

FOR 1st CYCLE OF ACCREDITATION

AL AZHAR COLLEGE OF ENGINEERING AND TECHNOLOGY

PERUMPILLICHIRA P.O THODUPUZHA IDUKKI (DISTRICT) KERALA-685605 685605 engineering.alazharthodupuzha.org

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

May 2023

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Al Azhar College o Engineering and Technology was started in 2010 under the aegis of Noorul Islam Trust with the objective of providing affordable education in engineering and technology in the socially backward district of Idukki. The founder of the college Hj KM Moosa has a vision is to establish a campus providing higher education in all disciplines. This institution is located in a large campus of about 12 acres at Perumpillichira near Thodupuzha. In order to cope up with the rapid advances in engineering and technology and ensuring the quality in teaching and learning process, the college has reinforced its quality and strengthening the processes towards getting accredited with NAAC.

The college is approved by All India Council of Technical Education, New Delhi and recognized by the Government of Kerala. It is affiliated to APJ Abdul Kalam Technological University, Kerala. The institution offers five under graduate programmes, such as Automobile Engineering, Civil Engineering, Computer science& Engineering, Electronics & Communication Engineering and Mechanical Engineering. The serene campus and lush green premises creates a perfect ambience for academics.

Vision

To be the trendsetters in the field of Education by imparting quality Education and facilitating our students to be remarkable through excellence and commitment.

Mission

To prepare each student for Academic, Social and Personal success by developing active and creative minds, a sense of understanding and compassion, courage to act on their beliefs.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Committed management run by Noorul Islam Trust which keeps the reputation and assurance of standard, in reality and in the perception of the public.
- The practice of democratic processes in decision making, especially in planning and executing programmes and activities.
- Dedicated and qualified faculty members are the backbone of this institution.
- All the computers in the institution have Internet connectivity and the whole campus is Wi-Fi enabled.
- Language lab facility for improving communication skills.
- Mentor system to guide and counsel the academic and psychological problems of students.
- We provide in house hostel facility to our students and staff.
- Financial support given to economically weak students.
- Green & Eco Friendly environment spread on 12 acres of land

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• College buses ply all over the district and neighboring districts to make the journey of the students and staff easy

Institutional Weakness

- A rural college situated in north Kerala, having no industries nearby.
- Students from rural areas at their entry level struggle to meet global standards due to the lack of communication skills in English.
- Alumni network is weak and requires strengthening and regular connection
- Slow learners are more
- Lack of research and innovation.

Institutional Opportunity

- Stable management with consistent management policies.
- The institute is regularly organizing various online & offline development programs for the benefit of the faculty and students.
- The faculty and students are provided opportunity to attend guest lectures, training programmes and interaction with eminent personalities.

Institutional Challenge

- Developing self-confidence and communication skills of the students.
- Competition from nearby colleges.
- Quality of student intake.
- Achieving results is the major task.
- Students with diverse background have diverse needs.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Al-Azhar College of Engineering and Technology is an affiliated institution under APJ Abdul Kalam Technological University. The institution takes a number of well-thought-out actions to implement the University curriculum in an efficient manner. The University plans and develops the curriculum and academic calendar, and distributes it to the affiliated institutions. The institution publishes its own academic calendar in accordance with the university academic calendar as the first step of ensuring effective curriculum delivery. The institution has a standard course diary which comprises of Time table, syllabus, course plan, subject coverage, attendance, continuous internal evaluation details, assignments and tutorial details. The assignments and internal exams which are included in the academic calendar are used to assess students internally.

By including different courses and conducting various activities, institution address issues related to Professional Ethics, Human Values, Environment and Sustainability and Gender. To enhance practical knowledge, students are encouraged to participate in experiential learning, which includes project work, internships and fieldwork. Through initiatives sponsored by the Women's Cell, NSS, and other committees, the institution is dedicated to educating students about their social responsibility. Feedback from stakeholders are also collected, assessed and analyzed before taking necessary steps for improvement.

Teaching-learning and Evaluation

The institution strictly follows all the admission procedures, guidelines and regulations as instructed by the Government of Kerala. All the admission procedures are unbiased and transparent. The institution is a home to students all around Kerala. Admissions are purely based on the score of any national level qualifying examination along with the scores of plus two examinations. Any graduate, who has completed any discipline, from any recognised board with a valid score in any national level qualifying examination comes under the eligibility category.

The learning methodologies and outcomes of the students are well monitored and analysed on a regular basis and necessary corrective measures are taken as required. Student learning methodologies include interactive learning, hands – on and intellectual learning processes. Online resources like NPTEL and Coursera are widely promoted by the institution to make learning more easier and effective.

Experienced and dedicated faculty members with excellent academic background are selected as per AICTE norms. The faculty are constantly on their way to excellence and development through the means of FDPs. All faculty members of the institution must have at least one FDP certificate by their name for the ongoing academic year. Faculties monitor the student performance on a regular basis and will provide additional assistance in case of students who have failed to achieve the set benchmark.

Evaluations of the teaching – learning process is calculated on the basis of overall performance and skills acquired. COs are assigned by each faculty member and each assessment is matched to respective CO and PO. Student feedback is collected twice in a semester and is reviewed for further improvements.

Research, Innovations and Extension

AACET has always prioritized innovation, research, and development initiatives and taken significant action in this regard.

The college administration and IQAC urge the teachers to participate in research-oriented programmes and faculty development programmes to keep themselves up to date and provide the students with top-notch education. It motivates them to carry out research in their chosen fields of study to publish papers and to host workshops on the new ideas and research. As a bonus for successful publishing or presentation of research products, our institution offers research incentives to the faculties.

With the technical and financial assistance of the Kerala Startup Mission, the Innovation and Entrepreneurship Development Centre (IEDC) of AACET has been operating well since its establishment. In collaboration with outside organizations, IEDC provides specific training sessions including camps on entrepreneurship and intellectual property rights awareness. Also, the Institutions Innovation Council of AACET coordinates recurring workshops and seminars as well as interactions with entrepreneurs, investors, specialists, etc.

The institution also has several memoranda of understanding (MOU) with various industries that support

research extension activities in order to foster a research culture among students and teachers. The connections with these industries have benefited the students, and a number of activities were organized including industrial projects, internship training, site visits, and training programmes.

The institution is committed in cultivating consciousness about social and environmental issues among its students. NSS students wing of the institution carry out various extension activities such as flood relief, covid-19 pandemic activities, blood donation camps and other outreach efforts as their commitment towards the community.

Infrastructure and Learning Resources

Al Azhar college of Engineering and Technology(AACET) has lush green campus with standard infrastructure, technology-equipped and well-furnished classrooms, Wi-Fi connectivity, spacious library with reading room, well maintained and equipped laboratories, computer facilities, student hostels inside the campus, conference rooms and seminar halls. To conduct regular classes for undergraduate programs the college has adequate spacious classrooms with proper ventilation and lighting. Our institution has excellent laboratory facilities for all the undergraduate programs which focus on students' curriculum based outcome. Sports facilities such as badminton, volleyball and football are provided. A well maintained gymnasium is functioning inside the campus.

The library is set up in a well-spaced area with enough reading space. Library is automated using KOHA and DELNET. Technical magazines, Previous university question papers, and newspapers are also available in the library. Library has membership with the National Digital Library(NDL). High-speed Internet connectivity is always available across all departments, classrooms, and offices. AACET has an official website named https://engineering.alazharthodupuzha.org/.To provide security and safety the entire institution is monitored using CCTV. To facilitate speedy communication among staff and students, AACET has WhatsApp groups with staff and students.

Student Support and Progression

Our institution provides trainings and funds for student support and progression. Each class is provided with an advisor who monitors each student keenly and provides proper support. Over last five years, almost 304 students have benefited by government schemes and 235 students have been benefited by institutional scholarships. Students have been given opportunity to improve their skills through programs that improve their soft skills, language, communication, life, computing skills conducted by the institution. Other supports such as grievance committee and anti-ragging committees conducts meetings frequently and considers their concerns. Grievance portal and suggestion boxes are checked regularly for the complaints. These support systems maintain discipline and create homely atmosphere for the students.

An efficient placement cell provides students training to acquire employability skills. Most of our students pursued higher education and some are placed in firms like Infosys, UST, Ultratech etc. Various programs are conducted in our institution for the physical and cultural betterment of students. Programs like Ablaze, Al-Azhar marathon, Al-Azhar fest etc. were conducted with active participation of students.

Our alumni association organizes meetings and various student support programs for building their career as well as provides financial aid for the deserving ones. Soft skill training and language development programs are

conducted for final year students by the alumni association. The association is also involved in assisting the placement cell.

Governance, Leadership and Management

The institution has a well defined Organizational structure so that the administrative and academic activities are run in an effective manner. Requisite number of committees and cells are formed to ensure the active participation of stake holders .The Institution regularly conducts meetings such as HOD's meeting, IQAC meeting, IEDC meeting, Anti-Ragging ,Students Grevience, Cell, Women 's Cell, Parent Teacher Association , Class Committee and Course Committee. The Institution has a great support system for the promotion of Academic Excellence, Overall Student development, Improving quality education, Employability and Entrepreneurship. Some initiatives taken by IQAC are Periodical monitoring of teaching learning process, Installing ICT enabled classroom, Conducting academic audits periodically.

The institution has a strong system for staff evaluations and staff welfare measures. A number of welfare programmes are instituted, including free meals and accommodation for staff who stay in hostel, Festival Allowances, ESI, PF, Insurance are provided. Casual leave, Sabbatical leave and maternity leave are provided as per KTU regulations. In addition, subsidized treatment is provided at Al Azhar Medical college and Dental College. All staff are allowed to use gym facilities to keep themselves in good physical and mental shape.

Performance based increment and promotion are give based on the report of the Academic Performance Evaluation Committee. An annual budget is prepared by the administrative section and it is discussed and reviewed by the management. The Fund allocated in the budget is used for various expenses which includes Salary, Infrastructure development, Maintenance, Purchase of Library books, Lab Equipments and Machineries. The institution provides financial assistance for teachers and students for participate in Conferences, Workshops, Seminars and Faculty Development programs.

