



SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

ADITYA COLLEGE OF ENGINEERING

**ADITYA NAGAR, ADB ROAD, SURAMPALEM, GANDEPALLI MANDAL
533437**

www.acoe.edu.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Aditya College of Engineering (ACOE) was founded as the premier promoter of quality education in coastal districts of Andhra Pradesh in 2008 under Sarojini Educational Society. Dr N. Sesha Reddy, as a founder chairman, promoted this educational institution, with a mission, to offer the best engineering education with unmatched innovations in the process of teaching and learning by aiming at the holistic development of the students. The College is situated in an eco-friendly area of 11.27 acres with thick greenery at Surampalem, Gandepalli Mandal, Kakinada District, Andhra Pradesh and is 15 KM away from Samalkot Railway Station on Howrah-Chennai Railway line in South Central Railway and 35 Km away from Kakinada and Rajahmundry on ADB Road.

ACOE is approved by AICTE, recognized by the Government of Andhra Pradesh, Permanently affiliated to Jawaharlal Nehru Technological University Kakinada (JNTUK). The college has also received UGC recognition under Sections 2(f) and 12(B) of the UGC Act. ACOE has got JNTUK Approved Research Centers (JNTUK-ARC) for departments of EEE, CSE and ECE and accredited by NAAC with B+ grade in the year 2018 and accredited by NBA for four programmes, EEE, ME, CSE and ECE in the year 2022.

The College has three academic Buildings with a total carpet area of 44,524 Sq. Mts. Apart from that there are two boys' hostels and one girl's hostel buildings and proudly offers UG and PG programmes in engineering and MBA with 15 years of rich standing experience in the educational era. Besides, the college has added many feathers in its cap which include recognitions and ranks from various agencies of India such as Careers 360 with AAA+. These distinct recognitions speak volumes about the institute's objective to promote engineering excellence.

Vision

To induce higher planes of learning by imparting technical education with

- International standards
- Applied research
- Creative Ability
- Value based instruction and to emerge as a premiere institute.

Mission

Achieving academic excellence by providing globally acceptable technical education by forecasting technology through

- Innovative Research And development
- Industry Institute Interaction
- Empowered Manpower

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

1. Good physical and advanced laboratory infrastructure.
2. Effective teaching and learning processes.
3. Motivated faculty members and staff.
4. Effective mentoring and proctoring systems.
5. Effective curriculum implementation through structured action plans.
6. Conduction of value-added courses to enhance employability.
7. Teachers' quality is monitored and maintained via online feedback collected from stakeholders.
8. Orientation/induction programmes for newly appointed teachers.
9. Special tutorials for bridging the knowledge gap.
10. All classrooms are ICT- enabled.
11. Duly constituted research committee in place.
12. Well thought-out research incentive policy in place.
13. Adequate library resources, including e-resources.
14. Optimal speed Wi-Fi enabled campus.
15. Well maintained, clean, green, and ambient campus.
16. Recognized NSS unit.
17. Annual self-appraisal of faculty member and staff in place.

Institutional Weakness

1. Low consultancy and industry interaction.
2. Limited PG and inter-disciplinary courses.
3. Limited exposure and experience of faculty members to industry.
4. Limited networking with IITs, NITs, IISc and other premier institutes.

5. Being affiliated institute having limited academic flexibility.
6. Relatively low PG admissions.
7. Very few externally funded research projects.
8. Very low UG to PG student progression.

Institutional Opportunity

1. Attainment of Autonomous status.
2. Enhancement of research capabilities and infrastructure.
3. Initiation of need-based academic and skill based programmes.
4. Participation in National and International collaborations.
5. Spearhead the economic development of the region.
6. Blended learning using e-resources to be enhanced.
7. Need to explore the possibility of industry funding for research projects.
8. Inter-institutional library networking may be strengthened.

Institutional Challenge

1. Seeking external funding for research.
2. Attracting and retaining qualified senior faculty members.
3. Upgrading research facilities keeping pace with technological advancements.
4. Motivation for quality research and publications.
5. Enhancement of quality of placement of students.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Aditya College of Engineering (ACOE) focuses on providing the quality education to the students. This is

based on the aspects like curriculum planning, implementation, flexibility, enrichment, and feedback mechanism. Curriculum planning will be done by incorporating the local, national, regional, and global development needs along with OBE concept and implemented.

College prepares its own event and academic calendar in line with affiliating university's academic calendar covering cross-cutting issues such as gender equity, professional ethics and human values, environment and sustainability. College offers a variety of certificate courses and provides necessary training in successful completion of the certification course so as to fill the gap in the curriculum as well as to update themselves with latest technologies and trends. Further, students are motivated to take up project works, field works, industry visits as well as internships during the semester-gap and summer to bridge the gap between industry and academics under the guidance and supervision of faculty members. While doing so, students are expected to learn through experience and from peers.

College implements feedback mechanism effectively and assesses the varying needs of all stakeholders. Feedback will be collected from student, teacher, parent, alumni, employee and employer and analyzed by individual departments and collectively by the Dean and Principal for further improvement and this is expected to enhance student satisfaction, reputation of the college, faculty morale.

Teaching-learning and Evaluation

Aditya College of Engineering (ACOE) is more conscious on the quality of students to be admitted and provide all necessary information and guidance to the aspiring students seeking admission in various branches of UG/PG Courses. ACOE is proud to have a number of students from other states of the country and many other countries. The admissions are made by the rule of reservation in the admission to the SC/ST/BC/Minority/Economically Weaker Sections/physically challenged etc., are available as per the rules in force. After the admission process is completed, learning levels of students will be assessed and organizes special programmes for advanced learners and slow learners. The institute maintains a healthy student-teacher ratio to facilitate learning activity without any hurdles and maintains full time teachers in the ratio as per AICTE norms. The Faculty members are well qualified and experienced. The teaching-learning process is more student-centric and the institution promotes a learner-centric approach and Information and Communications Technology (ICT) is mostly used by the teachers apart from regular chalk and talk. Students are trained regularly in new trends and innovative technologies through workshops/seminars delivered by experts from industry and academia. Students are encouraged to acquire new-age skills through MOOCs and NPTEL-SWAYAM online courses. Students are motivated to pursue higher studies and prepare for competitive examinations and it resulted in a better pass percentage of the students in all the examinations. The faculty mentors are appointed for guiding the students in academic issues and counselling will be carried out in necessary cases. The institute adopts reforms in continuous internal evaluation which is transparent and robust and the grievances of students related to examinations are dealt with transparency and efficiently. The program outcomes, program specific outcomes and course outcomes are stated and displayed on the website and wherever necessary. The attainment of outcomes is evaluated for all the courses and programmes offered by the institution.

Research, Innovations and Extension

ACOE is committed to enhance research activities and innovations by providing research facilities and resources. Faculty members are applying for funding from funding agencies and received 41.7 lakhs of grants

during the last five years from various government/non-government agencies like DST, Hydro Tribe, NCSTC. 31 doctorates are currently working in six departments of the college. Seventeen of them are recognized as research supervisors/co-supervisors for various universities. Faculty members of the college published a total of 223 articles in international journals, attended and presented papers at 69 conferences/books/book chapters that are indexed by SCI, Scopus, and UGC.

College established an innovation eco-system incubation center that develops entrepreneurship skills in young minds and has 10 startups like Tales to Teach Pvt.Ltd., 4SS Software Solutions Pvt Ltd., SDG organics, Hydro Tribe Pvt Ltd., Night Out Pvt Ltd., Top Tray, etc and college secured a 4-star rating in the ATAL ranking of Institutions on Innovation Achievements (ARIIA-2020-21) under the MoE. College conducted 23 workshops/seminars/webinars on research methodology, 16 IPR, and 20 entrepreneurship development.

College initiated various services in rural areas as a part of the social responsibility, under the scheme of Swacha Bharat and conducted 46 activities during the last five years. ACOE received 6 recognition awards for its services to the society. College conducts blood donation camps, plantation programmes, pulse polio programmes and COVID awareness programmes regularly.

ACOE working with various reputed organizations and maintains relations to improve employability skills and make students industry-ready. College encourages students to take up industrial visits and internship programmes to expose them to industrial environment. College signed MoUs with 18 different organizations such as Redhat, Microsoft, Amazon, Automation Any Where, CISCO, ORACLE University etc to expose the students to real-time environment. College encourages students to take professional certifications from AWS, Redhat, Salesforce etc which are useful to start their career in an efficient and comfortable manner in order to promote the industry- readiness.

Infrastructure and Learning Resources

ACOE has adequate number of class rooms with proper ventilation and necessary furniture to conduct theory and practical sessions and developed 15,333 Sq. m. as instructional area. College has seven seminar halls with LCD projectors, computers with internet connectivity and public address system and is utilized for co-curricular activities such as Seminars, Guest lectures, Workshops, Symposiums, Conferences and Faculty development programmes. College has fifty two classrooms equipped with white boards, markers, LCD projectors, internet facility and ICT enabled teaching practices are adopted for effective teaching-learning process. Similarly, all the tools, machines and other equipment are established in all the laboratories as per the guidelines laid down by the university.

Central library is being maintained with adequate number of books, journals, magazines, newspapers and a variety of books related to all competitive examinations such as GATE, TOEFL, CAT, GMAT and can accommodate 250 students and faculty at a time. College is also maintaining a Digital Library with computers and internet facility to access thousands of E-Books/Online materials/Videos/Journals etc. A well-equipped Digital Library with 20 computers having Internet connectivity is housed in the Central Library for the access of E-Resources. There is a display of clearly laid out floor plan in the entrance of the library. Signage is provided in each and every rack and in the entrance of the Library Halls. It provides easy access for referring books departmental wise. College library has the DELNET, NList facility and KNIMBUS platform and the electronic copies can be accessed.

