purifiers, rainfall catchment basins, sewage treatment, firefighting and fire alarm systems, pest control, and other amenities are also managed by the cell. Daytime housekeeping services are provided and are subcontracted annually. Periodic site inspections are conducted by the team leader and based on the condition of the location, alterations are advised for jobs like civil work and electrical work.

The department heads send reports to the management on a regular basis regarding the care of the physical facilities. Prioritization and recording of minor repairs are done in an office-based ledger. Students utilise each classroom to its fullest potential during the school day while also learning how to care for the facilities. To ensure that the lights and fans switch off if there is no activity inside, infrared motion sensors are installed in every classroom. A report must be generated each month, and these sensors must be frequently inspected. Concerns about the physical facilities are handled by the maintenance cell, which is directed by a professor from the civil engineering department. Email, among other methods, can be used to register complaints.

A generator in the COEP is in charge of maintaining a steady supply of electricity throughout the entire campus. The group is under the direction of the department head of electrical engineering. The department also employs teachers and support staff to maintain track of the maintenance of generators, lighting loads, solar power, etc. A third company is entrusted with the maintenance of the generators, and the third party performs routine inspections to guarantee the generators are in good working order.

The COEP has a Data centre to handle the maintenance of computers and other peripherals. The team is led by a coordinator (professor) from the computer engineering department, who is assisted by support staff. Replace or repair computers and accessories, install and upgrading software, maintain Wi-Fi, updating hardware, and doing other maintenance jobs are all examples of maintenance tasks. Regular inspections are conducted by the support staff of all departments, and the status of all computers and related equipment is sent to the computer centre each month for any necessary corrective work.

The physical education department, which is led by a physical education trainer and supportive personnel, is in charge of maintaining the sporting facilities. The department performs routine maintenance on the sports field either internally or through a third party.

The maintenance of the library is the responsibility of the librarian and his support team. The library regularly does internal audits to make sure the condition of the books. In order to understand the needs of the professors and students and take the proper action to meet those needs, the librarian frequently engages with both groups.

The upkeep of the academic facilities for their laboratories, workshops, and classrooms is under the supervision of the department heads in cooperation with the lab supervisors and technical personnel. To ensure reliable readings for the studies carried out in the laboratory, third-party companies calibrate the metres and equipment on a regular basis.

The following services and facilities are provided by the institution for its students, faculty, and staff, and are maintained by the contracted service providers: Banking cafeteria /space /Books, stationery, and printing resources are also available. Canteen services are outsourced to Boat Club Canteen and Cafe house in COep premises. The banking facility is taken care of by the State Bank of India. Outsourcing is done for the maintenance of sports grounds and sports-related equipment.

The Learning Resource Center's staff is responsible for maintaining the textbooks, bound journals, reprographic equipment, and library software. These facilities' usage is always being watched. The efficient use of facilities is ensured by effective planning at the beginning of the semester while creating timetables and academic calendars (both academic and general). Among other things, outsourcing firms take care of horticulture and landscaping jobs. The equipment provider provides maintenance as needed for the electronic surveillance systems that were deployed on campus. The in-house Computer Center is responsible for the upkeep of computers, ancillary gear, LAN, and Wi-Fi around the campus.

File Description	Document	
Upload any additional information	<u>View Document</u>	
Paste link for additional information	View Document	

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: 39.73

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
1898	1910	1380	1530	1387

File Description	Document
upload self attested letter with the list of students sanctioned scholarships	View Document
Upload any additional information	<u>View Document</u>
Institutional data in prescribed format	View Document
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document

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

Response: 3.9

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
295	260	130	110	0

File Description	Document
Upload any additional information	<u>View Document</u>
Number of students benefited by scholarships and freeships besides government schemes in last 5 years	View Document
Institutional data in prescribed format	View Document

5.1.3 Following Capacity development and skills enhancement activities are organised for improving students capability 1. Soft skills 2. Language and communication skills 3. Life skills (Yoga, physical fitness, health and hygiene) 4. Awareness of trends in technology

Response: A. All of the above

File Description	Document
Details of capability enhancement and development schemes	View Document
Any additional information	View Document
Link to Institutional website	View Document

5.1.4 Average percentage of students benefited by career counseling and guidance for competitive examinations as offered by the Institution during the last five years.

Response: 23.04

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
960	1010	940	900	0890

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 adopts the following for redressal of student grievances including sexual harassment and ragging cases 1. Implementation of guidelines of statutory/regulatory bodies

Page 76/137 28-10-2022 02:50:42

- 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	<u>View Document</u>
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: 59.08

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
660	650	735	780	755

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	View Document

5.2.2 Percentage of student progression to higher education (previous graduating batch).

Response: 5.84

5.2.2.1 Number of outgoing student progressing to higher education.

Response: 74

File Description	Document
Upload supporting data for student/alumni	<u>View Document</u>
Details of student progression to higher education	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: 25.28

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
75	35	90	30	33

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

2020-21	2019-20	2018-19	2017-18	2016-17
179	240	255	225	155

File Description	Document
Upload supporting data for student/alumni	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years	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: 1363

5.3.1.1 Number of awards/medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (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
7	460	270	346	280

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

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

Response:

Gymkhana is the regulatory body governing all sports, cultural and extra-curricular activities at COEP. With an amazing array of Extracurricular clubs and Societies, COEP is a wonderful place for exploring the different facets of science, culture and sports.

Students at COEP engage themselves in a large number of extra-curricular activities and a student can find an interest group corresponding to almost any hobby. Sports are structured so as to help every aspirant to find his or her level and improve from there and for that, we have state-of-the-art facilities available at the college campus. Student involvement in the campus clubs is an impetus for self-realization and helps maintain a healthy balance between academic rigour and social life. Cultural activities include various performing and non-performing arts, which are run by a set of clubs. The vibrant club culture on campus is something unique to COEP and helps to nurture and develop talent. Technical activities are also an integral part of student extra-curricular with a host of technical and scientific clubs fostering hobby-based learning in the technical and scientific fields.

The college encourages the advancement of inclusive practices for social justice and better stakeholder interactions. In order to instil civic virtues and social responsibility in its student body, the institute emphasises value-based education. The university supports active student participation in academic, social, cultural, and recreational activities and provides the necessary infrastructure for doing so. Engagement of students and alumni, in the opinion of the college, is essential for general and comprehensive growth.

File Description	Document
Paste link for Additional Information	View Document

5.3.3 Average number of sports and cultural events / competitions organised by the institution per year

Response: 5.2

5.3.3.1 Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17
1	7	7	7	4

File Description	Document
Upload any additional information	View Document
Report of the event	View Document
Number of sports and cultural events / competitions organised per year	View Document

5.4 Alumni Engagement

5.4.1 The Alumni Association / Chapters (registered and functional) contributes significantly to the development of the institution through financial and other support services.

Response:

Alumni Association of College of Engineering, Pune, is established and registered in the year 1993, as Charitable Educational Trust. Also COEP Charitable Foundation is established in USA. To date around 22,000 alumni have been enrolled as Life members of Alumni Association of COEP. Regular networking activities for Alumni based in India as well as foreign-based Alumni in U.S., Canada, Germany, Australia, Japan etc. are conducted to establish strong links. Every year we Silver Jubilee, Golden Jubilee and Diamond Jubilee Celebrations of pass outs as a part of Global Reunion-Alumni Fest. The primary objective is to reconnect, reminisce and revisit the institute, connect with classmates strengthen the bond and savour the rich professional experiences gained over the years.

COEP encourages alumni to provide technical Lectures,

Alumni Association regularly receives donations from Alumni & industries for the purpose of infrastructural and laboratory developments of the alma mater and for instituting Gold medals, Awards, Prizes & scholarships for the students. Foreign Contribution from Alumni Abroad is received as per provision of the Foreign Contribution Regulation Act 1976.

Alumni Association encourages students through various awards, scholarships and funding for projects and related infrastructure. During COVID-19 Pandemic Alumni Association Provided 169 needy students with Laptops along with Internet Connection Facilities to enable them to attend online lectures and examinations. Alumni Association supports building Infrastructure related to students' extracurricular activities. Through Alumni Association in 2020-21, the institute received the support of Rs 5 Crore to Build a Building for the Department of Computer and IT. For a detailed report please refer to https://www.coepalumni.net/ and http://www.coepalumni.us/

Alumni actively participate in Industry Advisory Board, curriculum development and also support in Internship and Placements.

File Description	Document
Any additional information	<u>View Document</u>
Link for additional information	View Document

5.4.2 Alumni financial contribution during the last five years (in INR).		
Response: A. ? 15 Lakhs		
File Description Document		
Any additional information	<u>View Document</u>	
Link for additional information	View Document	

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the Institution

Response:

The Board of Governors and Director actively participate in BOG meetings for ensuring that the policy statements and action plans are aligned for attaining the Goals of the institute, disseminating the vision and mission to all stake holders and involving them in forming the policy statements. All the stake holders have formulated action plans in consultation with faculty members and all other staff; to review the outcomes from the implementation of action plans through meetings with functional committees and makes necessary changes in action plans if required. The BOG regularly takes review of quality policies and makes amendments in quality policies if required. The action plans are formulated in line with Mission and Vision statements under the leadership of the Director and the same are incorporated into strategic plans for effective implementation. The Director ensures that all stakeholders are involved in different activities. For Reinforcing the culture of Excellence; the vision, mission, short term and long term goals, quality policies are kept wide open to all stakeholders for their suggestions, necessary training is provided to its faculty and supporting staff for their development through motivation and team building activities thereby creating healthy work culture. Through participative management, all stakeholders are involved in various decision-making bodies of the institute as a whole. The financial requirements are proposed by various statutory committees and the BoG with Director approval. The biggest change as far as pedagogy at COEP is concerned. COEP a state Government institution has been converted to COEP Technological University, the act of which is already passed in both the houses of Govt. of Maharashtra in 2022. With such a bold step, it is increasing its horizon for admitting the UG and PG students from all states of India with an increase in intake capacity up to twenty percent. The Board of Governors meet at regular intervals and review the operations of the institution and provide guidance and support for further improvements keeping vision and mission, and strategic plan in view. The Strategic Plan for the institute is developed in the year 2021 for duration of 5 years. Based on the achievements till 2020, further plans were prepared up to 2025. In last five years new year's few PG programs added to the existing PG programs making the total to 26 Programs. The intake of PG programs is almost equal to the UG intake and the number of Ph.D's being produced in each year is also increasing with interdisciplinary research contribution. There are nine departments; almost every department has a minimum one finishing school to impart high-end technical skills for enhancing employability and 2 industry-partnered Incubation Centers for encouraging entrepreneurship. The institute has made progress in all fronts.

