

### FOR

### **1<sup>st</sup> CYCLE OF ACCREDITATION**

### P. A. COLLEGE OF ENGINEERING

NADUPADAV, KAIRANGALA VILLAGE, MONTEPADAV POST, BANTWAL 574153 www.pace.edu.in

Submitted To

### NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

### BANGALORE

August 2024

### **1. EXECUTIVE SUMMARY**

### **1.1 INTRODUCTION**

P.A. College of Engineering (PACE), a minority institution established in the year 2000 under the aegis of PAET, with an aim to provide a career-oriented professional education and to produce technically competent engineers with moral and ethical values. The institution is dedicated to promote an effective learning environment that encourages excellence and diversity in thoughts and endeavour.

PACE is affiliated to the Visvesvaraya Technological University (VTU), Belgaum and is approved by the All India Council for Technical Education (AICTE), New Delhi, recognized by the Government of Karnataka..

P.A. College of Engineering which instituted with a total intake of 240 students- 60 students each in four disciplines of engineering, has now grown in leaps and bounds. Over the decades, new undergraduate programs in various branches of engineering, MBA courses and Research programmes were added to meet the growing demand in the industry and the intake has been increased in Engineering courses. Teaching and research facilities at PACE are already among the best and continues to improve. Well qualified faculty with international reputation, a well developed campus and outstanding infrastructure makes PACE much sought after for technical and management education. The institution regularly invites experts from industry and academia for interaction with students. While helping the students to reach their full potential, PACE also offers innumerable opportunities for extracurricular activities that match nearly every interest.

PACE is located in Mangalore, a city which has established itself as the knowledge hub of South India and has become a haven for advanced study. Beautiful environment and salubrious climate make Mangalore a dream destination for learning. Mangalore is well connected to the rest of the country by air, rail and road. Nestled amidst lush greenery, P. A. College of Engineering celebrates the serene splendour of pristine nature. Spread across 60 acres, the college offers the perfect setting for an academic environment.

#### Vision

PACE is envisaged as a centre of evolution for excellence in Technological, Management and Research Education. The institution aspires to spread universal knowledge through villages and cities enabling expansion of human resources.

#### Mission

- To provide career-oriented professional education to produce technically competent engineers and managers with moral and ethical values.
- To foster and promote an effective learning environment in the campus to be recognized as place that encourages excellence and diversity in thoughts and endeavour.
- To provide research and intellectual resources to address problems facing the industry and the society while advancing the scopes of multidisciplinary applications.

### **1.2 Strength, Weakness, Opportunity and Challenges(SWOC)**

#### **Institutional Strength**

- The Management has a very strong foundation in the Educational Sector with its presence in India and Abroad with 30000+ students, 3000+ Staff Members and 20+ Nationalities.
- 60+ Acres of Ample Lush Green Land.
- Experienced Faculty with very good retention with appreciable number of Ph.D. holders.
- Located at Kerala Border, providing ample opportunites for the students at the border to pursue quality higher education.
- Management, Engineering, Degree, and Medical Allied Courses in single Campus.
- Basic Infrastructure and Added Facilities Available.
- Ample Hostel Facilities
- Research facilities in the institute and good number of quality publications.

#### **Institutional Weakness**

- Away from City and Unable to attract enough Local Students
- Regular Maintenance requires attention with focus on replacement of Obsolete
- A face lift of Campus requires Attention.
- Consultancy requires more attention.

#### **Institutional Opportunity**

- New Courses on Emerging Technologies
- The Global Brand value of PACE GROUP can be used judiciously to make a Global Presence through a well-defined Online Education Platform.
- The untapped market potentials in line with the Campus Facilities and Uniqueness
- Major/ Minor Degree

#### Institutional Challenge

- The recent decline in demand for Engineering Courses
- Declined Job Opportunities for Core Branches
- The reduced focus of Students on Academics due to the Pandemic and Social Conditions

### **1.3 CRITERIA WISE SUMMARY**

#### **Curricular Aspects**

P.A. College of Engineering (PACE) follows a structured approach to curriculum planning and delivery, aligning with the academic framework of Visvesvaraya Technological University (VTU), Belagavi. The Curriculum given by VTU is thoroughly analyzed by the department in the presence of IQAC and suggestions are communicated to the university for further improvement of the curriculum. PACE believes in academic excellence and bridges the gaps in the curricular aspects by addressing content beyond syllabus through

initiatives such as value added/add-on courses, internship programs, technical talks and workshops, Industrial visits, Academic collaborations, Mini and major Projects and various certification programs. IQAC of the institute ensures that the content delivery plan and execution through various ICT enabled tools are performed in due course adhering to institute's Academic Calendar. The institute incorporates the outcome-based education (OBE) system to strengthen the quality of curriculum delivery. The institute prepares the students for socio centric activities by integrating the crosscutting issues such as Gender Equity, Environment and Sustainability, Human Values and Professional Ethics through Units/Cells namely Women empowerment cell, Environment Cell, NSS and Youth Red Cross units. PACE implements the corrective measure in every aspect of curriculum delivery through the stakeholder's feedback to excel in academic performance.

#### **Teaching-learning and Evaluation**

#### **Admissions and Faculty**

PACE conducts student admissions through the Common Entrance Test (Karnataka) and management quota. Excellence in teaching and learning is achieved by employing competent teaching faculty. For all first-year undergraduate programs, PA offers bridging and induction programs that help students grasp the fundamentals of all subjects. The college maintains student-teacher ratio as per AICTE guidelines. An appreciable number of faculty are having Ph.D. degree and others with PG degree with a good retention.

#### **Teaching Strategies and Resources**

PACE integrates various teaching strategies, including demonstrative, participatory, collaborative and creative learning to deliver learner-centred instruction with the goal of fostering innovation. The syllabus completion status is frequently monitored. Each mentor is keen for providing the students moral support in their personal and academic lives. To enable greater efficiency and effectiveness in education and training, LCD projectors have been mounted in every classroom and laboratory.

#### Assessment and Evaluation

Internal and external assessments at PACE are conducted by following VTU guidelines, with the university adopting the Choice Based Credit System (CBCS) to implement Outcome-Based Education (OBE). Continuous Internal Evaluation (CIE) involves ongoing assessments such as tests, assignments, quiz, presentations and other activities contributing to the overall grade. The Internal Examination Cell (IEC) monitors CIE and addresses grievances, ensuring transparency in assessment guidelines and weightage. Regular feedback aids students in improving their understanding. Question papers for internal assessments are structured according to Blooms Taxonomy. CO-PO mapping for each subject and evaluation of CO-PO attainment are conducted based on internal tests, other assessments and external examination marks at the end of each semester.

#### **Research and Development**

R&D centres at PACE focus on recent research areas, encouraging faculty members to enroll in Ph.D. programs and conduct their research within the institution's R&D centres. Some faculty members have been awarded Ph.D. degrees from the institution. The college promotes faculty participation in Faculty Development Programs (FDPs), conferences and workshops organized by other institutions. Departments within the college also organize FDPs and workshops, inviting resource persons to interact with students and faculty, thus enhancing the research culture and academic excellence.

#### **Research, Innovations and Extension**

The Research and Development (R&D) at PACE is a cornerstone of the institution's commitment to advancing knowledge and fostering innovation. This R&D cell is dedicated to oversee and promote research activities within the college, ensuring that students and faculty engage in quality research projects. The cell facilitates interdisciplinary research, secures funding, and ensures adherence to ethical standards, thereby creating an environment conducive to cutting-edge research and development. PACE has VTU approved research centres, each focusing on specific areas of expertise. These centres are thoroughly evaluated by the university for their facilities, faculty qualifications, and research outputs. They provide a focused environment where advanced research can thrive, offering access to specialized equipment and fostering collaboration among researchers with shared interests. By maintaining high standards and providing essential resources, these centres play a crucial role in advancing the institution's research capabilities.

The college has received research grants totaling Rs.103.80 lakhs from various funding agencies, including VGST, AICTE, VTU, KITS, etc. Our institute offers a productive atmosphere with advanced facilities and expert guidance to support the innovation ecosystem through initiatives such as IIC, IPR Cell and incubation centre. We have conducted various events focused on research methodology, intellectual property rights (IPR) and entrepreneurship to foster this ecosystem. As a result, our faculty members and students have published good number of research papers in Scopus-indexed and UGC-recognized journals and have presented many papers at national and international conferences. Over the past five years, they have also secured appreciable number of patents and grants and published several books with reputed publishers.

Our institute also has dedicated cells for NCC, NSS and YRC, along with student forums that raise awareness about social issues, contributing to the holistic development of students. We have conducted various extension activities, including blood donation drives, tree plantations, awareness campaigns, societal programs and skill development programs. These societal activities have earned our institute recognition and appreciation. Furthermore, our institute has signed various MoUs and collaborations with reputed industries, organizations, and startups and has organized various activities.

#### **Infrastructure and Learning Resources**

#### **Classroom Facilities**

The implementation of ICT enabled teaching learning resources has been a highlight at PACE. The installation of ICT enabled classrooms has increased confidence in the knowledge sharing among the faculty and student community.

#### Laboratory Setup

The laboratories set up in the college have adequate utility and sufficient hardware and software to enhance the practical aspects of industry requirements and as per the norms setup by the Visvesvaraya Technological University.

#### Surveillance System

PACE is being monitored by a licensed and comprehensive surveillance system catering to the needs of the institution in the advent of any untoward event that may occur.

#### Library Resources

The institution has adequate library resources along with online journals and e-consortium access to inculcate learning atmosphere and ignite research interest among the faculty and students. The library is headed by a librarian, assisted by a team of dedicated staff members.

#### **Computer Centre**

The institute has high performance servers and computer clusters to enable the students' learning and research skills. The institute has 24×7 generator facilities, video surveillance to enhance the study and security concerns.

#### **Transportation System**

To save the traveling time, the institute has provided a substantial number of buses to students and staff at a subsidized rate. The transportation helps the students of Dakshina Kannada (Karnataka state) and Kasargod (Kerala state) districts. The travel needs of the senior faculty members are taken care by a separate vehicle.

#### **Sports Facilities**

The sports activities are headed by a qualified Physical Director, supported by indoor and outdoor sport facilities which have led to championships in VTU state level, zonal level Football tournaments, VTU state level powerlifting championship and many more awards.

#### **Student Support and Progression**

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A well-structured student support system is in place at PACE, which includes dedicated cells for SC-ST students, a minority cell, a student welfare committee, and a placement and training cell. The college also hosts technical competitions and project contests through various professional society student chapters, such as IEEE and ISTE.

#### **Scholarships and Financial Assistance**

PACE provides substantial financial support through a variety of scholarships and freeships offered by both the institution and government agencies. This financial aid is designed to support students from diverse backgrounds. The institution helps in securing government scholarships, including those for minorities and merit-cum-means, ensuring that financial constraints do not hinder educational progress.

#### **Career Training Programs**

The placement and training cell offers a wide range of career training programs, focusing on soft skills, life

skills, language and communication skills, and the latest techniques in information technology. These programs are strategically designed to ensure that all students gain valuable skills and knowledge for their professional development. The training cell also offer career counselling and competitive exam guidance, including soft skills training, life skills, language and communication skills, and awareness of current trends and technologies.

#### **Extracurricular Activities**

PACE emphasizes the importance of sports and cultural activities in student development. PACE has cocurricular and extracurricular cells and various clubs, that actively coordinate and enhance student activities.

#### Student Redressal Mechanism

A robust student redressal mechanism is in place, involving representatives from the faculty, administration, and student. This system is designed to address grievances transparently and fairly, with regular meetings and feedback sessions to maintain high-quality standards. Our Grievance Redressal Cell, Internal Complaints Committee and Anti-Ragging Committee ensure that student complaints are addressed promptly and effectively, with a strong emphasis on resolving issues related to safety and well-being.

#### Alumni Achievements

PACE maintains a strong connection with its alumni through an active Alumni Association namely 'PACE Next'. This association supports institutional growth by engaging in lectures, organizing reunions, and facilitating ongoing interaction with current students.

#### **Governance, Leadership and Management**

PACE exemplifies exceptional institutional governance and leadership, consistently aligning with its vision and mission. This dedication is evident in the effective implementation of the National Education Policy (NEP), sustained growth and a decentralized management approach. The involvement of various stakeholders ensures a transparent and inclusive governance framework. The institution adheres rigorously to both short-term and long-term Institutional Perspective Plans, fostering a strategic direction for development. These efforts create an environment conducive to continuous improvement and progressive educational outcomes.

The perspective plan is executed efficiently, supported by well-defined policies, strategic academic committees, and a robust administrative setup. The HR office is crucial in managing clear appointment processes, service rules, and procedures, contributing to streamlined operations. This structured and supportive environment enhances both staff and student experiences, aligning with the institution's commitment to educational excellence and effective administration. These measures ensure sustained growth and institutional effectiveness, meeting academic and operational goals efficiently.

Additionally, the college has established a comprehensive performance appraisal system and effective welfare measures for teaching and non-teaching staff. By providing numerous avenues for career development and progression, the institution fosters a growth-oriented work environment. These initiatives ensure that staff are motivated, valued and offered ample opportunities for professional advancement, contributing significantly to the institution's overall excellence and sustainability.

Resource mobilization and utilization are managed effectively through various sources, including tuition fees,

student scholarships and funds from both government and non-government organizations. The college maintains high standards of financial transparency and accountability through regular internal and external audits, demonstrating a strong commitment to effective resource management and financial discipline. Strategic management of these resources ensures sustained growth and operational efficiency, reinforcing the institution's dedication to excellence in education and infrastructure.

The Internal Quality Assurance Cell (IQAC) plays a pivotal role in institutionalizing quality assurance practices. By continuously reviewing teaching-learning process and learning outcomes, the IQAC ensures persistent improvement across various activities. This ongoing assessment significantly enhances the overall quality and effectiveness of the institution, ensuring educational standards remain high and relevant.

#### **Institutional Values and Best Practices**

PACE promotes gender equity through inclusive admissions, recruitment, administration, and academic activities. The institution incorporates gender-neutral content in its curricular and co-curricular activities, emphasizing respect and empathy through clubs, workshops, and sensitization programs. The Woman's Welfare Committee celebrates Women's Day and organizes programs to inspire and support female students, ensuring a safe and harassment-free environment with the support of the College Internal Complaint Committee.

PACE is dedicated to environmental sustainability by adopting energy conservation measures, promoting energy literacy and implementing rainwater harvesting and waste management practices. The college provides facilities for differently-abled stakeholders and sustainable transportation options. Initiatives include green campus projects and efforts to manage waste effectively. Environmental and energy audits are conducted to maintain a commitment to sustainability, and the college supports green practices by providing infrastructure and policy for alternate energy sources.