Apart from above, college has made available other facilities such as language laboratory, multi-purpose halls,

Canteen, separate hostels for boys and girls, Guest rooms, 24 hours security, Girls common rooms, Boys common rooms, toilets and toilets for divyangans etc. College has separate gymnasium and yoga hall spread over 13m x 12m and 45m x 20m respectively and certified trainers take care of the gym and yoga activities. College organizes various events such as technical symposiums, youth festivals, and competitions. Music concerts, skits, folk dances, classical dances, singing, theatrical activities, fine arts activities, quizzes are part of these events.

Student Support and Progression

ACOE monitors continuously the students' progress and supports them in various tasks during their pursuit of study. College provides assistance to students in career guidance and counselling, which helps students' progression to higher levels of study or employment. College placement cell grooms students as per the industry standards and they organize various sessions in each semester to create awareness. College also established Technical Hub (T-Hub) which provides training to improve coding abilities and expose to latest technologies. Institute encourages students' representation in various academic, co-curricular and extracurricular activities along with sports, games and cultural activities to increase discipline; democratic outlook; social harmony; spirit of oneness; cultural and academic development; healthy relationship between students and teachers; leadership; self-reliance. Students are made as members in all the committees and they try to attend the meetings and it is observed that students participate actively in all the activities.

Mentoring and counselling is a regular process implemented by the college to transform students into a responsible citizen with all-round development. College monitors and guides the students towards getting scholarships, freeships and/or financial assistance provided by the Government, college and various other organizations as per the eligibility norms to continue their study on campus and also encourages them to pursue higher studies or motivate them to become entrepreneur as per their interest. Similarly, college organizes 'Achiever's Day' and rewards the meritorious students as well as the student who got the placement. College registered its Alumni Association under the Societies Registration Act. Alumni meet will be organized annually and alumni contribute to the growth of the college. A few alumni established functional startups successfully and many of them are the first-generation entrepreneurs who have decided to become entrepreneurs during their academic span at college. Alumni shares their knowledge, difficulties faced during their journey during the alumni meets.

Governance, Leadership and Management

ACOE has well-defined vision and mission and is visible in various institutional practices that address the needs of all its stakeholders. The Management of the institute believes in participatory decision-making process and encourages all the staff and students to participate in the decision-making process of the institute. The teaching staff is involved in the decision-making bodies such as Governing Body, IQAC, Academic Committee, Anti Ragging Committee, Disciplinary Committee, Grievance Redressal committee, Counselling committee etc. The committees meet at regular intervals to take decisions accordingly. Heads of the departments are given free hand to administrate their academic activities in coordination with the Principal and Dean (Academics and Administration). Institute adopted e-governance system with Administration, Finance and Accounts, Student Admission and Support and Examination modules for transparency. Institute has made all the efforts to empower its faculty members by organizing/attending number of Seminars/FDPs inside and

outside the campus. In-house programmes will be organized by inviting eminent persons from reputed institutes and industry. ACOE promotes its staff members for higher education and R & D activities.

College has well-formulated welfare policies in place to ensure the well-being of the employees, which in turn will enrich the quality of life of employees in terms of personal and professional growth. College has a mechanism for both internal as well as external audit by certified statutory auditors to audit at regular intervals as part of financial management and compliance. To ensure the quality education, the college has constituted an Internal Quality Assurance Cell (IQAC) with HoDs and senior faculty members of the institution as members. IQAC of the college reviews periodically the teaching and learning process and ensures that all the theory classes, laboratory work, internships, field projects and other teaching and learning processes are meticulously followed as per academic calendar in coordination with HoDs. Institute organizes orientation and induction programmes for the staff and students annually as per recommendations from IQAC.

Institutional Values and Best Practices

ACOE implements certain policies and principles and practices ethics that the actions and decisions of the college. Institutional values provide the framework that how college operates, interacts with stakeholders and shapes its working culture in terms of integrity, excellence, respect, collaboration, innovation, accountability, social responsibility and learning and deployment. College practices additional values like empowerment of women, gender equity, sustainability, leadership and trust which serve as guiding principles that promotes college name and fame and good relations with all the stakeholders that lead to success.

College provide the facilities for all the students as well as for divyangans. College practices all the energy saving methods by having installed roof-top solar power plant, rain water harvesting and conservation of water, use of battery vehicles, ban on use of plastic etc.

College maintains waste management system, initiated several green campus measures to keep campus clean and green always. College also arranges for the energy, green and environment audits with the help of ISO-certified and registered external agencies. College also provides inclusive environment by maintaining tolerance and harmony towards cultural, regional, linguistic, communal socio-economic and sensitizes the students and employees to the constitutional obligations, values, rights, duties and responsibilities by conducting various relevant awareness programmes. College adopts certain best practices such as distribution of clay idols of Lord Vinayaka, provide skilling-up programmes for students, conducting certificate courses, better placements etc.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	ADITYA COLLEGE OF ENGINEERING
Address	Aditya Nagar, ADB Road, Surampalem, Gandepalli Mandal
City	SURAMPALEM
State	Andhra Pradesh
Pin	533437
Website	www.acoe.edu.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	A. Ramesh	0884-9963176662	9000476662	08852-252243	office@acoe.edu.in
IQAC / CIQA coordinator	D.v.s.s.s.v. Prasad	0884-9951946669	9492508781	08852-252250	myselfdvsprasad@gmail.com

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details

State	University name	Document
Andhra Pradesh	Jawaharlal Nehru Technological University,Kakinada	View Document

Details of UGC recognition		
Under Section	Date	View Document
2f of UGC	19-03-2016	View Document
12B of UGC	17-01-2020	View Document

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	08-06-2023	12	
AICTE	View Document	08-06-2023	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	Aditya Nagar, ADB Road, Surampalem, Gandepalli Mandal	Rural	11.27	24483

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Electrical And Electronics Engineering	48	INTERMEDIATE	English	30	25
UG	BTech,Civil Engineering	48	INTERMEDIATE	English	30	20
UG	BTech,Mechanical Engineering	48	INTERMEDIATE	English	60	16
UG	BTech,Electronics And Communication Engineering	48	INTERMEDIATE	English	180	180
UG	BTech,Computer Science And Engineering	48	INTERMEDIATE	English	180	180
UG	BTech,Cse Artificial Intelligence And Machine Learning	48	INTERMEDIATE	English	180	180
UG	BTech,Cse Internet Of Things	48	INTERMEDIATE	English	60	60
PG	Mtech,Computer Science And Engineering	24	UG	English	12	12
PG	MBA,Master Of Business Administration	24	UG	English	60	59
PG	Mtech,Power Electronics And Drives	24	UG	English	6	2

PG	Mtech, Embedded Systems	24	UG	English	6	1
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Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	17				30				118			
Recruited	13	4	0	17	24	6	0	30	65	53	0	118
Yet to Recruit	0				0				0			

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				57
Recruited	27	30	0	57
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				43
Recruited	30	13	0	43
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	12	3	0	11	0	0	5	2	0	33
M.Phil.	1	0	0	0	0	0	2	0	0	3
PG	0	1	0	13	6	0	58	51	0	129
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD/DM/MCH	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 Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD/DM/MCH	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 engaged with the college?	Male	Female	Others	Total
	0	0	0	0

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	367	14	0	9	390
	Female	223	2	0	1	226
	Others	0	0	0	0	0
PG	Male	38	0	0	0	38
	Female	40	0	0	0	40
	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	47	27	6	8
	Female	18	7	2	10
	Others	0	0	0	0
ST	Male	2	1	0	0
	Female	3	0	0	1
	Others	0	0	0	0
OBC	Male	190	176	82	72
	Female	108	101	21	35
	Others	0	0	0	0
General	Male	169	204	184	139
	Female	124	128	105	103
	Others	0	0	0	0
Others	Male	20	6	0	0
	Female	0	1	0	0
	Others	0	0	0	0
Total		681	651	400	368

1. Multidisciplinary/interdisciplinary:	ACOE offers UG and PG programmes in various disciplines in engineering and technology and adopts the curriculum prescribed by the affiliating university, JNTUK. Affiliating university curriculum covers the courses from basic, programme core, electives and open electives which becomes multidisciplinary or interdisciplinary. Learners in all the disciplines will be studying these courses along with the mandatory courses. This is aimed to enhance the abilities and skills that can facilitate the process to find solutions to complex problems related to core and multidisciplinary /interdisciplinary areas.
2. Academic bank of credits (ABC):	Academic Bank of Credits (ABC) is a virtual/digital storehouse that contains the information of the credits earned by individual students throughout their learning journey. It will enable the students to open their accounts and give multiple options for entering and leaving universities. It is an online entity established by UGC to facilitate the students to become its academic accounts holder thereby paving the way for seamless students mobility between or within degree granting HEIs through a formal systems of credit recognition, credit accumulation, credit transfer and credit redemption to promote the distributed and flexible teaching-learning. ABC facility is being maintained by the Affiliating University, JNTUK for transferring of credits earned by individual students when they choose for entering and leaving university.
3. Skill development:	Skill development is generally used to refer to the productive capabilities acquired through all levels of learning and training, occurring in formal, non-formal, informal and on-the-job- settings. Skill development can reduce unemployment and underemployment, increase productivity and improve standards of living. Helping people develop and update their skills makes economic sense. ACOE has MoUs with various organizations and provides an opportunity for all the learners to enhance their skill-set through training, fieldtrips, internships, project works, seminars and workshops. Apart from these events, ACOE offers various technical training programmes through Infosys Springboard, Technical Hub (T-Hub) and Andhra Pradesh State Skill Development Corporation (APSSDC). Industrial visits are organized for Students to synchronize