File Description	Document	
Any additional information	<u>View Document</u>	
Link for additional information	View Document	

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

Page 82/137 28-10-2022 02:50:43

Response:

The Institute promotes participative management. Ideas pertaining to academic goals, organizational progression and better campus life are collected from all stakeholders to promote the efficient functioning of the Institute, The staff and other stakeholders help in infusing a positive attitude that leads to increased efficiency, improved communication, dedication, heightened morale, motivation and job satisfaction. Believing in decentralization, the BoG of COEP; takes policy decisions, finance, infrastructure etc. with the help of members of the Faculty nominated in BoG. The BoG also discusses matters related to teaching and administrative staff and decisions are taken at these levels are implemented; Believing in democratic values, The institution has decentralized many day-to-day functions involving Faculties and students for participative management. All these activities lead the Institute to get good RANKS in Various Surveys and improved NIRF Rankings. The decentralization is seen in the formation and WORKING of various empowering Committees to name a few are listed.

- Open Organization Structure
- Club Conveners and various Clubs (50+)
- Women's Cell
- Purchase Committee
- Campus/Hostel Discipline Committee
- Institution's Innovation Council
- Board of Studies-DUPC/DPPC
- Departmental Research Committee
- Library Committee
- National Innovation and Start-up Policy
- Industry Advisory Boards in each Department

The case study pertaining to institution academic proceedings-Teaching learning process as mentioned hereunder to demonstrate decentralization and participative management. At the Institution level, Academic Council has been constituted which includes the Director, Deputy Director and all the HODs. This Council meets periodically to discuss various academic and non-academic matters. These include the introduction of courses, reforms in Examination and Assessment, infrastructure augmentation etc. The assignment of the courses to be taught by the faculty happens in the most democratic way. In the department-level meeting, the courses are distributed among the faculty according to the expertise of the faculty and due consideration of the need. The Head of the Department at the Program level is responsible for assigning the courses to the faculty. HODs also ensure that the academic calendar is followed and academic discipline is maintained at all levels in the delivery of course content, conduct of examinations, assessment etc. The HOD as chairman of BOS also discusses the introduction of new courses, revision of content and syllabus of a particular course based on recent developments and requirements with the faculty. Any of the changes in the courses including revision and introduction of new courses are then put to the BOS of the respective Programme which includes experts and resource persons from Academia, Industry, Alumni etc., for discussion and approval. The recommendations of the BOS of the various Programmes are then put to the Academic Council which also includes experts and resource persons from Academia, Industry and represents all the stakeholders for discussion and approval.

File Description	Document
Any additional informatiom	<u>View Document</u>
Link for strategic plan and deployment documents on the website	View Document
Link for additional information	View Document

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

Once the planning part has been done the next step is its implementation. This stage is among the most imperative part and has to be implemented with proper supervision and cooperation.

Implementation at Institute Level

Governance & Administration: BOG, Director office, Administration office and account section.

Branding /Expansion: Institute office, stakeholders with the guidance of BOG Members

Infrastructure (Academics/physical): BOG, Director, PEC, BWC and HOD's Teaching- Learning: Dean academic, Director, HOD's, Faculty and Staff

Departmental Activities: HODs and Faculty Training & Placements:Director, TPO & HODs

Research & Development: Dean R&D, & HODs and faculty and staff

Students Development and welfare: Dean Student affairs

Quality Assurance: Dean Quality assurance/IIQA

Students Admissions: Director/ Admission team, Students Section

Deployment

The plans articulated by the BoG and Director are communicated to the target groups like faculty, students, staff and other stakeholders through meetings, emails and other forms of communication. The various directives are disseminated to all stakeholders by Director as guidelines at the institutional level to undertake all the above activities; through well-defined policies and procedures for each of the activities.

The tasks involved for this strategy are

- 1. Revision of curriculum & academic regulations:
- 2. Revision of examination regulations & procedures
- 3. Introduction of best practices
- 4. MoUs with industries and research institutions
- 5. Self and Collaborative Learning Initiatives

The institute was conferred autonomy status by UGC and SPPU University in the year 2003 for a period of five years. The conferment of autonomy helped in the revision of the syllabus and also in introducing reforms in the examination pattern and assessment. This also facilitated the institute to introduce new

courses such as Skill Development Courses: Communication skills, Soft skills and technical skills. As also Human Values and Professional Ethics courses and Co-curricular (CCA) and Extra-curricular Activities (ECA) in a structured manner. The introduction of the courses and the activities helped in improving the communication and technical skills of the students and in turn their placement opportunities and preparing them for higher studies. The institute switched over to Choice based credit system in 2003. As a result of this, the weightage for ESE was revised to 40: 60 as of now. The pattern of the question paper for continuous internal evaluation was revised incorporating Bloom's Taxonomy levels. Further, the eligibility and promotion rules for the students have also been revised. The details are given in the additional information. MOUs have been entered into with various industries for the purpose of internships, guest lecturers for students, faculty training, consultancy and research. It is now made compulsory for the award of the degree for the students to register for online courses and acquire certification from agencies such as NPTEL, Course era, Swayam etc. A wide choice of Open elective courses has been offered from III semesters to VII semesters as interdisciplinary courses. Self-learning initiatives have been introduced through the teaching-learning methodology.

File Description	Document	
Any additional information	View Document	
Link for Strategic Plan and deployment documents on the website	<u>View Document</u>	
Link for additional information	<u>View Document</u>	

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:

College of Engineering Pune is an Autonomous Institute of the Govt of Maharashtra; which is an exclusive Institute for Higher Education. The overall planning and development of the institution is done by the Board of Governors (BOG). The day-to-day administrative affairs of the College are managed by the Director who is assisted by the Deans, Heads of the Departments and various Committees, consisting of experienced members of the faculty. Director is the academic as well as the administrative head of the institution shouldering the responsibilities of administration, and infrastructure on behalf of BoG and Govt of Maharashtra.

The Deputy Director is responsible for all financial matters. The Statutory Bodies are constituted and meetings are conducted as per the UGC, MHRD, State Government and University guidelines. The Non-statutory Bodies are constituted by the Board of Governors to complement the functions of the Statutory Bodies. The BOG nominates other academicians and experts in to these Bodies to strengthen the functioning of the College. The programmes, courses and activities are periodically evaluated by the College and reported in the appropriate Bodies for proper implementation. There are Committees, Cells and Associations focusing on specific tasks and roles in the College. The executive leadership is shared with the Deputy Director, the Controller of Examinations, the Dean-Academics, the Dean-Research, the Dean-Students, the Placement Officer, and all the Heads of the Departments. There is a written Job Description for each office and given to the officials at the time of appointment. The office of the Controller of Examinations has compiled all the rules and regulations of the evaluation system in a booklet.

The Management encourages the faculty to participate in various committees. This enhances leadership qualities and skills. The Grievance redressal committees have been formed for both staff and the students. The power delegation and decentralization of authority enrich the effective and efficient functioning of the institution in all its spheres of planning, implementation and decision-making. The Management plays a crucial role in enriching the bottom-up approach in the planning and execution of various academic activities.

File Description	Document
Any additional information	View Document
Link to Organogram of the Institution webpage	View Document
Link for additional information	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	
Institutional data in prescribed format	View Document	
ERP (Enterprise Resource Planning) Document	<u>View Document</u>	
Any additional information	View Document	
Link for additional information	View Document	

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff and avenues for career development/ progression

Response:

The College of Engineering College, Pune is established by the Government of Maharashtra and all the teaching and non-teaching staff and non-teaching staff are appointed as per Government rules and norms. As per the rules of the Government of Maharashtra the staff members are secured and supported by the following schemes for Teaching and Non-teaching staff..

- 1. The employees and their families are secured by the Pension scheme as per the Government of Maharashtra norms. The employees recruited after the year 2005 are secured with DCPS through National Pension Scheme (NPS). All employees are Supported under the Group Insurance Scheme(GIS). Life of all the Employees is secured with Accidental Insurance Policy. Employees Provident Fund as per PF rules for all the teachers whether they are ratified or not are given PF benefits right from the day of their joining the college. This is done as per requirements by AICTE and keeping in view the financial safety of employees or their dependents. The temporary faculty does not avail the PF facility. The employees are supported with Mediclaim facility for employees and their dependents. All employees are funded under the Home Loan Advance scheme for purchasing a home.
- 2. The faculty members who are doing their PhD work in COEP only part-time and they are given financial assistance by paying the tuition fees is paid by the college.
- 3. Government of Maharashtra employees are funded under the Loan Advance scheme from the Faculty cooperative society.
- 4. The college has provided a health insurance policy for all the employees without any contribution from the employees in this regard. The students are also covered by insurance and the commitments of the college.
- 5. The women employees are extended the maternity leave as per the service rules of the institution
- 6. The Class III and Class IV employees are supported with the festival advance of Rs. 10000 during the Diwali festival.
- 7. Free health check-up camps are organized by the medical centre of the college with the help of many corporates in the Medical sector
- 8. The employees are provided with a Leave Travel concession(LTC) once in the four-year cycle.
- 9. All the Employees are secured with a General provident fund(GPF) and Advance/Loan scheme against the GPF.
- 10. Free uniforms for class IV employees.
- 11. Government quarters for Class III and class IV employees.
- 12.links

File Description	Document	
Any additional information	View Document	
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: 70.43

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
106	148	237	090	280

File Description	Document
Institutional data in prescribed format	View Document
Link for additional information	<u>View Document</u>

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

Response: 42.6

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
32	49	40	41	51

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres).	View Document
Reports of Academic Staff College or similar centers	<u>View Document</u>
Institutional data in prescribed format	<u>View Document</u>
Link for additional information	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: 61.66

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

2020-21	2019-20	2018-19	2017-18	2016-17
250	210	65	110	135

File Description	Document	
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	View Document	
IQAC report summary	View Document	
Institutional data in prescribed format	View Document	
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:

The present practice of quality assurance has contributed to the planning and execution of the policies uniformly throughout the college. All quality assurance strategies are applied uniformly throughout the college. Quality assurance cell plans, and schedules both internal and external academic audits. It also keeps track of the accreditation status of various programmes and makes arrangements for an application to accreditation agencies. IQAC has external committee members as per the guidelines of NAAC. Program Assessment & Quality Improvement Committee (PAQIC) is an in-house intra-department Committee chaired by the Head of the Department and comprising senior teachers in the department who are UG and PG Program coordinators for NBA accreditation. The most senior teacher amongst the NBA coordinators in the department shall also work as the department's NAAC coordinator and shall be invited to the IQAC meetings to present the work/progress of the department, in this regard. The meetings of PAQIC shall be organized MINIMUM TWO times in a year, preferably prior to the Institute-level IQAC meetings.