The institution fosters an inclusive environment, promoting tolerance and harmony across cultural, regional, linguistic and socioeconomic diversities. Events such as World Water Day, Women's Day, Republic Day, National Voters Day, and Independence Day are celebrated to raise awareness among students and staff about social and environmental issues, emphasizing constitutional values, rights, duties, and responsibilities.

PACE's best practices include the Google Developer Student Clubs (GDSC) and Embed Club, focusing on skill development and career readiness. These clubs offer workshops, guest lectures, and participation in global challenges, fostering innovation and industry-relevant skills. Another practice is Project-Based Learning (PBL), integrated into the curriculum across all academic years, enhancing critical thinking, creativity, and interdisciplinary learning by providing hands-on experience and fostering connections with industry partners.

The Employability Skill Program (ESP) at PACE bridges the gap between academic knowledge and professional requirements. ESP covers communication, aptitude, soft skills, presentation skills and interview skills, preparing students for the job market and professional challenges. This holistic approach ensures PACE graduates are well-rounded, socially responsible and ready to make meaningful contributions to the society.

### **2. PROFILE**

### **2.1 BASIC INFORMATION**

Name and Address of the College				
Name	P. A. COLLEGE OF ENGINEERING			
Address	NADUPADAV, KAIRANGALA VILLAGE, MONTEPADAV POST, BANTWAL			
City	MANGALORE			
State	Karnataka			
Pin	574153			
Website	www.pace.edu.in			

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	RAMIS M. K.	0824-2284701	9035960243	0824-0	principal@pace.edu .in
IQAC / CIQA coordinator	ZOHEB ALI	0824-2284702	9916470754	0824-0	zoheb_mba@pace. edu.in

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution			
By Gender	Co-education		
By Shift	Regular		

Recognized Minority institution				
If it is a recognized minroity institution	Yes <u>p a college-minority.pdf</u>			
If Yes, Specify minority status				
Religious	Muslim			
Linguistic				
Any Other				

E	Establishment Details				
	State	University name	Document		
	Karnataka	Visvesvaraya Technological University	View Document		

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

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Appr oval details Instit ution/Department programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks
AICTE	View Document	10-06-2023	12	Approval for the current 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?	No

Location and Area of Campus					
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.	
Main campus area	NADUPADAV, KAIRANGALA VILLAGE, MONTEPADAV POST, BANTWAL	Rural	27.5	20000	

### **2.2 ACADEMIC INFORMATION**

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Pro gramme/Co urse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Biotechn ology,	48	TWELFTH	English	30	17
UG	BE,Civil Engineering,	48	TWELFTH	English	30	19
UG	BE,Compute r Science And Engineering,	48	TWELFTH	English	120	120
UG	BE,Electroni cs And Com munication Engineering,	48	TWELFTH	English	60	56
UG	BE,Artifical Intelligence And Machine Learning,	48	TWELFTH	English	60	60
UG	BE,Compute r Science And Engineering Iot And Cyber Security Including Block Chain Technology,	48	TWELFTH	English	60	56

UG	BE,Mechanic al Engineering,	48	TWELFTH	English	30	28
PG	MBA,P G Department Of Business Administrati on,	24	GRADUATE	English	60	60
Doctoral (Ph.D)	PhD or DPhil ,Biotechnolo gy,	72	MASTERS	English	4	0
Doctoral (Ph.D)	PhD or DPhil,Civil Engineering,	72	MASTERS	English	2	0
Doctoral (Ph.D)	PhD or DPhil ,Computer Science And Engineering,	72	MASTERS	English	4	0
Doctoral (Ph.D)	PhD or DPhil ,Electronics And Commu nication Engineering,	72	MASTERS	English	2	0
Doctoral (Ph.D)	PhD or DPhil ,Mechanical Engineering,	72	MASTERS	English	6	0
Doctoral (Ph.D)	PhD or DPhil,P G Department Of Business Administrati on,	72	MASTERS	English	0	0
Doctoral (Ph.D)	PhD or DPhil ,Chemistry,	72	MASTERS	English	0	0
Doctoral (Ph.D)	PhD or DPhil ,Mathematics	72	MASTERS	English	0	0

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor			Associate Professor			Assistant Professor					
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0			0					
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0			0				
Sanctioned by the Management/Soci ety or Other Authorized Bodies	7				14				62			
Recruited	5	2	0	7	11	3	0	14	29	33	0	62
Yet to Recruit	0			0			0					

Non-Teaching Staff						
	Male	Female	Others	Total		
Sanctioned by the UGC /University State Government				0		
Recruited	0	0	0	0		
Yet to Recruit				0		
Sanctioned by the Management/Society or Other Authorized Bodies				56		
Recruited	27	29	0	56		
Yet to Recruit				0		

Technical Staff					
	Male	Female	Others	Total	
Sanctioned by the UGC /University State Government				0	
Recruited	0	0	0	0	
Yet to Recruit				0	
Sanctioned by the Management/Society or Other Authorized Bodies				40	
Recruited	26	14	0	40	
Yet to Recruit				0	

### Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	5	2	0	9	3	0	3	0	0	22
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	2	0	0	26	33	0	61
UG	0	0	0	0	0	0	0	0	0	0

<b>Temporary Teachers</b>										
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

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

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

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	134	0	0	0	134
	Female	56	0	0	0	56
	Others	0	0	0	0	0
PG	Male	30	0	0	0	30
	Female	17	13	0	0	30
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0

Tears					
Category		Year 1	Year 2	Year 3	Year 4
SC	Male	6	1	0	1
	Female	0	3	0	0
	Others	0	0	0	0
ST	Male	2	2	0	0
	Female	0	0	1	0
	Others	0	0	0	0
OBC	Male	129	136	83	90
	Female	88	60	13	25
	Others	0	0	0	0
General	Male	54	84	82	90
	Female	24	27	22	23
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		303	313	201	229

Provide the Following Details of Students admitted to the College During the last four Academic Years

#### Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	PACE is affiliated with Visvesvaraya Technological University (VTU) and follows the curriculum set by the university. VTU has introduced a multidisciplinary open-elective system, allowing students to take interdisciplinary subjects worth three credits. While the institution faces limitations in offering a flexible and innovative curriculum, students are encouraged to participate in certification courses, workshops, and technical talks that are multidisciplinary in nature. To incorporate social engineering graduate attributes, VTU has introduced subjects like Universal Human Value (UHV),
	Constitution of India and Professional Ethics (CIP) and Environmental engineering subjects to students

	as per the AICTE model curriculum. To further support interdisciplinary research, internships and innovative projects, the institution has signed MOUs with nearby institutions.
2. Academic bank of credits (ABC):	Being an affiliated college of the VTU, we are bound to follow the norms and regulations governed by the affiliated university. We do not have the option to implement ABC. We are open to adopting seamless collaboration, internationalization of education, joint degrees between Indian and foreign institutions, and to enable credit transfer, as and when mandated. We are following the curriculum set by the affiliated university, however our faculty members design the syllabus for add on/ value added courses in every academic year. The institution has been effectively implementing the CBCS and OBE system as peer the AICTE norms and the faculty are regularly trained to learn and adopt the Learning Outcome-based Curricular Framework. In the years to come, if we acquire autonomy, our faculty would be ready to design and deliver cutting-edge curricula at par with the academic and industrial standards.
3. Skill development:	The institution is dedicated to fostering the comprehensive and holistic growth of its students by providing training in a variety of skills. To achieve this, the institute has implemented a mandatory in- house Employability Skill Programme (ESP), which equips students with essential skills to enhance their employability and prepare them for successful careers. In addition to this every department organizes technical sessions/ workshops/invited talks/mini projects under various clubs to enhance the technical knowledge of the students. Also to improve the originality and correctness in the report writing, a system of plagiarism check and grammar check is mandatorily practised in the institute. Additionally, the institution has established Memorandums of Understanding (MoUs) and academic collaborations with reputed organizations and industries, further enriching the students' learning experience and opportunities.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	The Institute is committed to integrating Indian Knowledge Systems (IKS) into its curriculum, including non-credit courses that emphasize these aspects. To support this initiative, the Institute organizes programs like awareness on yoga practices,

	planting herbal saplings in the campus to create awareness among students on their medicinal values. As a part of the curriculum, the university has mandated the students to study a subject called Adalitha Kannada/ Samskruthika Kannada. Given the diverse cultural and regional backgrounds of our students, our campus thrives on a rich tapestry of traditions. The Institute strives to promote unity within this cultural diversity and foster religious harmony through various programs and activities.
5. Focus on Outcome based education (OBE):	OBE is an integral part of the Choice based Credit System (CBCS) currently followed by the curriculum of the affiliated university. Our institute follows the OBE guidelines in imparting quality education. As a measure of implementation of OBE, three departments namely CSE, BT and Mechanical engineering have been accredited with NBA. The institute plans to complete the accreditation of the remaining branches in due course of time. The students are made aware of the OBE guidelines in the very first class of every semester. OBE is also followed in the teaching learning process and measuring its effectiveness.
6. Distance education/online education:	The Institute promotes distance education through online internships, online certification courses from platforms like NPTEL/ Coursera / MOOCS etc. Our institute is an Academic Partner of IIT Bombay Spoken Tutorial which promotes learning and usage of Free and Open Source Software (FOSS) through spoken tutorial. The institute also organizes online sessions/webinars on the topics related to the current technological developments, which facilitates the students to improve their knowledgebase. To enhance the online education, the university has inculcated the concept of awarding minor degree and BE (Honours) by completing the required numbers of credits through online platforms such as NPTEL. Apart from the students, faculty members also upgrade their knowledge by completing online certification courses in their/interdisciplinary domains. The teaching learning process is enhanced by the used of Google Classrooms, e-resources, etc. The Institute encourages the students to participate in online based Hackathons and competitions organized by reputed institutions.

#### Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	A functional Electoral Literacy Club (ELC) has been set up in the college.
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	A Faculty coordinator Mr. Ismail Shafi A M, HOD, Department of Physics, and a student coordinator Mr. Mohammed Shakir, (MBA) has been appointed for the co-ordination of ELC activities by the college. The ELC is functional with the involvement of student members and faculty.
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	Electoral literacy programmes are held in the college to promote the sense of responsibility towards voting among the students. We have initiated programmes for the students in view of electoral literacy to enhance the democratic values and promote their participation in voting. The programmes initiated are as follows: 1. We have celebrated voter day. 2. We have associations with local panchayat's around the college and have conducted voter registration drive for the students in the college for voter registrations, corrections etc.
4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.	The representatives of the college have visited the nearby/local places to create the awareness among the people on voter registration process and make them to participate in the voter registration camp. The faculty members of the institute have involved in the electoral process being the presiding officers at various electoral booths assigned by the designated election commission authorities. Few nominated faculty members of the institute have undergone electoral process training at Mangalore University election training centre.
5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.	The coordinator of ELC along with the representatives ensure that all the students have registered as voters. This is achieved through awareness programme and voters registration drive.

### **Extended Profile**

### 1 Students

#### 1.1

#### Number of students year wise during the last five years

2022-23	2021-22	2020-21		2019-20	2018-19
1046	1107	1157		1258	1426
File Description		Docum	ent		
Institutional data in prescribed format		View D	ocument		

### **2** Teachers

#### 2.1

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

Response: 131	File Description	Document
	Institutional data in prescribed format	View Document

#### 2.2

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

2022-23	2021-22	2020-21	2019-20	2018-19
67	73	86	101	106

### **3** Institution

#### 3.1

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

2022-23	2021-22	2020-21		2019-20	2018-19
383.43	359.52	233.63		567.91	404
File Description			Docum	ent	
Upload Supporting Document		View D	ocument		

### 4. Quality Indicator Framework(QIF)

### **Criterion 1 - Curricular Aspects**

#### **1.1 Curricular Planning and Implementation**

#### 1.1.1

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

#### **Response:**

P.A. College of Engineering (PACE) follows a structured approach to curriculum planning and delivery, aligning with the academic framework of Visvesvaraya Technological University (VTU), Belagavi, while integrating its own detailed planning strategy.

The Internal Quality Assurance Cell (IQAC) finalizes the institute-level academic calendar in synchronization with the VTU schedule. This calendar is shared with departments, which then create their own calendars while adhering to the institutional timeline. These departmental calendars are disseminated to stakeholders through the ERP system. The HoD assigns courses to faculty members based on their expertise.

Course Coordinators (CC) and course instructors (CI) are finalized by Course Outcomes (COs) and mapping them to Program Outcomes (POs) and Program Specific Outcomes (PSOs). They identify curriculum gaps, plan and execute the courses, and assess COs as per VTU norms and Outcome-Based Education (OBE) principles. Module Coordinators (MC) evaluate and approve the COs, CO-PO-PSO mapping, and address curriculum gaps, while the Program Assessment Committee (PAC) oversees and verifies these processes, ensuring that assessments are carried out using PAC-approved tools, which will be recommended by the Department Advisory Board (DAB).

The Course Coordinator (CC) prepares a detailed lesson plan, which is then uploaded to the DHI system. To address curriculum gaps and enhance skill development, PACE utilizes a variety of pedagogical methods. These methods include model/project-based learning, add-on/value-added courses, group discussions, seminars, outreach programs, workshops, industrial visits, and industry-oriented certification courses.

To accommodate different learning paces, the Course Coordinator (CC) identifies slow and advanced learners through continuous internal evaluation (CIE). Slow learners receive remedial classes, while advanced learners are encouraged to pursue additional courses on platforms like SWAYAM, NPTEL, Coursera, and IBM, with a particular emphasis on NPTEL courses for B.E. honors students. The PAC and DAB review CO, PO, and PSO attainment, formulate action plans, and submit reports to the IQAC for review.

Internal assessments (IA) and other assessments (OA) are central to Continuous Internal Evaluation (CIE). Course Instructors and Coordinators prepare IA question papers based on Bloom's Taxonomy, with evaluation schemes reviewed by the Module Coordinator and approved by the HoD. The Central Examination Committee schedules and publishes IA timetables to ensure planned assessments. After IAs,

CIs and CCs evaluate scripts and calculate CO-PO/PSO attainment. The continuous evaluation also includes lab courses, projects, seminars, internships, mini projects.

The Principal and HoDs regularly review semester progress. Any changes to the academic calendar by the university are promptly integrated into the academics. At the end of each semester, academic documents are reviewed by the Intra Mentoring Committee (IMC), with a report submitted to the IQAC.

