

FOR 1st CYCLE OF ACCREDITATION

ACE COLLEGE OF ENGINEERING

PLAPPATTIVILA, KARINKADAMUGAL, THRIUVALLAM, THIRUVANANTHAPURAM, KERALA, 695027 695027 www.acetvm.com

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

February 2023

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

ACE College of Engineering is one of the pioneer engineering college in Trivandrum promoted by Manarul Huda Trust, a not for profit charitable trust focusing on education sector since 1980's. The college was established in 2013. The institute is affiliated to APJ Abdul Kalam Technological University, Kerala and is approved by the All India Council for Technical Education (AICTE), New Delhi. The college offers five UG Programs – B.Tech in Aeronautical Engineering, B.Tech in Civil Engineering, B.Tech in Electrical and Electronics Engineering, B.Tech in Electronics and Communication Engineering and B.Tech in Mechanical Engineering. The aim of promoting excellence in a caring and supportive environment underpins the culture of ACE College of Engineering. This culture is grounded in the concept that all our students have two basic rights at our college: **the right to learn and the right to safety.**

The institution provide a vast campus, the art of infrastructure, well equipped labs, qualified and dedicated faculty members who are eminent personalities with a quality experience in the field of engineering. The campus comprises of a library, hostel, canteen and dedicated area for sports, as we understand that physical and spiritual fitness is as important as mental vigor. The College encourages and coaches students to become innovative and critical thinkers who produce quality work. We support students in gaining academic skills, content knowledge, healthy habits and sound decision making. In the process of learning, we encourage students to think about various points of view and perspectives. We, at ACE, groom the students to develop the skills, capacity, and creativity to lead productive lives and positively contribute to the community and the world in which they live. We work with all our students to help them develop the right attitude that will facilitate them in taking leadership and ?nding productive solutions to the challenges faced by society.

Vision

To become a globally recognized benchmark in technical and research education that value excellence, quality and universal services.

Mission

- To equip the students with conceptual, technical knowledge and competence required for the practice of their profession with moral and ethical values.
- To maximize the capability and potential of staff and students to enable them to provide effective, responsive and innovative services and excellent learning environment.
- To provide an information rich environment to support and encourage excellence in teaching and research that connects strongly with the issues of our local, national and international stakeholders

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

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- Very good Infrastructure and the institution is surrounded by greenery environment
- Qualified and dedicated faculty members with good team work. Progressive and Committed Management. Clear Vision, Mission, Goals and Objectives.
- Strong Industry Institute Interaction trough Group of Institutions.
- MOUs with Industry and reputed Institutes for curriculum enrichment, FDPS and Students Training
- Separate hostels for boys and girls. Good transport facility to nearby places in the outskirt of the city.
- Proactive Internal Quality Assurance Cell (IQAC) to ensure quality in teaching learning process.
- Residential training camps and good placement opportunities for students as the number of companies recruiting are increasing year by year.
- Facilities available for various indoor and outdoor games and sports, financial support to participate in intercollege and inter university level events.

Institutional Weakness

- Lack of interest among students towards higher studies/research.
- Departments yet to get recognition as research centers.
- Average quality of students is reduced as less students are opting for engineering.

Institutional Opportunity

- Scope for more consultancy and research projects.
- Tie-up with research laboratories to promote knowledge Industrial Centre of Excellences Strong Alumni Association a chance for industry offered courses in Curriculum enhancement setting up Multi-Disciplinary research Centers.
- Increased focus on higher education: Govt. on India focusing more on higher education to provide quality education for UG.
- Digitization: Digitization will present a huge opportunity for educational institutions in terms of saving costs as well as reaching out to more students.
- E-learning platform: Investment in e-learning and starting of Massive Online Open Course (MOOC's) is an opportunity waiting to be harnessed for quality education.
- Programs in recent emerging specialization.

Institutional Challenge

- To enhance Faculty/ Student educational advancement through e-learning programs with reputed organizations.
- Promote more faculty to opt for Research.
- To attract bright students interested in Engineering.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

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The curricula for the five undergraduate programs of engineering have been formulated in accordance with the guidelines of AICTE, affiliating university and is in tune with the vision and mission of the Institution.

Considering the technological advancements, the curriculum for the undergraduate programs of engineering is shaped in the form of Humanities, Basic and Engineering Sciences, Mathematics, Professional Core, Professional and Open electives and Skill development courses. The emphasis is on overall development and knowledge acquisition. The curriculum also includes, Mini projects, laboratory and project work, technical report writing, and training in latest software's and technologies which is offered under technical skills. The core subjects in the curriculum provide technical knowledge in the chosen program. Students learn important concepts in professional core subjects and advanced concepts in professional elective subjects. The students are also encouraged to participate in technical symposiums, take up internships and involve in NSS events and join in extra-curricular clubs which aim at enhancing their inherent creative talents.

The curriculum imparts transferable and life skills through subjects such as Human Values and Professional Ethics, Skills Development courses - Soft skills, Communication skills and Technical skills, Economics and co-curricular activities which train students in all aspects, striving towards technological and human excellence. The curriculum including examination pattern and assessment system. New skill based courses that give students better placement opportunities have also been introduced. The success of curriculum design and development towards employability can be gauged through increase in net selections in placements and gradual improvement in the average pay-package, and also by admissions into higher educational institutions both in India.

Teaching-learning and Evaluation

The quality of students applying for admission has improved year by year, reflected in the rankings of students who applied for admission. As they come from different backgrounds, the organization provides other learning and support. Courses are held for slow learners. Bridge courses are organized for lateral entry students. Advanced students are encouraged to participate in hackathons/design competitions etc. The institute follows a mentoring system where each faculty receives about twenty students and he/she acts as their local supervisor. The institute has a policy of recruiting qualified and experienced teachers as per AICTE standards and this has helped to improve the teaching and learning process. The institute maintains the required teacher-student ratio. Courses are divided into faculties according to their competence and specialization. Teachers prepare a detailed course outline, lesson plan and handouts as part of the teaching schedule. Innovative teaching and learning processes, such as ICT tools and modern pedagogical methods, were adopted by the faculty. Learning management system (LMS) implemented to enrich the communication of students and teachers. In order to overcome the gap between the educational program and the requirements of the sector, the department conducts a technical training program. In order to strengthen the knowledge of students, guest lectures, seminars, conferences, etc. are organized among students. The examination and evaluation system is regularly followed as per the rules and regulations laid down by the University which are amended from time to time to make the system more efficient. A set of PEOs, POs and PSOs have been developed for each program based on an outcome-based learning approach. Course objectives and outcomes for each course are prepared according to the appropriate levels of Bloom's taxonomy. Examiners of Continuous Internal Evaluation (CIE) and Semester End Exams (SEE) also follow different levels of Bloom's taxonomy, such as application, analysis, and evaluation, to ask qualitative questions that are not appropriate to the method of learning. Systematic procedures were also developed to evaluate the performance of PEOs, POs, PSOs and COs. appropriate corrective actions are implemented annually based on perceived performance levels.

Research, Innovations and Extension

The Institute is always encouraging the research activities. The institution has established a department wise committee for industry institute interaction. The Industry Institution Interaction cell aims at bridging the gap between industry and academics.

The Institute has 19 operational Memoranda of Understanding (MoU) that are both perpetual and time-bound. The Institute supports academic research by giving researchers facilities for conducting studies. The Institute grants permission and financial support for attending conferences for paper presentations and Faculty Development Programs (FDP), as well as academic leave for those pursuing PhD studies. The students got access to a total of 59 industry engagement activities, including internships, workshops, and industrial project work. Workshop and internship topics are suggested to the students based on the current industrial requirement so that student will get an exposure to the industrial activities which in turn help them for their placement. Along with setting up many blood donation camps, a total of 60 extension programs for the communities were carried out during the previous five years. On average, more than 90% of students took part in these events through the NSS unit. NSS activities are conducted regularly throughout the year aiming at making the students a good human being and a socially responsible citizen.

Infrastructure and Learning Resources

ACE college of Engineering provides adequate infrastructural facilities to provide good learning ambience to the students which includes ICT enabled classrooms, laboratories, seminar halls, drawing halls, play grounds, conference hall, canteen, parking area and hostels as per the regulatory requirements of AICTE and A P J Abdul Kalam Technological University. The college is stretched over an area of 5.06 acres in a green, clean, neat and spacious environment. The class rooms and seminar halls are equipped with LCD projectors and screens, boards and a computer with Internet connectivity.

The Institution has domain centric laboratories as per the regulations of AICTE and APJ Abdul Kalam Technological University. Adequate and well-maintained equipment to conduct experiments is provided. The college has a dedicated 400 Mbps (JIO) and 300Mbps (BSNL) leased line connectivity from Tata Teleservices for uninterrupted internet services to the systems. Separate server rooms are available for all network connectivity throughout the campus.

The library offers online resources like e-books, e-journals, and e-databases for reference through institutional and remote access. The library has the subscription of e resources like DELNET, K- Hub, National Digital Library, Eshodhsindhu etc. Ace central library maintains a core collection of 11,351 volumes and 2,410 titles.

ACE provides excellent outdoor facilities such as volleyball courts, basketball courts, and badminton courts, handball courts and athletics fields. The indoor facilities include table tennis, carroms, and chess. ACE organizes inter-departmental competitions for both men and women for games like Cricket, Football, Basketball and Volleyball. The College teams are actively participating in APJ Abdul Kalam Technological University zonal intercollegiate competitions and national tournaments.

The students participate in the various cultural events organized during EPOCH-the college cultural fest and various departmental association activities. With systematic and generous support from the college and overwhelming participation of students from all the departments, the events are conducted every year.

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Ace facilities also include well maintained lawn, ramp, garden, first aid facilities, fire extinguishers and ATM. Canteen and Cafeteria facilities available for students and staff. The college has a stationary store that offers photocopy facilities for students and staff.

Student Support and Progression

Institution has taken necessary steps to assist students by providing information rich environment and providing meaningful holistic development and progression. It also aims at consistent student performance and progression for higher education and further career prospects.

Financial assistance is provided by Central and State Governments to economically/socially challenged students based on economic criteria. Institution is also providing various scholarships/Free ships based on academic merit and economic criteria.

Co-curricular and extra-curricular activities, skill development courses, structured CRT programs are integrated into the system for overall enhancement of a student. Remedial coaching is provided for academically weak students for improvement in academics. Bridge courses are conducted for first year students for bridging basic science subjects with engineering subjects. Strong advisory system in which every 15 students are assigned to each faculty for close mentoring. Personal counselling is also given by trained student counselors. The consistent academic and placement support rendered has resulted in increased placements with higher CTC and admissions for higher education in many reputed institutions in India. Institution organizes various sports and cultural activities every year wherein the students play an important role in planning and organizing.

Institution has a transparent mechanism for timely redressal of student grievances. Students are represented in several academic and administrative committees of the institution.

Governance, Leadership and Management

The institute has a well-defined organizational structure and the policies of the management committee and Board of Governors are implemented by the Principal with the help of Heads of the Department and various committee constituted for specific purposes. Faculty are represented in the BOG, Academic council and Board of studies as part of participative management. As part of decentralization, representatives of faculty, non-teaching staff and students participate in various Committee of the institution.