The Committee is expected to act as an interface between the Board of Studies-BoS and Industry Advisory Board-IAB, in the Department, while reporting periodically to the Institute level IQAC, for overall "Teacher & Learner-Centric Quality" improvement in all facets of academic programs' implementation, in the department.

The PAQIC shall have the following mandates:

- To ensure implementation of the resolutions and recommendations of the Program-specific BoS and IAB, in the department, towards overall Quality Improvement in the 'Curriculum Review-Analysis-Design', and most importantly 'Content Delivery'.
- To ensure and monitor the execution of standard practices and the state-of-art in 'Teaching-Learning-Assessment-(T-L-A)', in the Academic year, semester-to-semester, based on the resolutions and recommendations of the BoS/IAB, and feedback of teachers and learners on the T-L-A.
- To prepare for and offer the UG/PG programs in the Department for periodic assessment by NBA or NAAC, towards successful accreditation, by consistent upkeep and maintenance of relevant academic records, data, documents and evidence.

- To monitor, assess and compile the attainment of Programs outcomes, annually, with submission of gap analysis in case of default.
- To accumulate, compile and analyze all the relevant data and outcomes that enable successful participation of the department in national/global Ranking and Branding frameworks.

File Description	Document	
Any additional information	View Document	
Link for additional information	<u>View Document</u>	

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

Response: 2245

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
40	1680	365	70	90

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Annual statements of accounts	View Document
Link for additional information	View Document

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

Response:

1. Fees: Fees are charged to all the students as per the university and government norms. The main financial resource for the Institute is by way of tuition fees. The tuition fee is fixed based on the previous year's expenditure and the impact of the inflation in the next three years. The State Fee Regulatory Committee appointed by Govt. of Maharashtra also provides scope for the Institute to allocate funds for the capital expenditure, which the Institute is planning over the next three years.

- Hence, the major resource mobilization depends on the fee fixation done by the State Fee Regulatory Committee.
- 2. Salary Grant: The College receives a salary grant from the State Government. For this, an annual budget of the estimated salary grant to the state government is submitted to the government. This grant includes salaries of the Full-Time Permanent teachers and non-teaching staff as well as part-time teachers working on granted posts.
- 3.UGC Grants: Our College is under 2F and 12B as per the UGC Act and Permanent Affiliation of the University. So we receive grants from the UGC for the development and maintenance of Infrastructure and upgrade of the Learning Resources and Research (including grants for Minor and Major Research Projects).
- 4. Institute receives the fund from Stakeholders, non-government bodies, individuals and Philanthropists. The institution always monitors the effective and efficient use of available financial resources for the infrastructure development to support the teaching-learning process. Along with tuition fees, research grants from various Government and Non-Government agencies, consultancy projects and funding from alumni are add-on resources for the mobilization of funds. These funds are utilized for all recurring and non–recurring expenditures.
- 5. The institution has a well-defined mechanism to monitor the effective utilization of available financial resources for the development of the infrastructure to augment academic needs. All the administrative and academic heads along with coordinators of different cells (viz., research committee, placement cell, library advisory committee (for the purchase of books/journals), purchase committee (for repair and maintenance cost) software and internet charges, printing and stationery, equipment and consumables, furniture and fixtures), NSS cell, sports, cultural committee etc., will submit the budget requirements for the coming academic year.
- 6. The finance committee prepares an annual budget estimate duly considering the proposals received and also the recommendations of the Director and Board of management. All the major financial decisions are taken by the institute's financial committee and BoG-Governing Body.
- 7. Institute adheres to the utilization of the budget approved for academic expenses and administrative expenses by BoG. After final approval of the budget, the purchasing process is initiated by the purchase committee which includes all heads of departments and account officers, accordingly, the quotations are called and purchase orders are placed after final negotiations. All transactions have transparency through bills and vouchers. The bill payments are passed after the verification of items. A respective faculty member ensures that suitable equipment/machinery with the correct specification is purchased. Financial audit is conducted by chartered accountant for every financial year to verify compliance.

File Description	Document
Any additional information	<u>View Document</u>
Link for additional information	View Document

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes visible in terms of – Incremental improvements made for the preceding five years with regard to quality (in case of first cycle) Incremental improvements

Page 91/137 28-10-2022 02:50:43

made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles)

Response:

The present practice of quality assurance has contributed to the planning and execution of the policies uniformly throughout the college. All quality assurance strategies are applied uniformly throughout the college. Quality assurance cell plans, and schedules both internal and external academic audits. It also keeps track of the accreditation status of various programmes and makes arrangements for an application to accreditation agencies. IQAC has external committee members as per the guidelines of NAAC. Program Assessment & Quality Improvement Committee (PAQIC) is an in-house intra-department Committee chaired by the Head of the Department and comprising senior teachers in the department who are UG and PG Program coordinators for NBA accreditation. The most senior teacher amongst the NBA coordinators in the department shall also work as the department's NAAC coordinator and shall be invited to the IQAC meetings to present the work/progress of the department, in this regard. The meetings of PAQIC shall be organized MINIMUM TWO times in a year, preferably prior to the Institute-level IQAC meetings.

The Committee is expected to act as an interface between the Board of Studies-BoS and Industry Advisory Board-IAB, in the Department, while reporting periodically to the Institute level IQAC, for overall "Teacher & Learner-Centric Quality" improvement in all facets of academic programs' implementation, in the department.

The PAQIC shall have the following mandates:

- To ensure implementation of the resolutions and recommendations of the Program-specific BoS and IAB, in the department, towards overall Quality Improvement in the 'Curriculum Review-Analysis-Design', and most importantly 'Content Delivery'.
- To ensure and monitor the execution of standard practices and the state-of-art in 'Teaching-Learning-Assessment-(T-L-A)', in the Academic year, semester-to-semester, based on the resolutions and recommendations of the BoS/IAB, and feedback of teachers and learners on the T-L-A.
- To prepare for and offer the UG/PG programs in the Department for periodic assessment by NBA or NAAC, towards successful accreditation, by consistent upkeep and maintenance of relevant academic records, data, documents and evidence.
- To monitor, assess and compile the attainment of Programs outcomes, annually, with submission of gap analysis in case of default.
- To accumulate, compile and analyze all the relevant data and outcomes that enable successful participation of the department in national/global Ranking and Branding frameworks.

File Description	Document
Any additional information	<u>View Document</u>
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 tal

for the preceding five years with regard to quality For	r secona ana subsequent cycles - Incrementa
improvements made for the preceding five years with	regard to quality and post accreditation
quality initiatives)	
Response:	

Response:

• Teaching learning process

The institution reviews its teaching-learning processes, structure, and methodologies of operations and learning outcomes at periodic intervals. Soon after becoming autonomous in the year 2004, the institution reviewed and found the different gaps in the Teaching learning process.

The gaps were:

- Skill development courses such as communication skills, soft skills, and technical skills.
- Human values and professional ethics
- Focused courses on Entrepreneurship
- Theme-based projects
- MOOC courses certification.

The above gaps are filled by introducing new subjects such as Skill development courses for improving the communication skills and soft skills for the enhancement of placements of students, initially as valueadded courses and later on as credit courses. Basic and Advanced Programming skills, application packages for modeling and analysis, IoT, etc., with a view to improving opportunities for students placement in the subsequent years.

Courses on Human Values and Professional ethics at the second-and third-year level were introduced in tune with the vision statement which spells out the need for human values.

A Course on "Introduction to Entrepreneurship" was made mandatory for all the UG programs. In continuation to this course, two open electives are introduced to train the students to nurture a startup company through a collaboration with National Entrepreneurship Network (NEN).

Students who have joined under the CBCS scheme are required to take up theme-based projects in the sixth semester.

Students are required to obtain a certification before completion of the course from leading agencies such as NPTEL, Coursera, etc. as per their choice. Faculty are also advised to undertake these certifications.

Faculty members are advised to collect the question papers of reputed institution and provide solutions to enable them to improve their knowledge as well as question paper setting pattern.

·Structures& Methodologies of operations

All the faculty members prepare an academic plan well in advance before the commencement of classwork for the courses. Every faculty member maintains course file for each course being taught. Class Review Committee meetings are held with students to know the progress of course coverage, pedagogy practices and efficacy of the teaching learning process.

The Lecture record of all the faculty members is reviewed monthly to ensure uniform coverage of syllabus as per Lesson Plan. The internal question papers are audited regularly in the department. Course endfeedback is collected from all the students on the content, coverage and evaluation of answer scripts foreach course. The ICT facilities are reviewed from time to time for its improvement.

• Learning outcomes

The institute has adopted outcome-based education and prepared course outcomes, program outcomes and program-specific outcomes for all the programs. The programs got accredited under an outcome-based approach. The Course Objectives prepared during 2013 were reviewed again in the year 2017 and have been modified ensuring the components of performance, condition and criteria. Course end feedback and program exit feedback are collected from the students to improve upon the course content, its delivery mechanism and evaluation system. Attainment calculations are made for each course at the end of the semester and in turn, the Program Outcomes are mapped and evaluated. These assessments are useful in offering the course with necessary improvements as required for the next semester.