Faculty members are involved in curriculum development and assessment at the university level. They serve on Boards of Studies (BoS) and Boards of Examiners (BoE), set question papers, and engage in assessment processes. Feedback from faculty, course end surveys, program exit surveys, and facility feedback are collected, analyzed, and acted upon. Reports are submitted to the IQAC to ensure continuous improvement and adherence to academic standards.

File Description	Document
Upload Additional information	View Document

#### **1.2 Academic Flexibility**

1.2.1

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

**Response:** 19

File Description	Document
List of students and the attendance sheet for the above mentioned programs	View Document
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	View Document
Institutional data in the prescribed format	View Document
Evidence of course completion, like course completion certificate etc. Apart from the above:	View Document

	Other Upload Files	
	1	View Document
1.2.	2	

Percentage of students enrolled in Certificate/ Value added courses and also completed online courses

of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

#### Response: 30.16

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

2022-23	2021-22	2020-21	2019-20	2018-19
236	427	339	319	487

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

#### **1.3 Curriculum Enrichment**

#### 1.3.1

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

#### **Response:**

The institute follows curriculum prescribed by the university (VTU) and integrates various socially relevant crosscutting issues like Professional Ethics, Gender, Human Values, Environment and Sustainability across UG and PG programs to sensitize the students.

**Human Values and Professional Ethics: Human** values and professional ethics are addressed through the course "Constitution of India, Professional Ethics and Cyber Law" Universal Human Values, offered in the III/IV semesters of engineering programme. The primary objective of this course is to ensure that the students have knowledge of the constitution, fundamental duties and rights of citizens, professional ethics and the responsibilities of engineers.

The course also provides awareness about cybercrimes and cyber laws. The students of First Year UG will undergo Student Induction Program (SIP) in which cross-cutting issues like Human Values and Professional Ethics are addressed. The course *Workplace Ethics and Value System* in the 2014 and 2016 schemes for the MBA students provides insight into the workplace ethics apart from acquiring knowledge about corporate governance.

**Environment and Sustainability:** The issues of Environment and Sustainability are addressed through the course *Social Connect and Responsibility, Environmental Studies* offered to Engineering students in the III and V semesters. Through this course, students are sensitized to ecological and environmental

issues connected with land, air, food and water, with awareness on sustainable development.

**Gender equity:** P.A. College of Engineering, imparting quality education to shape global leaders has firm belief in gender equity which is Indispensable to ensure sustainable development of a country. The Institute has initiated promising measures to sensitize and promote gender equity amongst the stakeholders through curricular and co-curricular activities. To promote gender equity among the students, institute supports flexible seating arrangements in the classrooms, equal representation of both gender in the leadership positions of class and college level committees, curricular and co-curricular activities. The institute makes concerted efforts to create a pleasant environment free from gender discrimination through mutual respect.

Apart from the above, the institute organizes various awareness programs and activities on cross-cutting issues with the support of external organizations and experts. The NSS unit conducted various activities through Swachh Bharath Abhiyan, and imparting the students in the cross cutting issues like human values, gender equity, professional ethics, blood donation and health awareness camps conducted by Youth Red Cross Unit, Green campus by Environment cell, rainwater harvesting, play vital role in promoting inclusive environment towards regional and socioeconomic diversities among students making a Positive difference and shaping them into wholesome professionals.

File Description	Document
Upload Additional information	View Document

#### 1.3.2

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

Response: 69.31

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

Response: 725

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

#### **1.4 Feedback System**

#### 1.4.1

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

**Response:** A. Feedback collected, analysed, action taken& communicated to the relevant bodies and feedback hosted on the institutional website

File Description	Document
Feedback analysis report submitted to appropriate bodies	View Document
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	View Document
Action taken report on the feedback analysis	View Document
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	View Document

### **Criterion 2 - Teaching-learning and Evaluation**

#### 2.1 Student Enrollment and Profile

#### 2.1.1

#### **Enrolment percentage**

Response: 52.44

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

2022-23	2021-22	2020-21	2019-20	2018-19
288	286	214	235	363

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

2022-23	2021-22	2020-21	2019-20	2018-19
420	420	483	636	684

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

#### 2.1.2

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

#### Response: 44.7

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

2022-23	2021-22	2020-21	2019-20	2018-19
111	120	83	101	176

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

2022-23	2021-22	2020-21	2019-20	2018-19
210	210	241	318	343

File Description	Document
Institutional data in the prescribed format	View Document
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	<u>View Document</u>
Copy of communication issued by state govt. or Central Government indicating the reserved categories(SC,ST,OBC,Divyangjan,etc.) to be considered as per the state rule (Translated copy in English to be provided as applicable)	<u>View Document</u>

#### 2.2 Student Teacher Ratio

2.2.1

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

Response: 15.61

#### 2.3 Teaching- Learning Process

2.3.1

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

**Response:** 

P A College of Engineering employs student-centric methods to enhance learning experiences, including experiential learning, participative learning, and problem-solving methodologies. These approaches aim to develop students' skills, knowledge, attitudes, and values effectively.

### **Experiential Learning:**

- Laboratory Sessions and Hands-On Training: Beyond-syllabus experiments and practical internships.
- Integrated Courses and Industrial Visits: Partnered courses and real-world organization engagements.
- Induction Programs and Integrated Tools: New student orientation and integrated software tools to enhance learning process
- **Experiential Learning and Practical Applications:** Direct learning experiences and real-world exposure.

### **Participative Learning:**

- Workshops and Technical Talks: Interactive sessions with practical activities, discussions, and expert- led talks.
- Add-On Courses and AICTE Activities: Supplementary courses, competitions, and workshops enhancing technical skills.
- Hands-On Sessions and Sustainable Society Programs: Practical training with tools and environmental sustainability initiatives.
- **Co-Curricular Events and Alumni Interaction:** Sports, arts, cultural programs, and networking with alumni.
- Seminars and Paper Publications: Collaborative sessions on specific topics and academic paper contributions.
- Association Events and Project Funding: Activities by student associations and financial support for projects.

### **Problem-Solving Methods:**

- In-House Training and Project Development: Tailored sessions and hands-on project work.
- Annual Tech Fest and Problem-Based Assignments: Showcasing projects and practical assignments.
- Cutting-Edge Technology Projects and Mini Project Development: Innovation in technology and focused challenges.
- Case Studies, Debates, and Inter-College Events Participation: Critical thinking through discussions and external competitions.

# **Teachers use ICT-enabled tools for effective teaching and learning:**

- **PowerPoint Presentations:** Enhanced with digital libraries and online resources.
- **Industry Engagement:** Digital technology in smart rooms and labs for guest lectures and competitions.
- Online Quizzes: Tools like Google Forms, Kahoot!, and Quizizz.com.
- Video Conferencing: Platforms like Zoom and Google Meet for guidance and interactive sessions.
- Video Lectures: Recorded lectures available on YouTube.
- Student Career Portal: Resources for career planning and alumni networking.
- ERP System: Streamlined academic management and resource allocation.
- Attendance Monitoring: Automated systems for real-time tracking.
- Online Competitions: Technical and management competitions using ICT tools.
- MOOC Platforms: Access to NPTEL, SWAYAM, Coursera, and VTU e-learning.
- **Digital Library Resources:** Utilizing a library management system for e-learning resources, materials, and tools like Drillbit for enhanced research and academic integrity.
- Workshops/Internships: Advanced methodologies using ICT tools and industry-aligned internships.
- **Software Tools:** Specialized tools such as IntelliJ IDEA, Orange, Tinker cad, Google Home, Energy IDE, and Arduino IDE etc.

P A College of Engineering's commitment to student-centric methods and ICT integration ensures that students acquire the skills and knowledge necessary for lifelong learning and success, preparing them for a dynamic and competitive world.

File Description	Document
Upload Additional information	View Document

#### **2.4 Teacher Profile and Quality**

#### 2.4.1

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

**Response:** 77.05

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

2022-23	2021-22	2020-21	2019-20	2018-19
86	95	113	129	139

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts)	View Document

#### 2.4.2

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

Response: 15.94

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

2022-23	2021-22	2020-21	2019-20	2018-19
19	13	12	11	14

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

#### **2.5 Evaluation Process and Reforms**

2.5.1

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

**Response:** 

The internal and external assessments are conducted as per the guidelines laid down by VTU, Belagavi. The university has adopted the Choice Based Credit System (CBCS) to address Outcome Based Education (OBE).

Continuous Internal Evaluation (CIE) involves ongoing assessments to support students academically. This process includes tests, assignments, quizzes, presentations, and other activities contributing to the overall grade. VTU ensures transparency by providing assessment guidelines and weightage for each component according to the scheme. Question papers are designed to meet the requirements of OBE, incorporating questions from all levels of Bloom's Taxonomy. Each question is mapped to the relevant course outcomes for the respective courses. The Internal Examination Cell (IEC) at the college level monitors CIE and addresses grievances. Faculty members communicate assessment parameters, criteria, and deadlines to students, fostering clarity and allowing students to grasp expectations. Regular feedback aids students in improving their understanding. Student performance in internal tests is continuously monitored, recorded by mentors in attendance registers, student diaries, and the DHI App. Meetings are held to discuss students' performance in CIE/SEE. Actions are suggested to address any issues, and parents of underperforming students meet with mentors if necessary.

VTU conducts Semester End Examinations (SEEs) in a structured process to align with the curriculum and minimize bias. External faculty teams evaluate SEEs to ensure fairness. Practical exams, seminars, projects, and internships follow VTU guidelines for evaluation.

VTU employs a well-structured exam-related grievance resolution process spanning departmental, institutional, and university levels.

#### **Departmental and Institutional Level:**

Effective Examination Management: The Institutional Examination Cell (IEC) partners with department coordinators to assist students in addressing exam-related concerns efficiently.

Addressing Concerns: At the departmental level, students are encouraged to voice their concerns regarding exams. The department is committed to resolving these issues within defined timelines if they fall within its purview.

Re-tests and Absence Protocol: Re-tests are organized for students with authorized absences, facilitated through coordination with the IEC.

Timely Communication and Reporting: Following internal tests, students receive their answer scripts and have the opportunity to discuss assessments with faculty members. Faculty uploads internal exam marks as per the academic calendar, and progress reports are promptly dispatched.

University Portal Submission and Validation: Confirmed marks are uploaded to the university portal by faculty members. The subsequent approval process involves a comprehensive validation, including the participation of relevant faculty members and department heads.

#### University Level:

SEE Grievances: Grievances regarding Semester End Examinations (SEE), encompassing issues like "Out of syllabus" claims and question paper errors, are channelled to the course coordinator. These concerns are then escalated in writing to the Head of Department (HOD), Principal, and Registrar Evaluation of the University, adhering to established regulations.

Revaluation and Semester Exam Marks: Revaluation does not apply to practical courses and project work as per university norms. Students seeking revaluation for theory exams can obtain photocopies of their answer scripts and can apply for the revaluation process as per the VTU notifications.

File Description	Document
Upload Additional information	View Document

#### 2.6 Student Performance and Learning Outcomes

#### 2.6.1

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

#### **Response:**

The institute (PACE) follows Outcome Based Education (OBE) system as directed by Visvesvaraya Technological

University (VTU), which is in line with the AICTE guidelines. The institute follows twelve pre-defined Programme Outcomes (POs) across all its engineering programmes to incorporate Graduate attributes as prescribed by National Board of Accreditation (NBA).

The POs adopted by the institute for its Engineering Programmes are as follows,

1.Engineering knowledge

- 2.Problem analysis
- 3.Design/development of solutions
- 4.Conduct investigations of complex problems
- 5.Modern tool usage
- 6.The engineer and society
- 7.Environment and sustainability
- 8.Ethics
- 9.Individual and teamwork
- 10.Communication
- 11.Project management and finance
- 12.Life-long learning

#### **Display of stated POs, PSOs and COs:**

- The approved POs, PSOs and COs are disseminated to the stakeholders and published in the websites, IA Test booklet (blue books), lab records, lab manuals, e-newsletters, HoD & Faculty rooms, laboratories and Department corridors.
- The HoD of each program conducts awareness session on POs, PSOs and its mapping with COs

to course handling teachers/faculties.

- The course teacher conducts PO/PSO & CO awareness session during regular classes.
- The institution uses ERP-DHI education platform to state, display and communicate the COs, POs, PSOs, course wise mapping of COs with POs/ PSOs to Students and Faculty members.

The POs and COs of all courses of each programme has been consolidated and updated on the website.

File Description	Document
Upload Additional information	View Document

#### 2.6.2

Attainment of POs and COs are evaluated.

#### Explain with evidence in a maximum of 500 words

**Response:** 

#### Attainment of POs and Cos are evaluated in the outcome Based Education (OBE)

#### **CO** Assessment Processes

Assessment tools are categorized into two methods to assess the course outcomes:

**1. Direct methods** (Deals the students' performance on the basis of Continuous Internal Examinations (CIE), Semester End Examinations (SEE), Seminars, Projects, Technical Seminar, Laboratory and Class room assignments etc.