	<p>theoretical concepts with the real world processes. Affiliating University prescribed skill/job oriented courses, MOOC courses in its curriculum which are being implemented. Apart from this, students and faculty members are encourage to take SWAYAM-NPTEL courses to improve their knowledge and skills.</p>
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	<p>ACOE adopts the curriculum prescribed by the affiliating university, JNTUK and the affiliating university issues all the regulations to implement which incorporates programme core courses along with mandatory courses such as Constitution of India, Environmental Science and Professional Ethics & Human Values etc. Students and faculty members participate in learning through various online courses.</p>
5. Focus on Outcome based education (OBE):	<p>ACOE focused on OBE and has clearly stated all the programme outcomes, programme specific outcomes and course outcomes. OBE manuals are prepared and made available to all the people. The various Assessment tools are: Direct Assessment: (a) Performance in Mid Examinations (b) Performance in End Semester Examinations (c) Laboratory Tests (d) Project Evaluation Direct Assessment Tools: Mid Examinations: This type of assessment is carried out through the mid examinations which are held twice a semester. Each and every mid examination is focused on attaining the course outcomes. Mid examinations include Descriptive, Online (Quiz) and Assignment. End Semester Examinations: End Semester examination is a metric for evaluating whether all the Course outcomes are attained or not. End Examinations focus on attainment of course outcomes through descriptive mode. Laboratory Tests: Day to day evaluation of student's performance in the laboratories with respect to conduct of various experiments is also taken as criterion for attainment of course outcomes. Project Evaluation: Evaluation of the student based on the project work is also taken as an important criterion for attainment of course outcomes. Indirect Assessment: Indirect assessment is done based on (a) Feedback from the students in the form of Program Exit Survey (b) Exit Survey on Program Specific Outcomes. Indirect Assessment Tools: Program Exit Survey: This survey is conducted at the end of B. Tech. programme to analyze all the program outcomes. Exit Survey on Program Specific</p>

	<p>Outcomes: This survey is also conducted at the end of B. Tech programme to analyze all the program specific outcomes. Attainment of Program Outcomes: Specific Outcomes Assessment Process: Direct assessment: Mapping of COs to POs and PSOs. Since Cos are mapped to POs and PSOs, the values of COs are reflected in the respective POs and PSOs in every semester. Indirect assessment: Graduate exit survey Description: All students leaving the college on completion of program are given feedback forms to give their assessment of POs and PSOs Frequency: Every year from the graduating batch to give their assessment of POs and PSOs POs and PSOs attainment: Final POs and PSOs attainment is calculated as $0.9 \times \text{direct assessments} + 0.1 \times \text{indirect assessment}$. Direct Attainment of COs: Course Outcome attainment level from internal assessment (A): mid exam class average (Mid 1 covers CO1, CO2, CO3, and Mid 2 covers CO4, CO5 and CO6). Course Outcome attainment level from university exams (B): class average of end semester exams(for CO1, CO2, CO3, CO4, CO5, CO6) CO Attainment: $0.25 (A) + 0.75(B)$ Indirect assessment: Course end Survey: At the end of each semester a questionnaire is distributed to all the enrolled students and takes feedback on effectiveness of the course. The questionnaire is prepared to know the efficiency and utility of the course outcomes. Final CO attainment: Final CO attainment is calculated as $0.9 \times \text{direct assessment} + 0.1 \times \text{indirect assessment}$.</p>
6. Distance education/online education:	<p>ACOE adopts the curriculum prescribed by the university in which students can register for MOOC courses of 12 week duration, one year in advance, by prior information to the authorities concerned. College also motivates the students and faculty members to get the certifications through SWAYAM-NPTEL online courses.</p>

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	<p>ACOE established Electoral Literacy Club (ELC) and motivates all learners who attained 18 years of age to register themselves as a voter by fulfilling the requirements of voter registration. The club organizes awareness programmes on electoral literacy among</p>
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	<p>the local community explaining to them the significance and power of voting. Democracy has given people a powerful right- that is to VOTE. Voting is the fundamental basis of democracy's 'Of the people, for the people, and by the people' slogan. In general, the following points will be covered in the literacy programmes organized within the college and in surrounding villages:</p> <ul style="list-style-type: none"> • Why Should We Vote In India? – A very little room has been given to 'What the people can do' to strengthen the democratic roots and bring about a change in the system. Just as it is the elected leader's responsibility to fulfill the voters' well-beings, the same is the need for the people of India to contribute to choosing the correct leader for their representation. • Every Single Vote Is Significant - Every citizen's vote is counted in the polling process. If the people are equally divided between two candidates, one single vote can be a game-changer and a decisive factor. It is seen in the past how one vote from an MP can decide the fall of the government. Exactly the same way, a single person's vote can confirm the win/fall of an aspiring MP or MLA. • Origin of the Change - Voting is a highly effective medium to have the change that is wanted in the government. In recent years, there is a considerable rise in the voting percentage and people are truly loving to be the 'Change Makers'. • Non-choosers get NOTA - It is possible that one does not want any single candidate to be elected from all who are contesting. The election commission has made a special provision of NOTA. It stands for "None of The Above". Hence if none of the candidates fit your criteria, just hit the NOTA option and voice the opinion. • A Sense of Pride – One must honor the right of voting given by the constitution of India. The youngsters are well excited to exercise their right to vote as soon as they turn 18. The feeling after having cast a vote infuses a sense of pride for being a responsible citizen. As can be witnessed by sharing the inked finger on social media. The trend is continuing to gain popularity amongst youngsters and elders as well. 								
<p>2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?</p>	<p>ACOE established Electoral Literacy Club (ELC) having students and faculty members as coordinators appointed by the Principal and it is functional. The composition of ELC is presented here:</p> <table> <tr> <th>S. No.</th> <th>Name of the person</th> <th>Designation</th> <th>Role</th> </tr> <tr> <td>1</td> <td>Dr. A Ramesh</td> <td></td> <td></td> </tr> </table>	S. No.	Name of the person	Designation	Role	1	Dr. A Ramesh		
S. No.	Name of the person	Designation	Role						
1	Dr. A Ramesh								

	Principal Chairman 2 Mr. M. Raghunadh Assistant Professor-ECE Coordinator 1 3 Mrs. P. Sridevi Assistant Professor-ME Coordinator 2 4 Mr. R. Raja Sekhar Assistant Professor-CSE Faculty Member 5 Ms. K. Hima Bindhu Assistant Professor-ECE Faculty Member 6 Mr. A Veera Manikanta III Year B. Tech. (ECE) Student Coordinator 1 7 Ms. S L Prasanna III Year B. Tech. (CSE) Student Coordinator 2 8 Mr. G. Subrahmanyam II Year B. Tech. (ME) Student Member 9 Ms. Pilli Hema Malini III Year B. Tech. (CSE) Student Member 10 Mr. Kiran Sai II Year B. Tech. (CE) Student Member 11 Ms. Ch. Srilokitha II Year B. Tech. (EEE) Student Member 12 Mr. S S Naidu III AIML Student Member 13 Ms. Padala Sruthi III IOT Student Member
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	ELC of ACOE conducts awareness programmes during the election year and certain initiatives undertaken. Awareness programmes will be organized by the ELC within and outside college and in surrounding communities where they come from. The campaigning programmes include the voter registration process, promotion of ethical voting etc. Moreover, our students assisted the district election administration in smooth conduct of poll by participating voluntarily in web-casting, maintenance of discipline and queue at booth, assisting the police personnel. Further, student volunteers are encouraged to mobilize the disabled persons and senior citizens to cast their votes in their villages.
4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.	ELC of ACOE conducts awareness programmes within and outside the college and in surrounding communities where they come from. The campaigning programmes include the voter registration process, promotion of ethical voting etc. Moreover, students assist the district election administration in smooth conduct of poll by participating voluntarily in web-casting, discipline, maintenance of queue at booth, assisting the police personnel. Students of ACOE participated and extended their services in local body elections, state assembly elections and parliament elections till now. In general, the material with all the campaigning content required for polling will be supplied by the District Administration and ELC members distributes the material in surrounding communities/villages and at the same time, the following points will be

	explained to the people: • Why Should We Vote • Every Single Vote Is Significant • Origin of the Change • Non-choosers get NOTA • A Sense of Pride
5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.	ELC of ACOE takes care of students above 18 years who are yet to be enrolled as voters in the electoral roll by sending the requisition through Principal to District Revenue Officer (DRO)/ Mandal Revenue Officer (MRO) for the enrollment forms for freshers. College also institutionalized a mechanism of students' enrollment as voters within college through ELC. ELC members execute the enrollment process: <ul style="list-style-type: none"> • Distribute the enrollment forms to eligible freshers. • Ask them to fill the forms under the mentorship of faculty member. • Submit the filled-in forms with attachments like DOB proof, Adhar number etc. within the stipulated date. • Verify the forms by the college administration. • Submit the filled-in forms with attachments to the District administration for enrollment. • Follow-up the process. • Finally, check the enrollments in relevant final voters' list.

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
2591	2136	2062	2259	2294

File Description	Document
Upload Supporting Document	View Document
Institutional data in prescribed format	View Document

2 Teachers

2.1

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

Response: 269

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
157	159	159	160	160

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
228.89	189.47	333.62	340.07	430.72

File Description	Document
Upload Supporting Document	View Document

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:

Aditya College of Engineering (ACOE) is affiliated to the Jawaharlal Nehru Technological University Kakinada (JNTUK), Kakinada. The College meticulously plans and develops curriculum based on syllabus prescribed by affiliating university and prepare action plans for effective implementation of curriculum which is in line with the institution's vision to empower society through quality education.