E-governance has been implemented for the purpose of admission, finance and accounts and examinations using the in house developed software. The college implements several welfare measures for the faculty and staff for their personal and professional growth. These include Gratuity, maternity leave for women, provident fund etc. and financial support for higher education.

Faculty are encouraged to attend faculty development programs. Refresher courses workshops, conferences etc. and are financially supported by the way of providing on duty, travelling allowance, daily allowance, registration fee etc.

Professional development programs are conducted for teaching faculty and administrative /technical training programs for non-teaching staff. The faculty is also encouraged to enhance their educational qualifications by

reducing their work load, adjusting their timetable and providing academic leave with pay. The institute has a well-defined performance appraisal system for faculty and non-teaching staff. The institute has a well-defined policy for budgeting and audit including internal and external auditing. IQAC cell looks after quality aspects in the institute. The IQAC regularly reviews the teaching learning process evaluation and assessment, structure etc. and as a result new courses have been introduced with an aim to enhance not just the quality of placements but also to develop their knowledge, skill sets and overall personality. The institute has formulated a strategic plan and continues to implement it for its overall development.

Institutional Values and Best Practices

Our institution is committed to follow the rules and regulations as mandated by the statutory requirements with regards to academics, finance, and administration. We ensure complete transparency in all our activities and that all processes are carried out in a fair and accountable manner. The well-being and safety of our women employees and girl students is of utmost importance to us. To ensure this, we have taken adequate measures like providing counselling services and ensuring the availability of all necessary facilities. Our institution adopts an environmentally friendly approach in maintaining our campus. We take various steps to conserve natural resources, such as plantation of trees, implementation of water harvesting methods, and recycling of sewerage through a Sewage Treatment Plant (STP). We also utilize renewable energy sources for power generation and have installed incinerators to safely dispose of waste. Additionally, separate bins have been provided for the disposal of degradable and non-degradable waste, and we have established an e-waste room to ensure that electronic waste is disposed of in an environmentally responsible manner. We believe in providing equal opportunities to all students and have made arrangements for students with disabilities. This includes the provision of ramps, elevators, washrooms and other necessary facilities to ensure their comfort and accessibility. Skill development programs are regularly conducted in collaboration with industry experts.

Our institution recognizes the importance of staying up-to-date with the latest research and developments in various academic fields. To this end, we regularly host seminars, workshops etc. These events provide a platform for students and faculty to exchange ideas, collaborate, and stay informed of the latest advancements in their respective fields. Promoting entrepreneurship and innovation among our students is also a priority for our institution. To this end, we have established an IEDC that plays a crucial role in fostering a culture of entrepreneurship and innovation on our campus. In conclusion, our institution is dedicated to ensuring that all its processes are carried out in a fair and accountable manner, while also taking necessary steps to ensure the well-being and safety of our students and employees, and adopting an environmentally friendly approach.

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2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	Name and Address of the College					
Name	ACE COLLEGE OF ENGINEERING					
Address	PLAPPATTIVILA, KARINKADAMUGAL, THRIUVALLAM, THIRUVANANTHAPURAM,KERALA, 695027					
City	Thiruvananthapuram					
State	Kerala					
Pin	695027					
Website	www.acetvm.com					

Contacts for Communication									
Designation	Name	Telephone with STD Code	Mobile	Fax	Email				
Principal	Farrukh Sayeed	0471-7117777	8281829686	-	principal@acetvm.				
IQAC / CIQA coordinator	Afsal K F	0471-7117787	9447321008	-	afsal.k@acetvm.co m				

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

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Recognized Minority institution						
If it is a recognized minroity institution Yes MinorityStatusCertificate.pdf						
If Yes, Specify minority status						
Religious Muslim						
Linguistic						
Any Other						

Establishment Details

State	University name	Document
Kerala	A.P.J. Abdul Kalam 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/App roval details Inst itution/Departme nt programme Recognition/App pay,Month and year(dd-mm- yyyy) Remarks months								
AICTE	View Document	03-06-2022	12					

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

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Location and Area of Campus									
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.					
Main campus area	PLAPPATTIVILA, KARINKADAMUGAL, THRIUVALLAM, THIRUV ANANTHAPURAM,KERAL A, 695027	Urban	5.06	19974.73					

2.2 ACADEMIC INFORMATION

Details of Pro	Details of Programmes Offered by the College (Give Data for Current Academic year)								
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted			
UG	BTech,Civil Engineering	48	HSC	English	60	37			
UG	BTech,Aero nautical Engineering	48	HSC	English	60	54			
UG	BTech,Electr ical And Electronics Engineering	48	HSC	English	30	28			
UG	BTech,Electr onics And C ommunicatio n Engineering	48	HSC	English	60	60			
UG	BTech,Mech anical Engineering	48	HSC	English	60	28			

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Profe	essor			Assoc	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				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				6				10				56
Recruited	3	1	0	4	1	2	0	3	24	31	0	55
Yet to Recruit		-	1	2		1	1	7		'	1	1

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				35			
Recruited	25	6	0	31			
Yet to Recruit				4			

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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				20			
Recruited	14	4	0	18			
Yet to Recruit				2			

Qualification Details of the Teaching Staff

	Permanent Teachers										
Highest Qualificatio n	Profes	ssor		Associate Professor		Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0	
Ph.D.	2	0	0	1	1	0	1	0	0	5	
M.Phil.	0	0	0	0	0	0	0	2	0	2	
PG	1	1	0	0	1	0	23	29	0	55	
UG	0	0	0	0	0	0	0	0	0	0	

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	Temporary Teachers										
Highest Qualificatio n	Profes	ssor		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?	2	0	0	2

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

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Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	65	7	70	0	142
	Female	43	0	22	0	65
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years							
Category	Year 1	Year 2	Year 3	Year 4			
SC	Male	2	6	3	0		
	Female	1	3	2	1		
	Others	0	0	0	0		
ST	Male	0	0	0	0		
	Female	0	1	0	0		
	Others	0	0	0	0		
OBC	Male	69	88	69	84		
	Female	36	37	40	33		
	Others	0	0	0	0		
General	Male	9	15	21	25		
	Female	8	10	14	9		
	Others	0	0	0	0		
Others	Male	0	0	0	0		
	Female	0	0	0	0		
	Others	0	0	0	0		
Total	1	125	160	149	152		

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	Our institution has the vision of setting a benchmark
	for the education providers in the field of Engineering
	and Technology and providing quality technical
	education that fosters the spirit of learning and

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research through an innovative synergistic model of education that promotes academic excellence, scientific pursuit, and professionalism. The institution is keen in promoting multidisciplinary approach among the student community thereby facilitating the young minds to solve the day to day societal problems. Multidisciplinary activities are promoted by the various clubs formed with initiation of the students. These club plans events such as workshop, guest lecture, project expo, in the college. Being a non- autonomous institution, we follow the curricula and syllabi offered by the affiliating university viz. APJ Abdul Kalam Technological University, Kerala. The university offers non-credit mandatory courses like Life Skills, Sustainable Engineering, Disaster Management etc. The university also offers credit courses on Design and Engineering, Industrial Economics and foreign trade, internship and project work towards the attainment of a holistic and multidisciplinary education.

2. Academic bank of credits (ABC):

The university offers the concept of minor course in addition to the normal curriculum of one course. The institution encourage and considerable number of students have joined the 20 credit minor course in Software Engineering, Robotics and Automation in addition to the regular 160 credit course. In every academic year around 75% of the staff attend FDPs for the overall development of the academics. Many of our students and staffs have successfully completed online MOOC courses in NPTEL and other online platforms.

3. Skill development:

Our institution always emphasis on enhancing the skill set of the students by providing suitable value added courses in every branch. MoUs are signed with different industries and training partners to bridge the gap between industry and academia. The institution strongly believe in improving additional skill of the students in a course of 4 years so that the students will get more opportunities in different areas as per their interest. Different courses on cutting edge technologies like Cyber security and Ethical Hacking, Web development, Python programming, Workshop in Drone Technologies etc. have been conducted. The institution provides an online skill development platform Skill Rack to enhance the aptitude and programming Skill of students. College have signed an MoU with Additional Skill Acquisition Program

(ASAP), a Government of Kerala undertaking for skill enhancement and conducted many skill development program for the students like Coding Skill, Advance Python Programming. The institution is a premium member of ICT Academy Kerala where faculty and students are provided training in different areas.

4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):

Being a non-autonomous institution, our institution offers non-credit mandatory courses that emphasize on Constitution of India and its culture, nation building. The institution emphasizes the bilingual mode of teaching by the faculty members especially to teach Malayalam medium students from rural background and pay individual attention during tutorial sessions and revision classes. The institution conducts number of awareness programs in association with NSS and proper awareness is created among the students on environment, sustainability, energy conservation so as to make the students a socially responsible citizen. Fine arts Club and Nature & Heritage club conducts various activities to promote ancient knowledge, arts, culture and tradition of our country.

5. Focus on Outcome based education (OBE):

Our institution is following OBE for teaching, learning, evaluation and continuous improvement. Academic calendar is prepared before the commencement of classwork, in every semester. Faculty members prepare a lesson plan keeping in view of the syllabus offered by the university and the expected course outcomes (COs). COs are suitably framed by the course coordinator for each course, based on the syllabus and objectives of the course. COs are mapped with POs and PSOs. Questions in the internal assessment and assignments are framed such that the assessment of the entire Cos is properly made. Based on the performance of students and target fixed for attainment of each CO, assessment of attainment of COs is computed. If the target is not achieved, then suitable corrective action is taken. Similarly, assessment is made based on the performance of students in the external end semester examination. Then the assessment of attainment of POs and PSOs is made through all the courses as well as activities through mini projects, seminars and workshops, etc. The Department Quality Assurance Committee (DQAC) scrutinize this process and suggest suitable measures periodically for the

	improvement of the same.
6. Distance education/online education:	The institution supports online learning and assessment through Google Classrooms and Google meet apart from traditional teaching. Recorded session of the online classes during the pandemic was shared in the Google classroom so that students could access the study material at any point of time. Online revision classes are conducted and periodic evaluation of the students are done through online quizzes and online tests. Itemized syllabus and course materials are shared with the students through Google class rooms. The institution is also planning to conduct the customized value added courses on AI/ML, IOT, Web technology, drone technology etc through our training partners.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Yes, we have Electoral Literacy Club (ELC) in our college and it is functioning with the complete involvement of our students. Through various activities the electoral process of registration and voting is familiarized among students.
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?	We have both the faculty and student members as coordinator's, appointed by the college and it has its own representatives. The functions of this club are done through involving student participants in various awareness programmes. ELC includes the members as listed below: 1. Student Coordinator 2. Student Members from each department 3. Faculty Coordinator 4. NSS Student Representative
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.	Every year the club conducts seminars to help students know about their rights and encourage them to exercise those rights by participating in the elections. The Electoral Literacy Club has actively involved in various innovative activities to encourage the students to use their voting rights and spread awareness about the importance of voting among the general public in association with NSS.
4. Any socially relevant projects/initiatives taken by	Every year students are encouraged do the mini and

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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.

major projects in Electronics vote Machine (EVM), so that new authentication technologies could also been incorporated in the EVM like biometric authentication. ELC is creating awareness among the public through posters.