2. Indirect methods (Deals the students' performance on the basis of Students Course End Survey)

Direct Assessment I	Methods	
Sl. No.	Direct Assessment	Method Description
1	Internal Assessment	For Scheme 2018 three tests each
		carrying 30 Marks shall be
	(Theory Courses)	conducted. Other Assessments
		(Assignments and unit tests) are
		designed by faculty members
		based on the subject's nature.
		These assessments also include
		mapping to COs and
		corresponding Bloom's levels. The
		other assessment marks are
		evaluated out of 30 and scaled

			down to 10 marks. The final grade will be the average of the three test scores and the final other assessment marks (Total 40 Marks).
2	Internal Ass Laboratory Cour	essment for 'se	In the Laboratory course, the Internal Assessment marks shall be based on the laboratory records, observation, implementation and one IA test.
3	Internal Assessm	ent for Project	Project work evaluated by conducting 3 reviews and Viva- voce examination at the end of the semester. Project work is conducted batch wise. Carrying Total of 100 Marks
4 Indirect Assessment Methods	Semester End Ex	amination	One Exam carrying 100 Marks shall be conducted by the university. The total mark obtained is reduced to 60.
	Course End Surv	rey	Matching survey questions to Course Outcomes (COs) helps the course coordinator gauge how well students have met the intended learning goals. Using a standardized survey form ensures consistency across various courses, and a rating scale (usually 1-7) allows for a detailed assessment of student performance. At the course conclusion, a tailored survey form is generated, directly linking questions to CO's. Responses, often on a 1-7 scale, are collected to calculate the indirect attainment of CO's
<b>File Description</b>		D	

File Description	Document
Upload Additional information	View Document

### 2.6.3

Pass percentage of Students during last five years (excluding backlog students)
### Response: 95.98

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

2022-23	2021-22	2020-21	2019-20	2018-19
258	358	342	387	303

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

2022-23	2021-22	2020-21	2019-20	2018-19
276	365	366	392	318

File Description	Document
Institutional data in the prescribed format	View Document
Certified report from Controller Examination of the affiliating university indicating pass percentage of students of the final year (final semester) eligible for the degree programwise / year-wise.	<u>View Document</u>
Annual report of controller of Examinations(COE) highlighting the pass percentage of final year students	View Document

### 2.7 Student Satisfaction Survey

# 2.7.1 Online student satisfaction survey regarding teaching learning process Response: 3.96 File Description Upload database of all students on roll as per data template

### **Criterion 3 - Research, Innovations and Extension**

### **3.1 Resource Mobilization for Research**

### 3.1.1

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

### **Response:** 103.83

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

2	022-23	2021-22	2020-21		2019-20	2018-19	
3:	5	16.5	20		2.33	30	
File	e Description			Docum	ent		
<b>File</b> Upl	e <b>Description</b>	locument		Docume View D	ent ocument		

### **3.2 Innovation Ecosystem**

### 3.2.1

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

### **Response:**

PA College of Engineering is a cornerstone of the institution's commitment to advancing knowledge and fostering innovation. This cell is dedicated to overseeing and promoting research activities within the college, ensuring that students and faculty engage in meaningful and impactful research projects. The R&D Cell facilitates interdisciplinary research, secures funding, and ensures adherence to ethical standards, thereby creating an environment conducive to cutting-edge research and development.

The college boasts several Approved Research Centres, each focusing on specific areas of expertise. These centres are rigorously evaluated for their facilities, faculty qualifications, and research outputs before receiving approval. They provide a focused environment where advanced research can thrive, offering access to specialized equipment and fostering collaboration among researchers with shared interests. More than 10 patents were published and more than 4 were granted

PACE places a strong emphasis on the Initiative for Creation of Knowledge, aiming to generate new knowledge through innovative research projects with innovative Lab KTech Nain. This initiative includes organizing workshops, seminars, and providing grants for pilot projects. the institution ensures that both students and faculty contribute significantly to the body of global knowledge. This proactive approach not only enhances the academic experience but also positions the college as a leader in research and innovation.

The Institution Innovation Council (IIC) is dedicated to fostering a culture of innovation and entrepreneurship within the college. This council plays a pivotal role in creating a vibrant innovation ecosystem within the institution. By providing a platform for innovative ideas and entrepreneurial ventures, the IIC helps transform theoretical knowledge into practical applications, benefiting both the academic community and the broader society.

Incubation Centre provides vital support to startups and early-stage companies. Offering office space, mentorship, funding support, and access to professional networks, the Incubation Centre aims to transform innovative ideas into successful businesses. This initiative not only supports budding entrepreneurs but also strengthens the college's reputation as a hub for innovation. By nurturing startups and fostering a spirit of entrepreneurship, the Incubation Centre contributes to economic growth and job creation, while also enhancing the practical learning experience for students.

PACE is committed to the Indian Knowledge System (IKS), which involves researching and promoting traditional Indian knowledge across various fields, such as science, technology, arts, and literature. By documenting and integrating traditional knowledge with modern research, the institution ensures the preservation and application of valuable indigenous knowledge. This commitment not only enriches the academic curriculum but also helps preserve cultural heritage and promotes sustainable practices.

In summary, PACE comprehensive approach to research and development encompasses a wide array of initiatives aimed at fostering innovation, supporting startups, protecting intellectual property, and promoting interdisciplinary research, thereby contributing significantly to the creation and dissemination of knowledge. Through its dedicated R&D Cell, Initiative for Creation of Knowledge, Institution Innovation Council, Incubation Centre, adherence to the National Innovation and Startup Policy, and commitment to the Indian Knowledge System, the college is well-positioned to make a substantial impact on the academic and broader community.

File Description	Document
Upload Additional information	View Document

3.2.2

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

**Response:** 12

3.2.2.1 Total number of workshops/seminars/conferences including programs conducted on

Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years

	2022-23	2021-22	2020-21		2019-20	2018-19
	6	6	0		0	0
File Description		Document				
Upload supporting document		View Document				
Institutional data in the prescribed format		View D	ocument			

### **3.3 Research Publications and Awards**

### 3.3.1

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

### Response: 1.34

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

2022-23	2021-22	2020-21	2019-20	2018-19
20	41	50	37	27

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

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

Response: 0.37

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

2022-23	2021-22	2020-21	2019-20	2018-19
11	7	9	7	14

File Description	Document
List of chapter/book along with the links redirecting to the source website	View Document
Institutional data in the prescribed format	View Document
Copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	<u>View Document</u>

### **3.4 Extension Activities**

### 3.4.1

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

### **Response:**

Extension activities play a pivotal role in bridging the gap between academic learning and realworld challenges. Various initiatives such as Swachh Bharat, AIDS awareness, and gender issues sensitization have contributed to community development and significantly impacted students' holistic growth. These activities have helped students develop a profound understanding of social issues, instilling empathy, social responsibility, and range of skills essential for their personal and professional development. The Swachh Bharat campaign has led to remarkable improvements in hygiene and sanitation in the neighbourhoods. Cleanliness drives have resulted in cleaner streets and better waste management practices. These efforts have raised awareness among community members about the importance of cleanliness, promoting healthier lifestyles and reducing the incidence of diseases. The active participation of residents has fostered a sense of community ownership and responsibility towards maintaining a clean environment, strengthening the communal bond.

AIDS awareness programs have educated the community about HIV/AIDS, addressing its transmission, prevention, and reducing associated stigma. Through workshops and awareness

campaigns, students have disseminated crucial information, encouraging individuals to undergo testing and seek counselling. These activities have facilitated early detection and better management of the disease. The collaboration with healthcare providers and NGOs has established robust support networks for affected individuals, ensuring they receive necessary medical and emotional support. Initiatives focused on gender issues have empowered women and girls in the community, challenging traditional gender roles and stereotypes. Workshops and discussions have promoted gender equality, encouraging participants to voice their concerns and assert their rights. Awareness campaigns about gender-based violence have led to the creation of support systems for victims, providing them access to legal aid, counselling, and safe spaces. These efforts have contributed to a more inclusive and equitable community environment.

Engaging in extension activities has nurtured empathy and compassion among students. Understanding the challenges faced by different community members has made students more sensitive to social issues, fostering a sense of social responsibility. This involvement has motivated students to advocate for positive change, becoming active contributors to societal well-being. Organizing and leading community activities have equipped students with essential leadership and management skills. They have learned to coordinate efforts, motivate volunteers, and achieve collective goals. Interaction with diverse community members has enhanced their communication and interpersonal skills, enabling them to convey messages effectively and build strong relationships. Addressing real-world issues has honed their critical thinking and problem-solving abilities, preparing them to tackle complex challenges.

Extension activities have provided complements in academic learning. This hands-on involvement has enriched their education, preparing them for real-world challenges. Collaborating with community leaders, government officials has opened up valuable networking opportunities, aiding their future career endeavours. Participation in socially impactful activities is highly regarded by employers, adding significant value to their resumes and showcasing their commitment to community service and social responsibility.

### Conclusion

The extension activities conducted by PACE have had a profound impact on both the community and the students. Initiatives such as Swachh Bharat, AIDS awareness, and gender issue sensitization have not only contributed to community development

File Description	Document
Upload Additional information	View Document

### 3.4.2

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

**Response:** 

Extension activities in colleges play a crucial role in the holistic development of students and the community. These activities bridge the gap between academic knowledge and real-world applications, fostering social responsibility, community engagement, and personal growth. Recognizing and awarding colleges for their extension activities not only motivates institutions to enhance their outreach programs but also highlights the importance of community service in higher education.

Recognizing the efforts of colleges in conducting extension activities is essential for promoting and sustaining such initiatives. Various awards and recognition programs are instituted at national, state, and institutional levels:

PACE received a Swachata Hi Seva Awards from Ministry of Housing and Urban affairs, Government of India, these awards recognize colleges that excel in maintaining cleanliness and hygiene on campus and in their surrounding communities. The awards motivate institutions to contribute to the national Swachh Bharat Mission.

PACE also received a Silver Certificate of appreciation from, Energy Swaraj Foundation, for the excellence in Swatch Baharat Mission Initiatives in the campus as well as in the nearby communities. Cleanliness drives organized by the students have resulted in cleaner streets and better waste management practices. These efforts have raised awareness among community members about the importance of cleanliness, promoting healthier lifestyles and reducing the incidence of diseases. The active participation of residents has fostered a sense of community ownership and responsibility towards maintaining a clean environment, strengthening the community.

### Impact and outcomes

Awards and recognition for extension activities have a significant impact on colleges and their communities: Sustained Commitment to Cleanliness: Awards provide a lasting incentive for colleges to maintain high standards of cleanliness and sustainability. The recognition serves as a benchmark for future efforts, ensuring that cleaning activities remain a priority and are continuously improved.

- 1. Institutional and Cultural Change: Over time, the recognition of cleaning activities can lead to significant institutional and cultural changes. Colleges may adopt more sustainable policies, integrate environmental education into their programs, and foster a campus culture that values and prioritizes cleanliness and sustainability.
- 2. Replication and Scaling of Successful Initiatives: Award-winning cleaning activities can serve as models for other institutions. The strategies, practices, and successes of recognized colleges can be replicated and scaled, leading to broader impacts and the spread of effective cleaning and sustainability practices across educational institutions.

### Impact and outcomes

1. Encouragement and Motivation: Awards and recognition serve as a significant motivation for colleges to continue organizing blood donation camps. They validate the efforts of

students and faculty, encouraging them to engage in more community service activities.

2. Enhanced Reputation: Recognized colleges gain a reputation for social responsibility and community engagement, which can attract prospective students and faculty. It also enhances the institution's standing in the community and among peer institutions.

### Conclusion

Awards and recognition for extension activities are vital in promoting community service and engagement in higher education. By acknowledging the efforts of colleges, these awards not only motivate institutions to continue their outreach programs but also highlight the importance of social responsibility and community development.

File Description	Document
Upload Additional information	View Document

### 3.4.3

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

### Response: 32

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

2022-23	2021-22	2020-21	2019-20	2018-19
7	6	3	8	8

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

### **3.5** Collaboration

### 3.5.1

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

### **Response:** 29

File Description	Document
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc.	View Document
List of year wise activities and exchange should be provided	View Document
List and Copies of documents indicating the functional MoUs/linkage/collaborations activity- wise and year-wise	View Document
Institutional data in the prescribed format	View Document

### **Criterion 4 - Infrastructure and Learning Resources**

### 4.1 Physical Facilities

### 4.1.1

The Institution has adequate infrastructure and other facilities for,

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

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

**Response:** 

The P A College of Engineering spans 60 acres with a carpet area of 242811sq.mts.

The campus is divided into 3 blocks: Administrative block, Academic block and Laboratory block designed by a renowned architect, the infrastructure boasts ICT enabled classrooms, well equipped laboratories, a central digital library, an auditorium, a gymnasium, a canteen, and a health center. These facilities surpass the requirements of different regulatory bodies like AICTE as well as the affiliating university Visvesvaraya Technological University, Belgaum.

- Institution is dedicated to delivering quality education aligned with global standards. Classrooms are equipped with high end-ICT facilities. Innovative teaching methods including Google classroom, and Microsoft teams are employed for effective learning. PACE features most classrooms are fully equipped with LCD projectors, WiFi/LAN connectivity and white boards
- Air conditioned multipurpose hall with audio-visual aids serve All faculty meetings, workshops and club activities. Additionally 2 seminar halls with a seating capacity of 250 with adequate facilities.
- The College houses 41 laboratories including 3 research labs equipped with cutting edge facilities conforming to AICTE standards and remedial classrooms to provide extra classes to the students who require special attention.
- The central library is automated, offering a wide range of resources with a collection of over 33,823 volumes, online journal subscriptions and e-resources access. Additionally there is a digital library with internet connected system along with Departmental libraries for quick reference.
- PACE provides value added tech facilities through government funded bodies like NAIN-KTECH, Incubation centres and Research labs are available for learning the latest technologies.

- The IT infrastructure is excellent with 421 computers on campus ranging from core i3 with 4GB RAM and 500 GB HDD/SSD to i7 with 16GB RAM and 1 TB HDD/SSD. The campus has a high configured rack server for network connectivity. Internet access is provided by DENET INTERNET SERVICES PVT LTD with a total bandwidth of 200 Mbps. WiFi access points are available campus wide, including the hostel. Online classes utilize web cameras, Google classrooms and licensed version of Microsoft Teams. LCD projectors and LAN/WiFi are present in most of the classrooms and laboratories for presentations.
- The campus is equipped with 24\*7 surveillance cameras consisting of about 200 in numbers.
- The hostel offers a comfortable living environment for both genders providing healthy food and WiFi connectivity.
- The college promotes sports and games providing outdoor and indoor facilities .Students have participated in various events and earned accolades.College has won championship in several tournaments including VTU State level football championship,Independence cup Football tournament, VTU state level powerlifting competition, National level Karate championship, VTU state level Taekwondo competition.
- A Fitness center with modern equipment is accessible to staff and students.
- Cultural activities thrive through clubs, societies annual events-REVELATIONS and celebrations of national, international and religious occasions.
- An open auditorium seating 2500 people is available for outdoor programmes and functions.
- The campus offers additional facilities such as drinking water in each floor, barrier free mobility features, separate hostel for girls and boys, medical facility, college bus transportation, staff quarters, Principal bungalow, an ATM, 24\*7 security, vehicle parking, stationary store, photocopy center, fire safety equipment, rainwater harvesting and sewage treatment plants.

File Description	Document
Upload Additional information	View Document

### 4.1.2

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

### Response: 43.09

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

### during last five years (INR in lakhs)

2022-23	2021-22	2020-21		2019-20	2018-19
374.69	138.46	45.16		161.49	119.85
File Description			Docume	ent	
Institutional data in the prescribed format			View Document		
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)			View Do	ocument	

### 4.2 Library as a Learning Resource

### 4.2.1

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

**Response:** 

**PACE Central Library** 

P.A.College of Engineering Library has independent library building with an area of 11,524 sq.ft. It serves as a learning resource centre, offering library services to all students, research scholars and faculty members. It consists of various sections like Lending, Reference, Circulation, and Periodical, Digital, Technical, Newspapers and Reading Hall including a collection of previous semester question papers.