Curriculum Planning

As per the established norms, the IQAC of the institution asks all the departments to prepare the curriculum plan event calendar in line with academic calendar before the beginning of the academic year and the same is consolidated after the necessary approvals. Heads of the departments (HODs) allocate available courses to all the faculty members based on their specialization, experience before the beginning of the semester/academic year. HODs conduct meetings with all faculty members and prepare curriculum plan as per the schedules given by JNTUK which include syllabus coverage, deployment strategies, seminars, guest lectures, workshops, and industrial visits as per the requirements. Curriculum also covers cross cutting issues like gender sensitization, environment and sustainability, professional ethics and human values.

Curriculum Delivery

Teachers are encouraged to deliver the course contents effectively using ICT and innovative methods. The implementation of curriculum will be monitored continuously by the HODs and the Principal by taking the feedback from faculty members and class, teaching diary, and analyze additional time required for delivering if there is any lag. Teachers regularly write diaries to document the pedagogy and the time required to complete the same effectively besides the methods of delivering the curriculum. The students not only acquire knowledge and skills but also develop competence necessary after going through the course. The outcomes are specifically identified and the details are also updated on the website.

Continuous Internal Assessment

During a semester, there shall be two mid-term examinations. Each mid-term examination consists of one objective paper, one descriptive paper and one assignment. The objective examination (online) shall be for 10 marks and descriptive examination shall be for 15 marks with a total duration of 1 hour 50 minutes (20 minutes for objective and 90 minutes for descriptive paper) and an assignment for 5 marks.

The objective paper is set with 20 multiple choice questions, based on online question bank provided by

the University, and evaluated for 10 marks. The descriptive paper shall contain 3 questions, the student has to answer all questions and evaluated for 15 marks. The first mid-term examination shall be conducted on 50% of the syllabus and the second mid-term examination shall be conducted on the remaining 50% of the syllabus. Five marks are allocated for assignments. Internal evaluation will be for 30 marks.

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: 82

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: 59.79

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
1508	1411	1307	1314	1241

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:

Aditya College of Engineering is affiliated to JNTUK and follows the regulations as prescribed and incorporates the cross-cutting issues like Professional Ethics, Gender Equality, Human Values, Environment and Sustainability while preparing the curriculum plan.

Professional Ethics and Human Values

Professional Ethics and Human Values is a compulsory course for all the students that JNTUK has implemented for all UG programs. In order to maintain professional behavior at work today, values and ethics are needed. In this vein, the college organizes awareness events concerning morals and values, civic duties, the importance of honesty, equality, and a variety of topics related to ethics and values.

Gender Sensitization

In our college, every effort is made to uphold gender equality. We ensure a zero-tolerance campus through preventive measures and putting in place a policy for stringent action in the case of a violation, the college encourages excellent practices to prevent sexual harassment of women and girl students. The Women Empowerment Cell, known as "Nari-Sakthi," and the Prevention of Sexual Harassment, known as "Abhaya," arrange programs to elevate awareness and let students know that men and women are treated equally in the campus. So that gender difficulties don't occur, all genders are provided equal possibilities in terms of admissions, employment, training programs, sports, etc. On several occasions like women's day, the Women Empowerment Cell participates in the delivery of special lectures on

gender-related subjects. The college hosts workshops and lectures on women empowerment and prevention of sexual harassment. The institution encourages female faculty, staff, and students to participate in programs that promote women's leadership and empowerment.

Environment and Sustainability

It is very important to create awareness among stakeholders to protect the environment and to maintain sustainability. In all UG programs it was made mandatory to take the "Environmental Studies" course as per JNTUK regulations. In addition, the college hosts events like National Science Day, Swachh Bharat, Road safety, Arogya Rally, Yoga Practice and NSS-led activities. Awareness campaigns like "Say no to plastic," "Walk more, drive less", and "Save the Earth" are carried out by the Environment Club. As part of celebrations for holidays like Ganesh Chaturthi, clay idols are given to college staff and students. In addition, the college routinely carries out audits for green energy, and pollution control audits to take the appropriate actions to make it as a clean and green campus.

S.No.	Cross-cutting Issues	Documents
1	Professional Ethics	Course Structure and Academic Syllabus for R19 & R20
2	Gender Equality & Women Empowerment	Events are conducted by ICC-Abhaya
3	Human Values	Course Structure and Academic Syllabus for R19 & R20
4	Environment	Academic Syllabus for R19 & R20
5	Sustainability	Events conducted to create awareness on sustainability like Swachh Bharat, Yoga Practice, Road safety, Arogya Rally etc.,

File Description	Document
Upload Additional information	View Document
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: 54.57

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

Response: 1414

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

1.4 Feedback System

1.4.1

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

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

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

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1

Enrolment percentage

Response: 76.16

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
763	739	599	515	784

2.1.1.2 Number of sanctioned seats year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
816	912	912	912	912

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](#)

Provide Links for any other relevant document to support the claim (if any)

[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: 66.71

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
340	310	278	270	291

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
408	456	456	456	456

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
Provide Links for any other relevant document to support the claim (if any)	View Document

2.2 Student Teacher Ratio

2.2.1

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

Response: 16.5

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:

Aditya College of Engineering (ACOE) strongly believes that a well established system of teaching-learning process which focus on students and motivate them to be centre of any activity that takes place inside campus. Teaching-Learning takes place through various activities also such as clubs, cells, individual as well as group activities, technical symposiums, youth festivals, seminars/presentations inside and outside the college, project exhibitions, internships/industrial visits etc.

Experiential learning

- Learners experience and learn the concepts through laboratory sessions by performing experiment.
- College organizes workshops/seminars on various topics and provides hands-on experience to learn emerging technologies.
- Students are encouraged to visit industries for real time processes and to take training during semester gaps and in summer.
- Educational tours and surveys are organized by the departments.
- It is expected that learners take up projects/start-ups and explore all the possible opportunities.
- Encourage students to organize various events on their own to inculcate or improve leadership quality and other skills.

Participative learning

- Learner centric methods such as group work, role play, industrial visits, case studies, seminars and presentations will be deployed depending on the study of course.
- Encourage the learners to participate in various competitions at Regional/National/International level.
- College organizes technical symposium every year and encourages all the students to participate in different activities such as paper and poster presentations, quizzes, project exhibitions on selected themes.

Problem solving methodologies:

- Learners should be able to provide a solution for any kind of problem individually in the real life with their earned skills.
- Students are motivated to improve their problem-solving abilities through Tutorial classes / Quiz / Case Studies / Simulations / Assignments.
- Students are encouraged to participate in various competitions to enhance their exposure.

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

- ACOE focuses on overall and holistic development along with the employability of all the aspirants as a part of its vision and mission. The facilities related to infrastructure are being upgraded from time to time. Teachers use chalk and talk method, PPTs, animations and video lectures to visualize the concepts and also use NPTEL video lectures and other E-learning resources. Teachers demonstrate the experiments during laboratory sessions to enhance the practical knowledge and assess students through various tests.

- All the class rooms and seminar halls are equipped with LCD projectors, systems, Wi-Fi and college has smart classroom with smart board, lighting control, surround sound system, video conferencing and recording facilities. College has LMS platform i.e. MOODLE that enables teacher to create, share, upload the content and conduct assessments.
- College maintains SWAYAM-NPTEL local Chapter. Students and staff are encouraged to enroll for NPTEL online courses which would significantly widen their knowledge base.
- ACOE is maintaining central library with E-books and E-journals to support all the academic activities and is a member of DELNET/INFLIBNET and KNIMBUS.

Teachers uses Microsoft Teams online platform to conduct online classes for students during pandemic situation and whenever necessary.

File Description	Document
Upload Additional information	View Document
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: 100

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
157	159	159	160	160

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts)	View Document
Provide Links for any other relevant document to support the claim (if any)	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: 33.08

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
51	57	54	54	47

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 awarded by UGC recognized universities	View Document
Provide Links for any other relevant document to support the claim (if any)	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:

College believes that evaluation is for further improvement as teaching-learning and evaluation are supplementary and complimentary to each other. As an important stakeholder, the student is given all opportunity to raise their concerns and grievances with regard to evaluation. Regarding Formative Assessment, a student is free to contact the concerned class teacher to redress his or her grievances. The continuous evaluation of students is carried out by faculty regarding theory lectures, labs, assignments, unit tests, prelim exam, etc.

Formative Assessment

- Continuous evaluation of students is carried out by faculty regarding theory lectures, labs, assignments, unit tests. The midterm marks are allotted based on defined strategies and displayed

on notice board. In case of grievances the students are supposed to meet the concerned faculty and later the HoD, if the grievances are not resolved.

- In case the grievances are not redressed at the level of the class teacher and HoD, a student can meet the Principal regarding the examinations related grievances.

Summative Assessment

- The continuous evaluation of students is carried out by faculty regarding theory lectures, labs, assignments, unit tests as per the University mandate. The midterm marks are allotted based on defined strategies and displayed on notice board.
- The Institute appoints a Senior Supervisor who controls all the online/ theory examinations, displays schedules, instruct the students for smooth conduction of examinations of JNTUK. The marks obtained by the students in internal assessment are uploaded on the university web portal are displayed in the college examination notice board.

Redressal of grievances at University level: Examination form filling, exam seat allotment, results, photocopy, revaluations etc. are coordinated by examination section as per the procedures of the JNTUK.

- College appoints a Senior Supervisor for smooth conduction of evaluation procedures and the University has established procedure for the assessment and Redressal of grievances. The College has appointed Liaison Officer to liaison with the University to redress the grievances of the students. The University has made provision for Revaluation, Recounting and Challenge revaluation.
- The Liaison Officer would interact with the Examination Section of JNTUK and resolve the issues through the procedure like submission of written request of the College based on the request of the student to the institution.
- The result queries, printing mistakes of mark sheets, corrections, if any are handled at JNTUK examination section after receiving the request from the institution.
- The performance of a student in each semester shall be evaluated subject-wise with a maximum of 100marks.