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 club conducts activities periodically to create awareness on the importance of voting through various programs like talk session conducted by the faculty members of the club.

Extended Profile

1 Students

1.1

Number of students year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
565	597	557	588	648

File Des	cription	Document
Upload s	supporting document	<u>View Document</u>
Institutio	onal data in the prescribed format	View Document

2 Teachers

2.1

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

Response: 118

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

2.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
70	68	77	73	91

3 Institution

3.1

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

2021-22	2020-21	2019-20	2018-19	2017-18
117.23	90.83	195.08	242.05	234.44

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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:

Academic Calendar/ Almanac: At the beginning of every academic year, The Principal, Heads of various Departments & Exam Cell chalks out an academic calendar which includes internal assessment dates. This is made available to the staff and students before the commencement of the class work. The academic calendar is displayed on all the department notice boards and department prepares a plan at the department level, which includes the above and co-curricular activities such as workshops, seminars, online courses, projects research activities and guest lectures by experts from both industry and academia. Extra-curricular activities such as various literary and cultural clubs are also part of the plan. This academic calendar is strictly adhered to, by the institution.

Teaching Plans: Course allotment for every semester is prepared by the respective HoDs and the same is communicated to the faculty. For each course, teaching hours are allocated based on the number of credits. The faculty prepares a 'Course Plan' which gives the number of hours required to complete each unit. The 'Lesson Plans' are prepared which includes dates for each topic of a unit and the mode of teaching.

Laboratory: Lesson plans are also prepared for each laboratory course which indicates the number of experiments and the dates for each experiment. Laboratory manuals are prepared in advance which gives a detailed description of the experiments. The students maintain a laboratory record and the teacher evaluates and awards grades for each experiment which is considered for continuous internal assessment. Approved course plans, lesson plans and hand-outs are communicated to the students at the beginning of each semester. The Course plans and Lesson plans are appended to the attendance registers for ready reference by the faculty concerned. The topics covered, on the given day as per the time-table is entered in the attendance registers as log book. Effective implementation of the lesson plan and log book is reviewed by the HoD. The comments on any variation with respect to the lesson plan and lecture record are communicated to the faculty concerned.

Projects: Mini-projects presentation carried out by the students to help them to consolidate and apply their conceptual understanding of various subjects. Seminars help enhance the presentation skills of the students. The project work/ internship taken up in the final year enables the students to consolidate their knowledge, write and present technical reports and learn the benefits of teamwork. Students are encouraged to carry out project work as interns in industry. Co-curricular and extra-curricular activities aim to inculcate these qualities in order to bring about holistic personality development of students. Students are also encouraged to participate in technical competitions and ideation contests as part of co-curricular activities.

Every faculty member is assigned a group of students for mentoring throughout the course wherein the students' difficulties, requirements, and suggestions are recorded for the necessary actions related to curriculum implementation. Faculty members conduct revisions during tutorial hours. The College encourages faculty to participate in faculty development programs and, to present papers in

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1.2 Academic Flexibility

1.2.1 Number of Add on /Certificate/Value added programs offered during the last five years

Response: 26

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

1.2.2 Percentage of students enrolled in Certificate/ Add-on/Value added programs as against the total number of students during the last five years

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Response: 50.9

1.2.2.1 Number of students enrolled in subject related Certificate/ Add-on/Value added programs year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
325	324	325	251	279

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 into the Curriculum

Response:

The College has been working for the overall development of the students. Various courses, namely, Human values and Professional Ethics, Environmental Studies have been introduced as mandatory courses for all programmes of engineering to address issues as Gender Equality, Sustainability, Life Skills and Ethics. Courses on Disaster management, Non-Conventional energy resources etc, are offered as open electives.

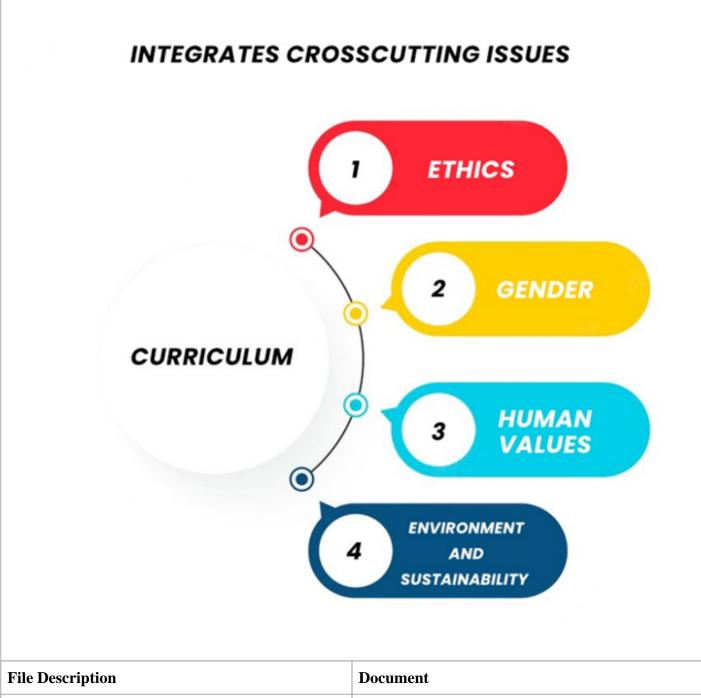
Human values and professional ethics: To instill Moral, Social and Ethical values, the university has offered two courses on Life Skills and Professional Ethics as credit courses during the academic periods for all B. E programs. These courses help students gain a world view of the self, society and profession. It emphasizes a holistic understanding of ethical human conduct, trustful and mutually understanding human behavior. The college also conducts Blood Donation Camp, E-Waste collection, Beach cleaning, and awareness programs in the nearby villages to promote National Integrity, Human values, Communal Harmony.

Environment and Sustainability: Sustainable Engineering is an interdisciplinary course. The course is offered as a mandatory course for all the U.G programs. The course includes the study of natural resources with emphasis on renewable energy resources, the importance of conserving the present ecosystem, promoting biodiversity, perils of environmental pollution and raising awareness on environmental and social issues. Open Elective courses under Choice based credit systems Disaster Management is offered to understand various types of natural and man-made disasters, their occurrences, effects, mitigation and management systems in India, the role of Geographical Information Systems (GIS), and Remote sensing technology in disaster mitigation and management. A course on Green buildings is also offered to

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

National Service Scheme: The College also has a vibrant NSS wing which encourages student participation in programmes like tree plantation, Swacch Bharat Abhiyan and bringing awareness on renewable energy sources, conservation of water and electricity. The Nature Club of the college conducts guest lectures on environmental awareness and celebrates Eco Week annually highlighting the importance of environmental conservation. Gender Sensitization: 'Universal Human Values and Professional Ethics' course includes a unit on Social responsibility inculcating civic sense and virtues highlighting issues related to the dignity of women at home and workplace. Discussions, debates and guest lectures pertaining to gender sensitization are arranged. International Women's Day is celebrated every year with active student participation. Also, special talks are arranged to encourage women to explore opportunities in science and technology. The student counselor counsels students on gender equality and other related issues. An exclusive committee consisting of women faculty and girl students is also functioning related to gender equality issues.

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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: 50.62

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

Response: 286

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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 (Yes or No)

Response: Yes

File Description	Document	
Upload supporting document	View Document	

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Enrolment percentage

Response: 50.67

2.1.1.1 Number of students admitted year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
125	160	149	152	174

2.1.1.2 Number of sanctioned seats year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
300	300	300	300	300

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

2.1.2 Percentage of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (Exclusive of supernumerary seats)

Response: 72.27

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

2021-22	2020-21	2019-20	2018-19	2017-18
98	122	105	107	110

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

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2021-22	2020-21	2019-20	2018-19	2017-18
150	150	150	150	150

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

2.2 Student Teacher Ratio

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

Response: 8.07

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 using ICT tools

Response:

The conventional class room lecture method is followed active learning methods which encourage participative learning by students. Active learning methods include Group Discussions, Quiz, Project Based Learning, Video Films, NPTEL lectures, Field Visit, Industry Visit etc. Few online videos developed by Bentley systems and MOOC facility from SWAYAM are also made available to students. College provides several experimental and virtual learning methods in individual laboratories to analyses the theoretical concepts of subjects through software programs in each department such as CAD, ANSYS, Solid works, Python program, PLC and Embedded program, etc., and also provides participative learning activities to impart the scope and objective of education to the engineering students. Also, Multimedia teaching aids like videos, online materials and PPT's are incorporated in the day-to-day teaching learning process that enhances the students' better understanding of the subject.

Experiential Learning

All class rooms have been established as smart classrooms to screen technological videos, PPT'S and online teaching to the students related to the relevant subjects in every semester. Various Guest lectures by experts from industries and academia are frequently organized by the respective departments to provide in depth knowledge of contents in the syllabus, to correlate the curriculum with the industry needs and also to provide knowledge beyond the prescribed syllabus which is towards the expectation of industries for better placement.

Participative Learning

The scope of learning widens giving students an education that is greater than the syllabus. Students are encouraged to organize and to participate in Inter-collegiate events such as symposium, project expo, national conference and international conference to bring out their talents. Students are organizing National level Departmental Symposium (an independent event) for the past six years and they continue to do the same. Industrial visits, In-plant Training and Internship Training in organizations are arranged to give hands-on experience to the students.

In addition to academics, to be a socially responsible citizen, our college encourages the students to participate in NSS, Blood Donation camp, Entrepreneur Cell, Women Grievance redressal cell & all technical club activities with equal enthusiasm to develop their overall personality.

In addition to the traditional teaching-learning methods, the institute is providing innovative student centric methods such as Hackathons (1)Workshops (2)Seminars(3)Virtual Lab (4) Simulation (5) Role play (6) Video (8) Demonstration, (9) Activity-based learning (10) Industry Visits(11)Guest lecture (12) GD/debate (13) Google Classroom(14)Project- based learning(15), Real-time case studies (16), Worksheets(17) PPT(18), Internship (19) Industrial Visit (20)Proto-type model (21) Research projects (22) Poster presentation.

Problem Solving Methodologies

Tutorial classes form a part of the course delivery to inculcate problem solving skills among the students to supplement regular teaching learning process.

In addition to general aptitude and logical reasoning classes, second and third year students are offered value added programs which improve their problem solving skills. Hackathons are arranged for students to test their coding skills and work on interesting real world challenges.

same. Industrial visits, In-plant Training and Internship Training in organizations are arranged to give hands-on experience to the students.

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2.4 Teacher Profile and Quality

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

Response: 100

2.4.1.1 Number of Sanctioned posts / required positions for teaching staff/ full time teachers year wise during the last five years:

2021-22	2020-21	2019-20	2018-19	2017-18
70	68	77	73	91

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File Description	Document
Upload supporting document	View Document

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

Response: 5.28

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

2021-22	2020-21	2019-20	2018-19	2017-18
6	6	4	2	2

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

ACE is affiliated with A P J Abdul Kalam Technological University (KTU), Kerala. The rules and regulations for the internal/external assessment are laid down by the university. The first-year students are made aware of the evaluation processes through induction programs. The university allows 70% marks for the end-semester exams and 30% internal marks. The internal Assessment marks are uploaded to the University web portal periodically based on the assessment schedule provided by the university.