**Electronic Public Access Catalogue (EPAC)** 

The library provides access to the library resource through EPAC. Users can search bibliographic records of the library.

### **Library Collection**

At present the library has 34,097 volumes of books and 7,681 titles covering all branches of engineering and reference books like encyclopaedia, hand books, dictionaries, GATE, GRE books & literature books. In addition to this main library has 1051 project reports, 1033 bound volumes of journals, 1019 ITDP book bank and 3361 rare books collections.

### **E-Journals and E books**

The Library subscribes 21,883 full-text e-journals and 100,000+ eBooks, NPTEL videos from different publishers, including Elsevier – Science Direct, Taylor & Francis, Emerald-Management, ProQuest, Springer Nature, IEEE ASPP and Knimbus open source. All library e resource is enabled IP based access in our campus and remote access through using Knimbus m-Lib platform.

### **College Membership**

**DELNET:** The institution has library network which helps to get Inter Library Loan and document delivery facility.

VTU consortium: It provides seven different publishers, e-journals and Drillbit plagiarism tool.

### Library Systems

The library follows OPEN ACCESS system. Books and bound volumes are classified and catalogued according to DDC 21 & 22 and arranged accordingly.

### Library Automation

The library is entirely computerized using Easylib 4.2.1 software to facilitate, manage and search of library resources. The books and reader cards are bar-coded to speed up the circulation works.

### **Digital Library and Internet**

Total 10 systems are arranged in Digital Library to facilitate browsing e-journals. The institute also has an intensive Digital Library consisting of around 3,130 CD-ROM's. Internet facilities are also available. One system for browsing e resources and study tables is kept for Divyangjan at reading hall.

### Accessibility to students

- Every semester, the library adds new edition of books, journals and newspapers.
- Every student is allowed to borrow books (3 Books for P.G Students & 2 for U.G Students) for issue/return.
- The library has ITDP Book bank, general book bank and ILL facilities like journal articles and books.
- The Library working hours is 8.30 a.m. to 8.00 p.m.

**Self-Learning Activities** 

- Separate Section is provided for student's discussion.
- Separate area for reading divyangjan students and staffs,
- Current Awareness Services like student and staffs orientation, paper clippings, document delivery services, WhatsApp awareness, mail awareness provided among library users.
- Laptop browsing area with internet cable connection for students and staffs is available.
- UG students and Staff are permitted to take any number of books from the reference section for reading.
- Students and staff's suggestions and grievances are addressed.

Security arrangements:

Purchased and installed licensed software (Antivirus) on server client systems.

**Library Facilities** 

The library offers photocopying, spiral binding, Lamination sticker print and scanning.

File Description	Document
Upload Additional information	View Document

### **4.3 IT Infrastructure**

4.3.1

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

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

**Response:** 

2022-23

- Internet wifi with 200 mbps speed facility is provided for staff and students.
- One PC with CPU of I 7 processor, 4 GB RAM and 500 GB SSD hard disk purchased for

administrative and office work.

- One PC with CPU of I 5 processor, 8 GB RAM and 500 GB SSD hard disk purchased for administrative and office work.
- One PC with CPU of I 3 processor, 8 GB RAM and 1 TB hard disk purchased for administrative and office work.

2021-22

- Internet wifi with 100 mbps speed facility is provided for staff and students.
- 30 PC with CPU of I 5 processor, 18 GB RAM and 500 GB SSD hard disk purchased for lab.
- 31 PC with CPU of I 7 processor, 16 GB RAM and 1 TB hard disk purchased for lab.
- 32 PC with CPU of I 3 processor, 8 GB RAM and 500 GB SSD hard disk purchased for lab.

2020-21

- Licenced software like MS 365 Apps, MS intune open and ms winedu purchased which worth of 4,18,880 /-.
- Licenced software like solid edge purchased which worth of 448400 /-.

2019-20

- Internet wifi with 65 mbps speed facility is provided for staff and students.
- 30 PC with CPU of I 3 processor, 4 GB RAM and 1 TB hard disk purchased for lab.
- 30 PC with CPU of I 3 processor, 16 GB RAM and 1 TB hard disk purchased for lab.
- Licenced software like MS 365 Apps, MS intune open and ms winedu purchased which worth of 2,78,850 /-.

- Internet wifi with 65 mbps speed facility is provided for staff and students.
- 8 PC (workstation) with CPU of I 7 processor, 16 GB RAM and 2 TB hard disk purchased for research work.
- 20 PC with CPU of I 7 processor, 16 GB RAM and 500 GB SSD hard disk purchased for lab.
- 19 PC with CPU of I 3 processor, 4 GB RAM and 1 TB SSD hard disk purchased for lab.

File Description	Document
Upload Additional information	View Document

### 4.3.2

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

**Response:** 2.6

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

Response: 402

File Description	Document
Purchased Bills/Copies highlighting the number of computers purchased	View Document
Extracts stock register/ highlighting the computers issued to respective departments for student's usage.	<u>View Document</u>

### **4.4 Maintenance of Campus Infrastructure**

### 4.4.1

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

Response: 32.04

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

2022-23	2021-22	2020-21	2019-20	2018-19
155.32	121.37	38.66	157.26	151.70

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for maintenance of infrastructure should be clearly highlighted)	<u>View Document</u>

### **Criterion 5 - Student Support and Progression**

### 5.1 Student Support

### 5.1.1

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

### Response: 76.41

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

2022-23	2021-22	2020-21	2019-20	2018-19
822	828	943	961	1026

File Description	Document
Year-wise list of beneficiary students in each scheme duly signed by the competent authority.	View Document
Upload Sanction letter of scholarship and free ships (along with English translated version if it is in regional language).	View Document
Upload policy document of the HEI for award of scholarship and freeships.	View Document
Institutional data in the prescribed format	View Document

### 5.1.2

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

Soft skills
 Language and communication skills
 Life skills (Yoga, physical fitness, health and hygiene)
 ICT/computing skills

Response: A. All of the above

File Description	Document
Report with photographs on Programmes /activities conducted to enhance soft skills, Language and communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self- employment and entrepreneurial skills)	<u>View Document</u>
Report with photographs on ICT/computing skills enhancement programs	View Document
Institutional data in the prescribed format	View Document

### 5.1.3

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

### Response: 64.6

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

2022-23	2021-22	2020-21	2019-20	2018-19
568	693	619	962	1030

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

### 5.1.4

The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases

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

**Response:** B. 3 of the above

File Description	Document
Proof w.r.t Organisation wide awareness and undertakings on policies with zero tolerance	View Document
Proof related to Mechanisms for submission of online/offline students' grievances	View Document
Proof for Implementation of guidelines of statutory/regulatory bodies	View Document
Details of statutory/regulatory Committees (to be notified in institutional website also)	View Document
Annual report of the committee motioning the activities and number of grievances redressed to prove timely redressal of the grievances	View Document

### **5.2 Student Progression**

5.2.1

Percentage of placement of outgoing students and students progressing to higher education during the last five years

Response: 76.82

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

2022-23	2021-22	2020-21	2019-20	2018-19
218	279	280	303	239

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

2022-23 202	)21-22	2020-21	2019-20	2018-19
276 365	55	366	392	318

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

### 5.2.2

Percentage of students qualifying in state/national/international level examinations during the last five years

### Response: 5.28

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

2022-23	2021-22	2020-21	2019-20	2018-19
7	6	6	1	1

File Description	Document
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	View Document
Institutional data in the prescribed format	View Document

### **5.3 Student Participation and Activities**

### 5.3.1

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

### **Response:** 39

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

	2022-23	2021-22	2020-21		2019-20	2018-19
	16	8	4		6	5
File Description			Document			
Upload supporting document		View Document				
list and links to e-copies of award letters and certificates		View D	ocument			
Institutional data in the prescribed format			View D	ocument		

### 5.3.2

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

### Response: 19.2

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

2022-23	2021-22	2020-21	2019-20	2018-19
22	22	11	18	23

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

### 5.4 Alumni Engagement

### 5.4.1

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

### **Response:**

### PACENEXT ALUMNI ASSOCIATION (R)

PACE, driven by its core value of a "family culture," regards its alumni as a vital part of its community, reflecting both its history and future. This conviction has led PACE to foster lifelong engagement with its graduates from Engineering and Management Studies, who now thrive as global professionals and ambassadors of their alma mater.

To support this connection, PACE established the PACE Alumni Association in 2005, now registered as PACENEXT (DRDK/SOR/40/2019-2020). Over time, the association has expanded to include chapters in Mangalore, Bengaluru, Kerala, UAE, KSA, Oman, Qatar, Southeast Asia, Europe, Canada, and the USA. These chapters are crucial for alumni networking, offering support to current students through events, mentorship programs, and services aimed at professional and personal development.

The association's office bearers, comprised of dedicated alumni representatives, maintain an up-to-date alumni database to strengthen connections, enhance recognition, and facilitate engagement through targeted initiatives. In the past five years, the association has organized five successful alumni meets and gatherings, fostering regular interaction among alumni.

Notable alumni include Mr. Mohammed Hanif and Mr. Shihab Kalandar, co-founders of Novigo Solutions Pvt Ltd; Mr. Vishnu Shashank, founder of Isiri Technology; Mr. Yajnesh Talapady, co-founder of FairFirst; and Mr. Amis Ahmed, founder of Speaking Herbs. These individuals exemplify the entrepreneurial spirit and success nurtured by PACE.

Social media platforms like Facebook (pacemangalore, pacenext), Instagram (pacemangalore\_official, pace\_next\_), and the dedicated email address (alumni@pace.edu.in) keep alumni connected with updates about major events and institute achievements. Alumni contribute to the institution's growth by serving on the Department Advisory Board, offering feedback on courses, and suggesting curriculum enhancements. Their involvement in institute-level committees ensures that their perspectives are integrated into decision-making processes.

PACE fosters strong connections between alumni and current students through technical talks on emerging topics, where alumni share industry insights and experiences. These talks, especially from entrepreneurial alumni, inspire students and provide real-world guidance. Alumni also serve as jury members for technical events, cultural festivals, hackathons, and as panel experts in startup events, lending their expertise to mentor budding talent.

Additionally, alumni mentor final-year student projects, assist in securing internships and career opportunities, and offer scholarships to economically disadvantaged students, alleviating financial barriers to education. The association also organizes annual food kit distributions during Ramadan to support those in need within the PACE community. Contributions are managed efficiently through a separate account at the Bank of Baroda, Konaje branch.

Annual alumni meets and gatherings are a highlight of the engagement efforts, bringing alumni together for reunions with fellow graduates and institute administrators. These events rekindle friendships, strengthen community bonds, and foster a sense of belonging. The association has organized five successful gatherings over the past five years, ensuring continued interaction among alumni.

Through these efforts, PACE ensures ongoing alumni involvement in various dimensions, enhancing the institute experience for both alumni and current students. This dedication to maintaining strong alumni relations underscores PACE's commitment to its core values and vision of a connected, supportive, and globally competent professional family.

File Description	Document
Upload Additional information	View Document

### **Criterion 6 - Governance, Leadership and Management**

### 6.1 Institutional Vision and Leadership

### 6.1.1

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

### **Response:**

P. A. College of Engineering (PACE), founded under the P. A. Educational Trust, is committed to providing career-oriented professional education, fostering technically competent engineers with innovative and ethical values. The institute's vision and mission guide all strategic initiatives toward well-defined objectives. Institutional governance and leadership at PACE are aligned with its vision and mission, ensuring strategic initiatives reflect its core values. The Board of Trustees oversees performance, financial health, and leadership succession, while the Governing Council formulates policies, approves budgets, and supports faculty and student development. The Managing Trustee handles development and financial management, and the Director (Finance) ensures compliance. The Principal oversees daily operations, with Heads of Departments maintaining academic standards. Specialized roles manage administrative functions, ensuring smooth operations. This structure supports PACE's commitment to continuous improvement and high-quality education.

### **NEP Implementation**

PACE integrates National Education Policy (NEP) principles, focusing on interdisciplinary studies, flexibility, and holistic education, in alignment with Visvesvaraya Technological University Belagavi. The Employability Skills Programme emphasizes skill development. Departmental research centers encourage collaboration through MoUs, internships, and guest lectures. Competency-based evaluations support comprehensive student development. Support services include an efficient ERP system, mentorship, counseling, and diverse co-curricular activities. Infrastructure upgrades enhance experiential learning, while wellness programs promote health. Social responsibility is reflected in community outreach and environmental projects, such as waste management, water conservation, sewage treatment, beach cleaning, and tree planting, preparing engineers for future challenges.

### Sustained Institutional Growth

PACE employs multifaceted strategies for sustained growth in academic, administrative, infrastructural, and community engagement domains. Academic excellence is pursued by continuously updating curricula to match industry trends and technological advancements, fostering adaptable and innovative engineers. Administrative efficiency is enhanced through systems like ERP, while robust student support services, including career counseling, training, placement, and extracurricular activities, contribute significantly to student development and progress.

### Short term and long term Institutional Perspective Plan

By 2026-27, the institution aims to achieve a NIRF ranking under 150 in Engineering, having participated in 2023. It seeks NBA accreditation for all departments, with ME, CS, and BT already accredited, and EC, CV, AIML, and CS (IoT) targeted for future accreditation. An A+ NAAC accreditation is planned by 2024, with IIQA accepted. The goal for the Atal Ranking of Institutions on Innovation Achievements (ARIIA) is to reach the "Excellent" band by 2025-26, currently in the "BAND PROMISING" category. A feasibility study for private university status is underway, targeting deemed/private university status by 2027-28. The institution also aims for 100% student enrollment by 2024-25 and plans to pursue Institution of Eminence status by 2030, with university status targeted for 2032.

### Decentralization

PACE promotes decentralization and active stakeholder participation in governance, ensuring both short-term and long-term goals are addressed through a collaborative approach. This strategy empowers departments and committees to contribute to policy development and strategic planning, enhancing transparency and inclusivity. The institution's perspective plan outlines strategic objectives and initiatives, aligning with immediate needs while preparing for future growth. This comprehensive approach supports adaptive development and fosters a dynamic and engaged institutional environment.

File Description	Document
Upload Additional information	View Document

### **6.2 Strategy Development and Deployment**

### 6.2.1

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

### **Response:**

PA College of Engineering, established under the P.A. Educational Trust, founded in 1999 has a mission to nurture future professionals with a blend of knowledge, ethics, and social responsibility. The Trust oversees various educational institutions, including PACE, which is affiliated with Visvesvaraya Technological University (VTU) and approved by AICTE. The college's governance structure is robust, featuring clearly defined policies, administrative setups and service rules.