File Description	Document
Any additional information	<u>View Document</u>
Link for additional information	View Document

6.5.3 Quality assurance initiatives of the institution include:

Page 94/137 28-10-2022 02:50:43

- 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)

Response: All of the above

File Description	Document	
Upload e-copies of the accreditations and certifications	View Document	
Institutional data in prescribed format	<u>View Document</u>	
Paste web link of Annual reports of Institution	tion <u>View Document</u>	
Link for additional information	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:

Measures initiated by the Institution for the promotion of gender equity during the last five year

Response:

Safety and Security

The important places in the institution such as the Main entrance, Examination halls, Canteen and Controller of examinations office are under CCTV surveillance. Complaint and suggestion boxes are made available in the department; also you can send a complaint directly to the director. The Institution has constituted the Women Protection Committee and Anti Sexual Harassment Committee for the safety and security of women and girls students. **Women Protection Committee:** An exclusive women development cell headed by Prof Dr V. S. Rajguru has been constituted by the Institution.

The following are the functions and responsibilities

- 1. To conduct awareness programs to emphasize the rights of the women
- 2. To develop the self-confidence of women.
- 3. To guide about Women Welfare Laws.
- 4. To highlight the importance of health and hygiene
- 5. To direct Women's role in society.
- 6. To develop a multi-disciplinary approach for overall personality development.
- 7. To formulate an equity action plan in the development activities of the Institution.

Anti Sexual Harassment Committee: The Anti sexual harassment committee headed by Dr. V. S. Rajguru is constituted in the institution and the following are the functions and responsibilities:

- 1. To build self-esteem and dignity among girl students and women faculty members To create and ensure a safe environment that is free of sexual harassment.
- 2. To create an atmosphere promoting equality and gender justice.
- 3. To seek medical, police and legal intervention with the consent of the complainant.
- 4. To make arrangements for appropriate psychological, emotional and physical support (in the form of counselling, security and other assistance)

Professional Psychological Counseling

College students are the cream of the young adult population. Many times it is observed that they are under tremendous pressure that stems from various aspects like expectations about excelling academically,

adjusting to the change in environment, family pressure, family problems, striking a balance between academics, extra-curricular activities, relationship issues, conflict in the values of the society at large and sometimes, psychological dysfunctioning.

The range of problems addressed include academic (exam stress, nervousness, lack of interest, perceived stress, year-down and backlogs, study habits, time management, and sometimes depressive symptoms), adjustment issues (lack of confidence, perceived insults, clashes with people, and inability to adjust with change in environment, especially for First Year students), relationships (family, clashes with family members, pressure about achievements & responsibilities, trouble with friends and intimate relationships or tumultuous personal relationships.

The services are totally free of charge for students of CoEP. Team of **Mrs. Tanuja J Kher** (M.A. Clinical Psychology, M.Phil. Educational Interdisciplinary,), **Dr Kshipra V Moghe** (M.A. Clinical Psychology, PhD, Certified in CBT)

Lateral entry students are offered group counselling sessions in order to help them integrate with mainstream students.

1. Common Room

Common rooms are available in each department of the Institution, equipped with tables, chairs, beds with linen, drinking water coolers and washrooms, exclusively for female students and employees. Sanitary towels are made available in the Health centre and in the student cooperative store.

File Description	Document
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
Annual gender sensitization action plan	<u>View Document</u>

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

Page 97/137 28-10-2022 02:50:43

File Description	Document
Geotagged Photographs	<u>View Document</u>
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:

Solid waste management:- College has two boys' hostels and one girls' hostel and residential quarters for teaching and non-teaching employees along with the director's residence. The solid wastes of all these places are collected by sweepers and dispatched through the municipality garbage collecting where dry and wait garbage are separated and subjected to the solid waste management plan of the municipality. The garbage other than the solid waste is also collected by housekeeping personnel and transported to a disposal site. Waste papers are collected and sold to vendors from time to time. As mentioned, the college campus has boys and girls hostels along with mess facilities where organic waste such as food ripening vegetable rumens are also collected by municipality van and disposed of properly. Solid waste of college premises is collected by sweepers daily and subjected to the municipality garbage collecting van

E-waste management.- Electronic goods are put to optimum use. The irreparable electronic goods and damaged computers are written off and then sold to a scrap vendor. UPS Batteries are exchanged by the suppliers. Obsolete computers are auctioned to the vendors. The electronic components and other e-waste are disposed of properly

Rain Water Harvesting

COEP's New Green Initiative under NaWaTech

DST Supported Project Total Hostel Water Recycling Solution: First campus in India

Natural Water Treatment Technologies to cope with water shortages in Urbanised India NaWaTech stands for natural water systems and treatment technologies to cope with water shortages in urbanised areas in India. It is a project under European Commission's 7th Framework Programme and is funded by the Department of Science and Technology, Government of India. NaWaTech Indian and European consortium partners aim to maximise the exploitation of natural and compact technical systems and processes for the effective management of municipal water resources, water supply and sanitation services, and of the municipal water cycle as a whole in urbanised areas of India. Due to a multi-barrier approach,

these systems will also be able to treat heavily polluted water (i.e. wastewater) in order to reuse it and supplement traditional sources to cope with water shortages today and in the future. Besides the technical aspects, research will also cover the technology sustainability of those systems in order to develop and bring to the market a cost-efficient multi-barrier water management approach: the NaWaTech system. NaWaTech project started on April 1, 2013, and it has a scheduled duration of 36 months. Pune and Nagpur have been selected as the two cities for the implementation of the project in India. The hostel campus at the College of Engineering Pune is the largest project site in Pune chosen for NaWaTech.

COEP Janeev Club (previously COEP Environment Club) had evolved from an environmental project initially undertaken by a group of Civil Engineering students.

The club aims at sensitizing students about various social and environmental issues and enhancing their knowledge regarding the same. The club conducts various activities like lectures and seminars by intellectuals and activists, documentary screenings, classic film screenings

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

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 additional 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

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: C. 2 of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document
Certification by the auditing agency	<u>View Document</u>
Certificates of the awards received	View Document
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: B. 3 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
Details of the Software procured for providing the assistance	View Document
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:

The College of Engineering, Pune has been contributing significantly to Engineering Education for over 165 years. We believe in not just imparting quality education to aspiring engineering but also having standard policies and measures to ensure the overall development of a student. As part of this, we regularly keep a track of students. At COEP, we have students coming from a large variety and diversity of backgrounds. Students from J&K, Northeastern states, and belonging to minorities of the country are admitted based on merit and State approved quota of seats.

We take each student's health (mental, physical and social) very seriously and we are extremely vigilant about identifying students who might run into trouble. For this, the COEP Wellness Centre ????? has amongst its 5 initiatives, the ICareWeCare activity where senior students undergo a "Sensitivity Training" so that they can provide help, support and guidance to all those who are newly admitted to the institute. This group of students also work as volunteers for the FY Student Induction Program, a mandatory activity by the AICTE which is successfully and effectively organized every year since 2018.

Other than this, COEP also has an Equal Opportunities Cell, an institutional body on the guidelines of SPPU, that constitutes of Male and Female Faculty representatives, along with Clinical Psychologists to ensure that each student gets equal treatment in all aspects of his/her academic life.

Further, as per the Vishakha Guidelines (the procedural guidelines to be used in cases of sexual harassment, 1997), an official committee was established in CoEP in May 2016 which comprised of members appointed on the basis of Vishakha guidelines. These include a Professor, an Associate Professor, a gender representative, a representative from the reserved category, a lawyer, a member of a recognized NGO and a member of the supporting staff. This committee has been officially appointed and conducts periodic meetings to assess or review cases.

As part of the Gender Equality program, under the TEQIP-III scheme, there is a methodic Complaint Redressal System in place. In this the complainant can launch a complaint online and once registered, the authorized committee members address the issue with utmost care and concern.

We at CoEP are dedicated to ensuring the safety and protection of each and every person involved with us

and are always willing to be a part of any initiative that helps us make our employees and students feel secure.

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

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:

Samvidhan Divas/ Constitution Day is celebrated on 26th November every year to remember and honour the adoption of the Constitution of India. The Constitution of India is a perpetual gift to all humankind that defines the fundamental right, directive principles and the duties of citizens. As a celebration of this, we recite the Preamble to the Constitution of India. The programme initiates with a Preamble reading of the constitution followed by lectures on the sensitization of students on responsibility towards the constitutional values, rights, duties and responsibilities of citizens. Students are encouraged to participate in activities like essay competitions on the related themes. viz. 'Economic Thoughts of Dr B. R. Ambedkar'. Research Responsibilities and Ethics The goal of the Research methodology course for postgraduate students is to familiarize them with research ethics in relation to their contribution to society. To educate pupils on the preservation of the ecosystem and environment, environmental science is taught and assessed as part of the curriculum. Additionally, green practices, resource conservation, the use of alternative energy sources, and renewable energy are all introduced to students. Induction of the students on values, rights, duties and responsibilities Students are made aware of the code of ethics, human values, rights, duties and responsibilities as a citizen of India during induction as well as other programmes throughout the year.

File Description	Document
Details of activities that inculcate values; necessary to render students in to responsible citizens	View Document
Any other relevant information	View Document

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

- 1. The 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	<u>View Document</u>

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

Response:

Independence Day and Republic Day are celebrated every year in the Institution. Management members of the Institution, staff members and students attend the flag hoisting ceremony. Dr. Sarvepalli Radha Krishnan's Birthday is celebrated on September 5th every year as Teachers' Day. An eminent academician is identified and felicitated every year on this occasion. As a tribute to the greatest Indian Engineer, sir Mokshagundam Vishveshvaraya on his birth anniversary the institute celebrates Engineers Day every year on September 15th every year. Various technical programs are conducted to mark this occasion. Technical competitions are conducted and prizes are distributed. An eminent Engineer is identified and felicitated every year on this occasion. 3rd International Yoga Day is celebrated at COEP in association with CII. COEP in association with the Confederation of Indian Industry (CII) celebrated the 3rd International Yoga day at the college campus. It started with the faculty, staff and students of both COEP & IIIT Pune performing the vogic exercises demonstrated by Dr. Parag Thuse who also delivered a talk on the purpose of International Yoga Day which is to promote yoga and endeavour toward making it a part and parcel of everyone's daily routine and the benefits of a yogic routine. The session was followed by the "Yogasan competition" and "Essay Competition" which had 9 students performing various assets and 11 students participating in essay writing respectively. As a Tribute to the great Indian Scientist, Sir C.V. Raman, his birth anniversary, is celebrated as National Science Day on 28th February every year. All the academic blocks and the Learning Resource Centre on the campus are named after the great Indian Scientists and academicians as a mark of respect to their contributions Women's Day is celebrated every year in 8th March.