Institutional Values and Best Practices

Documentation in the attachments supports the institution's values and best practices. The institutional values and social responsibilities, such as gender equality, environmental consciousness and sustainability, accessibility for individuals with disabilities, inclusion and situatedness, as well as human values and professional ethics. The other two important components that fall under these criteria are best practices and institutional distinctiveness. Gender equality includes a number of organized programs promoting women's empowerment. Under environmental awareness and sustainability, the use of solid waste management, efficient power use, rainwater harvesting, and other diverse green techniques is mentioned. For students with varying abilities, our college provides amenities including ramps, bathrooms disabled friendly toilets and college bus facilities. As evidenced by inclusion and situatedness, there is a cordial interaction between the institution and the neighborhood. We have conducted and scheduled a lot of events, such as eye camps, blood donation camps, and medical camps. The organization's code of conduct, fundamental principles, human values, and other principles are improved by human values and professional ethics.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College						
Name	AL AZHAR COLLEGE OF ENGINEERING AND TECHNOLOGY					
Address	PERUMPILLICHIRA P.O THODUPUZHA IDUKKI (DISTRICT) KERALA-685605					
City	THODUPUZHA					
State	Kerala					
Pin	685605					
Website	engineering.alazharthodupuzha.org					

Contacts for Communication									
Designation	Name	Telephone with STD Code	Mobile	Fax	Email				
Principal	D F Melvin Jose	04862-227944	8547952116	-	principalaacet@gm ail.com				
IQAC / CIQA coordinator	Kala O.s	04862-229193	9544707582	-	alazharcettdpa@g mail.com				

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular Day

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Recognized Minority institution							
If it is a recognized minroity institution Yes minority.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 Remarks								
AICTE	View Document	29-07-2022	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

Location and Area of Campus									
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.					
Main campus area	PERUMPILLICHIRA P.O THODUPUZHA IDUKKI (DISTRICT) KERALA-685605	Rural	15.83	19601					

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)								
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted		
UG	BTech,Civil Engineering	48	PLUS TWO	English	84	3		
UG	BTech,Auto mobile Engineering	48	PLUS TWO	English	42	8		
UG	BTech,Comp uter Science And Engineering	48	PLUS TWO	English	42	34		
UG	BTech,Electr onics And C ommunicatio n Engineering	48	PLUS TWO	English	30	6		
UG	BTech,Mech anical Engineering	48	PLUS TWO	English	84	6		

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				4				1				54
Recruited	2	0	0	2	0	0	0	0	23	31	0	54
Yet to Recruit		1	1	2		1		1		1		0

	Non-Teaching Staff								
Male Female Others Total									
Sanctioned by the UGC /University State Government				0					
Recruited	0	0	0	0					
Yet to Recruit				0					
Sanctioned by the Management/Society or Other Authorized Bodies				8					
Recruited	1	7	0	8					
Yet to Recruit				0					

	Technical Staff									
	Male Female Others Total									
Sanctioned by the UGC /University State Government				0						
Recruited	0	0	0	0						
Yet to Recruit				0						
Sanctioned by the Management/Society or Other Authorized Bodies				15						
Recruited	11	4	0	15						
Yet to Recruit				0						

Qualification Details of the Teaching Staff

	Permanent Teachers										
Highest Professor Qualificatio n		Associate Professor		Assistant Professor							
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0	
Ph.D.	2	0	0	0	0	0	0	0	0	2	
M.Phil.	0	0	0	0	0	0	0	0	0	0	
PG	0	0	0	0	0	0	23	31	0	54	
UG	0	0	0	0	0	0	0	0	0	0	

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

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

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	10	0	33	0	43
	Female	5	0	9	0	14
	Others	0	0	0	0	0
Diploma	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years						
Category		Year 1	Year 2	Year 3	Year 4	
SC	Male	3	2	2	0	
	Female	0	1	1	0	
	Others	0	0	0	0	
ST	Male	0	1	3	1	
	Female	0	0	0	0	
	Others	0	0	0	0	
OBC	Male	37	47	17	3	
	Female	11	26	13	0	
	Others	0	0	0	0	
General	Male	11	11	11	2	
	Female	1	9	4	1	
	Others	0	0	0	0	
Others	Male	1	3	2	0	
	Female	0	3	0	1	
	Others	0	0	0	0	
Total		64	103	53	8	

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:

In an engineering college, there are numerous multidisciplinary and interdisciplinary possibilities that can enhance the educational experience and prepare students for a wide range of career opportunities. Al Azhar College of Engineering and Technology is affiliated to KTU and is bound to follow the curriculum and syllabus prescribed by the affiliating university. So AACET follows all the multidisciplinary and inter disciplinary courses as per the syllabus. In addition we are offering add-on courses outside the syllabus to enrich the learning experience of the students. The NEP 2020 is advocating phased autonomy to colleges which will facilitate AACET to start more interdisciplinary courses, to face the challenges of the post-Covid job market: like combine different disciplines of engineering with medical science, dental science, bio sciences, environment science, bioinformatics, data sciences and many more which will really benefit students and the society at large.

2. Academic bank of credits (ABC):

The Academic Bank of Credits (ABC) is relatively new concept put forward in the NEP 2020. It conceives about a system or concept where academic credits are accumulated and transferred between educational institutions. It is envisaged in the NEP that a student can deposit the credits he/she accumulates in UG/PG education to a national registry so that he/she can transfer the credits if he transfers to another college or use the credits in the event of continuing studies after dropping out from a college for a few years. AACET will also register for the student-centric revolutionary idea of Academic Bank of Credits (ABC) once it is open for registration.

3. Skill development:

Al Azhar College of Engineering and Technology focuses on the development of technical skills and soft skills of the students in order to equip them to face the challenges of the global job market. The institution trains the students to acquire skills such as interview skills, writing & communication skills, resume writing, group discussions and presentation skills. Skill development is an important feature of NEP 2020 and very crucial in engineering colleges as it increases the employability of an engineering graduate. Skill development programs in engineering colleges help students acquire industry-relevant

skills, making them more employable and increasing their chances of securing desirable job opportunities. Skill development initiatives at AACET helps to bridge the gap by aligning the curriculum with industry needs. It ensures that students are equipped with the latest skills and technologies, making them better prepared for the professional world. Skill development programs focus on hands-on training, laboratory work, and project-based learning, allowing students to apply their theoretical knowledge in real-world scenarios. This practical exposure enhances their problem-solving abilities and critical thinking skills, making them more proficient engineers.

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

Integrating the Indian knowledge system into university education is important to promote a holistic and well-rounded approach to learning. The institution can incorporate courses or modules that explore Indian philosophy, literature, arts, history, Ayurveda, Yoga and Vastu Shastra. IKS can include subjects like ancient Indian sciences, traditional knowledge systems, and indigenous art forms. Such courses can be offered as add-on or as part of an interdisciplinary curriculum. These courses can be offered through online portals like NPTEL and SWAYAM. Experiential learning through field trips to historical sites, cultural institutions, traditional art centers, and ancient temples, archaeological sites, or interactions with traditional artisans and craftsmen which will to provide students with hands-on experiences related to the Indian knowledge system.

5. Focus on Outcome based education (OBE):

Outcome-based education (OBE) is an approach that emphasizes defining desired learning outcomes and aligning teaching and assessment methods to achieve those outcomes. These outcomes should be specific, measurable, achievable, relevant, and time-bound (SMART). They should reflect the knowledge, skills, and competencies that students are expected to demonstrate upon completion of the program or course. Implementing outcome-based education requires a systemic approach involving curriculum design, teaching methodologies, assessment strategies, and continuous evaluation. By focusing on clearly defined learning outcomes and aligning all aspects of the educational process, institutions can enhance student learning, improve graduate outcomes, and ensure the relevance and quality of their programs The college is upgrading to an

Outcome Based Educational methodology with the continuous endeavor of the faculties. Teachers are given adequate training through FDPs from the point of inception of OBE in the institution

6. Distance education/online education:

Online education has become operational and widely adopted in the wake of Covid-19 pandemic. Even after the pandemic the prospects of online education continue to be promising. AACET also conducted classes online during the pandemic. Our faculties used Google classroom, Google-meet and Zoom platforms for instruction. SWAYAM/NPTEL portals provide UGC approved courses which make the online courses legitimate and popular. While online education offers numerous advantages, it's important to acknowledge that certain subjects or skills may still require practical, hands-on training or face-toface interactions. AACET after the pandemic, uses online teaching to help students with remedial coaching and students who work while they learn. As only Universities can run distance education courses AACET doesn't plan distance education courses. 1. Accessibility: Online education has opened up access to education for individuals who may face barriers to traditional forms of learning, such as geographical distance, physical disabilities, or personal commitments. Students can participate in courses and programs offered by institutions around the world without having to relocate or commute. 2. Flexibility and Convenience: Online education offers flexibility in terms of scheduling and location. Students can access course materials and lectures at their convenience, allowing them to balance their studies with work, family, or other commitments. This flexibility is particularly beneficial for adult learners or those seeking to upskill or pursue additional education while working. 3. Diverse Learning Options: Online education provides a wide range of courses and programs across various disciplines. Students can choose from a vast selection of subjects, levels, and formats to meet their specific learning needs and interests. Whether it's earning a degree, acquiring professional certifications, or learning new skills, online education offers diverse options. 4. Cost-Effectiveness: Online education can be more costeffective than traditional education. It eliminates expenses associated with commuting, accommodation, and campus facilities. Additionally,

online courses and programs often have lower tuition fees compared to their on-campus counterparts, making education more affordable and accessible to a broader range of learners. 5. Interactive Learning Experience: Online education platforms have evolved to provide interactive and engaging learning experiences. Features like discussion forums, video conferences, and virtual classrooms facilitate collaboration, peer-to-peer learning, and real-time interaction with instructors. Furthermore, multimedia resources, simulations, and interactive assessments enhance the overall learning experience. 6. Personalized Learning: Online education can cater to individual learning styles and paces. Students can progress through the material at their own speed, review content as needed, and focus on areas that require more attention. Additionally, adaptive learning technologies and personalized feedback can provide tailored learning experiences, addressing the unique needs of each student. 7. Global Networking Opportunities: Online education fosters connections and networking opportunities among students, instructors, and professionals worldwide. Virtual platforms enable collaboration and knowledge sharing across geographical boundaries, allowing learners to engage with a diverse community of peers and experts, expanding their global networks. 8. Continuous Learning and Lifelong Education: Online education encourages lifelong learning by providing accessible and flexible options for individuals at any stage of their lives or careers. Professionals can acquire new skills, stay updated with industry trends,

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?