The university specifies the last date for application of Recounting/Revaluation/Challenge Revaluation along with the results. For recounting, only the marks posted by the valuator are verified once again. The answer booklet will be re-evaluated for Revaluation by valuator. The answer script will be revaluated by a valuator from the college and an official appointed by the university in the presence of student for Challenge Revaluation.

File Description	Document
Upload Additional information	View Document
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 institution has adopted OBE approach and accordingly Programme Educational Objectives (PEOs), Programme outcomes (POs), Programme Specific Outcome (PSOs) and Course outcomes (COs) are developed. Curriculum plan with deployment strategies will be prepared and implemented to attain the outcomes. Each course contains four to six COs that meet the requirements of the appropriate levels of Bloom's Taxonomy, covering both the cognitive and the knowledge spheres. These COs are revised, updated, and reframed in response to changes in the course material and are altered as necessary. In order to establish a connection between the course outcomes, program outcomes and program-specific outcomes, correlation matrices are developed. These matrices classify the correlation as High (3), Medium (2), or Low (1), depending on how relevant the COs are in comparison to the PSOs and POs.

Program Educational Objectives (PEOs): Program Educational Objectives are broad statements that describe the career and professional accomplishments that the program is preparing graduates to achieve.

Program Outcomes (POs): Program Outcomes are statements that describe what students are expected to know and be able to do upon graduating from the program. These relate to the skills, knowledge, attitude and behavior that students acquire through the program.

Programme Specific Outcome (PSOs): PSOs are statements that describe what students are expected to know and be able to do in a specialized area of discipline upon graduation from a program.

Course Outcomes (COs): Course Outcomes are narrower statements that describe what students are expected to know, and are able to do at the end of each course. These relate to the skills, knowledge and behavior that students acquire in their progress through the course.

POs are adopted as per the AICTE-NBA guidelines and other outcomes will be developed in consultation with the experts and stakeholders based on the syllabus. As per the mandate of the IQAC, the faculty of the College prepare curriculum plan document and deployment strategies as per the requirements of the Course. To ensure that all stakeholders have access to relevant information, the Vision and Mission of the institution, department, as well as all Undergraduate and Postgraduate Course Outcomes (COs), Programme Outcomes (POs), Programme Educational Objectives (PEO), and Programme Specific Outcomes (PSOs), are published on the Institute Website. Additionally, copies of the Programme Outcomes (POs), Programme Educational Objectives (PEOs), and Programme Specific Outcomes (PSOs) can be found in the following locations:

- Classrooms • Laboratories • Department corridors • Syllabus book • Student attendance register • Lab manuals • Lab records.

Mechanism of communication of POs and COs

- Outcomes will be published in the College web site.
- Outcomes will be displayed in all classrooms, laboratories, corridors.

- Outcomes will be published in course files.
- Announcement of COs and POs will be carried out in college radio at regular intervals.
- Outcomes will be explained in orientation and induction programmes.
- Outcomes will be distributed through social media to create awareness.

Mapping of outcomes will be displayed in the question papers of internal assesment.

File Description	Document
Upload Additional information	View Document
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:

Intially, the Course Outcomes (COs) for each Course are mapped to the Programme Outcomes (POs) and the Programme Specific Outcomes (PSOs), according to the degree to which their relevance is low (1), moderate (2), or substantial (3). The strength of the CO-PO-PSO mapping relationship is determined by averaging the mapping levels of the COs for each of the POs, denoted as Mapping Strength of PO.

Action verbs of revised Bloom's Taxonomy will be used in preparation and assessment. Attainment of outcomes is evaluated through 10% indirect assessment and 90% direct assessment whereas CO attainment will be calculated based on direct assessment. Mapping of COs and POs are considered at three levels, above 75% mapping is taken as 'High'; 50%-75% mapping as 'Medium', less than 50% as 'Low'.

Final Course Outcome Attainment will be calculated using the formula.

CO Attainment = (0.9) x Direct component + (0.1) x Indirect component

Indirect assessment

At the end of the Program, different surveys like Exit Survey, Alumni Survey, and Employer Survey are conducted. The responses from the stakeholders are recorded. The Attainment of a Survey is calculated as weighted averages of responses using the Rubrics as Strongly Agree (5), Agree (4), Neutral (3), Disagree (2) and Strongly Disagree (1). Consolidated Indirect component of PO/PSO assessment will be Arithmetic Average of all the attainment values of surveys conducted.

Direct assessment

- Direct assessment will be carried out as per the guidelines prescribed by the affiliating university, JNTUK.
- Direct assessment is divided as internal examinations for 30 marks and external examinations for 70 marks.
- Internal examinations/assessment will be conducted at college level for all theory courses and divided into components of Descriptive(15M), online quiz(10M) and assignments(5M), comprising a total of 30 marks. Internal examinations will be conducted twice in a semester and awarded by considering weightage of 80% of best score and 20% of least score.
- Internal examinations/assessment will be conducted at college level for all laboratory courses and conducted once in a semester for 25 marks based on the day-to-day performance in the laboratories.
- External examinations will be conducted by the University for 70 Marks for all theory courses, 50 marks for all laboratory courses, at the end of the semester.
- Results of internal and external examinations will be taken as input for the calculation of attainment.

Evaluation of attainment of POs and COs

1. A threshold is set to assess the students' performance based on the result of previous academic year for the course (Assumed threshold is 50%)
2. Total marks from each component is calculated (Assume it as R1)
3. Calculate no. of students attempted the exam (Assume it as R2)
4. Calculate weighted Average marks using (Average Marks $R3 = R1/R2$)
5. Find number of students on or above threshold ($R4 = (R3 > \text{Target Marks})$)
6. Attainment achieved by students ($R5$ is Average of Mid-I and Mid-II)
7. Calculate % of students attained: $M = R5/R2$
8. Repeat the same procedure for Assignment (A) and Quiz (Q).
9. Calculate the CO attainment as $(0.15 * M + 0.1 * Q + 0.05 * A)$

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

2.6.3

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

Response: 90.28

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
519	401	590	692	362

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
579	459	641	750	411

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
Provide Links for any other relevant document to support the claim (if any)	View Document

2.7 Student Satisfaction Survey**2.7.1****Online student satisfaction survey regarding teaching learning process****Response:** 3.97

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: 41.77

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
10	13.673	18.097	00	00

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:

The Aditya College of Engineering has taken an initiative towards developing the ecosystem for innovation by providing the necessary infrastructure with resources. The students and faculty are motivated to take up innovative projects to enhance their competency levels to grab the opportunities.

The Institution has created the knowledge sharing methods through the following.

1. Research & Development Cell (R&D)
2. Entrepreneurship Development Cell (EDC)
3. Institute Innovation Cell (IIC)
4. Student Activity Council (SAC)

R&D Cell	EDC	SAC	IIC
<ol style="list-style-type: none"> 1. Workshop on IPR & RM. 2. Research Publications. 3. Books & Book Chapters Publications 4. Patents Publications. 5. National/International Conference Paper Publications 6. National / International MOUs 	<ol style="list-style-type: none"> 1. Startup's. 2. Workshop on EDC. 3. Project Expo. 4. Idea Presentation. 5. Interaction sessions with young entrepreneurs. 6. Mentoring sessions. 	<ol style="list-style-type: none"> 1. Technical Club. 2. Sustainable Development Club 3. Photography/film Club 4. Language Club. 	<ol style="list-style-type: none"> 1. Atal Ranking in Beginners Category 2. Innovative Ecosystem 3. Creating Business Opportunities. 4. Exposure to Business Environment

Research & Development Cell (R&D Cell):

The R&D of institution motivates students and faculty members to extend scopes, to explore their new ideas in the field of R&D. R&D Cell is actively engaged in transfer of information on specialized topics to the student community, thereby supporting the implementation of innovation ecosystem in the campus.

The following initiatives were taken for the transfer of knowledge

- Training Programmes & Workshops on IPR, Research methodology.
- 200+ Journals are published in UGC Care List I & II in the last 5 five years.
- 65+ Patents are published.
- 50+ National/ International Conference papers published.
- 25+ Books/Book Chapters Published.
- 20+ MoU's are signed with National/International organizations/ Institutions.

Entrepreneurship Development Cell (EDC):

ACOE was initiated with the aim of promoting entrepreneurial spirit among students and to take up Entrepreneurship as a career and become job providers rather than job seekers. Activities of this cell includes organising Awareness programs, Mentoring sessions – guidance by successful entrepreneurs in various fields, sharing of success story by entrepreneurs, assisting in getting financial support for Startups.

List of Registered Startup's:

1. Tales to Teach Pvt.Ltd
2. 4SS Software Solutions Pvt Ltd.
3. SDG organics.
4. Hydro Tribe Pvt Ltd.
5. Night Out Pvt Ltd.
6. Top Tray.
7. QQadz
8. Trigid.
9. Agumentik
10. Get My Tailor

Student Activity Council (SAC):

ACOE motivates the students to make part of Student Activity Council (SAC) to boost the learning, application of theoretical concepts to real life problems, design the systems etc. SAC inculcate the leadership qualities and communication skills among the students by involving them in several student driven activities like technical seminars, projects etc.

Institute Innovation Cell (IIC)

Institution Innovation Council is initiated in order to develop an innovative and conducive learning environment for student where they emerge to be budding entrepreneurs with need of the hour business prospects. Our college has initiated IIC with a motto of creating local innovative ecosystem.

Our Institution had received the **Letter of Appreciation** from IIC-Ministry of Education Initiative.