Samvidhan Divas/ Constitution Day is celebrated on 26th November every year to remember and honour the adoption of the Constitution of India. Constitution of India is a perpetual gift to all humankind that defines the fundamental right, directive principles and the duties of citizens.

File Description	Document
Geotagged photographs of some of the events	<u>View Document</u>
Any other relevant information	View Document
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:

Best Practices of COEP

Title of the Practice: Training programs aiming at enhancing skills sets of students.

Objectives of the Practice:

- 1. To impart technical training in the respective domains of students.
- 2. To train students on communication skills and life skills augmenting their employability in the industry.
- 3. Providing a holistic development to add value to their education so that they can excel in their academics and in the careers of their choice.
- 4. To provide training to succeed at campus recruitments.
- 5. Fostering an environment for research and development.

The Context:

In today's competitive era, apart from the academic knowledge, industries need employees with specific skills sets that contribute to the company's growth. In order to meet the requirements of the company recruiters, students receive training to develop their various skills sets. Since students come from varied backgrounds, the training programs provided by COEP play a pivotal role in grooming their personality and over all abilities. These programs also cater to the needs of lateral entry students so that they get an equal opportunity of being hired in product development, consulting, and service-based businesses.

The Practice:

With the beginning of first semester, the Institution delivers well-structured skill training programmes for students of all branches of B Tech, M Tech, PhD, and PG Diploma students, allowing them to learn more effectively. The teaching programmes' specifics are listed below.

Applied Sciences is a bridge that connects pure science with engineering practices. It aims to provide a

Page 104/137 28-10-2022 02:50:43

strong foundation for engineering students. The Department of Applied Sciences is one of the integral parts of the institute. The department offers multi-disciplinary courses in Chemistry, Biology, Advanced Engineering Materials, Polymer Technologies, Energy Materials, Professional Communication, Professional Ethics, Psychology, Environmental Science, Constitution of India, Intellectual Property Rights, Entrepreneurship Development, Critical Thinking, Liberal Learning Course, etc. English language and communication skill course is part of the curriculum, in 1st and 2nd Semesters, which help in honing the communication skills of the students. LLC (Liberal Learning Course) is a one-credit course run for B.Tech and M.Tech first year students for the academic year 2018-19. Students are required to go through the list and rank their preferences and submit the list of preferences for registration to any one area. They are allocated one area from the list. Experts from particular areas conduct classes once a week for each area on campus through activities, discussions, presentations, and lecture methods and evaluation out of 100 per area is done for each area throughout the semester. Evaluation pattern may differ according to the nature of each area. Although there is no pre-defined syllabus for LLC areas, there is an outline which experts normally develop and follow for the classes. However, students may approach the faculty to cover certain topics of their interest in that area during classes based on students' interest and experts' area of expertise.

The language lab offers a platform for students and faculty members to enrich their communication skills with the help of software applications available in the lab such as Renet Language Studio, ESPOIR Interview Simulator, ESPOIR Spoken English, ESPOIR English through Science and Technology, etc. It also helps students to practise various international level exams in Business English and TOFEL, GRE.

In extension to the above training programs, various clubs also offer training programs related to their requirements. The COEP students have formed a Personality Development club, the motto of this club is to develop character with competence. The club emphasizes on invoking hidden soft skills which are very vital to stay and deal in the current scenario of cut-throat competition. Thus, the club conducts an array of workshops and training sessions by various experts from the professional world so as to develop communication skills as well as to learn about technical presentations and industrial etiquettes.

Additionally, the COEP Debate Club is Pune's premiere competitive debating club. It is divided into two sections English and Marathi section. The members participate in various inter college tournaments, viz Parliamentary Debates, Conventional Debates and Model United Nations, in and out of Pune, and have won numerous accolades. Being good public speakers, members also play an active role in anchoring college events. The members have regular debating and brainstorming sessions along with workshops for skill refinement. The Debate Club organises the annual 'Visveswarya Memorial Debate' and 'CoEP Model United Nations' through which it promotes discourse in the student community.

The 'COEP ACM Student Chapter' provides students a better exposure to ideas, knowledge, experience, and trends in computing. It aims at creating interest in students in computer science apart from what they learn during the course work. ACM is the world's largest educational and scientific computing society which delivers resources that advance computing as a science and a profession. ACM provides the computing field's premier Digital Library and serves its members and the computing profession with leading-edge publications, conferences, and career resources.

In this scheme, there are two schemes offered for the project work, namely Scheme A and Scheme B. A student opting for Scheme A carries out the project work at the Institute spanning across two semesters, wherein, a student opting for Scheme B spares one complete semester at an Industry/Research

Organization or at another institute of higher eminence (Academia). Each Department mandatorily includes industrial training and/or fieldwork (Internship) of 4-8 weeks for all the students of the department at the end of each academic year. However, these are arranged during the Summer Term period following the even semester of studies at the Institute.

There is an assessment evaluation of all the students attending the course, like a lecture course, Laboratory/Tutorial/Design/Drawing/Studio course or a combination of the above (known as Integrated course). This evaluation is done in two parts. Both of them are important in assessing the students' performance and achievement in the particular course:

The CTS/Students Exchange Program is open for the aspiring and eligible students, from reputed peer Institutes/Universities, from within the state or country, or overseas, towards an academic engagement for a maximum of TWO semesters at COEP departments. This programs enables students across the globe to interact and exchange their ideas and open the doors of multiple opportunities for their career. Once the Dean Academics, receive such request applications, duly recommended by the authorities of nominating Institute/University, facilitate such incoming students in terms of allotment of credits/coursework in a particular department, continuous/end-sem assessment and issuing the grade sheet. Dean-Students Affairs ensure the submission of semester tuition fees from such students to COEP, as the case may be, and may facilitate the incoming students, for hostel accommodation (if available), acquaintance with campus activities, cultural and life skills training etc.

Under Group A Co-Curricular activities are engaged by chapters of professional societies like SAE, ASRAE, ISHRAE, CSI, RSI, IEEE, ISTE, IET, Department Associations, Lab Development, Paper Presentation in National/International Conferences, Paper Publication in National/ International Journal, Model Building, Project competition, Entrepreneurship, Patenting, Participation in Technical clubs such as RSC, Satellite Club, Astronomy, Mind Spark etc. Whereas, the Group B comprises of Extra-Curricular Activities such as NSS, Unnat Bharat, Gymkhana Clubs, Impressions (Cultural Fest), Zest(Sports Event), Community Services, Social work, Activities in Alumni Association, Participation in Sports, Boat Club Activities and Regatta. It also includes various Clubs of Institute, Intra and Inter Collegiate competitions such as Social gathering, Mood I etc. On registering for a particular activity, the performance of a student is continuously monitored by the Faculty-in-charge. On participation in competitions, winning prizes, representing institute on state, national and international level etc, these activities reflect well on a student's profile.

Soft-skills training is also provided during the V and VI semesters, including Quantitative, Logical, Aptitude, Verbal, and Reasoning, to name a few. This assists students in preparation of the recruitment process, as well as entrance exams for further education and other competitive assessments. Every week, students are given online resources (online videos) and online examinations to help them study for all of the above-mentioned exams. To bridge the gap between the curricula and the industry requirements, the students are given inputs based on the requirements of various companies. The institute has started the Coteaching concept to train the students.

Owing to the fact that the model of recruitment process by various companies has changed, the recruiting companies are now expecting the students to have basic programming skills irrespective of the branch of

engineering they pursue. These Technical Skills Training programs include IT related skills namely Fundamental Programming Skills and Advanced Programming Skills. Students of engineering branches other than CSE and IT are offered training in these domains.

Finally, the students at the fourth year have a compulsory project work. Once guides are allotted, the students are given the liberty to choose project from the industry or advised by the project guide. The dissertation has to be submitted by the end of the final semester. Under this, the project guides give students training on their research ability, documentation, writing and presentation skills. All these collectively play a significant role in their further professional life.

Difficulties in achieving the objectives:

- 1. Constant motivation and encouragement is required for students to participate in the activities.
- 2. In some activities, due to intake limitation students could not enrol for the clubs or training program of their choice.
- 3. In the view of rapid technology change, students had to be well updated about the recent advancements in the industries.
- 4. Bridge the gap between hard skills and over all communication of students.

Initiatives taken to counter the difficulties:

To overcome the difficulty of encouragement and student outreach, faculty advisor and faculty mentors are nominated by the college. They are regularly in touch with students and give timely updates about the activities happening in the institute. They also monitor their progress and if needed guide them or direct them to the counselling team "Mitr" of our college.

The faculty advisor also guides the students to keep checking the website regularly so that the students get a chance to register for the programs of their choices.

To give impetus to industry interaction and co teaching, various guest lectures and workshops are arranged so that students are well-versed with the latest advancements in their fields.

To add value to the students' education, training is provided on communication skills which helps them in business communication. A language laboratory is set up which uses language learning software to help them in communicating effectively.

Second Best Practices of COEP

Title of the Practice: COEP Wellness Center "Mitra"

Objectives of the Practice:

- 1. To provide psychological counselling to those in need
- 2. To create a hand-holding system for the newcomers for better adjustment
- 3. To conduct training programs for holistic student development
- 4. To initiate open conversations and instil social sensitivity as a responsible citizen
- 5. To study and analyse patterns in behavioural & cognitive characteristics for better understanding and further develop relevant strategies of development

The Context:

Counseling and guidance have always been an integral part of any education. Our college, which is an institution of great history and repute, caters to the need of several students who wish to make a bright career in the field of Engineering. The strength of education at CoEP not only lies in the academic excellence but also in the various platforms it provides to the students. Thus, the college plays a crucial role in nurturing the students into a mature and responsible individual.