At Institution Level:

Two internal assessment tests (IAT) are conducted per semester. Internal Assessment test Schedules are mentioned in the Academic Calendar of every semester. The timetable for the same is announced two weeks prior to the commencement of the Internal Assessment Test. The seating plan and table marking are followed even for internal assessment tests. Faculty members should set their Course question papers and all the subject question papers duly signed by DQAC coordinator and the Head of the department are handed over to tt internal examination cell four days prior to the respective exam. After the successful

completion of the Internal assessment test, internal marks are uploaded in the University web portal as as per the University schedule. Students can view their internal marks in their own login to the University. Grievances identified in the internal assessment test for the student are rectified by the HoD and Principal.

At University Level:

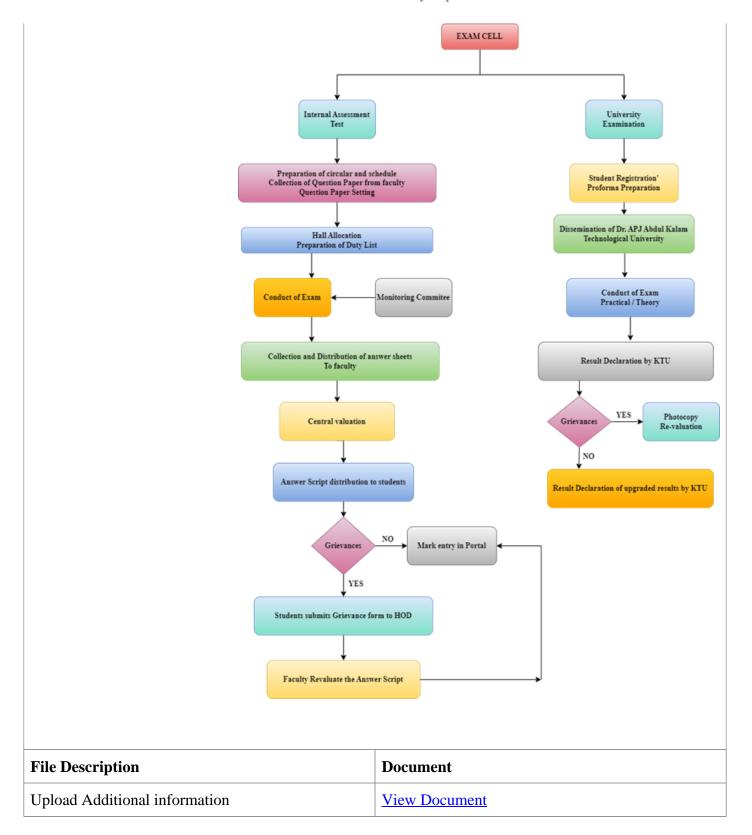
Students are permitted to appear for the semester examination after they registered for courses according to KTU regulations. The hall tickets are issued to the students well in advance. Any grievance related to the hall ticket like printing of the wrong name or delay in issuance is addressed by the exam cell. After Successful conduction of the University examination, Students are getting every university semester's results through their own login in the University portal.

Grievances identified regarding the KTU results such as applying photocopy, revaluation, and review process for the results they obtained, and other grievances like the correction in the grade sheet (DOB, printing mistakes, duplicate grade sheet, etc.) are rectified by College university examination cell and Control of examination of KTU, Kerala. The issues of the students are addressed with high priority.

Third valuation:

If the	e re-valuatio	n results	are no	ot satisfactory,	a stude	nt can	apply	for th	ird v	valuation	within	a weel	k after
the a	nnouncemen	t of the re	esults.										

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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 and attainment of POs and COs are evaluated

Response:

The Institute switched over to Outcome Based Education (OBE) in year to impart education through student centric approach and follow outcome oriented teaching learning process. Programme Outcomes (POs), Programme Specific Outcomes (PSOs), and Course Outcomes (COs) have been formulated for all the UG. Programme. Outcomes (POs) represent the graduate attributes formulated as per affiliated University. Programme Specific Outcomes (PSOs) are specifically defined outcomes of the programme which the graduates have to acquire by the end of the programme. Program Outcomes (POs), Program Specific Outcomes (PSOs) of all the UG Programmes have been disseminated to the teachers and students

Electronic Media /Location	Communication med	lia
Webpage	Web site (http://www.	acetv
	https://acetvm.com/de communication-engin	*
	https://acetvm.com/deengineering/	partm
Civil Engineering	https://acetvm.com/de	partm
Mechanical Engineering	https://acetvm.com/de	partm
	https://acetvm.com/deengineering/	partm
Department Corridors	Printed Boards	
Class Rooms	Printed Boards	
Laboratories	Printed Boards	
Teaching Materials	Log Book/Lab Manua	ıls

Course Outcomes (COs) are statements that describe essential learning that students should achieve, and can reliably demonstrate it at the end of a course.

The Course (learning) outcomes define the knowledge skills and behaviour that a student should be able to demonstrate. The course outcomes for each course are prepared by the course coordinator. For every course, 4 to 5 COs as recommended by NBA are drafted addressing most of the applicable levels of Blooms Taxonomy incorporating knowledge, skill and attitude. These COs are modified and reframed, in accordance with the changes in Curriculum and revised as per the need from time to time. These COs are discussed and finalized in the Board of Studies (BoS) of the respective programmes.

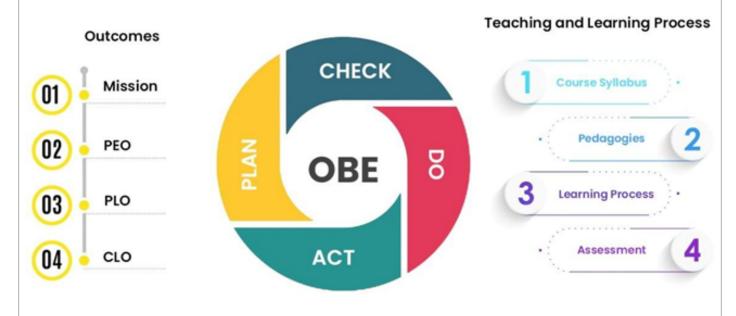
Correlation matrices are generated to link Courses with their outcomes, POs and PSOs. These matrices specify the correlation in terms of high, medium and low (3, 2 and 1 respectively) indicating the levels. The average mapping of Program outcomes for the given program is obtained by averaging the levels of mapping for each of the courses. Similarly the averaging is done for Program specific outcomes as well. These COs, POs and PSOs are circulated to all the students and staff through conference brochures, proceedings and Faculty Development programs.

POs and PSOs are displayed in the Department, Laboratories, Department Library, Seminar Hall and the same is also disseminated to students

While addressing the students, the course handling faculty members create awareness on COs, POs and PSOs. The HOD, faculty members, Faculty coordinator, also inform the students and create awareness and

emphasize the need to attain the outcomes.

To evaluate, whether corresponding COs are achieved or not. According to the performance of the student in answering each question, mapping is carried out with the respective COs for assessing the attainment level of the specific CO of the subject



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

2.6.2 Pass percentage of Students during last five years

Response: 76.4

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

2021-22	2020-21	2019-20	2018-19	2017-18
71	122	117	105	116

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

2021-22	2020-21	2019-20	2018-19	2017-18
134	143	125	135	158

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

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process				
Response: 3.96				
File Description	Document			
Upload database of all students on roll	View Document			

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

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

Response: 36.62

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

2021-22	2020-21	2019-20	2018-19	2017-18
5.139	4.521	14.525	5.661	6.773

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

3.2 Innovation Ecosystem

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

Response:

Introduction

An eco-system has been created in the institution to promote innovation, transfer of knowledge and entrepreneurship. The Innovation and Entrepreneurship Development Cell (IEDC) at the institution is a multifaceted platform that aims to nurture students' innovative ideas, transfer knowledge, and promote entrepreneurship. Through this platform, the institute collaborates with the Kerala Start-up Mission (KSUM) and Additional Skill Acquisition Platform (ASAP) to arrange various skill addition training programs, seminars, ideation contests, workshops, and other activities. These programs address the rapidly advancing engineering field by offering students the opportunity to gain knowledge in the areas of robotics, artificial intelligence, machine learning, data science, and Block chain. In this way, the IEDC provides students with the necessary skills they need to be successful in their careers. By capitalizing on the potential of the IEDC, students can gain the knowledge and skills needed to succeed in the everchanging technological landscape.

Projects

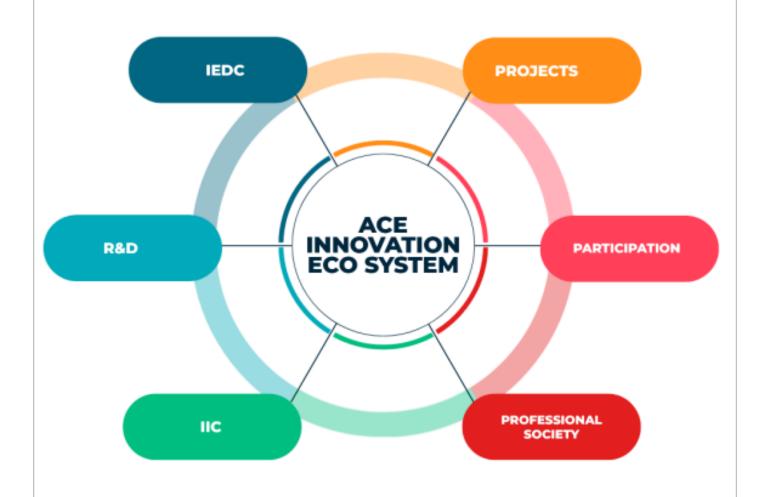
The ACE Kalam Forum for Innovation (AKFI) was established at ACE College with the intent of

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providing students with access to state-of-the-art research lab facilities. This initiative was launched to promote creativity and innovation among the students, encouraging them to take up innovative projects. The AKFI has established a suite of resources, including mentorship and guidance, to help students pursue their projects. From brainstorming sessions to project execution, the AKFI provides students with the necessary support they need to complete their projects. Students have access to a wide range of equipment, materials, and supplies to carry out experiments and conduct research.

Innovation Promoting Activities

The faculty of Institution is dedicated to the mission of knowledge sharing and creating a deep understanding of their respective field of expertise. To that end, the institution promotes academic research and encourages faculty members to publish in reputed journals. In addition, various seminars, symposiums, workshops, conferences, and other academic events are held periodically at the Institution. These events serve to further knowledgesharing and discussion among faculty and students. The institution also encourages faculty members to take part in national and international conferences outside of the institution, thus expanding their academic horizons and contributing to the wider academic community. Faculty members at this institution are encouraged to participate in knowledge sharing activities, such as delivering guest lectures and expert lectures to other institutions and successfully conducting funded programmes.