Electoral Literacy Club (ELCs) has been set up in the college as a forum to engage college students and inhabitants of the village to make them realize the importance of the right to vote which is the most powerful tool in a democracy. The Election Commission of India (ECI) has instructed all educational institutions to form ELC with the aim of educating and assuring the participation of young people who are the future voters and the foundation of Indian democracy. To provide the experience-

based learning of the democratic system, we undertake simulated voting events. We also hold debates, mock parliaments, election competitions, essay contests, and other activities that will create a proper awareness of the electoral processes. 2. Whether students' co-ordinator and co-ordinating Yes, The Institution has a functional ELC with the faculty members are appointed by the College and following office bearers: (1) Faculty Co-ordinator: whether the ELCs are functional? Whether the ELCs Mr. Bala Arun. K. B (2) Student representative from are representative in character? each department are: (a) President: Althaf Sajeed (b) Vice President: Merin Varghese (c) Secretary: Mridula O Nair (d) Joint Secretary: Abin Sony 3. What innovative programmes and initiatives The ELC has conducted some programmes for the purpose of giving awareness among students and the undertaken by the ELCs? These may include voluntary contribution by the students in electoral voters of the nearby panchayat wards. Activities done processes-participation in voter registration of by the ELC of AL Azhar College of Engineering & students and communities where they come from, Technology: a) Our students take part in voter assisting district election administration in conduct of education campaigns intended to educate the public poll, voter awareness campaigns, promotion of in the nearby villages. b) To educate the designated ethical voting, enhancing participation of the under populations about new voter registration. c) privileged sections of society especially transgender, Programmes to raise awareness and enthusiasm commercial sex workers, disabled persons, senior among academic staff and students. citizens, etc. 4. Any socially relevant projects/initiatives taken by The ELC has taken initiative to create democratic College in electoral related issues especially research awareness among the social groups of our locality by projects, surveys, awareness drives, creating content, conducting flash mobs and distributing pamphlets to publications highlighting their contribution to the people. The "My Vote, My Voice" signature advancing democratic values and participation in campaign was conducted by the ELC in order to raise electoral processes, etc. awareness about the importance of voting in the Kerala state assembly election scheduled on 6th April 2021. On 30th March 2021, the ELC unit of Al Azhar College of Engineering & Technology conducted an official campaign for first-time voters on the engineering campus. Dr. D. F. Melvin Jose, the college's principal, made the presidential address. A sense of awareness session was handled by staff coordinator Assistant Professor Bala Arun, from the Department of Mechanical Engineering. The event has a participation of more than 60 students. Althaf Sajeed, a first-year student in the mechanical engineering department, offered the vote of thanks. 5. Extent of students above 18 years who are yet to be Students above 18 years are identified and enrolled as voters in the electoral roll and efforts by encouraged to register as voters in their respective Taluk offices. For the first time voters, ELC ELCs as well as efforts by the College to institutionalize mechanisms to register eligible organized a demo EVM voting in coordination with the 'Idukki' District Election Commission Officer. students as voters.

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
215	190	159	166	255

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

2 Teachers

2.1

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

Response: 197

7	File Description	Document
	Upload Supporting Document	View Document
	Institutional data in 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
57	66	74	78	84

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
87.41203	143.73485	90.55508	222.80936	279.89550

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File Description	Document
Upload Supporting Document	<u>View Document</u>

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:

Al Azhar College of Engineering and Technology is affiliated with APJ Abdul Kalam Technological University (KTU) and approved by AICTE and Government of Kerala.

The institution complies with the curriculum set by the affiliating university. As per the university schedule, the Academic Council and IQAC prepare the academic calendar which includes schedule for first year student's induction, activities, seminars, internal exams, publication of internal marks and sports activities.

The HOD of each department allocates courses to the faculty members based on their specialization and preferences. The institution has a well-made course diary which comprises of Time table, syllabus, course plan, subject coverage, attendance, continuous internal evaluation details, assignments and tutorial details. The class committee, course committee and advisory committee meetings are conducted in every semester consisting of Chairman, HOD, faculty advisor of the class, all teachers who teach that class and representative students of the class.

The faculty maintains a lesson plan and course file which are regularly reviewed by the HOD and Principal. They also use ICT teaching aids to conduct classes more effectively. The HODs periodically review the progress in the syllabus completion and also the student's performance. The institution undergoes internal and external academic audits in every semester conducted by IQAC and university respectively

The on-going internal assessment of students is done through the conduct of assignments and internal examinations that are included in the academic calendar. The timetable for internal exams is prepared by the examination cell and displayed in advance. The descriptive component is scored on 25, assignment is scored on of 15, attendance is considered out of 10 and thus final internal marks of the student are assessed. Parents are informed about the performance of the students and PTA meetings are convened time to time.

A team made up of the seminar coordinator, seminar guide, and other faculty members evaluates the seminar internally in the seventh semester. Mini project work is done in sixth semester and CIE is marked out of 75. The project guide conducts a weekly review of the internal appraisal of project work. In the seventh semester, the topic is approved, and a preliminary assessment is made on it. Interim evaluations are used to examine the project work's progress, and final evaluations are completed over the course of eight semesters.

The Central library is equipped with text books and reference books which are prescribed in the syllabus. E-journals are also provided for both students and faculty members. Apart from formal education, for

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promoting industry-related skills, the institution conducts various value added courses in partnership with ASAP with which it has entered into MOU. Institution also motivates students to actively participate in workshops, internships so that they can acquire employability skills.

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

1.2 Academic Flexibility

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

Response: 09

File Description	Document	
List of students and the attendance sheet for the above mentioned programs	View Document	
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	View Document	
Institutional data in the prescribed format	View Document	
Evidence of course completion, like course completion certificate etc. Apart from the above:	View Document	
Provide Links for any other relevant document to support the claim (if any)	View Document	

Other Upload Files	
1	View Document

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

Response: 45.18

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

2021-22	2020-21	2019-20	2018-19	2017-18
76	122	121	29	97

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

1.3 Curriculum Enrichment

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

Response:

Al Azhar College of Engineering and Technology follows the curriculum offered by KTU which includes many courses that cover the interrelated topics related to Gender, Professional Ethics, Environment and Sustainability and Human values. The institution integrates these cross-cutting issues into the instructional system as demanded by the curriculum of KTU, the affiliating University. The IQAC and different clubs take initiatives for conducting various programs to address these issues.

Addressing Human Values and Professional Ethics Related Issues

To educate students on moral and social values, the affiliated university has included the courses such as Professional Ethics, Constitution of India, Sustainable Engineering in the curriculum. NSS camps are conducted for social work to improve the human values among students. Antidrug awareness camps and blood donation camps have been conducted to inculcate the moral values. KTU has included the papers such as Life Skills and Business Economics which deals with how a professional should behave in an organization. KTU has also included Human Relations Management in the curriculum which discuss about the human relations and their values as well.

Addressing Gender Related Issues

Institution provides both boys and girls equal preferences in all the aspects such as Admission, Cocurricular, Curricular and Extra-curricular activities. Various programs such as seminars, invited talks etc. are being conducted for students and staff in association with **Women's Grievance Redressal cell** in our institution. It will lead to promote gender equality. Institution also provides an **Internal Complaints Committee**, a body envisaged to receive complaints on sexual harassment at the institution from an aggrieved woman and to take action and inquiry of such complaints. That committee will take care of various issues like women's right and security and also creates an atmosphere free from all the gender

discrimination and sexual harassment. Equal representation of boys and girls in all student bodies and events are promoted in the institution. Responsibilities have been given equally to everyone irrespective of gender. This will help the students to show mutual respect with opposite gender.

Addressing Environmental and Sustainability Related Issues

The institution has installed Solar Panels for the conservation of energy. Rain Water Harvesting and Sewage Water Treatment Plant has been developed to conserve water for environmental protection. RWH is often used to supplement the main water supply and also to provide an independent water supply during water scarcity.

LED lightning has used in the institution to balance tight budgets while creating a safe campus and environment. It helps in better power consumption and decrease maintenance cost. Through the adoption and practice of environmentally friendly practices among students and employees, the institute also supports a clean and green campus.

List of courses related to Sustainable development

- MCN201: Sustainable Engineering.
- MCN202: Constitution of India.
- MCN301: Disaster Management.
- EST200: Design and Engineering.
- HUT200: Professional Ethics.
- HUT300: Industrial Economics and Foreign Trade.
- HUT310: Management for Engineers.
- HUT101: Life Skills.
- MCN201: Sustainable engineering.
- CET455: Environmental Health and Safety.
- MCN401: Industrial Safety Engineering.
- CET362: Environmental Impact Assessment.
- CET464: Air Quality Management.
- CET468: Climate Change and Sustainability.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

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

Response: 39.07

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

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Response: 84				
File Description	Document			
Upload supporting document	<u>View Document</u>			
Institutional data in the prescribed format	View Document			

1.4 Feedback System

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

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

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

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Enrolment percentage

Response: 17.52

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

2021-22	2020-21	2019-20	2018-19	2017-18
64	103	53	8	39

2.1.1.2 Number of sanctioned seats year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
270	270	270	294	420

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

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

Response: 41.94

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

2021-22	2020-21	2019-20	2018-19	2017-18
29	45	34	4	18

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

2021-22	2020-21	2019-20	2018-19	2017-18
56	56	56	58	84

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

2.2 Student Teacher Ratio

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

Response: 3.77

2.3 Teaching-Learning Process

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

Response:

Al-Azhar College of Engineering and Technology promotes the use of ICT enabled tools which include online resources for an effective teaching and learning process. Faculty members use IT enabled teaching techniques like PPT, video clips, online resources to help students get experience in advanced knowledge and the learning process. The library has digital resources such as e-books and e-journals, Delnet and National Library ID to support ICT in teaching. Each department is equipped with a smart classroom that consists of a projector and a laptop for ICT. Students enrolled in MOOC courses offered through Google Cloud, ASAP, NPTEL and Swayam. During practical sessions, faculty encourage the use of simulation videos or tools to support, enhance and optimize information delivery. Teachers upload course materials to online platforms such as Google classrooms and YouTube channels for students to access the content. The internet connection provided by the institution helps students with excellent sources of information. In

addition to conventional teaching methods, the institute is keen on promoting innovative methods to enrich the learning experience.

Methodologies include:

Experimental learning:

- Project work: As part of the curriculum project work is organized in two phases. Simulation tools are used for verifying the results.
- Internship or field Projects in industry: Departments plan and organize online internships for the students to acquire critical opportunities to explore and expertise in job functions that match their academic and personal interests.
- Field Visits: Faculty identifies and proposes field visits and surveys based on their specifically designed as per the course.
- Lab Experiments: As part of the curriculum various software and simulation tools are provided for the students to explore their technical knowledge.

Participative learning

- Invited Lecture: Guest lectures via online by renowned experts from industry and academics are assigned to supplement the teaching process and provide experimental learning.
- Peer to Peer sessions: Students are divided into groups and an interactive learning process is encouraged.
- Participation in competition at various levels: For Real time exposure students are revitalized to participate in inter college and university level competitions.
- Technical events: Department wise student's associations are formed to ensure participation of students in various programs. Technical fests are conducted to exhibit the technical skills and talents of our students.
- Al azhar FEST: Every year Al Azhar group of institutions is conducting an intercollegiate fest, organized by the student community, involving participants from other colleges as well with the support of faculties and management. Here students from various streams are put together to manage a mega event.