### **Organizational Structure**

The organizational structure is designed to facilitate efficient decision-making and administrative processes. The structure includes various committees and bodies that oversee academic and

administrative functions, ensuring that the institution operates smoothly and effectively. This structure supports the institution's strategic and development plans, which are periodically reviewed and updated to align with the evolving academic environment.

### **Human Resources and Recruitment**

The Human Resources Department plays an important role in maintaining a high standard of recruitment and service. The recruitment procedure involves meticulous planning, job description preparation, and rigorous selection processes, ensuring that only the most qualified candidates are appointed. The institution adheres to UGC/AICTE norms for the recruitment of teaching staff with specific qualifications required for different academic positions.

### **Service Rules and Procedures**

PACE has established comprehensive service rules that cover aspects such as employee classification, probation, and employment conditions. The rules ensure a fair and transparent system for all employees, with provisions for permanent, probationary, casual, temporary, substitute, and part-time employees. The institution's emphasis on maintaining a high standard of conduct and discipline among its staff ensures a conducive learning environment.

### **Strategic and Development Plans**

The strategic and development plans are prepared once in five years and serves as a framework guiding short-term and long-term goals and objectives. It outlines key focus areas, strategies and initiatives to ensure sustained growth and development. The plan encompasses multi-dimensional approach, addressing areas such as infrastructure development, improving graduate outcomes, research and perception and financial sustainability.

### **Proof of Effective Deployment**

PACE provides key documents for the effective deployment of its institutional perspective plan including the HR Policy Manual, organizational structure details and records of the deployment of strategic and development plans. Additionally, the institution maintains Memorandums of Understanding (MoUs) with various organizations, further enhancing its academic and research capabilities.

### **ICT-Enabled/Smart Classrooms**

The institution's adoption of ICT-enabled and smart classrooms demonstrates its commitment to advanced technology for enhanced learning experiences. These classrooms are equipped with advanced teaching aids and resources, facilitating interactive and engaging learning sessions.

### Academic Calendar

The academic calendar at PACE is planned and published, ensuring that all stakeholders are informed of important dates and events. This planning aids in the smooth conduct of academic activities and supports the institution's goal of providing a structured and efficient educational experience.

### Conclusion

The effective deployment of the institutional perspective plan at PACE is evident through its welldefined policies, robust administrative setup and efficient functioning of institutional bodies. The institution's commitment to quality education, supported by strategic planning and the adoption of modern technologies, positions it as a center of excellence in technological, management and research education.

File Description	Document
Upload Additional information	View Document
Institutional perspective Plan and deployment documents on the website	View Document

### 6.2.2

Institution implements e-governance in its operations

# Administration Finance and Accounts Student Admission and Support Examination

**Response:** A. All of the above

File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	View Document
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	<u>View Document</u>
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	<u>View Document</u>

### **6.3 Faculty Empowerment Strategies**

### 6.3.1

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

### **Response:**

Our institution places a high priority on staff welfare, recognizing their tireless efforts and dedication. To

support their well-being, growth, and development, we have implemented a comprehensive staff welfare policy. This policy includes a range of benefits, such as the EPF (Employees' Provident Fund) and ESI (Employees' State Insurance) schemes, which provide financial security, gratuity payments upon retirement or resignation, and free accommodation in campus hostels for eligible staff members.

In addition, we offer subsidized food and transportation facilities to ease their daily commute and living conditions. We also encourage our staff to pursue their academic interests by providing permission and financial support for attending workshops, conferences, Seminars and Faculty Development Programs (FDPs). Furthermore, we offer fee concessions for pursuing PhD programs and IEEE membership to support their professional growth.

To promote a healthy work-life balance, we have a generous leave policy that includes casual, earned, commuted, compensatory, and medical leaves. We also organize faculty family gatherings during alumni meets and other institutional events to foster a sense of community and belonging. Our institution is committed to creating a supportive and inclusive work environment, acknowledging the vital role staff play in our academic community.

By providing these welfare measures, we aim to foster a sense of belonging, motivation, and growth among our staff members. We believe that happy and supported staff are essential to creating a positive and productive academic environment. Our staff welfare policy is designed to support the overall well-being of our staff, enabling them to perform at their best and contribute to the institution's success.

In conclusion, our institution's staff welfare policy is a testament to our commitment to supporting our staff members' growth, development, and well-being. We recognize that our staff are our greatest asset, and we are dedicated to providing a supportive and inclusive work environment that allows them to thrive.

File Description	Document
Upload Additional information	View Document

### 6.3.2

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

### Response: 45.5

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

2022-23	2021-22	2020-21	2019-20	2018-19
39	22	34	52	50

File Description	Document
Policy document on providing financial support to teachers	View Document
Institutional data in the prescribed format	View Document
Copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head.	View Document
Audited statement of account highlighting the financial support to teachers to attend conferences / workshop s and towards membership fee for professional bodies	View Document

### 6.3.3

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

### Response: 50.84

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

2022-23	2021-22	2020-21	2019-20	2018-19
67	47	49	49	60

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

	17
22 20 23 17 20	

File Description	Document
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	<u>View Document</u>
Institutional data in the prescribed format	View Document
Copy of the certificates of the program attended by teachers.	View Document
Annual reports highlighting the programmes undertaken by the teachers	View Document

### 6.4 Financial Management and Resource Mobilization

### 6.4.1

Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)

### **Response:**

PACE, being a self-financed institution has strategies for resource mobilization, utilization, and financial audits are explained below.

### **Resource Mobilization:**

- 1. **Student Tuition Fees:** As a primary revenue stream, tuition fees provide a steady income base. PACE employs strategic pricing and financial aid policies to attract students while ensuring financial sustainability.
- 2. Government and Non-Government Organizations: Funds are received for faculty development programs, workshops, and student progression programs from AICTE, IEEE chapters, and other entities.
- 3. **Research Funds:** Securing research grants and funding for academic research projects not only supports scholarly pursuits but also enhances the institution's reputation and attracts talent and partnerships.
- 4. **Consultancy Services:** Offering consultancy services to external clients leverages the institution's expertise and facilities, generating additional revenue while fostering industry collaboration and knowledge transfer.
- 5. **Student Scholarship Schemes:** As a minority institution, students at PACE are eligible for numerous scholarship supports. These scholarships benefit both the students and the institution by supporting student recruitment, retention, and diversity initiatives.
- 6. **Trust Funds:** Endowments and trust funds provide long-term financial stability, offering a reliable source of income for institutional priorities such as infrastructure development, faculty support, and student enrichment programs.

### **Resource Utilization:**

- 1. **Budgeting and Planning:** The annual budget for software, equipment, consumables, services, etc., is prepared by the heads of departments, scrutinized by the principal, and approved by the governing council to ensure that funds are allocated by maintaining financial discipline and aligning with institutional priorities.
- 2. **Cost-effective Procurement:** The purchase committee of the institution is actively involved in procuring goods and services at competitive prices, minimizing costs without compromising quality.
- 3. **Delegation of Financial Power:** Understanding the need for smooth and efficient functioning of the departments and institution, the management has delegated financial power. Heads of Departments (HODs) can spend up to Rs. 50,000 for procuring consumables, equipment repairs, and minor contingencies within their departments. The Principal is authorized to spend up to Rs. 2 lakhs for purchasing laboratory equipment, computers, software, consumables, maintenance and repair of equipment, academic-related expenses, and institutional contingencies. The Managing Trustee is empowered to approve purchase bills exceeding Rs. 2 lakhs. Continuous monitoring of institutional expenditures and outcomes facilitates real-time adjustments to resource allocation, ensuring that budgetary goals are met effectively.

### **Financial Audits:**

- 1. **Internal Audits:** Periodic reviews conducted by the internal auditor and chief accountant evaluate financial controls, operational efficiency, and adherence to institutional policies and procedures, identifying areas for improvement.
- 2. External Audits: Independent audits by certified external auditors verify the accuracy of financial statements, assess compliance with regulatory requirements, and provide assurance to stakeholders.
- 3. **Continuous Improvement:** Audit findings are utilized to strengthen internal controls, enhance financial management practices, and align with industry standards, fostering continual improvement in governance and financial stewardship.

By leveraging strategic partnerships, efficient resource management, and rigorous audits, PACE maintains prudent financial stewardship and regulatory compliance. Continual adaptation to financial changes and proactive governance will further solidify PACE's leadership position.

File Description	Document
Upload Additional information	View Document

### 6.5 Internal Quality Assurance System

### 6.5.1

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the

quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

### **Response:**

The Internal Quality Assurance Cell (IQAC) has become an indispensable component of higher education institutions, significantly contributing to the institutionalization of quality assurance strategies and processes. Its role is multifaceted, encompassing the review of teaching-learning processes, operational structures and methodologies, and the assessment of learning outcomes. A systematic and sustainable approach to quality enhancement is ensured by the IQAC through its ongoing monitoring and recording of incremental improvements.

### Institutionalizing Quality Assurance Strategies and Processes:

The establishment of the IQAC is a proactive step towards embedding a culture of continuous quality improvement within the institution. It functions as a catalyst for change, driving initiatives that align with the institution's mission and goals. The IQAC formulates and implements quality benchmarks and parameters for various academic and administrative activities. These benchmarks are not only set, but continuously reviewed and updated to ensure they meet evolving educational standards and stakeholder expectations.

### **Reviewing Teaching-Learning Processes:**

The IQAC plays a pivotal role in scrutinizing and enhancing the teaching-learning processes. It undertakes a comprehensive review of the curriculum design and delivery, ensuring that the academic programs are relevant, dynamic, and aligned with industry standards. The Cell encourages students to integrate experiential learning methods, such as internships, projects, and field visits, in order to bridge the gap between theoretical knowledge and practical application.

Furthermore, the IQAC promotes the use of feedback mechanisms to gather insights from students, faculty, and other stakeholders. This feedback is meticulously analysed to identify strengths and areas for improvement in the teaching-learning process. Based on this analysis, the IQAC collaborates with faculty members to develop and implement action plans aimed at enhancing the overall educational experience.

### **Reviewing Structures and Methodologies of Operations:**

The IQAC also focuses on reviewing the operational structures and methodologies to ensure efficiency and effectiveness in institutional processes. It evaluates administrative procedures, governance practices, and resource management to identify opportunities for optimization. By fostering a culture of transparency and accountability, the IQAC ensures that the institution's operations are streamlined and aligned with its strategic objectives.

One of the key contributions of the IQAC is the development and maintenance of a comprehensive documentation system. This system records all quality assurance activities, processes, and outcomes, providing a reliable reference for continuous improvement. The IQAC also facilitates the preparation of the Annual Quality Assurance Report (AQAR), which documents the institution's quality enhancement initiatives and achievements.

### **Assessing Learning Outcomes:**

The assessment of learning outcomes is a crucial aspect of the IQAC's mandate. The cell establishes clear and measurable learning objectives for each academic program and systematically evaluates student performance against these objectives.

### **Recording Incremental Improvements:**

A hallmark of the IQAC's effectiveness is its commitment to recording incremental improvements in various activities. Through its systematic review of teaching-learning processes, operational structures, and learning outcomes, the IQAC ensures that the institution remains committed to excellence and continuous improvement. Its efforts in recording incremental improvements provide a clear roadmap for sustained quality enhancement, ultimately benefiting students, faculty, and the broader educational community.

File Description	Document
Upload Additional information	View Document

### 6.5.2

Quality assurance initiatives of the institution include:

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

Response: A. Any 4 or more of the above

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

### **Criterion 7 - Institutional Values and Best Practices**

### 7.1 Institutional Values and Social Responsibilities

### 7.1.1

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

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

### **Response:**

P. A. College of Engineering is dedicated to promoting gender equity among students and employees, taking an active role in responding to societal events through various initiatives. The institute emphasizes gender equity in admissions, recruitment, administrative functions, and academic activities. At the core of our mission is a commitment to creating an inclusive educational environment. In both curricular and co-curricular activities, we strive to include gender-neutral content, ensuring diverse representation and fostering equality in educational materials and discussions. Our efforts extend beyond the classroom, incorporating co-curricular activities, clubs, and workshops that emphasize inclusivity and encourage active participation from all genders. Sensitization programs are crucial to our approach, focusing on respect, empathy, and awareness of gender-related challenges. By integrating gender equity principles into every aspect of our educational offerings, P. A. College of Engineering aims to create an atmosphere where every individual, regardless of gender, feels valued and empowered. This dedication to diversity and inclusion reflects our commitment to fostering a supportive and equitable educational community. Through our comprehensive approach, we not only address current societal issues but also prepare our students and staff to be conscientious and proactive members of society. By embedding these values into our core operations and activities, P. A. College of Engineering ensures that gender equity is a lived reality within our community. This holistic approach underscores our dedication to creating a balanced and respectful environment where everyone has the opportunity to thrive and contribute meaningfully.

### Gender equity & sensitization in curricular and co-curricular activities:

- Woman's Welfare Committee of P.A. College of Engineering evaluates institutionalization gender equality into organization through their policies, programs and services
- The Woman's Welfare Committee of the institute organizes gender equity promotion programs and sensitizes participants to learn how gender equality factors into the Sustainable Development Agenda.
- The institute celebrates Women's day in a grand manner and presents success stories of famous women to inspire the girl students and to make them understand their potential.
- Equal opportunities are given to girl students in committees, programs, sports and events.

### Facilities for women on campus:

- Institute has a safe, secured and free environment in the institute campus for everyone concerned.
- The atmosphere in the campus is free from oppression, threat, and abuse.
- The institute has zero tolerance for harassment and sexual abuse.
• Everyone is assured of all the fundamental rights in the campus.

The institute also has Woman's Welfare Committee and College Internal Complaint Committee which regularly meets and this has provided a free environment to the girl students.