College students are the cream of young adult population. Many a times it is observed that they are under tremendous pressure that stems from various aspects like expectations about excelling academically, family pressure, family problems, relationship issues, conflict in the values of the society at large and sometimes, psychological dysfunctioning. Students come from different backgrounds and thus, it becomes difficult for them to adjust with the drastic changes they see around them. Some can cope well, others can't. There has been a significant rise in the number of issues experienced by students. These issues range from having a low CGPA, adjustment problems with the new academic structure, adjustment with a life away from home, peer pressure, low confidence, emotional turmoil to personal relationships, striking a balance between academics & extra-curricular activities, and career choices/decisions. Sometimes the problems aggravate and can lead to issues of serious concern, like depression, suicidal ideation, anxious behaviour, etc. The earlier these problems are addressed, the better are the chances of recovery.

After having recognized the need of the time for providing support and guidance, the COEP Wellness Center ????? (an initiative of the Applied Science Department) was established on World Mental Health Day October 10, 2019. initialized professional counseling services.

The Practice:

", is the philosophy that ????? profess. ????? started as an idea out of the need to provide professional counseling to students who seek help, however, the activities are not limited only to counseling. The team comprises of Centre Administrator- Mrs. Nandini Iyer, who is responsible for administration related issues, in-house Expert-Psychologist- Dr. Kshipra Moghe (also the Centre Head) and Mrs. Tanuja Kher, who have been providing psychological counseling to students in need for the past 12 years. After the centre was

established, a need to have external experts on board was realized and hence, Clinical Psychologist- Ms. Manasi Kshirsagar and Psychiatrist- Dr. Himani Kulkarni (Poona Hospital & Jupiter Hospital) were invited to be a part of the same as external experts. Further, all the activities are effectively taken care of by a team of dedicated volunteer students.

Difficulties in achieving the objectives:

- 1. Students of engineering, especially at COEP, are under stress for performance and many a times display symptoms of anxiety, depressions etc.
- 2. Students come from diversified backgrounds and hence many of them find it difficult to adjust with the new environment which includes, change in academics, surroundings, peers, etc.
- 3. There are several non-technical and non-academic aspects which are must for students to learn about such as physical health issues, mental health awareness, emotional sensitization (empathy skills), inter-personal relationship skills etc.
- 4. Being an Engineering institute, many socially inclined topics which affect students/people in general need an open discussion for which there is not platform, such as gender issues, harassment issues, body image, impact of social media etc.
- 5. With continuous advancements taking place around us every day, the psyche of students varies drastically from one batch to another. The solutions that work for present students may not work for those coming in the next batch.

Initiatives taken to counter the difficulties:

As part of ?????, we run 5 initiatives that make ????? a place for all. Here is an overview of our activities conducted in the past year (2020-21)

- 1. **Professional Psychological Counseling** Counseling sessions are provided to those who approach us or those who are referred to us. Our team of experts, all experienced Psychologists, are available as per a pre-decided schedule on appointment basis. This is available both Online and Offline, ever since COVID-19 pandemic.
- 1.I Care We Care Our flagship activity, this is basically to organize bonding sessions between senior students and the juniors, especially the first years. All the passionate and dedicated group of student mentors who are willing to help the newcomers and fellow mates are a part of this activity. It incorporates taking a lead to reach out to fellow mates, help them open-up, provide support, identify resources that may help, becoming a bridge between them and the resource, taking follow-ups and basically staying connected. The team undergoes a **sensitivity training** that incorporates basic counseling skills that enable the team members to listen carefully, empathize better and offer rational help. This activity has run successfully online. Also, the entire team of I-Care-We-Care are a part of the First Year 'Student Induction Program' as mentors to the fellow juniors.

Page 109/137 28-10-2022 02:50:44

- 1.**I Learn** This incorporates training sessions or workshops that are arranged based on the need and demand of the students. This includes various topics that are beneficial and interesting for students and faculty, such as physical health while being online, etc.
- 2. **OpenSpace** This is a one-of-a-kind activity which is like a listening circle that invites students to discuss OPENLY about select topics. There are times when we wish to discuss things and share views about topics that are otherwise too difficult, tabooed, or complex. Listening circles are a great way to collaborate, express and listen without judging and without being judged. This is for the un-like-minded people to become like minded. The thrust of this activity is on Listening, a skill that is highly underrated and is highly necessary.
- 3. **Insights** This activity focuses on conducting research studies primarily related to mental health and behavioural aspects, since without facts and confirmation of assumptions, everything is a fantasy while life is not. To understand the behaviour of students and identify what works and what doesn't, Insights invite all those who have a research aptitude and are interested in studying behaviour, for it requires a scientific mind to unwind the machine called mind.

Important Links:

COEP Website link: http://www.coep.org.in/departments/appliedscience/counsellingcentre

Social Media handles:

- Facebook https://www.facebook.com/COEP-%E0%A4%AE%E0%A4%BF%E0%A4%A4%E0%A5%8D%E0%A4%B0-105570731135894/
- Instagram https://www.instagram.com/coep_mitr/
- LinkedIn https://www.linkedin.com/company/coepmitr/
- Telegram Channel: https://t.me/coep_mitr_channel
- YouTube https://www.youtube.com/channel/UCCk88PqsrDs0Y MB7ItQ KA

File Description	Document
Best practices in the Institutional web site	View Document
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

Page 110/137 28-10-2022 02:50:44

Response:

As COEP works diligently to realize its mission of providing the best learning, teaching and research opportunities. The Vision, Mission and Quality Policy of the Institution are all oriented toward the holistic development of the student, which is evident during admissions. COEP is the most preferred college and 100% of the seats are filled by the top 10% of CET-qualified students. The Institution's focus has been to impart quality education coupled with the overall development of the students. To achieve this, the Institution encourages students to participate in various activities:

1. Clubs

The various clubs of CoEP provide the students with the much-cherished opportunity to come together to discuss and exchange ideas with like-minded people. Here, there's something for everyone. The Astronomy Club is for the Astro-enthusiasts. It organizes regular star parties, wherein the students get a chance to star-gaze and learn more about the dark and starry vastness. If you are a quizzing enthusiast, the Boat Club Quiz Club is the place for you. It's the open-to-all quiz club, with quizzing enthusiasts meeting at the Boat Club on weekends to "pick each others' brains". The Debating Club of CoEP is one of the famous ones. With separate groups for Marathi and English, the debate club is known for its ability to make a point and to make it well. It organizes a week-long event every year, also holding seminars by eminent business personalities. The Satellite Team is currently working on building a pico-satellite, with the aim of improving communication in the coastal areas. CoFSUG, the CoEP Free Software Users Group, is for the 'free software' enthusiasts. It aims at propounding the free software philosophy not just in CoEP but in other colleges as well. The oldest technical club of CoEP, the HAM Club conducts workshops in CoEP as well as in other colleges, apart from providing the technical link during the college events.

Spandan is a CoEP students' initiative which is now an NGO. Spandan is an initiative by COEPians, started in 2003. Some of the activities which we conduct include a celebration of Rakshabandhan in orphanages, spending time in old age homes, making blind-school students self-employed, village camps, Blood Donation Camps and much more. Times have changed now. Spandan is changing its agenda. In addition, to help the underprivileged to burgeon, the members of Spandan are going to put, the Engineering and Technical Skills. As a member of Spandan, you will get to know society better and will get exposure to working towards the underprivileged part of the society and as per our new agenda; you will get to polish your technological skills.

2. NPTEL/MOOCs Courses:

To develop self-learning skills, Faculty and students are encouraged to obtain a certification in online courses before completion of the programme from reputed agencies such as NPTEL, and Coursera and to enhance academic knowledge on the latest topics, faculty are encouraged to complete one MOOC for each semester.

3. BHAU's Innovation & Entrepreneurship Cell

BHAU's Innovation & Entrepreneurship Cell is a student-led club, supported by the institute and mentored by faculty. BHAU's s Innovation and Entrepreneurship Cell, COEP aims to foster a culture of entrepreneurship among students. COEP's I&E-Cell is a pre-incubation centre of COEP and thus provides mentoring to the students having ideas or innovations and helping them follow steps like ideation,

innovation, proof of concept, business model, prototyping, and designing. Pune Start-Up Fest (PSF) is the annual entrepreneurial festival organized by the I&E-Cell of COEP. It arranges a Start-up Expo which furnishes numerous Startups and internship opportunities for interested students. Startups and students are given huge opportunities to develop by giving them access to entrepreneurial resources and networks throughout the community. Ignited Innovators of India (I2I) is a movement organized by the BHAU Institute of Innovation, Entrepreneurship and Leadership [BIEL] at the College of Engineering, Pune. I2I is a unique initiative that aspires to reach out to students across India and provide them with an opportunity to become social entrepreneurs and bring about small but significant changes in the world around. The I2I initiative has been instituted with the vision of promoting and instilling entrepreneurship, leadership and team-building skills among students in various colleges. The program encourages them to take up innovative projects that hold the potential to make a tangible difference to the community.

4. Robot Study Circle

Robot Study Circle is known as RSC, the Prestigious Robotics Club of COEP is one of the best Robotics clubs in India. It's a totally different world where club members have created hundreds of robots for society such as Drones, Railway Track Surveillance robots, Bomb Disposal Robots, and Badminton Playing Robots etc. Robot Study Circle is the National Champion in ROBOCON which is one of the best competitions in robotics in the world. RSC represented India in International Robocon held in Tokyo, Japan and won 6th international position as well as Nagase Award for the country. Also, the Club has industrial collaboration with Siemens PLM as a title sponsor, Volkswagen, Janatics Pneumatics, Schmalz India, Pepperl & Fuchs, and Robolab Technologies.

5. Society of Women Engineers (SWE)

Society of Women Engineers (SWE) is an international, non-profit educational service organization dedicated to making known the need for women engineers and encouraging young women to consider an engineering education.

COEP SWE Affiliate aims to provide members with the ideal engineering experience through networking and professional development events, personality development workshops, field visits and numerous inspiring keynote lectures by successful women across the globe.