Problem solving methodologies

- Tutorial Sessions: As part of the curriculum tutorial sessions are conducted for all problematic and derivative subjects.
- Technical Quizzes: Technical quizzes are conducted in each branch as part of department associations via online and offline mode.
- Free internet access: Free internet access is ensured in the library and in the campus which helps promote the habit of self-learning and discussion among students.
- Assignments and Tutorials: Assignments and tutorials on relevant topics in every course are given which make the students imbibe the self-learning capability by utilizing online resources.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

2.4 Teacher Profile and Quality

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

Response: 99.17

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

2021-22	2020-21	2019-20	2018-19	2017-18
57	66	73	82	84

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

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

Response: 3.9

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

2021-22	2020-21	2019-20	2018-19	2017-18
3	3	3	3	2

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

2.5 Evaluation Process and Reforms

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

Response:

Internal assessment at the college is transparent and every student has an idea about the standard process of internal assessment of theoretical and practical subjects. Before the start of the academic year the college formulates an academic calendar. There will be at least two internal examinations in each semester. Internal exams are held on the scheduled date according to the institution's academic calendar. The exam schedule will be published on the department notice board 10 days before the scheduled date. The examination cell prepares circulars for the students regarding the seating arrangements and examination rules. The total marks for internal examinations will be 50 marks for each subject which will later be normalized to 20 marks in case of 2015 scheme and 12.5 in case of 2019 scheme for final assessment. The exam part will have at least 50% of the syllabus according to the rules of the university. The faculty handling the subject will prepare two set of question papers and the evaluation scheme based on the outcomes specified in the subject. After that scrutiny will be done at the department level and question paper for the conduct of exam will finalize. The answer sheet has been evaluated and scripts are returned to the students for verification and students can contact the subject faculty directly for any clarifications. If a student does not appear for any of the serial tests due to serious reasons or fails in the examination, he/she can appear for the retest to improve the internal marks. At least two assignments are given for each subject. The Faculty Advisor of each batch will collect monthly attendance from the faculty and publish the monthly attendance regularly.

Each department organizes class and course committee meetings according to university standards for student feedback, complaints and suggestions on subject matters. Internal grades are displayed on department notice boards and communicated to students. Internal marks for practical classes are 100 which includes 70 marks for daily assessment and Viva 30 marks based on the final test conducted at the end. Once the sessional marks are finalized and approved by the Academic Board, this is then uploaded to the university portal. For several subjects, such as a comprehensive exam, design projects and a seminar, the project has only an internal award. In such cases, the evaluation process is carried out by evaluation committees composed of each department regularly according to university regulations.

The college has a well-structured examination grievance redressal mechanism. A student may approach the faculty, faculty advisor, department head, and Principal for redressal of examination related complaints as

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per the requirement and jurisdiction of the complaint.

University level: If any student feels that the marks obtained in any paper are not fair, he/she can apply for re-evaluation by paying the fees to the college office. The college examination cell will assist the students in the application process. If there is a change in the score, then the remitted fee will be refunded by the university itself.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

2.6 Student Performance and Learning Outcomes

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

Response:

The Outcome Based Education (OBE) system was introduced by our institute years ago. For this aim, Programme Outcomes (POs), Programme Specific Outcomes (PSOs), and Course Outcomes (COs) have been defined. Expected results are taken into consideration throughout course preparation, material delivery, and assessment.

Program Outcomes (POS) outline the expected professional achievements students should reach upon finishing the program. POs encompass various interconnected knowledge areas and skills, defining the necessary disciplinary knowledge and abilities students should possess, as well as the level of learning expected upon course completion. Our institution adheres to the 12 Programme Outcomes established by the National Board of Accreditation for undergraduate programs.

Program-specific outcomes (PSOs) are statements that delineate the expected capabilities of students upon successfully finishing a specific engineering program. These PSOs are formulated by the respective departments in collaboration with various stakeholders, including faculty, parents, alumni, and industry representatives. The committee responsible for developing the PSOs reviews input and suggestions from these stakeholders and finalizes the outcomes accordingly. It is possible for the PSOs to be revised or modified in the future based on the needs identified during committee meetings. Each undergraduate (UG) program within our institution possesses three to four program-specific outcomes (PSOs) that are distinct and tailored to the respective field of study.

Course outcomes (COs) enumerate the specific knowledge and skills that students acquire upon completing each course. They represent the cognitive functions provided by the course. During department meetings, which include representation from all relevant stakeholders, the COs are formulated. The course committee engages in extensive discussions to establish the course outcomes and their alignment with program

outcomes (POs) and program-specific outcomes (PSOs). Similarly, COs are developed for laboratory classes through a similar process.

The program outcomes, program-specific outcomes, and course outcomes for all programs offered by the institution are clearly defined and made available on the college website and department notice boards. These outcomes are also effectively communicated to both teachers and students. Regular seminars and webinar sessions are conducted to educate faculty members about the importance of learning and teaching strategies aligned with the desired outcomes. The Head of the Department (HOD) collaborates with the faculty to raise awareness among students and emphasize the importance of achieving these objectives. In accordance with university standards, each department conducts periodic meetings of the class committee, course committee, and advisory committee.

At the beginning of each semester, the committees, comprising student and faculty representatives, convene to discuss the program-specific outcomes and course outcomes pertaining to the relevant subjects. Subsequently, committee members in each course arrange peer-to-peer sessions to apprise other students about the program-specific outcomes and course results. During mandatory orientation programs, new students receive comprehensive information about the objectives and expected outcomes of their program. Moreover, students are provided with the complete syllabus, learning objectives, and assessment plan for each course.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

2.6.2 Attainment of POs and COs are evaluated. Explain with evidence in a maximum of 500 words

Response:

Faculties evaluate students subject-specific knowledge, skills, and critical thinking abilities through Continuous Internal Evaluation and End-of-Semester Exams. These assessments are used to gauge the achievement of program outcomes, program-specific outcomes, and course outcomes. The course outcomes for all courses were mapped to program outcomes (POs) and program-specific outcomes (PSOs) using correlation levels ranging from 0 to 3. A correlation level of zero indicates no correlation, one indicates minimal correlation, two indicates moderate correlation, and three indicates significant correlation.

Bloom's Taxonomy is a hierarchical framework used to classify educational objectives and learning outcomes. It categorizes cognitive skills into six levels, starting from lower-order thinking skills to higher-order thinking skills.

- 1. Remembering: This level involves recalling or recognizing information.
- 2. Understanding: This level focuses on comprehending and explaining concepts or ideas.

- 3. Applying: This level emphasizes using knowledge and principles in new situations.
- 4. Analyzing: This level involves breaking down information into its constituent parts and examining relationships between them.
- 5. Evaluating: This level involves making judgments and assessments based on criteria and evidence.
- 6. Creating: This level represents the highest level of thinking, where individuals generate new ideas, designs, or interpretations.

Bloom's Taxonomy provides a framework for educators to design learning activities and assessments that promote critical thinking and higher-order cognitive skills in students.

The direct attainment is determined by end-of-semester exams and continuous assessment, which takes into account assignments, internal examinations, tutorials, and other activities provided by the faculty. Internal tests are administered internally by the college. The end-of-course evaluation for each course is used to compute indirect attainment. Students' opinions on all the COs should be able to be solicited through the final course survey form. Each course outcome is given a grade depending on the results. Once both direct attainments have been attained, the weighted average of direct attainment (80%) and indirect attainment (20%) is used to calculate the overall attainment of each course outcome.

The faculty sets a cut off for each course result, and attainment is compared to the cut off value. The course outcome is considered achieved when the total attainment meets or exceeds the cutoff. If the attainment falls short of the cutoff, corrective actions will be implemented to improve the achievement. At the beginning of the semester, the faculty members align the program outcomes (POs) and program-specific outcomes (PSOs) with the course outcomes (COs). Once the complete attainment of COs is reached, the alignment is used to assess the extent of PO and PSO attainment. Successful attainment is determined when the comparative value is close to or equal to the linked value. If there is a significant disparity in attainment, corrective action will be taken.

File Description	Document
Upload Additional information	View Document

2.6.3 Pass percentage of Students during last five years (excluding backlog students)

Response: 82.52

2.6.3.1 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
6	19	78	37	63

2.6.3.2 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
19	29	79	45	74

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

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.65

File Description	Document
Upload database of all students on roll as per data template	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

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

Response: 0.3

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

2021-22	2020-21	2019-20	2018-19	2017-18
0.3	0	0	0	0

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

Response:

Al Azhar College of Engineering and Technology grooms the students to be technically oriented, innovative and lifelong learners with the aim of creating and transferring knowledge through the following programs. The Institution promotes innovation and entrepreneurship development as they are of vital importance with the changing scenario of technical education.

Conscious efforts are made to foster creativity and critical thinking among students in complying with AACET's aim to evolve into a transformational leader in education. The College encourages students to take part in group discussions, debates, and seminars that help them analyze and explore novel ideas with the goal to enhance their critical thinking. Every student does at least one project during their four-year programme. Students are allowed to choose the projects of their interest with proper guidance from the project guides within the department. These projects foster student's creativity and inventiveness.

AACET has taken a number of steps to promote entrepreneurial skills of students like:

IEDC: Innovation and Entrepreneurship Development Centre (IEDC) of AACET has been actively functioning since its inception with the technical and financial support of the Kerala Startup Mission.

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IEDC is keen in providing support to students, for conversion of their idea into a prototype. IEDC organizes special training like Intellectual Property Right Awareness and Entrepreneurship Awareness Camps in association with external agencies.

IIC: AACET's Institutions Innovation Council strives to carry out a variety of innovation- and entrepreneurship-related tasks as ordered by Central MIC in a timely manner. With the participation of many industries, AACET organizes trainings, workshops, seminars with active collaboration of investors which give the students a kind of optimism and training to start their own project startups.

ADD-ON COURSES: Add on courses are offered to students in different branches of B.Tech program. It provides students with important employable skills through a variety of certificate programmes and fosters the creates industry-related skill development.

NPTEL: National Programme on Technology Enhanced Learning a digital learning platform initiated and created by the faculty members of IITs and IISc provide video lectures for various courses in Engineering, Sciences and Technology. AACET being an NPTEL Local Chapter, encourages faculty members and students to take up online courses in their subjects of interest. This creates fundamental knowledge and understanding outside the prescribed syllabus. The courses will also help prepare candidates for the entrance examination for their higher studies.

Financial Assistance: AACET provides Research Incentives to the faculty, scholars and students. It serves as a tool for supporting research activities or rewarding personnel for the successful publication or presentation of research outputs, funded projects, etc.

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

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: 6

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
4	2	0	0	0

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: 0.02

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
1	1	2	0	0

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

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: 0.09

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
15	2	0	0	0

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

3.4 Extension Activities

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

Response:

NSS UNIT 635 prepares to carry out extension activities like social outreach programs, one-day and three-day camps in pursuit of its service to the community and society. The Institution motivates the students to do innovative projects which solve social problems through the different project scheme and academic projects. Major activities done by the institution are listed below:

Flood Relief Activities:

The students of AACET actively participated in the flood relief operation of 2018/19;

- Organized flood relief camp from 12th to 17th august 2019.
- Collected and Supplied food, medicines and all other necessary items as per the needs of the flood affected people of Kuttanadu.

Covid-19 Pandemic Activities: -

AACET actively participated in the covid-19 pandemic activities such as;

- Supplied hand sanitizers during the deficiency of same in these Covid 19 pandemic situations.
- Hand overed 12 Oximeters to the District collector, Idukki.
- Organized a post covid-19 medical camp lead by Dr. Edwin George (Associate Professor, Al Azhar Medical College) for the residents of Kumaramangalam Gramapanchayath.
- A post covid awareness session was given to all attendees of the medical camp by Dr Surabhi Somam, Medical Officer Kumaramangalam FHC.
- About 100+ student donors have registered in 'RUDIRASEENA PORTAL' to overcome the blood shortages in blood banks due to covid pandemic.