File Description	Document
Upload Additional information	View Document

### 7.1.2

#### The Institution has facilities and initiatives for

1. Alternate sources of energy and energy conservation measures

- 2. Management of the various types of degradable and nondegradable waste
- 3. Water conservation

4. Green campus initiatives

**5.Disabled-friendly, barrier free environment** 

**Response:** B. 3 of the above

File Description	Document
Policy document on the green campus/plastic free campus.	View Document
Geo-tagged photographs/videos of the facilities.	View Document
Circulars and report of activities for the implementation of the initiatives document	View Document
Bills for the purchase of equipment's for the facilities created under this metric	View Document

#### 7.1.3

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

**1.Green audit / Environment audit** 

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

Response: A. All of the above

File Description	Document
Report on Environmental Promotional activities conducted beyond the campus with geo tagged photographs with caption and date	View Document
Policy document on environment and energy usage Certificate from the auditing agency	View Document
Green audit/environmental audit report from recognized bodies	View Document
Certificates of the awards received from recognized agency (if any).	View Document

## 7.1.4

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

#### **Response:**

- P. A. College of Engineering has created an atmosphere where every stakeholder can freely involve, interact and improve.
- Institute always focuses on a peaceful, healthy and comfortable campus for all the students and staff.
- Many events are conducted to inspire students about harmony.
- The institute actively participates in various national and international observances to create awareness among students and staff.
- World Water Day is celebrated on March 23, 2023, to emphasize the importance of freshwater and advocate for sustainable management of water resources.
- Women's Day, observed on March 7, 2023, highlights the achievements of women and calls for gender equality.
- Republic Day, celebrated on January 26, 2023, commemorates the adoption of the Indian Constitution and promotes national pride.
- National Voters Day on January 25, 2023, aims to encourage more young voters to take part in the political process.
- National Energy Conservation Day, observed on December 14, 2022, raises awareness about the importance of energy efficiency and conservation.
- AIDS Awareness Day on December 7, 2022, educates the community about HIV/AIDS prevention and support.
- National Pollution Control Day, celebrated on December 2, 2022, focuses on the importance of controlling industrial pollution.
- Kannada Rajyotsava, observed on November 1, 2022, celebrates the formation of Karnataka state and promotes regional culture and language.
- Teachers' Day, celebrated on September 5, 2022, honors the contributions of teachers and the

importance of education.

- Independence Day on August 15, 2022, marks the anniversary of India's independence and promotes patriotism.
- Onam Celebration on August 29, 2022, is a cultural festival that showcases the rich traditions of Kerala.
- Azadi ka Amrit Mahotsav, celebrated on August 12, 2022, commemorates 75 years of India's independence and highlights the country's achievements.
- The Cultural Fest 2022 on June 30, 2022, provides a platform for students to exhibit their talents and appreciate diverse cultural traditions.
- World Environment Day, observed on June 6, 2022, raises awareness about environmental protection and sustainability.

These events are celebrated with various activities such as debates, essay competitions, and cultural performances to engage students and staff, fostering a sense of community and awareness about important issues.

File Description	Document
Upload Additional information	View Document

#### 7.2 Best Practices

#### 7.2.1

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

**Response:** 

**Best Practices at P. A. College of Engineering** 

Best Practice-I: Skilling and Innovation through Google Developer Student Clubs (GDSC) and Embed Club

**Outcome: Career Development and Community Building** 

**Objectives of the Practice:** 

1. Provide a platform for students to explore Google technologies.

2. Enhance coding skills.

3. Apply knowledge to real-world projects.

4. Foster collaboration and continuous learning.

5. Create an inclusive environment for all members to contribute and grow.

#### **Context:**

- GDSC and Embed Club at PACE are student groups aimed at innovation, collaboration, and skill development in technology.
- These clubs bridge the gap between academic learning and industry requirements, especially benefiting students from rural backgrounds.
- Activities and initiatives help students build industry-relevant skills and prepare for future career challenges.

**The Practice:** 

- Workshops: Host sessions on programming languages, Git/GitHub, web development, mobile app development, and machine learning.
- Google Cloud Study Jam: Offers a one-month complimentary subscription to Google Cloud for courses like Cloud Foundations and Gen AI, resulting in numerous certifications.
- Solution Challenge: Participate in the global Solution Challenge, encouraging students to develop solutions aligned with the UN's 17 Sustainable Development Goals.
- Guest Lectures and Tech Talks: Invite industry professionals to provide insights into emerging technologies, industry trends, and career opportunities.

**Evidence of Success:** 

- Skill Development: Members develop practical skills through hands-on learning and practical experience.
- Community Building: The clubs foster friendships, collaborations, and a sense of belonging.
- Innovation: Challenges, campaigns, and collaborative projects nurture a culture of innovation.
- Career Advancement: Members explore career paths, develop industry-relevant skills, and build a strong professional network.

**Problems Encountered and Resources Required:** 

• Students from rural backgrounds may lack exposure to advanced technology and industry practices.

- Motivating students to improve their overall personality and communication skills is challenging.
- Resources needed include up-to-date technology, industry partnerships for guest lectures and mentorship, and continuous feedback mechanisms.

Conclusion: GDSC and Embed Club enhance the educational experience at PACE by offering a platform for exploration, learning, and collaboration in technology. These clubs empower members to become lifelong learners, innovative problem solvers, and successful professionals.

Best Practice-II: Advancing Education Through Year-by-Year Project-Based Learning

**Outcome: Empowering Learners, Engaging Communities** 

**Objectives of the Practice:** 

1. Foster deep learning through hands-on, experiential learning.

2. Develop essential skills like critical thinking, creativity, collaboration, and communication.

3. Enhance student engagement with motivating learning experiences.

- 4. Promote interdisciplinary learning for a holistic understanding of complex problems and solutions.
- 5. Prepare students for future success with relevant knowledge, skills, and experiences.

#### **Context:**

- Project-Based Learning (PBL) is systematically incorporated into the curriculum across all academic years.
- This approach is beneficial for students from rural backgrounds who may lack exposure to advanced educational methodologies.
- The major challenge is to design a system that monitors student performance and guides them in improving their skills to meet industry requirements.

**The Practice:** 

- First Year: SPICE Fosters creativity and innovation through project-based learning, encouraging critical thinking and collaboration.
- Second Year: SPARK Provides a platform for advanced project-based learning, allowing students to handle more challenging tasks.

- Third Year: NIRMAN Applies solid disciplinary foundations in real-world entrepreneurial projects, preparing students for careers or entrepreneurship.
- Fourth Year: KAUSHAL Equips final-year students with skills and experience needed for professional success through real-world projects.

**Evidence of Success:** 

- Enhanced Student Motivation and Engagement: Increased motivation and participation due to the hands-on nature of activities.
- Improved Academic Performance: Higher academic performance due to a deeper understanding and application of knowledge.
- Deeper Conceptual Understanding: Thorough exploration of subjects leads to a profound grasp of concepts.
- Strengthened Collaboration and Communication Skills: Projects require effective collaboration, improving teamwork and communication.
- Heightened Creativity and Problem-Solving Abilities: Challenges students to develop innovative solutions.
- Greater Knowledge Retention: Experiential learning helps retain knowledge longer.
- Career and College Readiness: Better preparation for careers and higher education with relevant skills and experiences.
- Success in Competitions: Students often excel in national and international competitions.
- Community and Industry Connections: Fosters connections with external partners, providing networking opportunities and real-world insights.

**Problems Encountered and Resources Required:** 

- Many students come from rural areas and poor families, and their parents or guardians may not understand the importance of education.
- Students from Kannada medium schools often lack good English communication skills.
- Motivating students to improve their overall personality is a significant challenge.
- Resources needed include up-to-date technology, industry partnerships for guest lectures and mentorship, and continuous feedback mechanisms.

Conclusion: Year-by-year project-based learning enhances educational quality and prepares students for success in the 21st century. This approach revolutionizes the educational experience, equipping students to become capable and adaptable professionals in an ever-evolving global landscape.

File Description	Document
Best practices as hosted on the Institutional website	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

**Response:** 

The Employability Skill Program (ESP) at P. A. College of Engineering

The Employability Skill Program (ESP) at P. A. College of Engineering is a distinctive and essential component of our curriculum, meticulously designed to prepare students for the competitive professional world. By focusing on a comprehensive range of skills, ESP aims to ensure that students are well-equipped to excel in various professional settings.

**Overview of ESP** 

**Purpose and Goals** 

The primary goal of the Employability Skill Program is to bridge the gap between academic knowledge and professional requirements. This is achieved by equipping students with a broad spectrum of skills that are critical for career success. The program encompasses various aspects of career readiness, including communication, aptitude, soft skills, presentation skills, and interview skills.

**Comprehensive Skill Development** 

ESP provides a holistic approach to skill development, addressing all facets of professional readiness. The curriculum is designed to ensure that students develop the necessary skills to thrive in diverse work environments and meet the dynamic demands of the job market.

**Key Components of ESP** 

#### **Communication Skills**

#### **Importance of Communication**

Effective communication is the cornerstone of professional success. In today's globalized and interconnected world, the ability to communicate clearly and effectively is crucial. Whether it's verbal or written communication, the clarity and precision with which one can convey ideas can significantly impact professional relationships and opportunities.

#### **Training Modules**

ESP includes extensive sessions aimed at enhancing both verbal and written communication skills. These sessions cover:

- Effective Communication Strategies: Techniques for clear and concise communication.
- Active Listening: Skills to understand and respond appropriately to others.
- Expressive Communication Essentials: Focus on articulation and expression.

#### **Practical Applications**

Students are trained in real-world scenarios to practice these skills, helping them articulate their thoughts clearly and confidently. Activities include:

- Group Discussions: Enhancing interactive and collaborative communication.
- Role-Playing: Simulating workplace communication to improve practical skills.
- Presentation Exercises: Focusing on structure and delivery.

**Aptitude Skill Development** 

#### **Focus Areas**

The aptitude skill development sessions concentrate on sharpening students' problem-solving abilities, logical reasoning, and analytical skills. These skills are essential for academic assessments, aptitude tests, and real-world problem-solving.

#### **Training Modules**

- Fundamentals of Quantitative Aptitude: Basics of numerical problem-solving.
- Quant and Logical Excellence: Advanced problem-solving techniques.
- Quant Insights and Logical Agility: Enhancing quick thinking and adaptability.

- Standard Quant and Logic Proficiency: Mastery of standard aptitude test formats.
- Quant Logic Mastery: Comprehensive logical reasoning skills.

#### **Practical Applications**

Through a series of exercises and mock tests, students improve their performance and confidence. The program includes:

- Timed Practice Tests: Simulating exam conditions.
- Puzzle Solving Sessions: Enhancing logical thinking.
- Case Studies: Applying analytical skills to real-world scenarios.

**Soft Skills Development** 

**Importance of Soft Skills** 

Soft skills such as interpersonal skills, teamwork, leadership, time management, and adaptability are critical for thriving in diverse work environments. These skills are increasingly valued by employers across industries.

#### **Training Modules**

- Interpersonal Skills: Building effective professional relationships.
- Teamwork and Leadership: Strategies for collaboration and leadership in teams.
- Time Management: Techniques for efficient time use and prioritization.
- Adaptability: Skills for managing change and uncertainty.

#### **Practical Applications**

ESP offers comprehensive training in these areas through:

- Workshops: Interactive sessions with real-world scenarios.
- Team Projects: Opportunities to practice teamwork and leadership.
- Time Management Drills: Exercises to improve planning and efficiency.

**Presentation Skills** 

#### **Importance of Presentation Skills**

The ability to deliver engaging and impactful presentations is a valuable asset in both academic and professional contexts. Effective presentations can influence decisions, convey important information, and showcase one's skills and knowledge.

**Training Modules** 

- Creating Compelling Presentations: Techniques for effective slide design and content organization.
- Delivery Skills: Enhancing confidence, clarity, and engagement in presentations.
- Constructive Feedback Sessions: Providing and receiving feedback to improve performance.

**Practical Applications** 

ESP provides numerous opportunities for students to practice and refine their presentation skills through:

- Practice Sessions: Regular opportunities to present on various topics.
- Peer Reviews: Constructive feedback from peers and instructors.
- Mock Presentations: Simulating professional presentation environments.

**Interview Skills** 

**Importance of Interview Preparation** 

Preparing for job interviews and internship opportunities is a key focus of ESP. The ability to present oneself effectively during an interview can significantly impact career opportunities.

**Training Modules** 

- Resume Writing: Crafting effective resumes and cover letters.
- Interview Etiquette: Professional behavior and body language during interviews.
- Common Interview Questions: Preparing responses to typical interview questions.
- Mock Interviews: Simulating real interview scenarios.

**Practical Applications** 

Through thorough guidance and practice, students become adept at handling interviews. The program includes:

- Resume Workshops: Sessions on creating standout resumes.
- Etiquette Classes: Training on professional demeanor.
- Interview Drills: Practice interviews with feedback from professionals.

**Integration and Implementation** 

**Curriculum Integration** 

ESP is seamlessly integrated into our curriculum as part of the industrial-oriented development classes offered at PACE. This ensures that all students have access to the program throughout their academic journey.

#### Facilitators

The program is facilitated by experienced faculty members and industry experts who bring realworld insights and practical knowledge to the sessions. This blend of academic and professional expertise enriches the learning experience.

#### **Course Offerings**

ESP encompasses a variety of courses designed to address different aspects of employability skills, such as:

- Expressive Communication Essentials
- Effective Communication and Professional Skills
- Strategic Career Development
- Professional Excellence Essentials
- Professional Pathways
- Fundamentals of Quantitative Aptitude
- Quant and Logical Excellence
- Quant Insights and Logical Agility
- Standard Quant and Logic Proficiency
- Quant Logic Mastery

#### **Benefits of ESP**

**Enhanced Employability** 

By addressing various facets of professional readiness and aligning with current industry requirements, ESP ensures that students are well-prepared to meet the demands of the job market.

**Holistic Development** 

ESP promotes holistic development by enhancing both technical and soft skills, ensuring that students are well-rounded professionals.

**Industry Relevance** 

The inclusion of industry experts and practical insights makes ESP highly relevant to current industry standards and expectations.

#### **Confidence Building**

The comprehensive training provided by ESP builds confidence in students, helping them face professional challenges with assurance.

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

## **5. CONCLUSION**

## **Additional Information :**

P.A. College of Engineering (PACE) aims to provide industry readiness qualities to the students through MoUs with industries and collaborations with academic institutions. Some of the MoUs and collaborations include those with Candour Autotech Pvt. Ltd., Trivandrum, Yenepoya Foundation for Technology Incubation, Mangalore, Presidency University, Bangalore, Infosys Ltd., Bangalore, Nitte (Deemed to be University), Mangalore, IIT Bombay Spoken Tutorial, CADD TehLabs Training Services, Mangalore, etc. which help the students to enhance participative and experiential learning. The students and faculty members of PACE have benefitted in terms of internships, industrial visits, workshops, training sessions, invited talks and value added courses as a result of these MoUs and collaborations. The institute mandatorily conducts Employability Skills Programme (ESP) to the students as a part of their curriculum and focusses on strengthening their skill-sets for placement opportunities, competitive exams and higher studies. The institute also conducts student project exhibitions namely Nirmaan and Kaushal in every academic year. An appreciable amount of research grants have been received by the institute over the five years. Students also involve themselves in societal activities such as beach cleaning, blood donation, etc., through NSS, Youth Red Cross and Environment cell.