File Description	Document	
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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: 30

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

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

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

3.3 Research Publications and Awards

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

Response: 0.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
4	4	3	5	8

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

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

Response: 0

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

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

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

3.4 Extension Activities

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

Response:

ACE College of Engineering is involved in various extension activities which are beneficial to the people of the society. NSS unit of ACE College of Engineering is one of the active units in the locality. We take up various activities such as anti-narcotics awareness campaign, e-waste collection campaign, beach cleaning drive , AIDS awareness campaign, free eye testing camps, free food donation drives, blood donation camps, cleaning drives in the adopted village etc.

During covid-19 our college acted as a quarantine centre which was opened to the public. The effort taken by ACE College of Engineering was appreciated by the local administration during the covid pandemic. Many people affected by covid were benefitted by this noble act of ACE College of Engineering. Also during the pandemic sanitisers were being prepared in ACE College of Engineering utilizing the lab facilities. It was made in accordance with the WHO formulations. These sanitisers were distributed to the nearby palliative care and orphanage free of cost.

During kerala floods, our NSS volunteers were involved in various volunteering activities across the state. Flood relief items were collected by the volunteers and was surprised to the needy people of Manjeri and Wayanad. For this purpose, collection points were started in the college. Our volunteers also worked in various collection points of flood relief items in sorting and packing of those items. It gave a sense of responsibility to the students which helped in the holistic development of the students.

Cleaning drives in the adopted village is another activity which the NSS volunteers of ACE College of Engineering is being constantly involved. It includes cleaning of nearby homeo hospital, public health centres, schools etc. The surroundings are cleaned and painting works for the hospitals are also done by the volunteers.

Free food donation activities are conducted by the Volunteers for the patients, bystanders and needy people in the vicinity of General Hospital, CHC Vizhinjam, and SAT Hospital, Thiruvananthapuram. NSS volunteers collected food packets from students, faculty and staff members of ACE and distributed the

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food packets in the hospitals.

Awareness campaigns such as AIDS awareness campaign, Awareness on climate action, Anti-narcotics awareness campaign, Diabetes awareness program, Awareness program on importance of healthy life style, Awareness program on Sansad Adarsh Gram Yojana etc are organized by the NSS unit of ACE for the benefit of society and environment. People in nearby localities were participated in all those awareness programs and they expressed their gratitude towards conducting the same.

The flagship event among all the outreach activities is the e-waste collection campaign. People in the adopted village were given awareness on the harmful effects of throwing away e-waste to the environment. It can be controlled by scientifically disposing e-waste. NSS unit of ACE College of Engineering took up the initiative and collected e-waste from the households of the adopted village for their scientific disposal.

File Description	Document	
Upload Additional information	View Document	

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

Response:

NSS unit of ACE College of Engineering regularly conducts beach cleaning drive in the locality. Being located close to the sea, it the responsibility of the institution to make the beach neat and clean. Even local people take part in the beach cleaning drive organized by the college and make the cleaning process more effective. Volunteers of ACE and a team of faculty members coordinated the beach cleaning drive and made it successful. Through this program we spread the message to work towards a plastic-free, litter-free and pollution-free environment and to keep the beaches clean. The aim of this beach cleaning drive is to create awareness among people to keep our water bodies and beaches clean by without throwing plastic to our water bodies. Beach cleaning drives were conducted at the nearby coastal areas such as Kovalam, Vizhinjam, Samudra beach etc. volunteers also conducted an awareness for discouraging the use of plastic for the people residing at the beach sides. On behalf of these activities ACE College of Engineering received awards from various agencies.

Blood donation camps are camps are constantly been done in various parts of the adopted village in association with the nearby hospitals for the benefit of society. Many people are benefitted by the noble act of the volunteers of NSS of ACE College of Engineering. Not just our students, faculty and staff members but people from outside and the parents of students contribute in the blood donation camp. Awareness programs are also conducted for the students, faculty members and parents about the benefits and myths of blood donation. The motive is to bring awareness about the shortage of blood that we are facing every year, and why we have to donate blood periodically etc. The conduction of Blood donation camps helped to improve the contribution from the nearby localities periodically. Various appreciation letters are received on behalf of this noble activities of ACE College in the adopted village.

Periodic free eye checkup camps are being conducted by ACE College. It is also being done in the adopted village. People from nearby localities, parents of students are also participated in the camp. Orientation

sessions and awareness regarding eye care are also conducted for the participated people by the medical team. Orientation on Benefits of periodic eye checkup was also conducted by the medical team for the participants. Medicines and essentials were distributed for the participants by the medical team at the time of camp. Appreciation certificates are received for this noble activity.

File Description	Document	
Upload Additional information	View Document	

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

Response: 60

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

2021-22	2020-21	2019-20	2018-19	2017-18
12	10	11	12	15

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	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: 59

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

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 Availability of adequate infrastructure and physical facilities viz., classrooms, laboratories, ICT facilities, cultural activities, gymnasium, yoga centre etc. in the institution

Response:

Academic Wings

ACE college of Engineering provides adequate physical infrastructural facilities to provide good learning ambience to the students which includes classrooms, smart classrooms, ICT enabled classrooms, laboratories, seminar halls, drawing halls, play grounds, conference hall, canteen, parking area and hostels as per the regulatory requirements of AICTE and A P J Abdul Kalam Technological University. The college is stretched over an area of 5.06 acres in a green ,clean ,neat and spacious environment.

ICT Enabled classrooms

The class rooms and seminar halls are equipped with LCD projectors and screens, boards and a computer with Internet connectivity.

Laboratories

The Institution has domain centric laboratories as per the regulations of AICTE and APJ Abdul Kalam Technological University. Adequate and well-maintained equipment to conduct experiments is provided. The laboratories are kept open beyond the working hours depending on the needs of the students. Sufficient safety measures have been incorporated and are displayed at strategic locations in the laboratories.

Internet Connection

The college has a dedicated 400 Mbps(JIO) and 300Mbps(BSNL) leased line connectivity from Tata Teleservices for uninterrupted internet services to the systems. Separate server rooms and are available for all network connectivity throughout the campus.

Central library

The library offers online resources like e-books, e-journals, and e-databases for reference through institutional and remote access. The library has the subscription of e resources like DELNET, K- hub, National Digital Library, Eshodhsindhu etc. Ace central library maintains a core collection of 11,351 volumes and 2,410 titles. The diversity of the library collection includes books, print journals, newspapers, CD-ROMS, e journals, e books, project reports, newspapers etc.

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Sports facilities

ACE provides excellent outdoor facilities such as volleyball courts, basketball courts, badminton courts, handball courts and athletics fields. All the dimensions of these play areas are as per national and international standards. The indoor facilities include table tennis, caroms, and chess. ACE organizes interdepartmental competitions for both men and women for games like Cricket, Football, Basketball and Volleyball. ACE also conducts annual sports meets every year. The College teams are actively participating in APJ Abdul Kalam Technological University zonal intercollegiate competitions and national tournaments.

Cultural Activities

The students participate in the various cultural events organized during EPOCH-the college cultural fest and various departmental association activities. With systematic and generous support from the college and overwhelming participation of students from all the departments, the events are conducted every year. We have been able to incorporate clubs to facilitate all-round development.

Gymnasium

A well-equipped gymnasium is in use for the students and staff to develop their physical, stay fit and healthy.

Miscellaneous Facilities

Ace facilities also include well maintained lawn, ramp, garden ,health care centre, first aid facilities, fire extinguishers, sanitary napkin vending machines and ATM. Canteen and Cafeteria facilities available for students and staff. Facility is provided during the college hours and provides a variety of hygienic foods and snacks at an affordable rate. The college has a stationary store that offers photocopying facilities for students and staff. It also provides general stationery items at reasonable rates. In addition to these facilities ACE has a Director room, Principal room, Office room, Board room, IQAC room, HOD Rooms and Faculty rooms, Placement cell, server room, workshops, Drivers room, Examination cell, restrooms, toilets. The campus also has CCTV surveillance at all strategic locations, Generator, Elevator, and RO water purifier.

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

4.1.2 Percentage of expenditure, excluding salary for infrastructure augmentation during last five years (INR in Lakhs)

Response: 19.96

4.1.2.1 Expenditure for infrastructure augmentation, excluding salary during the last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
32.45	1.96	4.85	46.04	90.29

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

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS), subscription to eresources, amount spent on purchase of books, journals and per day usage of library

Response:

Library is automated using Integrated Library Management System (ILMS)

Library automation is the essential requirement in any premier academic library. Automation helps to manage library functions systematically and provide a higher quality of service to library patrons. Ace library automated with Benchmark library manager software developed by DOCME Cloud solutions Pvt. Ltd to regularize the library functions.

Details of the software which makes the library automated (ILM)

Name of	the ILM	Version	Nature of automation	Year	
Software					
Benchmark	Library	1.2	Fully	2019-2022	
Manager					

The library was using RIMS Library Manager 2.3 developed by Techno Alliance Pvt Ltd. from 2013 and

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fully switched to **Benchmark Library Manager** 1.2 developed by DOCME Cloud Solutions Pvt. Ltd. Software since July 2019, which is a cloud based software. It has different modules to carry out the functions of acquisition, cataloging, barcoding, reports generating, circulation etc. Circulation work i.e. all the issues, renewal and return details of the books are entered automatically by scanning the bar code. All the previous records of the students can be taken at any time using this software. When the due date is over the issued details of the book will be indicated in red mark and fine amount will be allotted. Besides this, a reminder mail is also send to the defaulter's registered mail automatically. Since the software is on cloud basis the members can access OPAC module from anywhere to search the availability of books.

Subscription to E resources

The library offers the online resources like e-books, e-journals, and e-databases for reference through institutional and remote access. The library has the subscription of e resources like **DELNET**, **K- hub**, **National Digital Library**, **Eshodh sindhu etc.** Links to access the e resources are displayed in the notice boards and also intimated to the users through their registered mail ID... Library's subscribed databases provide multiple user access to e resources at any time. Systems are assigned to access e resources from the library. Separate cubicles with charging points are arranged in the library to use personal laptops.

Library expenses

Ace central library maintains a core collection of 11,351 volumes and 2,410 titles. The diversity of the library collection includes books, print journals, newspapers, CD-ROMS, e journals, e books, project reports, newspapers etc. As far as the procurement is concerned 818 books procured in the academic year 2018-19 while 733 books were purchased in 2019-20. In 2020-21 and 2021-22 total volume of books purchased were 366 and 602 respectively. In the academic year 2017-18 and 2018-19 library procured 36 print journals. The library purchased 37 print journals for the academic year 2019-20 and 38 journals for the next two academic years. Library procured the database DELNET for the access journals and e books in the year 2020-21 and the subscription renewed for the subsequent years. The average library expense for the last five academic years is Rs.5 Lakhs.

Usage of Library

We can generate and print more numbers of reports like book issued and return reports categorized byaccession number, author, subject, department, publisher and title. Monthly reports and yearly reportfacility are also available in the library management system. The e attendance module of benchmark library software records an average of 140 and above users per day.