Helping the Needy:

AACET conducted several programs for developing care and concern for the physically disabled and needy such as;

- Snehasparsham: NSS unit of AACET organizes regular visit to old age homes. Students indulge in various entertainment programs for the elderly.
- Supplied the needful devices for online classes for under privileged people of Idamalakkudy village, Idukki district.
- Supplied laptops to all the students admitted to the college after the covid-19 pandemic.

Helping Hand towards the Local Community:

As part of a commitment to the local community, the college has conducted many programs such as:

- An awareness session against drug abuse in collaboration with the "Vimukthi" project under Kerala Excise Department was organized.
- A stem cell donation awareness and donor's registration program was organized in association with Datri Stem Cell Registry at district level on 20th October 2022.
- AACET NSS Unit in coordination with Nehru Yuva Kendra, Idukki, jointly organized a seminar on 'JALAJAGRAN ABHIYAN' and also launched a project on "Digital Banking Awareness" by Kumaramangalam Panchayath President.
- Launched an anti-drug campaign addressed by Sri. Rishi Raj Sing IPS on 20 January 2018 to eradicate drug abuse.
- Visited the Perumpillichira Anganvady on 14th November 2017 as a part of the Childrens day celebration.
- Conducted orientation class, poster design competition etc. on Anti-Tobacco day on 31st May 2017

Swachh Bharath Mission:

The college has organized events such as:

- Planted tree saplings and cleaned the college premises as part of Environmental day.
- Construction of rainwater harvesting system on college premises.
- Removing over 1000 plastic bottles from the Munnar region for proper recycling and 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:

The Institution strongly believes in cultivating a sense of social responsibility in our students, empowering them to serve humanity better. Conforming to this mission, the institute encourages the NSS unit of the Institute, which has been functional since 2016, with a mandate to carry out extension activities in pursuit of its service to community and society. Our Institution received several recognitions from various government/government recognized bodies for carrying out these activities. The major achievements of the college are listed below.

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Recognitions received for flood relief activities:

The unprecedented flood situation that occurred in Kerala in august 2018 badly affected the lives of people. Our students provided exceptional support in all possible ways during rescue and relief activities. The variety of actions included packing "take home kits" in areas destroyed, gathering food and other supplies for relief camps, and offering temporary shelter to those who were affected. It is a matter of happiness and pride to note that AACET received a token of appreciation from **Haritha Keralam Mission** for conducting clean drive for flood affected region of Ranni, Pathanamthitta. AACET members ignoring their personal difficulties came forward as volunteers for cleaning of houses and public places.

Recognitions received for Swachh Bharath Mission:

Swachh Bharat is a national level campaign by the Government of India to clean the streets, roads and infrastructure of the country. As a part of this mission, AACET regularly conduct various activities like planting trees, cleaning rural areas as well as college premises, construction of rainwater harvesting system.etc. Our NSS unit conducted a clean drive at a rural area near our institution on 2018 for which we have received an award from **Kumaramangalam Grama Panchayath**.

Recognitions received for Medical Camps conducted:

Health camps are organized regularly in AACET in association with NSS unit to meet the quick health care needs of the underprivileged communities in neighborhood areas and students of our institution. At the same time, it helps in creating awareness among the students about their health and hygiene. With this in view, we have conducted a number of health check-up, blood donation camps as well as health awareness camps in the institution. These camps have been vital in the scenario of the greatest pandemic of all times. AACET received a certificate of appreciation from Government of Kerala for organizing the maximum number of camps in Alappuzha-Kottayam-Idukki region under **Rudhirasena portal** in the period 2021-2022. Also we received a token of appreciation from IMA Blood Bank Society, Thodupuzha for best VBD camp in 2022.

In addition, we have also received tokens of appreciation from the schools nearby where the Institution conducted on job training programs, quiz competitions, career guidance. We have also received the award for "best engineering college" from RTI Council and Kerala Consumer Protection for the year 2022.

Overall, the college has received several recognitions for conducting extension activities from various government and non-government bodies.

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

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

Response: 19

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

2021-22	2020-21	2019-20	2018-19	2017-18
6	6	3	2	2

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

3.5 Collaboration

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

Response: 0

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

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

- 4.1.1 The Institution has adequate infrastructure and other facilities for,
 - teaching learning, viz., classrooms, laboratories, computing equipment etc
 - ICT enabled facilities such as smart class, LMS etc.

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

Response:

Infrastructure Facilities:

Al-Azhar college of Engineering and Technology (AACET) aims to provide a good infrastructure for the professional and personal growth of engineering students as well as to meet the academic and administrative requirements of the college. The institution complies with land requirements, classroom specification, and laboratories as per All India council for Technical Education (AICTE) and University norms. The institution's vision is "To be the trendsetters in the field of Education by imparting quality Education and facilitating our students to be remarkable through excellence and commitment". To develop students with industry-related skills, the college actively undertakes value-added programs in partnership with Kerala state Centre for Advanced Printing Technologies (C-apt), Conceptia Software Technologies, and Additional Skill Acquisition Programme. Students are encouraged to be part of various clubs to gain adequate knowledge in their chosen field of interest. The campus showcases lush green scenery. A modern library with a well-stocked collection of books and Wi-Fi connected computers to facilitate digital learning and encourage research. The entire campus is surveilled with a CCTV facility.

To conduct regular classes for undergraduate programs the college has an adequate number of classrooms, seminar halls, tutorial rooms and laboratories. Students become more proactive in ICT-enabled classrooms. The college's physical infrastructure is fully utilized to offer value-added courses, co-curricular activities and extracurricular activities. A dedicated placement cell is functioning in the college for campus recruitment. Al-Azhar college of Engineering and Technology (AACET) has excellent and up to date laboratory facilities which focus on students' curriculum based outcomes. This institution has adequate computer Labs with sufficient computers for the teaching-learning process. They are updated regularly depending on the need for computations. Transport and hostel facilities are available for staff and students depending upon their needs.

Physical Facilities

Sports play a crucial role in preparing one for a healthy life and shaping their personalities. Even though the academic curriculum keeps them engaged in learning and procuring a job, the importance of sports in helping them to have good mental and physical health is undisputed. There are a variety of sports facilities available for the students to keep them physically active and fit. Sports facilities such as badminton, volleyball and football are provided. Sports meets are conducted annually. The campus houses a well maintained gymnasium for the students and faculties with a trainer. A dedicated facility is provided to practice Yoga and Meditation for the students and staff of the institution. It is a calm and quiet area with a

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great ambience. Every year, the college's students and faculty together commemorate Yoga Day. College day and Arts day are being celebrated with several competitions and the students can perform various cultural programs and showcase their talent and skills. Festivals like Holi, Onam, Eid-ul Fithar and Christmas are celebrated every year to promote peace and unity among students.

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

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

Response: 13.69

4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
14.42422	27.11873	35.00856	18.18860	18.15147

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

4.2 Library as a Learning Resource

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

Response:

The library provides high-quality teaching and learning resources with an adequate amount of book titles in a wide variety of subjects for each and every department. The library is set up in a well-spaced area with enough reading space. Al-Azhar college of Engineering and Technology (AACET) gathers and conserves valuable books, special reports, and additional knowledge resources for the betterment of students and

faculty members' knowledge advancement. Two dedicated librarians are available in the library for helping students as well as faculties to maintain the library in order. The books are arranged department wise according to the subject for easy access. The library has a book bank system, which allows students to take a maximum of 3 books for 15 days. Students can renew books before allocated time or a small amount of fine is collected which can be used for library development. Books are purchased on demand based on the request from the department heads.

The library is self-automated using 'KOHA' software, which is an open-source library management system. The software is a fully showcased, modular library management system that aids in maintaining library order through indexing and authority control. The library follows a partial automation system with the help of two librarians. 'DELNET'- Developing Library Network, a significant source of material-sharing library network in India, provides the college library with its power. Thus, the library of AACET has connected actively to more than 7700 libraries in India and a few other countries comprising Universities, Colleges, R&D organizations, medical hospitals and so on. By gathering, storing, and making information available to all users via a network system, DELNET encourages the sharing of information sources across other libraries. Our library has membership with the National Digital Library (NDL), an initiative of the Ministry of Human Resource Development, Government of India. NDL offers assistance for students at all academic levels, including researchers and continuous learners, as well as for all disciplines, popular access methods, and students with disabilities. It is being created to assist students, enable people to prepare for situations by learning from standards of excellence from around the world and make it easier to get equipped with skills to overcome technical challenges. The support of NDL is providing the users and helping them to make ready for different entrance and competitive exams.

File Description	Document	
Upload Additional information	<u>View Document</u>	
Provide Link for Additional information	View Document	

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words

Response:

To assist the teaching and learning activities, the college provides cutting-edge IT infrastructure. The institution emphasizes infrastructure development plans because it acknowledges the link between appropriate infrastructure facilities and efficient teaching-learning. The college has a well-developed infrastructure for providing users with IT services. All departments in our institution are equipped with LCD projectors, scanners and printers. The computers and printers of all the departments have software installed in them and the hardware is also maintained from time to time. The campus is Wi-Fi enabled. The students and faculty members have exposure to digital databases which supports them to use e-learning resources. The institution is equipped with adequate computer facilities including printers that are available to the students as well as the faculties for academic and extracurricular purposes. A system manager and

technical staff assist the entire networking and communication system of the campus. High-speed Internet connectivity is always available across all departments, classrooms, and offices through Wi-Fi connectivity.

The students are motivated to make use of ICT resources available for presentations, assignments, and projects. The System and Network administrator handles the routine needs and takes care of the entire IT infrastructure. All departments have up-to-date software in their fields to meet curricular requirements. The students are trained in operating systems and sophisticated technical software like Windows 10, Ubuntu, Solid works, AutoCAD, Ansys, MATLAB and so on. Some of the open-source software like Unix and Linux are also utilized efficiently. Apart from the curriculum, all the departments have industry ready software to train students on current industrial trends. The Power backup (UPS) facilities for various computing works in departments, Central libraries, and offices are provided on the college campus at various locations. To provide security and safety HD CCTV cameras have been installed at various locations on the campus. Surveillance cameras keep track of visitors coming in and out of the college and monitor student's and teacher's discipline. The recruitment of appropriate and well-qualified lab technicians'/system administrators ensures effective utilization and maintenance of IT infrastructure.