## **Concluding Remarks :**

P.A. College of Engineering (PACE) was established in the year 2000 under the aegis of P.A. Educational Trust, with an aim to provide a career-oriented professional education and to produce technically competent engineers with moral and ethical values. The institution is dedicated to promote an effective learning environment that encourages excellence and diversity in thoughts and endeavour. The vision of PACE is to provide affordable, relevant, industry oriented and world class professional education for all. With this aim PACE has provided the best infrastructure & facilities, highly experienced faculty, ICT enabled classrooms & labs and a dedicated placement cell.

PACE since its inception strives to meet the Vision through its Mission, thereby bringing excellence in transformative education to students through the collaborative efforts of its stake holders, industry experts and various MoUs. The institution's governance structure is indicative of effective leadership and provides opportunities for involvement of stakeholders. IQAC regularly ensures Governance is transparent and in line with the institution's Vision and Mission.

Institution has well established infrastructure facilities to create favourable environment for students to transfer the knowledge. The green initiative policy of the college ensures effective waste management in the campus. The institute encourages usage of ICT for teaching learning process. Institute practices Outcome Based Education thoroughly, as a result of which CSE, ME, BT programmes have been accredited by NBA.

Institute's efforts in disseminating content beyond syllabus through various value-added courses has resulted in enhancing student knowledge. The research facilities available in the institute helped the students and faculty members to carry out useful research works and projects and publish them in reputed journals.

Through a good student support system, the institute supports students coming from various socio-economic backgrounds through scholarships and freeships, mentor-mentee interactions, and also ensures a committed academic environment. The college also supports sports activities and has won awards at the state and zonal

levels of the university. The institute is planning for the effective implementation of NEP and the accreditation of the remaining programmes in due course of time which helps in achieving autonomous status.

# **6.ANNEXURE**

## **1.Metrics Level Deviations**

1.Method	S Leve	Deviation	15							
Metric II	Sub C	Questions ar	nd Answers	before and	after DVV	Verification				
1.2.1	Num NPT durir	Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years) Answer before DVV Verification : Answer After DVV Verification :19								
	D									
	Ke	emark : DV	v has made	changes as	per the repo	ort shared by	y HEI.			
1.2.2	Perce cours five y	entage of str ses of MOO pears	udents enro Cs, SWAYA	lled in Cert M, NPTEI	ificate/ Val L etc. as ago	ue added co uinst the tot	ourses and also completed online al number of students during the last			
	1.2 onlin last fi	2.2.1. Numb e courses of ive years Answer be	per of studer MOOCs, S fore DVV V	nts enrolled WAYAM, /erification:	in Certifica NPTEL etc	te/ Value ad . as against t	lded courses and also completed the total number of students during the			
		2022-23	2021-22	2020-21	2019-20	2018-19				
		560	603	655	679	789				
		Answer Af	fter DVV V	erification :	1		1			
		2022-23	2021-22	2020-21	2019-20	2018-19				
		236	427	339	319	487				
	Re	emark : DV	V has made	changes as	per 1.2.1					
2.1.2	Perce reser	entage of se vation polic	ats filled ag y for the fir	ainst reserv st year adm	ved categor vission duri	ies (SC, ST, ng the last j	OBC etc.) as per applicable five years			
	2. last f	1.2.1. Numl ive years (H <u>Answer be</u>	ber of actua Exclusive of fore DVV V	al students f supernum Verification:	admitted fi lerary seats :	rom the res	erved categories year wise during			
		2022-23	2021-22	2020-21	2019-20	2018-19				
		225	200	115	111	223				
		Answer Af	fter DVV V	erification :						
		2022-23	2021-22	2020-21	2019-20	2018-19				
		111	120	83	101	176				
	2.	1.2.2. <b>Num</b>	ber of seats	earmarkee	d for reserv	ed categor	y as per GOI/ State Govt rule year			

	wise	during the Answer be	<b>last five ye</b> fore DVV V	a <b>rs</b> Verification			
		2022-23	2021-22	2020-21	2019-20	2018-19	
		225	200	115	111	223	
		Answer Af	ter DVV V	erification :			
		2022-23	2021-22	2020-21	2019-20	2018-19	
		210	210	241	318	343	
	Re	emark : DV	V has made	changes as	per the repo	ort shared by	, HEI.
3.2.2	Numi Prope	ber of works erty Rights ( 2.2.1. Total arch Metho	shops/semin (IPR) and e number of adology, Inf	nars/confer ntrepreneu Workshop	ences inclu rship condi s/seminars/	ding on Res ucted during (conference obts (IPR) s	search Methodology, Intellectual g the last five years s including programs conducted on and entrepreneurship year wise
	durin	ng last five y Answer be	years fore DVV V	/erification	:	51115 (11 14) (	ind entrepreneursing year wise
		2022-23	2021-22	2020-21	2019-20	2018-19	
		17	12	06	04	05	
		Answer Af	ter DVV V	erification :			
		2022-23	2021-22	2020-21	2019-20	2018-19	
		6	6	0	0	0	
	Re	emark : DV	V has made	changes ex	cluding sem	ninars and w	orkshops
3.3.1	Num durir	ber of reseang the last f	arch papers ive vears	s published	per teache	er in the Jou	ırnals notified on UGC care list
	3.3 durir	3.1.1. Numb ng the last f Answer be	oer of resea ive years fore DVV V	rch papers	s in the Jou	rnals notifi	ed on UGC CARE list year wise
		2022-23	2021-22	2020-21	2019-20	2018-19	
		44	53	94	40	35	
		Answer Af	ter DVV V	erification :			
		2022-23	2021-22	2020-21	2019-20	2018-19	
		20	41	50	37	27	

	numb	ers as share	ed by HEI				
3.3.2	Num natio	ber of book nal/ intern	ts and chap ational con	oters in edit ference pro	ed volumes oceedings p	s/books pul er teacher	olished and papers published in during last five years
	3.3 in na	3.2.1. <b>Total</b> tional/ inte Answer be	number of rnational c	f <b>books and</b> onference J Verification	chapters i proceeding	n edited vo s year wise	lumes/books published and papers during last five years
		2022-23	2021-22	2020-21	2019-20	2018-19	]
		11	8	12	11	18	-
		Answer Af	fter DVV V	erification :			-
		2022-23	2021-22	2020-21	2019-20	2018-19	
		11	7	9	7	14	-
	Re	emark : DV	V has made	changes as	per the repo	ort shared b	- y HEI.
3.4.3	Num	ber of exten	nsion and o	utreach pro	grams cond	lucted by th	e institution through organized
5.4.5	forun	ns including	g NSS/NCC	C with invol	vement of c	ommunity o	during the last five years.
					•	•	0 0 0
	3.4 indus wise	4.3.1. Numl stry, comm during the	ber of exter unity, and last five yea	nsion and o Non- Gove ars	utreach Pr rnment Or	ograms con ganizations	nducted in collaboration with 5 through NSS/ NCC etc., year
	3.4 indus wise	4.3.1. Numl stry, comm during the Answer be 2022-23	ber of exter unity, and last five yes fore DVV V 2021-22	nsion and o Non- Gove ars Verification 2020-21	utreach Pr rnment Or 2019-20	ograms con ganizations 2018-19	nducted in collaboration with 5 through NSS/ NCC etc., year
	3.4 indus wise	4.3.1. Numl stry, comm during the Answer be 2022-23 11	ber of exter unity, and last five yes fore DVV V 2021-22 11	nsion and o Non- Gove ars Verification 2020-21 4	utreach Pr rnment Or 2019-20 8	ograms con ganizations 2018-19 10	nducted in collaboration with s through NSS/ NCC etc., year
	3.4 indus wise	4.3.1. Numl stry, comm during the Answer be 2022-23 11 Answer Af	ber of exter unity, and last five yes fore DVV V 2021-22 11	nsion and o Non- Gove ars Verification 2020-21 4 erification :	utreach Pr rnment Or 2019-20 8	ograms con ganizations 2018-19 10	nducted in collaboration with s through NSS/ NCC etc., year
	3.4 indus wise	4.3.1. Numl stry, comm during the Answer be 2022-23 11 Answer Af 2022-23	ber of exter unity, and 2 last five yes fore DVV V 2021-22 11 fter DVV V 2021-22	nsion and o Non- Gove ars Verification 2020-21 4 erification : 2020-21	utreach Pr rnment Or 2019-20 8 2019-20	ograms conganizations 2018-19 10 2018-19	nducted in collaboration with s through NSS/ NCC etc., year
	3.4 indus wise	4.3.1. Numl stry, comm during the Answer be 2022-23 11 Answer Af 2022-23 7	ber of exter unity, and i last five yes fore DVV V 2021-22 11 fter DVV V 2021-22 6	nsion and o Non- Gove ars Verification 2020-21 4 erification : 2020-21 3	utreach Pr rnment Or 2019-20 8 2019-20 8	ograms con ganizations 2018-19 10 2018-19 8	nducted in collaboration with s through NSS/ NCC etc., year
	3.4 indus wise of Re	4.3.1. Numl stry, comm during the Answer be 2022-23 11 Answer Af 2022-23 7 emark : DV	ber of exter unity, and a last five yes fore DVV V 2021-22 11 fter DVV V 2021-22 6 V has made	nsion and o Non- Gove ars Verification 2020-21 4 erification : 2020-21 3 changes as	utreach Pr rnment Or 2019-20 8 2019-20 8 2019-20 8	ograms con ganizations 2018-19 10 2018-19 8 ort shared b	<pre>output output outp</pre>
3.5.1	3.4 indus wise of Re Numb interv reseat	4.3.1. Numl stry, comm during the Answer be 2022-23 11 Answer Af 2022-23 7 emark : DV ber of funct nship, on-th rch during	ber of exter unity, and i last five yes fore DVV V 2021-22 11 fter DVV V 2021-22 6 V has made tional MoU the last five	nsion and o Non- Gove ars Verification 2020-21 4 erification : 2020-21 3 changes as s/linkages v ing, project years.	utreach Pr rnment Or 2019-20 8 2019-20 8 2019-20 8 per the repo	ograms con ganizations 2018-19 10 2018-19 8 ort shared b ions/ indus ent / faculty	<pre>ducted in collaboration with a through NSS/ NCC etc., year ] ] y HEI. tries in India and abroad for exchange and collaborative</pre>
3.5.1	3.4 indus wise of Re Numb interv reseat	4.3.1. Numl stry, comm during the Answer be 2022-23 11 Answer Af 2022-23 7 emark : DV ber of funct nship, on-th rch during Answer be Answer be answer Af emark : DV	ber of exter unity, and i last five yes fore DVV V 2021-22 11 fter DVV V 2021-22 6 V has made tional MoU the last five fore DVV V V has made	nsion and o Non- Gove ars Verification 2020-21 4 2020-21 3 changes as s/linkages v ing, project years. Verification erification : changes as	utreach Pr rnment Or 2019-20 8 2019-20 8 2019-20 8 per the repo <i>vith institut</i> <i>work, stude</i> : 29 per the repo	ograms con ganizations 2018-19 10 2018-19 8 ort shared b <i>ions/ indus</i> <i>ent / faculty</i>	y HEI.

facilities excluding salary component, during the last five years (INR in Lakhs)

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

	Answer before DVV Verification:								
		2022-23	2021-22	2020-21	2019-20	2018-19			
		314.86	288.82	175.42	348.76	340.99			
		Answer Af	ter DVV Ve	erification :					
		2022-23	2021-22	2020-21	2019-20	2018-19			
		155.32	121.37	38.66	157.26	151.70			
	Re facilit	mark : DV ies	V has made	changes on	ly consideri	ng expenses	s of physical and academic support		
5.1.4	The in haras	nstitution a sment and s	dopts the fo	llowing for	redressal o	of student gr	ievances including sexual		
	narus	smeni unu i	rugging cus	663					
	1 2 3 4	. Implement 2. Organisa 3. Mechanis 4. Timely ro	ntation of g tion wide a sms for sub edressal of	guidelines of wareness a omission of the grievar	of statutory and underta online/offli aces throug	/regulatory akings on p ne students h appropris	bodies olicies with zero tolerance s' grievances ate committees		
		Answer be	fore DVV V	/erification	: A. All of t	he above			
		Answer Af	ter DVV Ve	erification:	B. 3 of the a	above			
	Re	mark : DV	√ has made	changes as	per the repo	ort shared by	<sup>7</sup> HEI.		
5.3.2	Avera	age number	r of sports a	and cultura	al program	s in which s	students of the Institution		
	partic	ipateu uu	ing last inv	e years (or	gamseu by	the institut	ion/other institutions)		
	5.3 partic	3.2.1. Numb cipated yea	oer of sport r wise duri	ts and cultung last five	iral progra years	ms in whicl	1 students of the Institution		
	-	Answer be	fore DVV V	Verification:	•	-			
		2022-23	2021-22	2020-21	2019-20	2018-19			
		46	35	14	33	45			
		Answer Af	ter DVV Ve	erification :					
		2022-23	2021-22	2020-21	2019-20	2018-19			
		22	22	11	18	23			
	Re	mark : DV	V has made	changes gro	ouping near	by dates for	sports and cultural programs		

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

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

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
48	30	34	59	58

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
39	22	34	52	50

Remark : DVV has made changes excluding financial support less than 3000

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

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

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
67	71	84	71	80

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
67	47	49	49	60

6.3.3.2. Number of non-teaching staff year wise during the last five years Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
22	20	23	17	20

#### Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
22	20	23	17	20

Remark : DVV has considered less than 5 days

7.1.2	The Institution has facilities and initiatives for					
	1. Alternate sources of energy and energy conservation measures					
	2. Management of the various types of degradable and nondegradable waste					
	3. Water conservation					
	4. Green campus initiatives					
	5. Disabled-friendly, barrier free environment					
	Answer before DVV Verification : A. 4 or All of the above					
	Answer After DVV Verification: B. 3 of the above					
	Remark : DVV has made changes as per the report shared by HEI.					

## **2.Extended Profile Deviations**

ID	Extended (	Questions					
1.1	Expenditure excluding salary component year wise during the last five years (INR in lakhs)						
	Answer before DVV Verification:						
	2022-23	2021-22	2020-21	2019-20	2018-19		
	758.12	497.97	278.79	567.91	523.85		
						-	
	Answer Af	7					
	2022-23	2021-22	2020-21	2019-20	2018-19		
	383.43	359.52	233.63	567.91	404		
	<u> </u>	·	· ·		· ·	٠ 	