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

4.3 IT Infrastructure

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

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Response:

IT facilities have been updated on regular basis. Also, new IT equipment has been purchased as per the requirements. In session 2019, 21 gigabyte motherboard, 11 hard disk 500 GB were purchased in Central Computer Lab. In session 2019, 9 Ram 2 GB to Ram 4 GB were purchased in Materials and Structures Lab. In session 2019, 8 Ram 2 GB to Ram 4 GB and 8 gigabyte motherboard were purchased in Computer aided design Lab. In session 2019, 5 new Ram 2 GB and 9 HARD DISK 250 GB to 500 GB were purchased in Electronic Project Design Lab. In session 2019, 10 HARD DISK 250 GB to 500 GB and 8 gigabyte motherboard were purchased in Digital Signal Processing Lab. In session 2019, 2 new Ram 2 b in power system Lab.7 new Ram 2 b and 10 gigabyte motherboard were purchased in software Lab. In session 2019, 6 Ram 2 GB to Ram 4 GB AND 5 Gigabyte motherboard were purchased in Project Lab. In session 2019, 3 Gigabyte motherboard were purchased in Digital Library.

Overall in every year, our computer laboratories were upgraded for new requirements. Since 2015, we are using 200 Mbps Internet speed in our campus. The college has a dedicated 400 Mbps (JIO) and 300Mbps (BSNL) leased line connectivity from Tata Teleservices for uninterrupted internet services to the systems. Separate server rooms and are available for all network connectivity throughout the campus. The Institution has domain centric laboratories as per the regulations of AICTE and APJ Abdul Kalam Technological University.

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

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

Response: 2.67

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

Response: 212

File Description	Document
Upload supporting document	View Document

4.4 Maintenance of Campus Infrastructure

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

Response: 57.2

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)

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2021-22	2020-21	2019-20	2018-19	2017-18
52.23	40.94	107.33	158.49	144.15

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

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Percentage of students benefited by scholarships and freeships provided by the Government and Non-Government agencies during last five years

Response: 69.51

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government and Non-Government agencies year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
453	435	398	388	380

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

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

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

Response: A. All of the above

File Description	Document
Upload supporting document	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: 67.65

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

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2021-22	2020-21	2019-20	2018-19	2017-18
422	408	371	374	424

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

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

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

Response: A. All of the above

File Description	Document
Upload supporting document	<u>View Document</u>

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: 69.06

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

2021-22	2020-21	2019-20	2018-19	2017-18
119	108	89	85	79

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

2021-22	2020-21	2019-20	2018-19	2017-18
134	143	125	135	158

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File Description	Document
Upload supporting document	View Document
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 (eg: JAM/CLAT/GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 100

5.2.2.1 Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ Judicial Services/Public Prosecution services/All India Bar Exams/State government examinations) year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
0	2	1	0	0

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

2021-22	2020-21	2019-20	2018-19	2017-18	
0	2	1	0	0	

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

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: 3

5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at

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national/international level (award for a team event should be counted as one) year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1	0	0	2	0

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

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

Response: 4.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
4	1	5	6	5

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

5.4 Alumni Engagement

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

Response:

The Institution has registered an Alumni Association. Alumni Association is one of the strongest assets of an institution. It is an association of former students (Alumni). It is formed to facilitate and encourage alumni to contribute to the institute's effort for achieving excellence in academics and improve facilities through fund raising or imparting knowledge and expertise of its members who specialised in different industrial and technological fields. Alumni guide their juniors in many ways and contribute to their future life through ACE College of Engineering Alumni Association led by our Alumnus. Alumni Association is

effectively functioning from 2016 onwards in the Institute to build strong bonding with the alumni for the growth and development of the Institution. The alumni meet is conducted once in a year. All B.Tech. Certificate holders of the KTU studied in ACE College of Engineering and teaching faculty (who are Alumnus) of ACE College of Engineering are members.

The following are the activities carried out with the help of Alumni,

Mentorship:

Alumni used to actively mentor their juniors in their technical aspects of their expertise. They share various motivational information through their experience in the real world. The present students in College will be guided through them and get encouraged that they can also flourish in various fields.

Curriculum Enrichment:

Alumni are actively contributing to the curricular gap identification and development of Add on course and value added course modules.

Alumni Interaction Programmes:

The department alumni coordinators would organise alumni interaction programmes to motivate current students about the employability and educational opportunities abroad. Alumnus share their experience with their juniors.

Industry Connect:

Alumni help in establishing MoUs with industries. The alumni, those who are entrepreneurs, arrange industrial visits to the students and provide inputs on how to start a new venture to turn into job providers. The Alumni extend their support for student's internships.

As a recruiter:

Our Alumni are in top positions in MNC's and reputed industries. The opportunities available in their organisation are shared with the students and eligible students were recruited with the help of Alumni.

As an Entrepreneur:

Successful alumni entrepreneurs are motivating the building technocrats to become Entrepreneurs by sharing their experience. Barriers and successful strategies shared by them give a clear idea for the students to enhance their skills to become successful Entrepreneurs.

Research and Consultancy:

To fuel the research and consultancy works in various fields like engineering, automation, software, etc. Our Alumni members are extending their help to the departments by directing the entrepreneurs to carry out consultancy works in various sectors of the engineering streams.

Generosity:

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The Alumni also play a significant role in contributing scholarships to deserving students.		
File Description Document		
Upload Additional information	View Document	

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance and leadership is in accordance with vision and mission of the institution and it is visible in various institutional practices such as decentralization and participation in the institutional governance

Response:

ACE College of Engineering is an emerging name in the field of engineering education together with modern infrastructure and distinguished faculty members. ACE ensures each student who passes out from it is confident, knowledgeable and disciplined.

The college runs on the philosophy of giving equal opportunities to students from all walks of life and to train them so that when they venture out into the professional world they are ready to face all challenges of profession with confidence.

Vision:

To become a globally recognized benchmark in technical and research education that values excellence, quality and universal services.

Mission:

- To equip the students with conceptual, technical knowledge and competence required for the practice of their profession with moral and ethical values.
- To maximize the capability and potential of staff and students to enable them to provide effective, responsive and innovative services and excellent learning environment.
- To provide an information rich environment to support and encourage excellence in teaching and research that connects strongly with the issues of our local, national and international stakeholders

Leadership and commitment

The commitment of top Management is outlined in the Quality Policy as defined in the Quality Policy Statement.

Quality Policy

ACE Management has ensured that the quality policy

- a) Is appropriate to the purpose of the institution
- b) Provides a framework for establishing and reviewing the quality objectives
- c) Includes a commitment to comply with the requirements and continually improve the effectiveness of the QMS

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- d) Is communicated and understood within the organization and to the interested parties as appropriate.
- e) Is reviewed for continuing suitability

Participation of the teachers in the decision-making bodies:

Faculty are represented in all decision making bodies of the institute namely, Academic Council, IQAC etc. While three senior faculties and one professor have been nominated as members of the Governing Council. While all the HODs and some of the faculty are members of the IQAC. Most of the faculty are also members of various other Committees viz., Anti Ragging, Grievances Redressal, Internal Complaint Committee (ICC), Disciplinary Committee etc., which have been constituted with specific functions and responsibilities.



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

6.2 Strategy Development and Deployment

6.2.1 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, deployment of institutional Strategic/ perspective/development plan etc

Response:

ACE college of Engineering Established in 2013 by the Manarul Huda Trust and offers BTech Programs.

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ACE college of Engineering has a Governing Council consisting of the President, Secretary, and Members. The Governing Council is constituted as per UGC provisions. It consists of Chairman, Nominees of Management, Members representing Academia, Industry, faculty and the Principal as the Member Secretary. Academic Council oversees policies and procedures regarding academic matters with the Principal as the Chairman and HoDs & Senior faculty of the college, experts from premier Institutions, Industry representatives and University nominees as members. The College Academic Committee meets regularly for monitoring and implementation of policies, Academic and Admissions. Functional heads for Finance, Administration, Learning Resource Centre, Computer Centre, Physical Education and Maintenance also report to the Principal. Other committees include: Anti-Ragging, disciplinary, grievance redress, Women Empowerment etc. Administrative Manual includes employee's duties, responsibilities, leave and conduct rules, recruitment process, etc. A provision is available for stakeholders to give their feedback/suggestions through on-line and suggestion boxes.

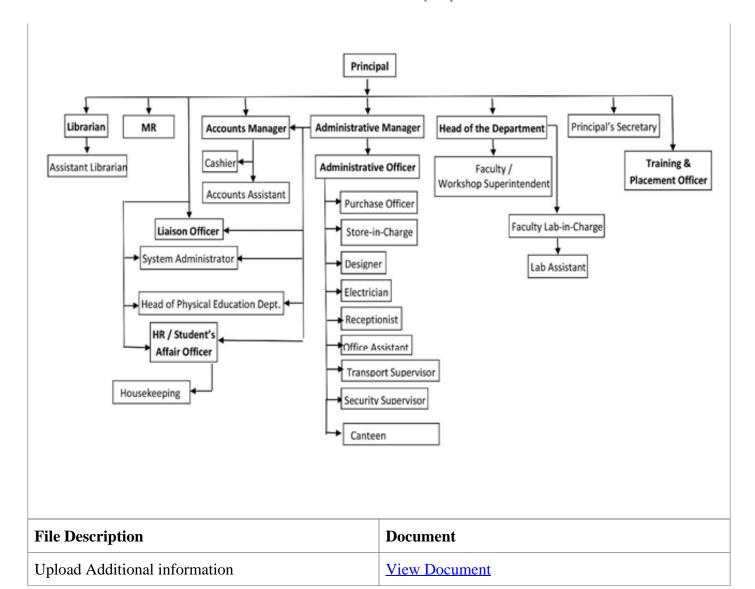
The institutional Strategic/Perspective plan has been clearly articulated and implemented. The following Goals of the Strategic Plan are being implemented.

- 1. To establish better academic practices and procedures
- 2. To be a choice for good quality students and competent faculty
- 3. To produce technically competent and ethically strong
- 4. To encourage Research & Consultancy
- 5. To develop a smart campus

The tasks involved are the Comprehensive Academic ERP System which is under development. Provision of more Wi-Fi Hotspots Increasing the scope of Campus Surveillance System. Enhancement of energy conservation systems, Enterprise Resource Planning (ERP) software is designed to manage day to day academic and administrative activities. It is designed as a web application, with a responsive user friendly interface that can be accessed from desktop or mobile. Wi-Fi access points have been provided in the campus to strengthen the teaching learning process. Surveillance cameras have been installed in the campus for the safety of the students and faculty and for monitoring the conduct of examinations.

Organization Structure

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6.2.2 Implementation of e-governance in areas of operation

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

Response: A. All of the above

File Description	Document
Upload supporting document	View Document

6.3 Faculty Empowerment Strategies

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

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Response:

ACE considers its employees as a valuable asset and likes to have a long term healthy relationship with them. Being a valuable partner, ACE carry out the following:

- Induction & orientation
- Training as per requirement
- Timely Appraisal
- Give opportunities to achieve full potential
- Registration fee, Dearness allowance, travel grants for teaching and non-teaching staff for attending various conferences, workshops
- Permission to faculty to deliver guest lectures at other Institutes
- Visits to industry and higher learning Institutes for knowledge acquisition
- Support in career development
- Share all successes and failures
- Give honest feedback and assessment about performance
- Respected salary as per the norms of AICTE / discretion of Management
- Adequate measures to gain confidence in profession
- Counseling by HOD / Principal

STAFF WELFARE SCHEMES

Medical/Health Benefit

- All the ACE employees and their legal dependents are eligible for discounts at Al-Arif Hospital, Ambalathara, Thiruvananthapuram which is run by MHT.
- For Inpatient Treatment: Staff will get a 20% discount (excluding cost of medicines) and legal dependents will get 15% discount (excluding cost of medicines).
- For Outpatient treatment: Staff & legal dependents will get 15% discount only on lab and other diagnostic charges for the staff and legal dependents of ACE Staffs.