File Description	Document
Upload Additional information	View Document

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

Response: 2.03

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

Response: 106

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

4.4 Maintenance of Campus Infrastructure

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

Response: 19.49

4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic

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

2021-22	2020-21	2019-20	2018-19	2017-18
46.67488	10.40445	34.31761	31.66611	37.64969

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for maintenance of infrastructure should be clearly highlighted)	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 institution, government and non-government bodies, industries, individuals, philanthropists during the last five years

Response: 54.62

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

2021-22	2020-21	2019-20	2018-19	2017-18
110	103	90	103	132

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

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

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

Response: B. 3 of the above

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

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

Response: 12.79

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

2021-22	2020-21	2019-20	2018-19	2017-18
18	22	13	41	32

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

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

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

Response: B. 3 of the above

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

5.2 Student Progression

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

Response: 41.46

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
18	20	23	17	24

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
19	29	79	45	74

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

Response: 0.73

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

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

File Description	Document
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	View Document
Institutional data in the prescribed format	<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: 0

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

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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>

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: 9.8

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
19	0	6	15	9

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

5.4 Alumni Engagement

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

Response:

Our institution has a strong and active alumni association. In 2021, the college decided to initiate the formal registration process of Alumni Association named AL-AZHAR COLLEGE OF ENGINEERING AND TECHNOLOGY ALUMNI ASSOCIATION. The association was registered in the Idukki district registrar office under the Travancore -Cochin Literary Scientific charitable society registration (Act XII of 1955) with registration number IDK/TC/97/2021 on the date 16th of April 2021. The objective of the alumni association is to create a connection between the institution's alumni, teachers, staff, and students and to promote contact between past students and present ones. Through visits and other programmes, alumni engage with current students and share information about career opportunities, emerging industries, and employment opportunities. The Alumni Association uses a variety of activities, programming, and

services to foster ties among alumni, assist students, and guarantee an unforgettable Institute experience. The alumni also aspire to provide needy and eligible learners with financial aid.

The objectives of the association

- 1. To keep alumni in connection with the institution they attended.
- 2. To establish an atmosphere for bringing together past college students, enabling them to make valuable contributions to the cause of national engineering research and education.
- 3. To facilitate cultural and social interactions among past students, current students, and college teachers in order to foster an awareness of tradition and legacy within this large family, which will ultimately contribute to the ongoing development and economic viability of this institution.
- 4. To give graduating students the chance to develop their entrepreneurial skills and real-world expertise, in addition to advise on their careers.
- 5. To assist students in achieving placement in accordance with their qualifications by giving them training in soft skills, interview skills and communication skills.
- 6. To assist the authorities in enhancing the college's educational and cultural initiatives.

Every year final year pass-out students are contributing an amount to the association, as membership fees for the welfare activities of the alumni association. Apart from that, our association is focusing on well-being of the members of the alumni and the general improvement of the institution. Soft Skill training programs are conducted for final year students, by the alumni association. The main aims of the programs are to prepare the students for group discussions and placement interviews. The placement cell has organised a language development programme for the final-year students in 2019 on behalf of the alumni association. The Resource person was Mr. Jijo chittadi an expert in motivational speech and language skills.

In the year 2021, the alumni association, in collaboration with the placement cell has arranged a Skill development program for the final year students. The Resource person was Mr. Ramees Ali, Structural Engineer, RA Lab Manjeri. Interaction of the Alumni with the students is encouraged and alumni allowed to take motivational and inspiring lectures to the students whenever they visit the campus.

File Description	Document
Upload Additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

Response:

GOVERNANCE

Al-Azhar College of Engineering and Technology was started in the year 2010, under the aegis of Noorul Islam Trust. The Governing body of the institution monitors the task of achieving the Vision and Mission of the Institution. It meets regularly to decide the policies of the college for smooth functioning.

VISION

To be the trendsetters in the field of Education by imparting quality Education and facilitating our students to be remarkable through excellence and commitment.

MISSION

To prepare each student for Academic, Social and Personal success by developing active and creative minds, a sense of understanding and compassion, courage to act on their beliefs.

The institution has grown to a centre of excellence because of quality policies that are being are continually reviewed and improved. The institution has established an academic council, which is led by the principal and includes representatives from each department. The institute provides operational autonomy to relevant functionaries. HODs, who report to the Principal, are in charge of overseeing the numerous operations within their respective departments. HODs are given the authority to make choices on the distribution of work and many other activities within their specific programmes, to monitor the student behaviour, and to support their faculty in all tasks relating to academics and discipline. At various levels, the institution's teaching and non-teaching personnel play a part in the development and implementation of the management system.

The Institution has an IQAC cell to review the progress of implementation of Strategic Policies and take corrective action to achieve the broad based goals.

Every programme in the institution is guided by a Head of Department, who has the authority to make decisions regarding the programme. The institution gives all of its employees operational autonomy and authority to strive towards a decentralized governance structure. On the basis of the institution's governing policy, the Governing Body makes decisions about all academic and administrative operations. The principal is in charge of academic concerns and has the authority to make both immediate and long-term decisions in consultation with the HODs.

HODs have the authority to make decisions about work allocation, class schedules, extracurricular

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activities, and maintaining order among the department's faculty and students. The Student Committees coordinate and plan extracurricular activities.

Participative management

By including all teaching and non-teaching staff members and students in all campus events, the institution promotes a culture of participatory management. Teachers participate in decision-making at the departmental level. Both faculty/staff and students are free to share their opinions, and they can also provide suggestions to improve the institution's standards. Several committees made up of faculty members and students have been established to monitor institutional activities. Class committees, course committees, placement and exam cells, IQAC, alumni association, anti-ragging committee, women's cell, parent-teacher association, and grievance redressal committee are among the different committees. Through all of them, the institution successfully carries out decentralization at various levels and raises college productivity and efficiency.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

6.2 Strategy Development and Deployment

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

Response:

The institution is run by the Noorul Islam Trust, established by Sri. KM Moosa, a philanthropist and educational visionary who has already made his mark in the area of education since 2002 founding the Al Azhar College of Arts and Science. The institution fulfills the objective of the founder to promote academic brilliance and competency in students to tackle most of the present challenges in the global job market. The chairman, principal, administrative officer, Norul Islam Trust representatives make up the college's governing board. The Principal serves as the governing board's secretary as well as the academic and administrative leader of the college.

The college has excellent facilities and a great support system for both students and faculty. These features help to promote:

- Improving the standard of faculties for improved performance.
- Overall student development, including intellectual, physical, and emotional health.
- Keep in touch with business, alumni, and society.

- Boosting one's employability and encouraging entrepreneurship.
- Devoted to ensuring the social, economic, and environmental sustainability of all elements.
- To establish benchmarks for organisational governance and leadership.

The Institution develops a number of strategic/perspective Plans: short term, midterm, long term every five years, which are evaluated annually before establishing the yearly plan for the following academic year.

In accordance with our institution's strategic plan, IQAC was founded in the academic year 2019–20. Internal quality assurance cell (IQAC) regularly reviews all significant administrative, academic, and non-academic planning and implementation activities linked to teaching and learning. The old teacher-centric method has been significantly changed by IQAC to a more student-oriented approach.

IQAC initiatives have included, among others:

- Regular evaluation of the teaching-learning process.
- Examining students' academic development.
- Adopting interactive learning techniques based on ICT.
- Periodically performs internal academic audits and guidance is provided to departments concerned for improvement based on the audit report.

Faculty are recruited in accordance with with AICTE guidelines. The interview board is constituted with BOG Chairman as the chairperson of the interview board and the Principal, HoD and subject expert as members.

A grievance redressal cell has been established to deal with employee and student complaints. These committees are set up of senior faculty members who are officially nominated by the principal. AACET's grievance redressal mechanism is so open and accessible that any student or faculty member may approach the appropriate cells to register their problems. Then an inquiry is carried out in line with the rule and regulations provided by KTU and proper remedial measures are takenas per the findings. A suggestion/complaint box is placed in the front office of the institution

File Description	Document
Upload Additional information	<u>View Document</u>
Institutional perspective Plan and deployment documents on the website	View Document
Provide Link for Additional information	View Document

6.2.2 *Institution implements e-governance in its operations*

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

Response: A. All of the above

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

6.3 Faculty Empowerment Strategies

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

Response:

The college has a welfare system in place, for all the staff. The various welfare schemes are listed below

- Food and Accommodation are provided free of cost for faculties who stay in the hostel.
- Festival Allowance is given to all faculties.
- Non-teaching faculties are covered under ESI and EPF.
- Education fee assistance is provided for the staff children.
- Assistance like registration fee, dearness allowance, and travel allowance are provided for faculties those attending conferences, workshops and faculty development programs.
- All the staff are insured through group insurance policy by United India Insurance Company Ltd.
- Study Leave is given for the faculty who go for doctoral programs and career advancement schemes
- Maternity leave is provided to the women employees, for a period of 180 days.
- Teaching and non-teaching faculty members are eligible for availing casual leave and vacation as per the regulations of KTU.
- All teaching and non-teaching staff are eligible for using college transport facilities.
- Free medical facilities are provided for all faculties.
- Institution maintains gymnasium for faculties at free of cost

The Institution is following a appraisal scheme guided by AICTE viz. Performance Based Appraisal System (PBAS). In this scheme, the performances are sub classified into three major categories.

1. Academic related activities

- 2. Co-Curricular and Extra Curricular activities
- 3. Research and Development

Every Academic year we collect self-appraisal form, filled by faculties, where he/she provides the necessary information of his/her performance and contribution in all the spheres of activities assigned duly to him/her by the department. The HODs give their feedback about the performance of the faculty member. Based on the Appraisal form their API (Academic Performance Indices) scores are evaluated in three categories. The Principal after discussing with HOD's set a minimum cut-off score of API scores required to be achieved by the faculty members in the three categories. Based on these scores additional benefits are given to the faculties. Faculty members are free to raise a grievance which will be duly addressed and actions to be taken in case if he/she is not satisfied with the decisions of the institution.

The institution facilitates Faculty Development Programmes and Professional Development Programmes for the teaching and non-teaching staff so that they get ample opportunities to update themselves and get upgraded in their career.

Feedback is collected from the students, in the beginning and middle of every semester. A committee consisting of the principal, head of department and a senior faculty goes through the feedback forms and takes required action to improve the quality of teaching and learning. For non-teaching staff feedback forms are collected by the Administrative Officer and a committee comprising of the principal, vice principal and administrative officer reviews their performance and based on those appraisals given.

File Description	Document
Upload Additional information	View Document

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

Response: 13.09

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
18	7	14	3	5

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

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

Response: 37.97

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

2021-22	2020-21	2019-20	2018-19	2017-18
23	62	82	5	8

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
23	23	23	23	23

File Description	Document
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	View Document
Institutional data in the prescribed format	View Document
Copy of the certificates of the program attended by teachers.	View Document
Annual reports highlighting the programmes undertaken by the teachers	View Document
Provide Links for any other relevant document to support the claim (if any)	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:

AL AZHAR College of Engineering & Technology run by the Noorul Islam trust was founded in the year 2010. The institution is affiliated to KTU on purely self financing basis. The main r source of income for the institution is the tuition fees and other fees collected from students as directed by Govt of Kerala and KTU. This amount is utilized to pay the salary of teachers and the non-teaching staff and to provide them academic and related services and infrastructural development. The College Management offers free-ships to economically backward students from this income.

Our institution aims to dynamically mobilize funds for infrastructure, maintenance and purchase of lab equipments, salary, promotion, and transportation facilities provided by the institution. During the commencement of each academic year, Governing body after collecting feedback from various departments about the financial requirements, then prepares the budget for the year. In the budget, allocations will be made to meet recurring and nonrecurring expenses for that year.