6. SPIC MACAY

SPIC MACAY seeks to conserve and promote an awareness of this rich and heterogeneous cultural tapestry amongst the youth of this country through a focus on the classical arts, with their attendant legends, rituals, mythology and philosophy and to facilitate an awareness of their deeper and subtler values. The SPIC MACAY is a non-profit, volunteer organization pioneered with the motive to promote Indian classical music, dance, and culture amongst the youth. It organizes the annual VIRASAT series in which prominent artists perform live and give lecture demonstrations.

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

5. CONCLUSION

Additional Information:

The institution started PG programs and PhD programs in the early 50's when IITs were yet to establish. First Department of Electronics and Telecommunication in the country was established at COEP. It eventually produced first Ph.D in Telecommunications for the country. Academic experiments such as "PG by research", "Sandwich UG programs", "Education in two shifts", "Dual Degree", were successfully practiced at College of Engineering Pune during 1950-1970. While country witnessed the growth of the national institutions like IITs, College of Engineering Pune experienced the stagnancy during 1970-2000, for whatever reasons. It has experienced renaissance, through opportunity it was given by Government of Maharashtra to function as fully autonomous institution since 2003-04. The dramatic transformation COEP has undergone from a state college to a national level, vibrant, IIT-like institution under the visionary leadership of late Dr. F. C. Kohli, in last 10-12 years, attracted the attention of the academic world. Today, it is ranked the first affiliated college in the country as per the N.I.R.F survey undertaken by MHRD. It is also first in the country in terms of the accreditation of the programs by the NBA. The "Swayam" (A pico satellite prepared by the students of the institute using indigenous technology) is launched by the ISRO on June 22nd, 2016. College of Engineering Pune is a cited example by MHRD and World Bank for the TEQIP project and benchmarked for other participating institutions to emulate. COEP's Governance Model is recognized by the world bank to be the best in the country. The industry association of the institute is the best in the country, apparent from the fact that it has bagged CII-AICTE industry-institute interaction awards five times in last 6 years.

- College of Engineering Pune (CoEP) has granted 'Unitary Technological Public University' status from the Maharashtra government.
- First at the national level in the Atal Ranking of Institutions on Innovation Achievements (ARIIA) 2021 under the category of Govt. / Govt. aided institutions.
- 52nd amongst the top 100 engineering institutions across the country as per the results of the National Institutional Ranking Framework (NIRF) 2021 competing with IITs and NITs.
- The array of the programmes was further expanded from the academic year 2021-22 with the addition of the following three new One Year Full Time Post Graduate Diploma Programmes.
- COEP ranked 4th as per Times and AAAA+ as per the Career 360-degree ranking survey 2022 for Best Technical Institutions in the country.

Concluding Remarks:

COEP has grown into a centre of excellence in engineering education after decades of dedicated work. College

Page 114/137 28-10-2022 02:50:44

of Engineering Pune is a cited example by MHRD and World Bank for the TEQIP project and benchmarked for other participating institutions to emulate. COEP's Governance Model is recognized by the world bank to be the best in the country. COEP aspires to preserve its pre-eminent position by forming strategic collaborations with industry, consistently increasing its financial resources, and innovating creative programmes in line with changing times. The Institute has a vibrant research environment with linkages to Government, Non-Government Institutes, Industry and Consultancy agencies.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers befor	e and after DVV Verifica	ation	

- 1.1.2 Percentage of Programmes where syllabus revision was carried out during the last five years.
 - 1.1.2.1. Number of all Programmes offered by the institution during the last five years.

Answer before DVV Verification: 160 Answer after DVV Verification: 169

1.1.2.2. How many Programmes were revised out of total number of Programmes offered during the last five years

Answer before DVV Verification: 160 Answer after DVV Verification: 169

- 1.1.3 Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the last five years
 - 1.1.3.1. Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years..

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
323	403	297	310	232

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
310	395	280	300	220

- 1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.
 - 1.2.1.1. How many new courses are introduced within the last five years

Answer before DVV Verification: 1552 Answer after DVV Verification: 1540

1.2.1.2. Number of courses offered by the institution across all programmes during the last five years.

Answer before DVV Verification: 5790 Answer after DVV Verification: 5695

- 1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).
 - 1.2.2.1. Number of Programmes in which CBCS / Elective course system implemented.

Answer before DVV Verification: 35 Answer after DVV Verification: 35

1.3.2	Number of val	ue-added co	urses for in	nparting tr	ansferable a	nd life ski	lls offered during	g las
		w many new before DVV V			re added w	thin the la	st five years	
	2020-21	2019-20	2018-19	2017-18	2016-17			
	613	855	812	599	210			
	Answer A	After DVV V	erification :					
	2020-21		2018-19	2017-18	2016-17			
	605	840	800	580	200			
1.3.3	Average Perce	ntogo of stru	lanta annali	lad in the a	annaga mada	n 1 2 2 aba		
.3.3	Average reice.	mage of stud	ients em on	ied in the co	ourses unde	1 1.3.2 abu	ove.	
			ents enrolle	ed in subjec	t related Co	rtificate o	r Add-on prograi	ns y
	wise during las	s t five years before DVV V	Verification	. \				
	2020-21		2018-19	2017-18	2016-17			
	1228	1215	1197	1203	1258			
	1220	1210		1200	1200			
	Answer A	After DVV V	erification:		1			
	2020-21	2019-20	2018-19	2017-18	2016-17			
	1216	1205	1182	1197	1245			
1.3.4	Percentage of s	students und	lertaking fi	eld project	s/ internshi	s / studen	t projects (Data f	or tl
	latest complete		_	1 0	•			
			e nts undert Verification	_	projects / i	nternships	/ student projects	S
		fter DVV Ve						
1.4.1	Answer a	fter DVV Ve	erification: 1	1215	labus – sem	ester-wise	/ year-wise is rec	eive
.4.1	Answer a Structured fee	fter DVV Ve	erification: 1	215 eview of syl	labus – sem	ester-wise	/ year-wise is rec	eive
.4.1	Answer a Structured feed from	fter DVV Ve	erification: 1	215 eview of syl	labus – sem	ester-wise	/ year-wise is rec	eive
1.4.1	Answer a Structured feed from 1) Students, 2) 4) Alumni Answer b	fter DVV Ve	erification: 1 esign and re Employer Verification	eview of syles, : A. All 4 o	f the above	ester-wise	/ year-wise is rec	eive

Answer before DVV Verification: B. Feedback collected, analysed and action taken Answer After DVV Verification: B. Feedback collected, analysed and action taken

2.1.1 Average Enrolment percentage (Average of last five years)

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1217	1237	1214	1215	1196

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1123	1105	1105	1105	1105

2.1.1.2. Number of sanctioned seats year wise during last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1123	1075	1075	1075	1075

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1123	1105	1105	1105	1105

Remark: As per the sanctioned seats provided

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)

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
667	665	614	612	604

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
658	655	605	600	598

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

Answer before DVV Verification: 254 Answer after DVV Verification: 254

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)

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
151	147	136	128	107

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
140	135	125	116	98

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

2.4.3.1. Total experience of full-time teachers

Answer before DVV Verification: 3582 Answer after DVV Verification: 3582

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

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
4	4	7	7	7

Answer After DVV Verification:

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

2.6.3 Pass Percentage of students(Data for the latest completed academic year)

2.6.3.1. Total number of final year students who passed the examination conducted by Institution.

Answer before DVV Verification: 1188 Answer after DVV Verification: 1177 2.6.3.2. Total number of final year students who appeared for the examination conducted by the Institution.

Answer before DVV Verification: 1282 Answer after DVV Verification: 1282

- The institution provides seed money to its teachers for research (average per year, INR in Lakhs)
 - 3.1.2.1. The amount of seed money provided by institution to its faculty year-wise during the last five years (INR in lakhs).

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
39	69.30	16.18	3.58	20

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
26	55.30	6.18	0.58	10

- 3.1.3 Percentage of teachers awarded national / international fellowship for advanced studies/research during the last five years
 - 3.1.3.1. The number of teachers awarded national / international fellowship for advanced studies / research year wise during last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
10	8	13	17	17

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
5	4	5	8	8

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
108.45	672.05	235.85	906.84	955.68

2020-21	2019-20	2018-19	2017-18	2016-17
95.45	660.05	220.85	885.84	940.68

3.2.2 Percentage of teachers having research projects during the last five years

3.2.2.1. Number of teachers having research projects during the last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
29	40	19	27	36

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
29	40	19	27	36

3.2.3 Percentage of teachers recognised as research guides

3.2.3.1. Number of teachers recognized as research guides

Answer before DVV Verification: 87 Answer after DVV Verification: 87

Average percentage of departments having Research projects funded by government and nongovernment agencies during the last five years

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

Answer before DVV Verification:

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

Answer After DVV Verification:

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

3.2.4.2. Number of departments offering academic programes

Answer before DVV Verification:

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

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

	1	0	9	9	9	9	
3.3.2	Number	of want	shona/com	nare aand.	icted on Da	acoarah mas	thodology, Intellectual Property
3.3.2	Rights (IPR),ent	repreneurs	hip, skill d	evelopmen	t during th	e last five years.
				_			on Research methodology, evelopment year-wise during the
	last five	-	fore DVV V	erification:			
		020-21	2019-20	2018-19	2017-18	2016-17	
	4	2	25	31	65	96	
		acruar A fe	ter DVV Ve	wification .			
		020-21	2019-20	2018-19	2017-18	2016-17	
	2		13	16	53	84	
3.4.1							 -
	The Institution ensures implementation of its stated Code of Ethics for research through the following: 1. Inclusion of research ethics in the research methodology course work 2. Presence of Ethics committee 3. Plagiarism check through software						
	Ar	nswer bef		erification	: A. All of t		
3.4.2	Number	of Ph.D	's registere	d per teacl		the data gi	ven w.r.t recognized Ph.D guides/ ars
	 3.4.2.1. How many Ph.Ds are registered within last 5 years Answer before DVV Verification: 469 Answer after DVV Verification: 465 3.4.2.2. Number of teachers recognized as guides during the last five years Answer before DVV Verification: 87 Answer after DVV Verification: 80 						
3.4.3	Number last five		rch papers	per teache	ers in the Jo	ournals not	ified on UGC website during the
		1. Numb	er of researc	ch papers in	the Journal	ls notified o	on UGC website during the last five
	Answer before DVV Verification:						