Semester end feedback of students: All the students are required to give their feedback online for all their respective subject staff on metrics as listed below: Coverage of syllabus, ability to explain the concepts in clear and simple language, Creating interest through examples, Audibility while giving the lecture Eye contact, voice modulation and mannerisms, etc. Interaction in the class, Overall class control and discipline, Punctuality, Internal tests and assignments – Quality.

- 1. Encouraged to pursue research by providing seed money grants if necessary.
- 2.To upgrade qualification by deputing them on academic leave.
- 3.To stay abreast to current state of the art technologies, Faculty members who could not perform to the desired thresholds are advised to undergo pedagogical training to improve their teaching methods and techniques and Personal interaction with the Head of the Department to work on necessary improvements.

Fee Concession on Education

All the ACE employees can avail a tuition fee subsidy of 30% for their first and second born child and

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50% for third born child studying in the same school which is run by the MHT

Promotion in Higher Education

Long leave facility to employees is granted to pursue Higher Education especially for PhDs.

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

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

Response: 59.1

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

2021-22	2020-21	2019-20	2018-19	2017-18
30	53	54	50	37

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

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

Response: 82.76

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

2021-22	2020-21	2019-20	2018-19	2017-18
72	75	89	81	91

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

2021-22	2020-21	2019-20	2018-19	2017-18
20	21	22	24	27

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

ACE College of Engineering Established under Smt. Manarul Huda Trust and the Mobilization of Funds for various resources: Funds are mobilized from the following resources.

- 1. Manarul Huda Trust
- 2. Student Tuition Fees

The main financial resource for the Institute is by way of tuition fee. The tuition fee is fixed in line with government regulation and previous year's expenditure and the impact of inflation in the next three years. The institution furnishes all the relevant details of the expenditure and projections for every three years to the Internal Fee Regulatory Committee which fixes the tuition fee of the Institute as per the guidelines stated by the university. The internal Fee Regulatory Committee also provides scope for the Institute to allocate funds for the capital expenditure, which the Institute is planning over the next three years. Hence, the major resource mobilization depends on the fee fixation done by the internal Fee Regulatory Committee. The Sponsoring trust, MANARUL HUDA TRUST, extends financial support to the Institute for the shortfall and ensures the availability of requisite funds. Budget Preparation Systematic process of preparing budget, accounting, systematic purchase and bill settlement process along with regular periodical audit are the important aspects of making best use of financial resources. Our institution has a proper system for effective and efficient use of available financial resources. The funds are allocated to each department during the preparation of the yearly budget. This budget is generally for the requirement or upgradations.

Optimal utilization of resources

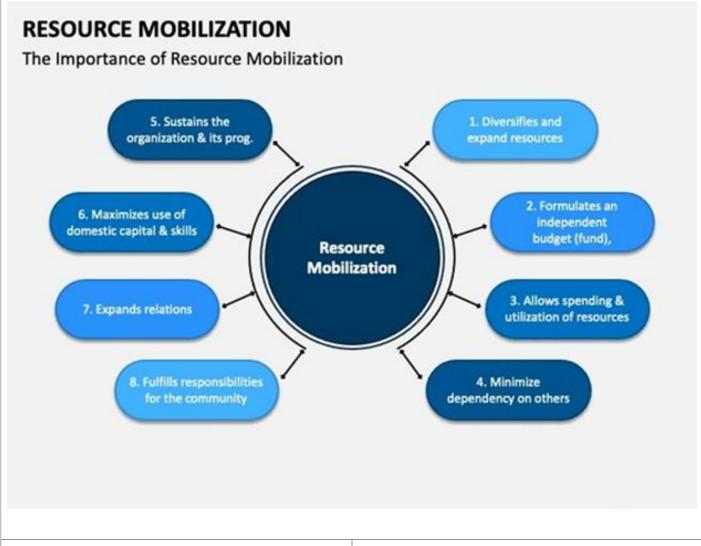
An annual budget is prepared to ensure optimal utilization of financial resources, based on the estimates received from the departments and functional units of the Institute. The amount is sanctioned by the

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Managing Committee. Monthly statements are prepared for income and expenditure. Audit is performed periodically to ensure that the budget is optimally utilized for the purpose it is intended. The resources in the form of facilities and equipment are maintained to ensure optimum performance.

Auditing

A qualified Chartered Accountant reviews the accounts/entries on quarterly basis. Suggestions/objections, if any, raised by the Chartered Accountant are discussed with the management for necessary action. Every year the accounts are further reviewed and finalized by external auditors and audited financial statements are prepared. The balance sheet is verified by the external auditors and submitted to the management. Based on this report the budget for the next academic year is prepared effectively. The external audit helps the management to understand the financial requirements and the suitable actions are taken to utilize the fund mobilized through various sources.



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

6.5 Internal Quality Assurance System

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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 IQAC Cell was set up in the year 2019 in the institute. The main purpose of this Cell is to assure internal quality in all the activities of the institute in terms of academics, administration, finance, and other allied areas. While the minutes of the meetings of the IQAC are posted on the Institute Website, the minutes of the meetings of other Committees are recorded and circulated to the concerned. Faculty are also the members of the Department Advisory Committee.

Some of the best practices instituted even before the formation of the Cell are:

Student Attendance monitoring

- Peer Learning Groups
- Remedial coaching
- Encouragement towards research and publications
- Regular auditing of accounts

The following initiatives have been taken up after the formation of IQAC Cell while continuing the above:

- Periodic IQAC meeting
- Class Committee meeting
- Semester-end feedback
- Student exit survey
- Course-end feedback

Example 1: Feedback Mechanism

An effective feedback mechanism is devised to ensure the proper teaching-learning and evaluation processes. The teaching-learning process is monitored by the hierarchies such as the principal, Head of the department, Class coordinator and Advisor.

Feedback is one of the best quality enhancement strategies. It always gives us an opportunity to know how others perceive us. Our institution always conducts a structured feedback activity and feedback is obtained from both internal and external stakeholders including students, parents, faculties, alumni, and employers. The feedback is analyzed and appropriate action will be taken by the departments.

Example 2: Collaborative activities

The mission of the college Collaboration with Industry helps reduce the distance between education and employment opportunities. This is the well-defined relationship to achieve the results in greater benefits of outcomes of students. Knowledge creation and technology development require considerable training for the young budding engineers to pace with their expectations. These contributions occur through the signing of a Memorandum of Understanding (MoU) with the leading and core industries as well as institutes to provide collaborative training programs to the students in their relevant discipline. ACE is enriching the collaboration every year and the training from the industries is supporting student Placements.



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

6.5.2 Quality assurance initiatives of the institution include:

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

Response: C. Any 2 of the above

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

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Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity and Institutional initiatives to celebrate / organize national and international commemorative days, events and festivals during the last five years

Response:

ACE College of Engineering is known for its commitment to promoting gender equity and creating an inclusive environment for all its students. In recent years, the college has taken several measures to ensure that women students are empowered and have equal opportunities to succeed. These measures include the establishment of a Women Empowerment Cell, which serves as a platform for women students to voice their concerns and receive support.

The Women Empowerment Cell regularly organizes workshops, seminars, and training sessions to help women students develop their leadership skills and build self-confidence. Additionally, the cell provides counseling and support to women who face any form of discrimination or harassment on campus.

The college also celebrates various national and international commemorative days, events, and festivals to raise awareness about gender-based issues and promote equality. For example, the college celebrates International Women's Day with a series of events that highlight the achievements of women in various fields and the challenges they face.

In conclusion, ACE College of Engineering has taken several initiatives to promote gender equity and create a supportive environment for all its students. The Women Empowerment Cell and the various commemorative days, events, and festivals serve as a testament to the college's commitment to promoting gender equality and empowering women students

Response:

- To promote gender equity, our institution established Women Empowerment Cell. All the students are encouraged to participate in various Technical Workshops, Seminars without any gender discrimination.
- Our Principal, the driving force behind all the success heads the institution by his innovative approach in learning and knowledge acquisition. More than 60% of the faculty members are women who play key roles in major positions such as Head of the Departments and the Coordinators of various club and various centre activities.
- Women Empowerment Cell aims to empower girl students and faculty to enhance their understanding of issues related to women and to make the college campus a safe place for girls and women. The cell brings advancement, development and empowerment of women through Guest Lectures, Seminars, Awareness Programs and other welfare activities since its formation.
- Since its establishment, institution organizes National Festivals and Birth and Death Anniversaries of great Indian Personalities. The college celebrates these events with great enthusiasm to commemorate the ideology of nationalism and to pay tribute to our great National Leaders.
- Republic Day is celebrated on 26th January in order to honour the date on which the

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Constitution of India came into effect.

- INDEPENDENCE DAY is celebrated on 15th august every year by hoisting national flag at the college premises.
- 5th September is celebrated as Teacher's Day as a mark of tribute to the

contribution made by teachers to the society.

• In honour of DT.APJ Abdul Kalam's birthday, the aeronautical department of ACE

College of Engineering has conducted a programme on 15th October.

Yoga day is organized by ACE college of Engineering on the occasion of International Yoga Day.
 The event was conducted for all students to know more about the importance of Yoga in our daily life

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

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: A. 4 or All of the above

File Description	Document	
Upload supporting document	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
Upload supporting document	<u>View Document</u>

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

Response:

India is a diverse country in the universe. Students will remember an important day only if they are told what the occasion signifies. Celebrating events and festivals in our college has become an integral part of learning and building a strong cultural belief. These celebrations bring the students closer to each other's traditions and cultural beliefs and develop respect and understanding for each other's customs and traditions. There are three types of celebrations, namely seasonal, national and religious.

The objectives of celebrating these festivals are:

- National festivals will heighten the patriotic spirits in students, enabling them to grow into better citizens.
- Celebrating a seasonal festival changes student's attitude towards mother Earth and nature.
- Religious festivals teach students about the importance of family, tradition and values. It gives an insight into the culture and its principles.
- International festivals will create an increased cheerful ambiance and deepen the bonds with other races.

In order to attain the above mentioned objectives, ACE College of Engineering provides an inclusive environment for everyone with tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities. Different sports and cultural activities organized inside the college promote harmony towards each other. India is a diverse country where people belonging to various cultural backgrounds reside. Therefore, all through the year, our college witnesses a variety of festivals and occasions. Few celebrations are:

Onam Celebration: Onam is the harvest festival of Kerala. In order to show our respect to other state traditions and to develop bonding among students, this festival was celebrated by conducting various competitions and programs.

Cultural Festival: Epoch, the three-day cultural festival of Ace College of Engineering is focused to brought out the hidden talents of the students in different fields.