The Fund allocation in budget for the following expenses:

Salary and Other expenses.

Fee payments for University and AICTE, etc.

Expenses for Construction and maintenance of Infrastructure.

Purchase of lab machineries and software.

Financial support for faculties to attend Conference and Workshops.

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For the betterment of the institution we have a well defined financial policy to ensure effective and optimal utilization of funds for academic, administrative and infrastructure development. Each academic year, all Departments prepare budget based on their requirements such as purchase and maintenance of equipments, software, computers, and printers. Principal prepares a combined budget for the college and present it in Governing Body meeting. The Governing body reviews the budget proposals and finally recommends for approval. The Governing Body regularly monitors the annual expenses, and modifies the budget and provides reviews about efficient use of financial resources. The budget is finally reviewed and approved by the chairman of the BOG.

In case of any emergency, the institution has a provision to allocate fund from the suspense account as provided in the budget department. The Principal and the HOD's discuss the requirements and take decisions according to the priorities.

The institution has its own internal audit team which conducts the internal audit regularly. Noorul Islam Trust office deputes internal auditors and they do a thorough audit on each and every transactions on a half yearly basis. In addition the institution appoints a chartered accountant firm to conduct an independent external audit to verify and certify the entire Income and Expenses. Till now there has been no major corrections from any of the audit teams. Some errors happened was corrected immediately by the Audit members. They had taken strong precautionary measures to avoid errors in future. The institution is following a robust internal and external financial auditing system.

File Description	Document
Upload Additional information	View Document

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

Response:

The Institute has set up an Internal Quality Assurance Cell (IQAC) to develop a system for the consistent improvement in the overall performance. The IQAC of AACET was constituted in the year 2019 headed by a Chairperson and Coordinator .The cell comprising of 15 members, including representatives from management, faculties, students, alumni, local society and industry. The cell oversees and monitors all the academic activities including internal evaluations and examinations. Under the guidance of IQAC, the institutional processes like academic auditing, advisory system, orientation programmes, various committee meetings, remedial classes, internal exams are done. IQAC schedules meetings once in every quarter to implement the duties effectively.

The Practices implemented are:

1. Academic auditing: For each department internal audit is conducted twice in every semester under

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the supervision of IQAC. During the academic auditing college specific documents such as academic calendar, report of various committees, staff details and department specific documents such as course file, minutes and action taken reports of class committee and course committee are audited. Finally prepares an internal audit report and are presented to the external academic auditor. The cell ensures to improve in the upcoming academic year based on the external auditing feedback.

- 2. **Academic Calendar:** Before the commencement of each academic year IQAC publish college calendar based on University Academic Calendar and advise all departments to prepare their department calendar with days earmarked with various departmental activates.
- 3. Advisory system: A staff member (Class Advisor) from the concerned department will be in charge of a batch of 30 students. The Class Advisor keeps the records of all academic and extracurricular activities of the students. Regular advisory meetings are conducted under the supervision of a senior faculty as Chairman to give advice and guidance to the students in all curriculum matters.
- 4. **Course committee:** The committee monitors the conduct of the common courses, adherence to the course plan and time schedule, completion of the syllabus.
- 5. Class Committee: To review the periodical progress of the class and to ensure that all academic activities of the class are carried out smoothly, the class committee is conducted thrice in each semester. The committee address the difficulties faced by the students and take suitable remedial actions at the appropriate time.
- 6. Outcome Based Education: OBE is a process which is based on trying to achieve certain specified outcomes. It aims to gain knowledge and developing skills for the students to attain their goals by the end of the course. The IQAC ensures that all faculties timely calculate the CO-PO attainment of their assigned courses.
- 7. **Orientation Courses** are conducted for newly admitted students before the commencement of B.Tech S1 classes. A variety of events are arranged to orient and welcome new students.
- 8. **Remedial classes:** After the first internal evaluation faculties are advised to identify weaker students and provide remedial classes for them.
- 9. **Internal Exams**: IQAC ensures that the internal exams question paper of each course covers all the Course Outcomes and Taxonomy Levels as mentioned in the syllabus.

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

Response: C. Any 2 of the above

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

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years. Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words

Response:

The institution celebrates various events and festivals every year to make the students and faculties know more about the importance of gender equity.

International Women's Day

International Women's Day is being organized on every 8th of March by the students in the college campus. Talks and debates are arranged on topics such as Gender sensitization and women empowerment on that day by the college.

Makalkkoppam

As part of National Girl Child Day, AACET in coordination with NSS CELL organized an open photography contest titled "MAKALKKOPPAM" regionally. The contest aims to keep girl child and her family together.

Teachers Day

Teachers Day celebration is organized on every 5th of September by the students. Last year, a formal meeting was held, where students and teachers interacted about the importance of student teacher relationship and their experiences in the campus.

Women's Cell

The purpose of the women's cell is to foster a sense of positive self-esteem and confidence among female students, empowering them to make informed decisions for themselves and their lives. Spreading awareness among the students about the social, legal, and constitutional rights of women in order to prevent exploitation based on gender is also one of the main focuses of the cell.

Internal Complaints Committee

Internal Complaints Committee (ICC) plays a critical role in the prevention, prohibition and redressal of sexual harassment for women employees and students.

Sick Room

A sick room Is provided exclusively for female faculties and female students. Female faculties and female students are permitted to make use of the facility at any time as and when required.

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Surveillance Cameras

The entire college campus is under the surveillance of CCtv network all day and night.

Women empowerment schemes

Some of the major roles and duties of our institution is assigned to female faculties. The institution offers food and accommodation completely free of cost for the female faculties who struggle to get to college by travel. Currently many female faculties working in our institution are making use of this facility.

Female faculties are encouraged to attend Various Career Enhancement Schemes like workshops, conferences, FDPs and QIPs. Financial assistance is provided by the institution for most of the Programs.

In Our Institution, more than 50% of faculties are women. 3 Heads of the departments are also women.

Rest room for housekeeping staffs

There is a special rest room is provided for female housekeeping staffs.

Sanitary Napkin Incinerator

The Sanitary Napkin Incinerator utilizes an eco-friendly approach to dispose of napkins by burning them and transforming them into ash. An electrically operated Sanitary Napkin Incinerator is placed at Ladies Toilets for their convenience and secure usage.

Security

The college and hostels are under strict security under 24 x 7 x 356 hours. At least 5 security persons are available at the college campus every time for the security services.

Moreover, we celebrate all festivals like Christmas, Onam, Ramzan, New Year etc to ensure harmony in the student population and the social fabric is intact and homogeneous.

File Description	Document
Upload Additional information	View Document

7.1.2 The Institution has facilities and initiatives for

- 1. Alternate sources of energy and energy conservation measures
- 2. Management of the various types of degradable and nondegradable waste
- 3. Water conservation
- 4. Green campus initiatives
- 5. Disabled-friendly, barrier free environment

Response: A. 4 or All of the above

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

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

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

Response: C. Any 2 of the above

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

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

Response:

At AACET, new appointment of faculty members is done purely on the basis of their qualification and pedagogical skills. We have faculties from different religions, geographical regions and states, working hand in hand to realize the vision of our institution. No preference been ever given to any community while considering appointments to various vacancies in departments and administrative sections.

Being a minority-status institution, Al Azhar College of Engineering and Technology works to foster a positive campus culture because it is essential to ensure that students can study unhindered on campus. It is

essential for building a democratic society that is peaceful. Creating cultural harmony in the campus is crucial for students to focus on their academics and other related activities. We observe all religious holidays like Christmas, Onam, Ramadan etc. every year in order to establish an inclusive environment in the campus for the students to cherish.

Our college provides linguistic harmony whereby having faculty members from different states in India. They carry out their respective roles to develop and implement the best practices of academics and skill values in the institution.

The institution offers courses on Constitution of India, Professional Ethics, Life Skills and Sustainable engineering as part of curriculum which instils the idea of unity in diversity and love for the environment.

Students were directed to sign "My Vote My Voice" signature campaign to create awareness on the significance and impact of voting in the assembly election scheduled on 06/04/2021. The signature campaign was conducted for first time voters by NSS unit of Al Azhar college of engineering on 30/03/2021 at our campus. The principal Dr. D. F Melvin Jose and Asst. Prof. Bala Arun, NSS Program Officer, Spoke on the occasion creating awareness of voting in the democratic process. Around 60 students were participated in the event. The event was a grant success and wound up with vote of thanks by Althaf Sajeed, a first year student of Mechanical Engineering department.

The success of democracy lies in the hands of citizens, who take responsibility for themselves and their community, for the wellbeing of the country. It creates active citizens who are inevitable in the democratic process. Awareness about the citizenship rights and the responsibilities enables them to raise their voice against discrimination, injustice and corruption in our society. A program named RIGHTS was on 7th of October 2019 to create awareness about the citizenship rights and responsibilities which was inaugurated by the principal. A talk was delivered on the topic 'The fundamental duties and rights' by Adv Caroline Elias, HoD, Al Azhar Law College, Thodupuzha.

File Description	Document
Upload Additional information	View Document

7.2 Best Practices

7.2.1 Describe two b	best practices succe	ssfully implement	ted by the Instit	tution as per NA.	AC format
provided in the Mai	nual				

Response:

Best Practice I

1. Title

AACET Fee Waiver Scheme

2. Objectives of the practice

- 1. To help Engineering aspirants from rural, underprivileged and economically weaker sections of the society. This is purely meant to help them in realizing their dream of higher education dream in engineering sciences.
- 2.The management collects only less than the approved tuition fees from admitted students under government quota depending on their financial status.
- 3. The students who got admitted under the Management Quota paying less fees than the approved Management Quota Fees.

3. The Context

Many students admitted to our college are coming from the weaker sections of the society. They find it difficult to pay their tuition fee and struggle to get a chance for professional education. In addition, Idukki district has only 5 Engineering Colleges at present. Even though it is geographically the second-largest district in the area, it is very challenging for the students to advance to higher education after schooling.

Hundreds of students from different regions of the district are making advantage of our AACET Fee Waiver Scheme which reduces their financial burden to study a professional program like Engineering. The majority of applicants to the institution are from lower socioeconomic groups. For them, AACET Fee Waiver Scheme is a blessing for them.

4. The Practice

After the implementation of this Fee Waiver Scheme, many scholars from the lower socioeconomic sections of society started to join for B Tech program. The eligible Candidates are selected based on a number of criteria such as plus two marks and annual income. The students who satisfy these conditions become eligible for the Fee Waiver scheme.

5. Evidence of Success

Many Students who are studying in our college after the introduction of this scheme are from Economically weaker section of the society. Such students, after graduating from our college, contribute a lot for the development of the society.

6. Problems encountered and Resources Required.

It was very difficult to find the eligible students for the fee waiver scheme, since the number of applicants from Economically Backward class are more in number. In spite of paucity of funds, the management strains itself to allocate funds to all eligible students.

Best practices II

1. Title

Sustainable Campus Development.