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

3.2.2

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

Response: 59

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
14	8	16	12	9

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: 0.09

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
0	2	1	10	11

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
Provide Links for any other relevant document to support the claim (if any)	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: 0.26

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
45	11	9	3	1

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
Provide Links for any other relevant document to support the claim (if any)	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:

Aditya College of Engineering established NNS Unit in the institute during the year 2010 to motivate the students to take part and associate themselves in various programs that promote good citizenship and social service to community. The students participated in various activities like organizing blood donation camps, health check-up so on. Through the extension activities, college promotes and imbibes students with social justice and responsibility. The active participation of the students in social service activities gives them an opportunity to understand the life style and standard of living of the underprivileged.

In collaboration with the Local Non-Government Organizations like Lions club, Rotary club and Red Cross, organized various activities such as:

- Environment Enrichment and Conservation.
- Health, Family Welfare & Nutrition Programs.

Social Service Programs like:

- Blood Donation camps (twice a year).

- Tree Plantation - Vanam Manam- plants distribution.
- Free Medical Camps (eye & dental).
- AIDS Awareness campaigns/ programmes/ Rallies.
- Commemoration and observance of all Important days and occasions.
- Road Safety week.
- Swachh Bharath, Food Donation.
- Visit to old age homes and orphanages donating fruits, medicine, study material, blankets etc.
- Regular Yoga training.
- Special classes to the school children in adopted village.
- Personality development training activities.
- Digital literacy campaigns.
- Cleaning and bleaching of public places -schools, Panchayat offices, temples and community halls.
- Adult Education- Physical, Spiritual and Psychological Counselling for the volunteers and students.

National Service Scheme is a community service programme sponsored by the Ministry of Human Resource Development, Govt of India. This scheme promotes national solidarity. It would be possible to awaken the villagers and slum dwellers to their responsibilities and develop the confidence, to tackle their common problems with energy, enthusiasm and in a co-operative spirit, based on mutual aid and self-reliance. The motto of the National Service Scheme is “NOT ME BUT YOU.” This expresses the essence of democratic living and upholds the need to appreciate the other man’s point of view first and to show consideration for fellow human beings. It also underlines that the welfare of an individual is ultimately dependent on the welfare of society as a whole. Therefore, the aim of the NSS is to demonstrate this motto in its day to day programme.

Aims and objectives of NSS

- 1.To understand the community in which they work
- 2.To understand themselves concerning their community
- 3.To identify the needs and problems of the community and involve them in problem-solving process.
- 4.To develop among themselves a sense of social and civic responsibility
- 5.To utilize their knowledge in finding practical solutions to individual and community problems
- 6.To develop the competence required for group living and sharing of responsibilities
- 7.To gain skills in mobilizing community participation
- 8.To acquire leadership qualities and a democratic attitude
- 9.To develop the capacity to meet emergencies and natural disasters.
- 10.To practice national integration and social harmony.

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

3.4.2

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

Aditya college of engineering is a reputed institute that has been recognized for its efforts in community service and outreach through extension activities. The institute has implemented various programs such as Volunteer Work, Community Development Projects, and outreach initiatives, blood donation camps, health checkup camps that address social issues. These efforts have been acknowledged through awards and accolades from government agencies, non-profit organizations and community groups. These recognitions are a testament to the institute's commitment for making a positive impact on the community and its dedication to social responsibility.

Additionally, the institute organizes various activities to tackle major social issues such as Cleanliness, Environment and Women's Health. Special efforts have been taken to instil human values and social awareness among students through activities like blood donation camps, Covid-19 vaccination camps, tree planting, cleanliness campaigns, AIDS awareness programs, Covid-19 safety awareness, celebrations of national leaders' birth and death anniversaries, Women's Day, Teachers' Day, Voter Awareness, Anti-corruption Oaths, Fit India Abhiyan, Human Rights Day etc.

These activities are organized through NSScommittee and departments with the aim to develop students' personalities, social consciousness and social services.

1. For the academic year: 2018-2019, 2019-20, 2020-2021, 2021-2022 the N.S.S. unit of the institute organized blood donation camps and collected the blood packets of 500+ in each camp. For the outstanding contribution institute had received best appreciation certificate from Indian Red Cross Society Blood Bank, Kakinada
2. The Department of National Service Scheme of Aditya College of Engineering received appreciation letter from Nodal Officer for GP Elections, AP for participating in Web Casting of Panchayat Elections held in four phases during February 2021.
3. For the academic year: 2017-2018 the NSS unit had received certificate of appreciation for "Best NSS Unit for well-organized Special Camp".

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

3.4.3

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

Response: 46

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
12	4	10	11	9

File Description	Document
Photographs and any other supporting document of relevance should have proper captions and dates.	View Document
Institutional data in the prescribed format	View Document
Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	View Document
Provide Links for any other relevant document to support the claim (if any)	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: 90

File Description	Document
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc.	View Document
List of year wise activities and exchange should be provided	View Document
List and Copies of documents indicating the functional MoUs/linkage/collaborations activity-wise and year-wise	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	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:

Aditya College of Engineering (ACOE) is located in a lush green campus with serene environment, spread across in 11.27 Acres of land. ACOE is maintaining its infrastructure as per norms and utilizes all the facilities optimally based on the requirements. The facilities are given below:

Classrooms & ICT facilities

ACOE has adequate number of class rooms with proper ventilation and necessary furniture to accommodate 72 students for theory sessions. ACOE has developed 15,333 Sq. m. as instructional area. ACOE has seven seminar halls with LCD projectors, computers with internet connectivity and public address system. These halls are utilized for co-curricular activities such as Seminars, Guest lectures, Workshops, Symposiums, Conferences and Faculty development programs. The institute has fifty two classrooms equipped with white boards, markers, LCD projectors, internet facility etc. ICT enabled teaching practices are adopted for effective teaching-learning process.

Computers

ACOE has 777 computers in which 705 computers are used for academic purposes and all those are connected through LAN.

Central UPS Facility

ACOE maintains 120 KVA central UP facility for continuous power supply to support 777 computers and 76 projectors.

Staff rooms and student rest rooms

ACOE has 2196.12 Sq. m. as administrative area and contains the board room, spacious office with all required facilities, cabins for heads of the departments, dining halls etc. Faculty cubicles are provided with furniture, Wi-Fi facility. Students' amenities area of 1656 Sq. m., circulation area of 4,400.00 Sq. m along with standard rest rooms and wash rooms separately for boys and girls comprising a total area of 20,466 Sq. m.

Central Library

Central library is being maintained with adequate number of books, journals, magazines, newspapers and a variety of books related to all competitive examinations such as GATE, TOEFL, CAT, GMAT and can accommodate 250 students and faculty at a time. Number of volumes were added during last five years. ACOE is also maintaining a Digital Library with computers and internet facility to access thousands of E-Books/Online materials/Videos/Journals etc. Apart of the above mentioned, other facilities like well-equipped laboratories such as language laboratory, multi-purpose halls, Canteen, separate Boys and Girls hostel, Guest room, 24 hours security, Girls common rooms, Boys common rooms, toilets etc. are also available in ACOE.

ACOE has CCTV cameras with 24 hours vigilance and generator facility.

Gymnasium and Yoga facilities

ACOE has separate gymnasium and Yoga hall spread over 13mX12m and 45mX20m respectively. Certified trainers take care of the gym and yoga activities

Cultural Activities

ACOE organizes various events such as technical symposiums, youth festivals, and competitions. Music concerts, skits, folk dances, classical dances, singing, theatrical activities, fine arts activities, quizzes are part of these events. All seven seminar halls are utilized as auditoriums for cultural activities.

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: 32.23

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
77.59	54.91	119.55	97.76	141.00

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
Provide Links for any other relevant document to support the claim (if any)	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 plays a central role in enhancing the quality of academic and research environment in Education institutions. ACOE campus has a spacious Central Library with an area of 900 Sq m. The faculty members and students of the institution utilize the library for continuous learning and to enhance their knowledge. The Library is well equipped with a reading capacity of 250 readers and is also Wi-Fi enabled.

Digital Library has 20 computer systems. The Central Library has various Text books, Reference Books, eBooks, Journals, Magazines, e-Journals, Project Reports, Tutorials and NPTEL Video Lessons related to engineering and allied subjects. Exclusive reference section is available in the library. New arrivals of books and journals are displayed on separate stands and racks. The library has a reading room and reprographic system to provide photocopies of essential / important portions to the students. Security of resources is ensured through a system of checking at the exit point for all resources borrowed by the users. Visitors are also required to sign noting the time of entry and exit. CCTV cameras are installed in the library for strict surveillance. Link to scholarly open access journals/database is also available on the Library webpage.

A well-equipped Digital Library with 20 computers having Internet connectivity is housed in the Central Library for access to E-Resources. There is a display of clearly laid out floor plan in the entrance of the library. Signage is provided in each and every rack and in the entrance of the Library Halls. It provides easy access for referring books departmental wise. The college library has the DELNET and NList facility. The Electronic copies can be accessed through DELNET and NList. ACOE has KNIMBUS platform to access e-resources remotely. Information about new book arrivals, catalogue from various publishers are displayed in the Library notice boards and communicated to the respective departments through e-mail. Reference Books, Proceedings, CD-ROMs, Latest Arrival and Library book borrow details are deployed through Intranet.

Library Automation: Library is automated using Integrated Library Management System (ILMS)

- Name of the ILMS – ECAP
- Year of Automation – ECAP Advanced version 5.0
- Technology: Barcode
- Partial / fully - Fully Automated
- Available bandwidth: 100Mbps
- Library Working Hours:
 - Monday to Saturday: 8.00 AM. To 10.00 PM.
 - Sunday: 9.00 AM. To 1.00 PM.
- Number of Librarians: 4
- Library support staff: 2

File Description	Document
Upload Additional information	View Document
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:

ACOE is committed to provide the best and the state of the art infrastructure facilities as per the requirements of the Statutory bodies as well as that of the stakeholders. IT infrastructure is continuously upgraded to promote better teaching-learning facilities, research facilities and general facilities in consultation with the stakeholders. Upgradation of IT and ICT facilities has been happening from time to time.