2020-21	2019-20	2018-19	2017-18	2016-17
108	58	55	80	149

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
95	50	45	70	136

- 3.4.4 Number of books and chapters in edited volumes / books published per teacher during the last five years
 - 3.4.4.1. Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings year-wise during last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
133	54	90	72	177

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
122	42	80	63	185

- 3.5.1 Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).
 - 3.5.1.1. Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
365.20	1006.95	1091.24	875.59	528.05

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
365.200	1006.95	1091.24	875.59	528.05

Remark: As per HEI

- Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs).
 - 3.5.2.1. Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs)

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
47.80	48.58	29.19	54.04	56.21

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
47.800	48.58	29.19	54.04	56.21

Remark : As per HEI

- Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government recognised bodies during last five years
 - 3.6.2.1. Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
7	6	7	9	39

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
7	6	7	9	39

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
2	4	14	11	10

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
02	04	14	11	10

Remark: As per HEI

Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years

3.6.4.1. Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
85	255	654	583	593

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
085	255	654	583	593

Remark: As per HEI

- 3.7.1 Number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work
 - 3.7.1.1. Total number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
22	68	88	46	27

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
022	68	88	46	27

Remark: As per HEI

- Number of functional MoUs with institutions of national, international importance, other institutions, industries, corporate houses etc. during the last five years (only functional MoUs with ongoing activities to be considered)
 - 3.7.2.1. Number of functional MoUs with institutions of national, international importance, other Institutions, industries, corporate houses etc. year wise during last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
125	92	61	47	42

2020-21	2019-20	2018-19	2017-18	2016-17
125	092	61	47	42

	Remark : As per HEI
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) 4.1.3.1. Number of classrooms and seminar halls with ICT facilities Answer before DVV Verification: 53 Answer after DVV Verification: 53
4.1.4	Average percentage of expenditure for infrastructure augmentation excluding salary during the last five years (INR in Lakhs) 4.1.4.1. Expenditure for infrastructure augmentation, excluding salary year-wise during last
	five years (INR in lakhs)
	Answer before DVV Verification: 2020-21 2019-20 2018-19 2017-18 2016-17
	114.54 106.13 91.34 97.12 99.58
	Answer After DVV Verification : 2020-21 2019-20 2018-19 2017-18 2016-17
	2020-21 2019-20 2018-19 2017-18 2016-17 114.54 106.13 91.34 97.12 99.58
	114.34 100.13 91.34 97.12 99.38
4.2.2	Institution has access to the following: 1. e-journals 2. e-ShodhSindhu 3. Shodhganga Membership
	4. e-books 5. Databases
	6. Remote access to e-resources
	Answer before DVV Verification: A. Any 4 or more of the above Answer After DVV Verification: A. Any 4 or more of the above
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)
	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) Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1793155	1364033	1391097	1597609	1592023
6	0	8	6	4

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
179.31	136.40	139.10	159.76	159.20

Remark: As per HEI value converted into lakhs

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

Answer before DVV Verification: 165 Answer after DVV Verification: 165

4.3.3 **Bandwidth of internet connection in the Institution.**

Answer before DVV Verification: ?50 MBPS
Answer After DVV Verification: ?50 MBPS

- 4.3.4 Institution has the following Facilities for e-content development
 - 1. Media centre
 - 2. Audio visual centre
 - 3. Lecture Capturing System(LCS)
 - 4. Mixing equipments and softwares for editing

Answer before DVV Verification : A. All of the above Answer After DVV Verification: C. 2 of the above

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1130	996	995	1662.43	1338.99

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

	1130	996	995	1662.4	1338.99
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- 5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during last five years
 - 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)

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1908	1921	1390	1540	1399

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1898	1910	1380	1530	1387

- Average percentage of students benefited by scholarships, freeships, etc. provided by the institution and non-government agencies during the last five years
 - 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)

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
305	271	143	120	0

2020-21	2019-20	2018-19	2017-18	2016-17
295	260	130	110	0

- 5.1.3 Following Capacity development and skills enhancement activities are organised for improving students capability
 - 1. Soft skills
 - 2. Language and communication skills
 - 3. Life skills (Yoga, physical fitness, health and hygiene)
 - 4. Awareness of trends in technology

Self Study Report of COLLEGE OF ENGINEERING PUNE Answer before DVV Verification : A. All of the above Answer After DVV Verification: A. All of the above 5.1.4 Average percentage of students benefited by career counseling and guidance for competitive examinations as offered by the Institution during the last five years. 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 Answer before DVV Verification: 2018-19 2016-17 2020-21 2019-20 2017-18 960 1010 940 900 890 Answer After DVV Verification: 2017-18 2020-21 2019-20 2018-19 2016-17 960 940 900 0890 1010 Remark: As per HEI 5.1.5 The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases 1. Implementation of guidelines of statutory/regulatory bodies 2. Organisation wide awareness and undertakings on policies with zero tolerance 3. Mechanisms for submission of online/offline students' grievances 4. Timely redressal of the grievances through appropriate committees Answer before DVV Verification: A. All of the above Answer After DVV Verification: A. All of the above 5.2.1 Average percentage of placement of outgoing students during the last five years 5.2.1.1. Number of outgoing students placed year - wise during the last five years. Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
670	663	746	791	768

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
660	650	735	780	755

5.2.2 Percentage of student progression to higher education (previous graduating batch).

5.2.2.1. Number of outgoing student progressing to higher education.

Answer before DVV Verification: 74 Answer after DVV Verification: 74

- 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.)
 - 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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
88	44	100	42	43

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
75	35	90	30	33

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
189	250	265	235	165

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
179	240	255	225	155

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
14	479	283	355	299

2020-21	2019-20	2018-19	2017-18	2016-17
7	460	270	346	280

5.3.3 Average number of sports and cultural events / competitions organised by the institution per year

5.3.3.1. Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
01	07	07	07	04

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1	7	7	7	4

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

Answer before DVV Verification : A. ? 15 Lakhs Answer After DVV Verification: A. ? 15 Lakhs

- 6.2.3 Implementation of e-governance in areas of operation
 - 1. Administration
 - 2. Finance and Accounts
 - 3. Student Admission and Support
 - 4. Examination

Answer before DVV Verification: A. All of the above Answer After DVV Verification: A. All of the above

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
106	148	237	90	280

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
106	148	237	090	280

Remark: As per HEI

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
32	49	40	41	51

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
32	49	40	41	51

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
260	223	74	118	142

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
250	210	65	110	135

- Funds / Grants received from non-government bodies, individuals, philanthropists during the last five years (not covered in Criterion III and V) (INR in Lakhs)
 - 6.4.2.1. Total Grants received from non-government bodies, individuals, Philanthropers yearwise during the last five years (INR in Lakhs)

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
49	1691	378	79	107

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

	40	1680	365	70	90	
5.5.3	Quality assura	ance initiati	ves of the	institution	include:	
	analyso 2. Collab 3. Partici	ed and used orative qual pation in NI her quality	for impro ity initiati RF	vements ves with o	ther institu	ell (IQAC); Feedback collected, tion(s) nal or international agencies (ISC
		before DVV After DVV V				
7.1.2	The Institutio measures	n has facilit	es for alte	ernate sou	rces of ener	gy and energy conservation
				vation		
	Answer Answer	LED bulbs/ before DVV After DVV	Verification	on : A. 4 or n: A. 4 or A	All of the a	
7.1.4	2. Borewe 3. Constr 4. Waste	rater harves ell /Open we uction of tan water recyc	ting Il recharg nks and bu ling	ge unds		tem in the campus
715	Answer	before DVV After DVV	/erification	-		
7.1.5	2. Use of 3. Pedestr 4. Ban on	eted entry of Bicycles/ Ba rian Friendl a use of Plast aping with t	automob ttery pow y pathwa ic	ered vehic ys	eles	
	Answer	before DVV After DVV	/erification	n: A. Any	4 or All of th	ne above
7.1.6	Quality audits	s on environ	ment and	energy ar	e regularly	undertaken by the Institution and

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

Answer before DVV Verification: C. 2 of the above Answer After DVV Verification: C. 2 of the above

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

Answer before DVV Verification: B. 3 of the above Answer After DVV Verification: B. 3 of the above

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

Answer before DVV Verification: A. All of the above Answer After DVV Verification: A. All of the above

2.Extended Profile Deviations

עון	Extended Questions
1.1	Number of programs offered year-wise for last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
35	32	32	32	32

2020-21	2019-20	2018-19	2017-18	2016-17
35	33	33	34	34

1.2 Number of departments offering academic programmes

Answer before DVV Verification: 10 Answer after DVV Verification: 10

2.1 Number of students year-wise during last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
4103	4058	4087	4077	4052

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
4092	4057	4086	4077	4094

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1257	1191	1219	1186	1255

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1267	1188	1219	1182	1212

Number of students appeared in the examination conducted by the Institution, year-wise during the last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
4103	4058	4087	4077	4052

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
4092	4057	4086	4077	4094

3.1 Number of courses in all programs year-wise during last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
997	1164	1287	1544	799

2020-21	2019-20	2018-19	2017-18	2016-17
1348	1262	1183	1104	798

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
257	253	236	245	243

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
257	253	236	245	243

3.3 Number of sanctioned posts year-wise during last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
510	506	392	392	392

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
510	506	392	392	392

4.1 Number of eligible applications received for admissions to all the programs year-wise during last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
250000	250000	250000	250000	250000

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
249990	249990	249990	249990	249990

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
558	558	558	537	552

Total number of classrooms and seminar halls Answer before DVV Verification: 53
Answer before DVV Verification: 53
Answer after DVV Verification: 53
Total number of computers in the campus for academic
Answer before DVV Verification: 1661
Answer after DVV Verification: 1650
Total Expenditure excluding salary year-wise during las
Answer before DVV Verification:
2020-21 2019-20 2018-19 2017-18 2016-17
54321821 57052314 47030744 53337905 58452647
3 5 0 4 4