2. Objectives of the practice

- I. To raise awareness among our students, faculty, and staff about environmental protection for future generations.
- II. To practice conservation and effective use of natural resources.
- III. Have knowledge of techniques for preserving and producing new natural resources.
- IV. Spreading the concept of resource and energy conservation to the neighborhood.
- V. To encourage students and employees to adopt them and benefit personally, which will afterwards improve society at large.

3. The Context

The Energy Consumption is increasing day by day. Fossil Fuels and Water are precious resources and we must reduce the consumption of these resources as low as possible. For that we must focus on the Sustainable development. Due to modernization of social living, many fold increase in industrialization and man's desire for comfortable living has increased the production of greenhouse gases there by increasing the future of sustainable earth for future generations. The situation further deteriorated as the people still use outdated practices in manufacturing and refining process.

Environmentalist and natural observers feel that creating immediate awareness among the youngsters who will be the next generation, about the controlled and effective usage of the existing resources and concentrating on the tapping of the abundantly available renewable energy sources will end the threat to the limitedly available natural resources.

The college management has decided to be an example by practically adopting energy efficient methods and thereby creating awareness among its students and staff to a restricted use, reuse and save natural resources for next generation.

4. The Practice

Our college is located in a hilly terrain where all the rain water becomes runoff water and nothing can be stored in large quantity in the form of ponds or lakes. As per the practice of the local architecture of buildings, all buildings are provided with hipped type of roofing. All the rain water falling over these roof surface is harvested using rooftop catchments and pipe system arrangements. To preserve more water, the institution constructed a Rain Water Harvesting system of Capacity of 50,000 liters in our campus on January 2022.

Used Water from various sources like kitchen sinks, wash basins, bathrooms, and areas for washing clothes in dormitories is collected and transferred to the full-fledged waste water treatment facility in our campus. The treatment facility has a daily capacity of 2 lakh liters.

With the aim of providing safe drinking water, we have a water purifying facility at 3 points in the campus. The area around our college is devoid of plastic. Waste is separated into dangerous and non-toxic categories. Separate collections of bio- and non-biodegradable garbage are made. These wastes are

disposed on a daily basis in order to keep the campus decontaminated.

To reduce electricity consumption of our college, we are gradually replacing old CFL lights, tube Lights with LED lights from 2019 onwards. Several solar powered lamps are placed at various parts of our campus for promoting the use of green energy.

5. Evidence of Success

The electricity consumption is reducing gradually over these month slightly due to the replacement of normal lights in to LED lights. For eg; around 110 tube lights situated in the college campus are converted to LED Tube lights, as a result of this approximately more than 2 units of electricity consumption per hour is saved when all lights are in use.

6. Problems encountered and Resources Required.

Surface of solar panels should be periodically cleaned with soft materials without creating scratches on the surface. To maintain the greenery of the campus and gardens, a group of staff who work all day including working days, non-working days and holidays, should be employed. The difficulty in finding the fund for arranging these facilities in the campus is also a challenge.

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

7.3 Institutional Distinctiveness

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

Response:

The college began its operations in 2010 with the primary goal of encouraging academic excellence and competency in students, particularly in the rapidly expanding fields of engineering and technology on a global scale. The college offers five UG programs that have been recognized by the AICTE and are associated with Kerala Technological University.

VALUE BASED EDUCATION

The newcomers in the first year degree classes are given bridge courses and orientation classes which help them to get accustomed to the engineering education system. The first year students are given bridge courses in Mathematics and Science subjects. The students are subjected to continuous evaluation through assignments, class tests, internal tests, viva for labs courses.

The weak learners and advanced learners are identified in the process of evaluation and appropriate measures are taken. Advanced learners are given the responsibility of peer teaching and represents the college in university level competition. Remedial classes and tutorial sessions are scheduled for improving the performance of students. The performance of students is monitored and reported to the parents on time by their mentors. In the higher semesters, students undertake core subjects along with seminars, comprehensive viva, design project and main project.

Students of our college receive education that is founded on values. It attempts to achieve a multifaceted development of a human being, meaning intellectual, physical, spiritual, and ethical development. It instills educational and cultural ideals among students. Students would achieve a prominent place in society if they adopt the virtues of excellent behavior, self-confidence, and high values. The curriculum provides a means to implement values in the form of courses like Life Skills, Professional Ethics, Constitution of India etc., which focus on critical thinking on particular problems, handling engineering ethics and human values, team work, communication skills which provides the base for the inculcation of values.

Our College has been providing free Food and Accommodation for all faculties residing in the Campus and College Hostels. So we are able to attract faculties from neighboring states. The college bus fee is deducted to 75% of the normal fare for all our faculties who use the college bus facility.

The NSS unit at our college proposes various activities like the relief and rescue operations for flood relief measures. About 80 NSS volunteers from the college actively participated in relief efforts like cleaning the roads. The NSS volunteers cleaned up the area, made food packages for the flood victims, ran the communal kitchen, and gave out medications. In addition to participating in rescue efforts, the volunteers gave food packs to the afflicted people in several locations. They collected items of daily uses like dry ration, clothes, soaps, sanitary napkins, medicines of regular use, milk powder, bleaching powder, hand wash, sanitizers etc. This aroused a healthy social awareness and instilled a patriotic and national feeling in the minds of the students. Value based extracurricular activities are initiated by all departments of the college during the technical fest conducted every year. The students are trained in the art of living in total harmony with the environment.

Our college is provided free laptop to every first year students at free of cost to tide over the economic recession due to the covid-19 pandemic for conducting the online classes smoothly on 2020-2021 and 2021-2022 Academic Years.

Majority of the final year projects are designed and developed to serve the needs of society. The projects are supervised by the faculty, from the initial design to the final stage, and are accomplished in the form of a utility.

Hundreds of students from different regions of the district are making advantage of our AACET Fee Waiver Scheme which reduces their financial burden to study a professional program like Engineering.

The IQAC will integrate into an institution's system and work to achieve the objectives of quality enhancement and sustenance because quality enhancement is a continual process. The IQAC's mission is to improve quality continuously while enlisting the support of all stakeholders. To maintain high standards of work in academia and administration, the internal quality assurance cell offers recommendations and directives to the administration. The cell keeps track on the quality aspects of all the institution's academic and extracurricular endeavors.

Our Entrepreneur and Placement Cell at AACET plans a variety of events, including seminars and workshops. It emphasizes the development of social skills, which are essential for a successful entrepreneur. All together, these make up the characteristics needed for an entrepreneur to succeed. Relationship building, hiring, talent sourcing, team strategy formulation, empathy, or having strong emotional intelligence are examples of social skills. Discipline and moral principles should go hand in hand. Moral values are instilled by giving workshops and invited lectures. Positive moral values are important because they create an overall feeling of peace and joy. Discipline is an essential part of our life. Without discipline in life we cannot work smoothly.

Our management has several institutions including Medical College and Dental College; both these institutions are located very near to our Engineering College. The students and faculties of AACET can utilize the medical facilities of our medical college and dental college at a reduced cost.

Because of the deluge of new technology, information explosion, and violent news in the press and media, today's youth are perplexed. Our institution takes the initiative to provide value-based education to this new generation in order to instill the value system in their bewildered minds and make them value-oriented, powerful leaders.

The discipline committee of our college works to maintain a calm and peaceful learning environment on campus, to prevent physical altercations between students, to look into reports of unruly behavior among students, to take appropriate action against those students, and to take steps to prevent future unruly behavior. As a result, our institution aspires to have a nice, upbeat approach that can motivate students to pursue ideals, morality, and achievement.

File Description	Document
Appropriate web in the Institutional website	View Document

5. CONCLUSION

Additional Information:

A potent and dynamic Career guidance and Placement Unit operates under the institution which ushers the young aspirants to the world of opportunities. It helps the students to enrich their entrepreneurial skill along with other job specific talents by providing training and occasional start up boot camps. Well-equipped workshop and multimedia laboratory facilities available in the college boost the skill development of students.

Government Scholarships and AACET Fee Waiver Scheme are provided to empower students from weaker sections of the society. Active student clubs, NSS units and professional chapters are evidently play a crucial part in the enhancement of non-scholastic activities of the students.

In addition, a fully-furnished conference hall is operational for various departmental activities. Our faculties and students are authorized to take advantage of the rich offline as well as digital library to explore the world of knowledge. 24X7 internet facility and centralized data center with optical fiber backbone are some of our merits.

Moreover, hostel facilities are provided for both boys and girls which enable a vigorous atmosphere for better living experience. Hostel mess and college canteen are kept hygienic in order to provide healthy and homely food for the occupants. A fully operational healthcare center, indoor sports room and well maintained playground within the campus are exclusively left for the students to thrive a healthy generation.

Finally, our alumni chapter with wide spectrum of international alumni, student contribution in various socioeconomic issues, participation in international conferences and so on are a few other notable strong-points.

Concluding Remarks:

Established in 2010 as a private sector self-financing engineering college, the institution demonstrates perpetual excellence in academics and other non-scholastic activities. Scholarships are available for meritorious students. In order to inculcate students with job oriented skills, the college actively administers value-added programs in partnership with MOU's of ASAP and IBM. Students are encouraged to take part in various clubs to acquire forthcoming experience in their chosen field of interest.

The campus ambience is mostly green. The academic pursuit of our students are wholly supported by modern, well-stocked libraries and other advanced facilities. The institution has an admirable infrastructure fully connected with high-speed Wi-Fi facility. The faculty members are skilled and proficient with strong academic and industry credentials.

In nutshell, AACET is worth experiencing because of its exceptional amenities and verdant premises. Yet, we are in pursuit of achieving ultimate preeminence.

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

Answer before DVV Verification:

Answer After DVV Verification :09

Remark: DVV has made changes as per the report shared by HEI

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

Answer before DVV Verification:

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

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
15	2	0	0	0

Remark: DVV has made changes as per the report shared by HEI

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
13	9	6	9	7

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
6	6	3	2	2

Remark: DVV has made changes as per the report shared by HEI

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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.

Answer before DVV Verification: Answer After DVV Verification:0

Remark: DVV has made changes as per the report shared by HEI

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

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

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

Remark: DVV has made changes as per the report shared by HEI

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

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

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

Remark: DVV has made changes as per the report shared by HEI

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
16	22	26	18	27

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
18	20	23	17	24

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
19	29	79	45	74

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
19	29	79	45	74

Remark: DVV has made changes as per the report shared by HEI

- 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
22	9	7	12	11

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
19	0	6	15	9

Remark: DVV has made changes as per the report shared by HEI

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
23	62	82	5	8

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
23	62	82	5	8

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
15	15	15	15	15

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
23	23	23	23	23

Remark: Number of non teaching staff as per IIQA is 23 for all years

6.5.2 Quality assurance initiatives of the institution include:

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

Answer before DVV Verification: A. Any 4 or more of the above

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

Remark: DVV has made changes as per the report shared by HEI

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

Answer before DVV Verification: B. Any 3 of the above Answer After DVV Verification: C. Any 2 of the above

Remark: DVV has made changes as per the report shared by HEI

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: 200
	Answer after DVV Verification: 197

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