Teacher's day: 5th September is celebrated as Teacher's Day as a mark of tribute to the contribution made by teachers to the society.

Republic Day: Republic Day is celebrated on 26th January in order to honour the date on which the

Constitution of India came into effect.

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

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:

Skill Development Training Program

To make the program effective following steps were followed

• Identification of skill gaps and the required skill set for the students taking into consideration

the stakeholders' feedback, local needs and the expectations from the industries.

- Preparation of Plan for Skill Development Programs.
- Planning the required human and physical resources.
- Announcement of the program and counseling the students about the importance of these

skills for career as well as its use in day to day life.

- Seeking participation of students for the program.
- Making the infrastructure ready
- Organizing the program and giving wide publicity to all the students and faculty members.
- Follow up of the program
- Getting feedback from students, parents and employers

Best Practice 2

Academic Events

In addition to the standard academic program, the institution is taking an extra step in having the students experts in the individual subject matter. So, apart from the assessment, we gave a realistic approach to all the topics. Technical Quiz Students need to form teams while participating in quizzes, allowing them to hone their teamwork skills. Technical seminars Making students take seminars on the subject topics would

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always help them to understand the subject. This would give them a chance to collect more information about the seminar topic they are provided with. The result is that they would learn the subject well. Because they have to acquire knowledge about the subject of their own. By taking seminars in front of their teachers and friends, the students will be able to talk before a crowd later in their life without any difficulty. Also, they can improve their presentation skills. It is a great chance for the students to improve their skills within their curriculum. They can improve their language. By taking seminars they will become very able to interact with the people which will turn out to be useful in their later life. Brainstorming It Allows Creative Thinking, It Encourages Everyone's Viewpoints, It Involves Everybody, It's Swift and Easy, It Sets a Learning Baseline. Role play is an excellent tool for engaging students and allowing them to interact with their peers as they try to complete the task assigned to them in their specific role. This work can be done in cooperative groups and/or students can maintain the persona of their role throughout the class period. Students are more engaged as they try to respond to the material from the perspective of their character. Role play will give children the skills to handle problematic social interactions, such as bullying, which may happen as they progress through life. Design and Simulation/ Hardware Implementation Modeling and simulation are emerging as an increasingly important tool for education and training. Students can apply previously learned concepts and theories to practical situations solving real designing problems. It helps students see complex relationships that would otherwise involve expensive equipment or dangerous experiments. It provides students with new methods of problem-solving. Allows for math, science, and technical skills to be taught in an applied, integrated manner. Provides realistic training and skills for a multitude of career areas. It is used extensively in industries.

File Description	Document
Any other relevant information	View Document
Best practices as hosted on the Institutional website	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:

ACE KALAM FORUM FOR INNOVATION-AKFI

In this modern era of development a vibrant knowledge Network has to be created across the different sectors to achieve success. For achieving this goal we have inaugurated an innovation forum called ACE KALAM FORUM FOR INNOVATION-AKFI. The club was inaugurated by Dr Pankaj Priyadarshi, Head of Aerodynamic wing at ISRO on 9th may, 2016.

The club will promote inclusive innovations by linking itself into creativity. Primarily, the club will aim at four functions:

1. Search

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- 2. Spread
- 3. Sense
- 4. Celebrate.

The students can take up value addition in local ideas, test some of the innovations, modify the design or cover the whole value chain of Innovation including student based entrepreneurship. The club will also extend its efforts and include activities like skill development and other complementary activities. An industry-institute cell may be made up with in the club so that better awareness about different industries can be brought within the students.

Objectives

- 1. To explore innovative ideas, methodologies and technologies.
- 2. To organize seminar, conferences, workshops, exhibitions relating to innovations.
- 3. To provide opportunities for students to be engaged in innovative activities through creativity and technical workshops.
- 4. To provide a platform for students, teachers and other members of society to showcase their skills by creating new innovations and products.

Various programs were conducted under AKFI:

- 1.ACE Kalam Forum For Innovation(AKFI), ACE College of Engineering, Trivandrum, in association with StudyOwl conducted a Developer Weekend on May 13th and 14th, 2017, on the ever prevailing topic of Web Development.
- 2. Solar auto rickshaw is an innovative vehicle developed by our college students under the guidance of Mr.Remanikanth sir (AP,EEE Dept) and under innovation & experience, an innovative firm, it was launched at ACE college of Engineering on 2nd October 2017 by Hon Minister of Tourism, Kerala Shri Kadakampalli Surendran.
- 3.On 26th September 2019, our team 'Venture' (Aeoronautical Department) under the guidance of Assistant Prof.Prem Kishore sir, conducted our first ever workshop on RC Glider in the forenoon section in the college.

IEDC

The IEDC (Innovation & Entrepreneurship Development Cell) came into existence in ACE College of Engineering with the aim to emerge as a Centre of Excellence in the field of Entrepreneurship Promotion and to act as a catalyst in transforming employable to entrepreneurial communities by translating latent ideas into viable enterprises.

Various events were conducted under IEDC:

Webinar On Orientation To IEDC: ACE College of Engineering IEDC announced the new board of governors for the year 2021-22 led by Mr. Noufal R of Sixth Semester, Aeronautical Engineering Department.

Ideation Webinar By E-Cell IIT Bombay: ACE College of Engineering in association with the Innovation and Entrepreneurship Development Cell conducted a ideation webinar on From Idea to Reality by Mr. Pulkit Jain, co-founder of Vedantu.

Webinar On Digital Entrepreneurship: ACE IEDC is excited to announce the launch of Innovators' Premier League (IPL) at ACE College of Engineering, Thiruvananthapuram.

Innovators' Premier League is an initiative of Kerala Start-up Mission (KSUM) that aims to bring awareness and sensitization of IEDC & its activities among students, building a competitive & entrepreneurial mindset among innovators, and create the pipeline of start-ups.

During IPL, students in the institution will compete with each other at the College level, followed by Regional level competitions under three major pillars – Innovation, Technology & Entrepreneurship. The league competition runs on a point system where institution and students can achieve points through conducting boot camps, workshops, startup generation etc. under various categories.

IEDC Talk On Breaking The Stereotypes Of Entrepreneurship: ACE College of Engineering hosted an IEDC talk series to introduce people to some remarkable innovative entrepreneurs. This time, we had Mr. VIPIN GOPAN, CEO of kinesys tech solutions, to share his astounding story of accomplishment with the public.

Webinar On Virtual Labs For Practical Courses: ACE College of Engineering has been selected as a nodal centre of the Virtual Labs initiative funded by the Ministry of Education (formerly MHRD), Government of India, under the National Mission on Education through Information and Communication Technology. It is envisaged as an e-learning platform for practice oriented subject areas in the same lines of NPTEL for classroom courses, aimed at facilitating learning of engineering and sciences through experimentation in a virtual environment at the preferred pace, place and period (time) of the learner.

In conclusion, our institution stands out in its commitment to fostering innovation and creativity in engineering students. Through the provision of cutting-edge technology and hands-on projects, interdisciplinary collaboration, and a supportive environment that encourages risk-taking and entrepreneurship, our institution is setting the stage for students to turn their ideas into reality. By providing a comprehensive approach to innovation and idea generation, our institution is uniquely equipped to prepare engineering students for the challenges and opportunities of the future. The combination of resources, facilities, and curriculum offered at our institution makes it a premier destination for students looking to develop their skills and bring their ideas to life.

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

5. CONCLUSION

Additional Information:

- The institution is having ISO 9001:2015 certification to maintain a system of operation
- Minor courses like Software Engineering and Robotics & Automation are promoted in every branches to have multi-disciplinary / inter-disciplinary knowledge and job opportunities
- Honour courses are promoted in every branch of study to have a specialization in respective branches.
- Institution has a credit of opening first student chapter of NIQR (National Institute for Quality and Reliability) in Kerala in order to inculcate the interest in the quality and reliability of the work.
- ACE IEDC have secured fourth position in second edition of Innovative Premier League IPL 2.0 among all the colleges in Trivandrum.

Concluding Remarks:

Education plays an important role in the development of an individual's mind and country. ACE College of Engineering aims to impart quality education and make the students technically skillful engineers and socially responsible citizens. The institution lay emphasis on Innovation, Creativity and promotes Universal Human Values in young minds in order to serve the society with empathy.

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6.ANNEXURE

1.Metrics Level Deviations

Metric ID Sub Questions and Answers before and after DVV Verification

1.2.1 Number of Add on /Certificate/Value added programs offered during the last five years

Answer before DVV Verification:

Answer After DVV Verification :26

Remark: As per the revised data and clarification received from HEI, based on that DVV input is recommended.

- Percentage of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (Exclusive of supernumerary seats)
 - 2.1.2.1. Number of actual students admitted from the reserved categories year wise during the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
108	135	114	118	124

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
98	122	105	107	110

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
150	150	150	150	150

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
150	150	150	150	150

Remark: Filled seats not to exceeds earmarked one. Any excess admission made in the categories to be considered as General Merit, DVV input recommended accordingly.

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

2.4.1.1. Number of Sanctioned posts / required positions for teaching staff/ full time teachers year wise during the last five years:

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
72	70	79	75	93

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
70	68	77	73	91

Remark: As per the revised data and clarification received from HEI, based on that DVV input is recommended.

- 2.4.2 Percentage of full time teachers with NET/SET/SLET/ Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)
 - 2.4.2.1. Number of full time teachers with NET/SET/SLET/Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. year wise during the last five years

Answer before DVV Verification:

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

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
6	6	4	2	2

Remark: As per the revised data and clarification received from HEI, based on that DVV input is recommended.

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
4	4	3	5	8

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
4	4	3	5	8

4.1.2 Percentage of expenditure, excluding salary for infrastructure augmentation during last five years (INR in Lakhs)

4.1.2.1. Expenditure for infrastructure augmentation, excluding salary during the last five years (INR in lakhs)

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
32.45	1.96	4.85	46.04	391.21

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
32.45	1.96	4.85	46.04	90.29

Remark: As per the revised data and clarification received from HEI, based on that total expenditure should not be less than any other expenditure so DVV input is recommended accordingly.

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

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
431	408	371	374	424

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
422	408	371	374	424

Remark: As per the revised data and clarification received from HEI, based on that DVV input is recommended.

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

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
119	108	89	85	79

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
119	108	89	85	79

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
144	147	138	143	163

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
134	143	125	135	158

Remark: As per the revised data and clarification received from HEI, based on that DVV input is recommended.

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
2	0	1	2	0

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
1	0	0	2	0

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
21	4	15	17	15

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
4	1	5	6	5

Remark: Events can not split into activities, DVV input recommended accordingly.

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
74	77	91	83	106

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
72	75	89	81	91

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
20	21	22	24	27

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
20	21	22	24	27

Remark: As per the revised data and clarification received from HEI, based on that DVV input is recommended.

2.Extended Profile Deviations

ID	Extended Questions
1.1	Number of teaching staff / full time teachers during the last five years (Without repeat count):
	Answer before DVV Verification: 120
	Answer after DVV Verification: 118
1.2	Number of teaching staff / full time teachers year wise during the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
72	70	79	75	93

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
70	68	77	73	91