College has very good internet facility. The college internet facility is supported with two leased lines from BSNL with bandwidth of 400 MBPS and 100 MBPS. Both the lines are being used separately for academics and examination purposes. Internet services are available 24 x 7 in providing all the required resources. The institution has established a local area network with network points in all departments, library, laboratories and hostels. Wi-Fi routers are provided at various points to provide internet access for all the students and staff.

Central computing centre is established in the year 2010 with an area of around 300 Sq. m. for consolidating and managing network operations from various servers like App servers, DB servers and

computer clusters into a single facility. ACOE has wall rack with 36U mounted, with rack server and switches. Server configuration includes high power computing Dell Power Edge R730 Server with 3.6 TB capacities. Enterprise firewall checkpoint has been deployed for providing a secure campus network in the ACOE. Proper monitoring is followed to protect the security of the internet facilities against various network-oriented threats such as viruses, malicious software, etc.

Faculty are encouraged to use ICT facilities for better visualization and delivery of the subject. Also, the students are supported by the faculty to present their seminar topics using the ICT facilities. ACOE provide WACOM writing pads for virtual learning environment. ACOE has 777 computers and all are connected through LAN in which 705 computers are for academic purpose. All the computer laboratory systems are frequently upgraded to latest configuration such as 4GB RAM to 8GB RAM etc and also maintained properly so that each and every system supports latest technologies. All the computer laboratories are having required software tools as per the curriculum and also do projects on latest technologies. The institution has 52 classrooms and one digital recording room, all rooms are provided with internet facility. ACOE has seven seminar halls with LCD projectors, computers with internet connectivity and public address system. ACOE is also maintaining a digital library with computers and internet facility. CCTV cameras are installed in the library, laboratories and in corridors for strict surveillance.

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

4.3.2

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

Response: 3.68

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

Response: 705

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
Provide Links for any other relevant document to support the claim (if any)	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: 53.25

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

2021-22	2020-21	2019-20	2018-19	2017-18
160.82	93.80	168.40	193.63	194.22

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
Provide Links for any other relevant document to support the claim (if any)	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: 82.23

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
2025	1750	1744	1950	1858

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
Provide Links for any other relevant document to support the claim (if any)	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: A. All of the above

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

5.1.3

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

Response: 64.14

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
1422	1333	1670	1341	1509

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

5.1.4

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

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

Response: A. All 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
Provide Links for any other relevant document to support the claim (if any)	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: 62.99

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
401	309	406	445	228

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
579	459	641	750	411

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
Provide Links for any other relevant document to support the claim (if any)	View Document

5.2.2

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

Response: 23.98

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
45	36	75	65	31

File Description	Document
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.3 Student Participation and Activities

5.3.1

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

Response: 5

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

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

File Description	Document
Upload supporting document	View Document
list and links to e-copies of award letters and certificates	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.3.2

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

Response: 35.4

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
24	5	39	54	55

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:

Aditya College of Engineering (ACOE) is a registered Alumni Association under the Societies Registration Act. It was formed on 30th June 2021 at The Registrar of Society, Kakinada Region, Andhra Pradesh. Registration No: 724 of 2021/Andhra Pradesh under Societies Registration Act 2001.

ACOE and the Alumni association jointly believe in creating and maintaining association with its alumni. The Alumni Association provides an interface for establishing a link between the alumni, staff, and students of the institute. ACOE alumni are currently working at various positions all over the globe.

The Alumni Association Contribution through various means :-

- 1.Book Donation:** Some of Alumni contribute by donating text books to the association. These books are useful for the students as a reference for their academic learning and career guidance.
- 2.Alumni Interaction:** Alumni of ACOE give inputs to aspiring graduates. They are invited as resource persons at various events, guest lectures and panel discussions. They provide inputs and share their experiences regarding skills, recent technologies & trends in corporate world, application of knowledge and corporate working culture.
- 3.Placement & Career Guidance Assistance:** Alumni are working in organizations at various capacities. They keep the faculties and the placement officer abreast about the available job opportunities. They assist and guide the students to crack the interviews. They also share their experience with the students and motivate them for their career development in various domains.
- 4.Campus recruiters:** Alumni come to campus as recruiters for their companies and also recommend and promote ACOE to their employers for campus placements.
- 5.Entrepreneurship Awareness:** Some of our Alumni have established startups in different sectors, many of them are first generation entrepreneurs. They decided to become entrepreneurs during their academic span at ACOE. Through the journey as an entrepreneur they learnt various skills & knowledge. They enlighten the students with their success stories and challenges faced.
- 6.Alumni Meet:** We at ACOE have a tradition of inviting alumni for Annual Alumni Meet in the month of January . In this meet the alumni get chance to reconnect with the old friends. This is the best platform for networking and sharing new trends and current happenings in the corporate world. These inputs are helpful to academicians in molding the aspiring students.
- 7.Institute Social Responsibility:** Our Alumni in association with ACOE are engaged in

conducting social activities for the welfare of the society through Donations in the form of Books, Blankets, Chairs, Mats, Storage containers, Stationary etc.

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

Vision of the Institution:

To induce higher planes of learning by imparting technical education with

- International standards
- Applied research
- Creative Ability
- Value based instruction and to emerge as a premiere institute.

Mission of the Institution:

Achieving academic excellence by providing globally acceptable technical education by forecasting technology through

- Innovative Research And development
- Industry Institute Interaction
- Empowered Manpower

Aditya College of Engineering, Surampalem, has a strong Governing Body headed by Sri. N. SatishReddy, President, was established by Sarojini Educational Society in the year 2008 with the motto of providing quality education and quality training programs to the young aspirants. Governance and leadership is highly supportive and provides the necessary infrastructure to achieve the goals by providing necessary support and efficient human resource in the form of faculty members.

NEP implementation: Institute offers various Skill Enhancement Courses to help students develop employability skills. Soft skills development through case studies, group discussions, project work, and internships prepares students for the workplace. The Institute's focus on integration of Indian traditional knowledge systems, into teaching and learning process.

Sustained institutional growth: Institution has made significant strides in terms of its infrastructure, academic programs, faculty and student strength. The Governing Body comprises eminent personalities from the Society, Academicians, Faculty representatives, State Government & University representatives. Along with the Governing Body, the administrative activities are supported by Finance

and Purchase committees for the smooth conduct of all the academic and financial activities to meet the vision and mission of the institute.

Institute is academically and administratively headed by the Principal. He is the Member Secretary of Governing Body and is assisted by Dean (Academics & Administration), Internal Quality Assurance Cell (IQAC), Administrative Officer, and Coordinator of various Institute level Committees. The various Committees direct the day-to-day functioning of the Institute. The responsibilities are communicated to the faculty members through regular staff meetings and circulars.

The Heads of Department prepare the plan (Curricular, Co-curricular & Extra-curricular activities) in line with the vision and mission of the institute in coordination with IQAC. Further it is submitted to the Principal for approval through IQAC. The IQAC ensures effective execution of teaching methodology of courses, maintenance of academic standards, and student welfare. This would bring transparency to the governance and inherently encourages participative management thereby aligning to the vision and mission of the institute.

The deployment of the institutional strategic/perspective/development plans is a crucial aspect of the institute's functioning. These plans provide a roadmap for the institution's growth and development, ensuring that it stays relevant and responsive to changes in its environment. The Institution regularly evaluates its plans to ensure that it achieves its objectives and maintains a high level of quality in its academic programs and services.

File Description	Document
Upload Additional information	View Document
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:

Governing Body is an apex authority of the college which gives the direction, policy making and implementation, finance and infrastructure decisions and ensures the quality in all the systems. Governing Body consist the members of educational society (Chairman, Vice Chairman, Secretary, Joint Secretary, and Treasurer), nominees from affiliating university and state government, distinguished academicians, industrialists, senior staff members along with the Principal as member secretary. Governing Body meets twice in a year to review the progress, performance and makes policies, suggests the improvements according to the present context as well as foresees the future. Apart from the Governing Body meeting, Chairman/Vice Chairman conducts review meetings periodically with the

Principal, Dean and other senior staff members to check the progress related to academics, consultancy, R & D and grievances.

Principal is the administrative and academic head of the college and makes the decisions pertaining to academic and administrative strategies and will be the Chairman of various committees. These committees regularly monitor, evaluate and recommend in respect of various matters related to Institutional Quality assessment aspects. Principal executes all the policies, implements the strategies, prepare the reports and submit to the Governing Body apart from maintaining the norms prescribed by the statutory bodies. All the grievances will be redressed appropriately by the committees at the earliest.

Dean (Academics & Administration) has a key role to play in all academic matters to tone up the academic performance of all the departments and the overall quality and standards of the students and enriching the skills of the staff members. He Assist the Principal in all matters of academic activities like

Preparation of the reports / documents / write-up etc. He is responsible in making periodic assessment of staff particularly the new entrants and submits a report with suggestions / remarks to the Principal.

HoD is responsible for the smooth functioning of all the department level activities and responsible for analysis of curriculum and strategic plan pertaining to the department. He shall adhere to the Policies and Procedures governed by the Academic committee and ensures quality practices in their departments. Monitors the academic schedule/attendance/syllabus completion/Internal examinations. HoD monitors the requirements in laboratories and prepares budget proposals for purchase.

Administrative officer is the over-all In-charge of administrative functions, responsible for Transport, Campus maintenance, Security of college property, and Personnel, Canteen operations, Public relations, Health Centre, among others.

He takes care of all admissions approval procedure and communicating with principal.

Accounts Officer keeps account of financial transactions such as admission fees, semester fees, hostel fees etc.

He takes care of all the financial transactions related to preparation of salary bill for Teaching and Non-Teaching faculty, repair, maintenance and purchase etc.

Policies and procedures have been established for the staff appointments, promotions, service rules, code of conduct, maintain discipline in the campus, incentives and welfare of students and staff. All the rules, norms, policies will be conveyed to all the stakeholders from time to time and the same will be displayed through the college web site.

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

6.2.2***Institution implements e-governance in its operations***

- 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
Provide Links for any other relevant document to support the claim (if any)	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:

College implements the performance appraisal system for teaching and non-teaching staff based on the key performance indicators and specific formats will be used for this purpose. HoD interacts with every employee and posts his remarks and forwarded to Principal.Principal in consultation with HoD evaluate the appraisal of individual staff member and propose suitable increment/promotion as per the norms prescribed.

College implements effective welfare measures and they are presented below:

- ü **Transport**—Transportation facility is provided to teaching and non-teaching staff at free of cost.
- ü **Group insurance**--Group insurance facility is implemented to all the interested staff members with 50% contribution by the management.

- ü **ESI**--Employee's State Insurance facility is implemented as per government norms.
- ü **PF**--Provident fund scheme is implemented to all the interested people as per the government rules.
- ü **Canteen**--Lunch and dinner is being provided to the teaching and non-teaching staff at subsidized rates.
- ü **CL**--Teaching and non-teaching staff are entitled with 12 Casual leaves apart from regular government holidays.
- ü **Summer vacation**--Teaching and non-teaching staff are allowed to avail the vacation for 15 days.
- ü **Maternity leave**--Women staff are permitted to avail 45 days with full pay.
- ü **Medical leave**--Medical leave is provided to staff based on the need.
- ü **Fee concession to the children of employees**--Fee concession of 50% in tuition fee will be provided to the children/wards of all employees in Aditya Educational Institutions.
- ü **Higher studies**--Staff members who wanted to pursue higher qualification are provided the benefit in terms of sponsorship or paid leave.
- ü **Research/Publication incentives**--Faculty members who are active in their research and publish their work will be encouraged with the incentives. Further, Registration fee, TA, DA will be provided to attend the conferences of National/International level. All the researchers will be encouraged with the honorarium as per research incentive policy norms, if any funded research project sanctioned by the funding agencies.
- ü **Sponsorship for Training programmes**--Faculty members are encouraged to attend STPs, workshops, seminars at National/International level to update their knowledge levels and are provided required fee, TA, DA.
- ü **Sponsorship for NPTEL online courses**-- Faculty members are encouraged to appear for NPTEL online courses and examination fee will be reimbursed based on the performance of the faculty member.
- ü **Promotions**--Staff members are promoted based on their qualification, service and performance appraisal to higher position along with the monetary benefit.
- ü **Compensatory/Special leaves**--Leaves will be provided to the staff that works beyond normal working hours as and when required.
- ü **Membership fee of professional bodies**--Teaching staff will be provided 50% fee towards membership of any professional body.
- ü **On-Duty/Official duty**--OD will be granted to a staff member when he/she is deputed official work.
- ü **Uniform**--Prescribed uniform will be provided to all the technicians/non-teaching staff at free of cost.

Salary advance--Salary advance will be provided to the needy people and is recoverable against their salary.

File Description	Document
Upload Additional information	View Document
Provide Link for 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: 71.07

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
112	119	113	110	111

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 / workshops 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: 83.37

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
241	207	224	225	226

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
124	94	108	117	109

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:

Aditya College of Engineering (ACOE) is a self-financed institution affiliated to Jawaharlal Nehru Technological University, Kakinada (JNTUK) under AICTE. The major part of the funds required by the institution is being met by internal generation from students' fee. Institution has a well-defined strategy for monitoring the expenditure of funds in an efficient and effective manner. The mobilized resources are mainly utilized for infrastructural development of the Institute, Human resources and developing teaching learning process. The financial activities are administered by the Governing Body. College mobilizes funds through tuition fee which will be received under reimbursement scheme of Govt. of Andhra Pradesh. Further, fee collections for the other services rendered to the students, for example, student transportation fee, hostel fee registration fee collections for workshops and skill enhancement activities, grants received from government bodies, non-government bodies, philanthropists and alumni. Funds also generated by lending its infrastructure and other sources for external agencies like TCS-ION for conducting exams e.g. RRB Exam, GATE, CAT, JIPMER and TSPSC. Funds collected will be fixed deposited in the bank and utilized for the bills such as electricity bill, internet bill etc., library books, repairs, expenses for workshops, events, club activities, faculty development and student skill development programmes, admission process, college promotional expenses etc. Government of Andhra Pradesh regulates the tuition fee for all engineering colleges through Andhra Pradesh Admission Fee Regulatory Committee (APAFRC) by considering various factors such as infrastructure, faculty-student ratio and will be disbursed under Fee reimbursement scheme.

Utilization of funds:

Budgets will be allocated to each department to meet annual expenses and monitored. In the beginning of academic year, every department proposes their budget and total budget will be consolidated by Principal which will be reviewed and approved by the Governing Body. This allocated amount will be used for infrastructure development and salaries, campus maintenance, training, laboratory consumables, maintenance of labs etc.

Institution has adequate mechanism for auditing by both Internal and external auditors. Internal Audit is performed by officials deputed from the society periodically and the reports are obtained before conducting of the external audit which is normally done after the closure of the accounts in all respects. Internal Auditing consist both financial and systems audit regularly and submit quarterly reports. External audit is done by the statutory auditors. Statutory auditors audit the financial and statutory compliance aspects of the college as per the Companies Act 2013 and the Income Tax Act 1961. For Aditya College of Engineering, external audit is carried out by Mr. V. V. Satyanarayana, Chartered Accountant, Membership No:022084.

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

6.5 Internal Quality Assurance System

6.5.1

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

Response:

Aditya College of Engineering established IQAC on 9th June 2016 in order to increase the involvement of faculty activities. IQAC works effectively towards quality achievement, enhancement and sustenance by establishing all procedures in curricular aspects, teaching-learning processes, research activities, learning resources, student support services and progression, governance, leadership and management activities etc. It ensures the implementation, review and evaluation of all the policies, procedures and contributes significantly. It is an integral part of the institution working with a goal towards the development and quality enhancement in various aspects. IQAC is involved in all the college level committees and professional bodies where academic, administrative and student centric programs are in progress.

The following two practices are provided which are exercised meticulously as a result of institutionalizing the quality assurance initiatives by IQAC.

Practice 1: Facilitating Digitization of Teaching-Learning Process:

The Learning Management System (LMS) as an integral part of the teaching-learning process had initially got cognizance in the year 2018, and following practices are ensured.

Creating Updated LMS Contents: Course instructors ensure the availability of updated video lectures and study materials in alignment with the lesson plan.

Ensuring Quality and Utilization: To ensure the quality and utilization of the LMS content, feedback and usage reports are collected from students at the end of the semester.

Using LMS as Assessment Tool: The course instructors upload assignments and quizzes in the LMS to assess the students.

Practice 2: Implementation of Outcome-Based Education: Outcome Based Education is another initiative by IQAC and IQAC organized the workshops by inviting experts to explain OBE approach to all the teaching staff members. As a part of this initiative, teaching staff prepared programme educational objectives (PEOs), programme specific outcomes (PSOs) and teaching staff members are able to write course outcomes (COs), Correlation of Cos with POs and PSOs, Preparation of question papers using Blooms Taxonomy levels of learning and attainment of POs, PSOs for each course which facilitates to implement OBE in the college.

The importance of the OBE system for the assessment of a learner's ability is based on

Bloom's Taxonomy.

Mapping of CO-PO & CO-PSO: During syllabus preparation, the course outcomes (CO) for each course are prepared using action verbs of various learning levels recommended by Bloom's

Taxonomy. Correlation levels of COs with POs and PSOs are also decided.

Preparing CO Mapped Question Papers: Each question in the final semester examination is mapped with CO for tracking proper distribution of Bloom's Taxonomy Levels. It also helps in the assessment of the PO and PSO attainment level of a course.

Assessing CO Based PO & PSO Attainment: At the end of a semester, results are analyzed to generate CO based PO & PSO attainment report.

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

6.5.2

Quality assurance initiatives of the institution include:

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

Response: A. Any 4 or more of the above

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

Institute, society and nation. The Institute has approximately 29.73% of girl students and around 29.01% of female staff out of which 20.6% of female staff are holding the administrative positions. In order to promote gender equity in the institution the following measures are taken:

- Awareness programs are conducted on women safety, Career Opportunities and life-style based disorders.
- Internal Complaints Committee addresses the grievances related to gender safety and security.
- Encouraging female students in all curricular, co-curricular and extracurricular activities.
- Separate placement drives are conducted for female students. Separate hostel facility and common rooms are available for female students and staff. Staff quarters are provided in the campus. Security guards are positioned across the Institute to look after the security of the students.
- Extensive surveillance network with 24x7 monitored control rooms.
- Sanitary napkin vending machines are provided in the common rooms in order to promote health and hygiene.

Gender equity refers to the principle of fairness and justice in the distribution of resources, opportunities, and benefits between individuals of different genders. It aims to ensure that everyone, regardless of their gender identity, has equal access to and is treated fairly in areas such as education, employment, healthcare, politics, and social and economic opportunities.

Gender equity recognizes that historical and societal biases have led to unequal treatment and opportunities for individuals based on their gender. It seeks to address these disparities and create a more inclusive and just society. The concept of gender equity acknowledges that equality does not mean treating everyone exactly the same, but rather recognizing and addressing the unique needs, experiences, and challenges faced by different genders.

Promoting gender equity involves addressing a wide range of issues, such as:

ACOE has initiated Women grievances and Equal opportunity cell in the 2014 under the name ABHAYA. This cell promotes Gender equality, Sensitization of the students and faculty. This cell creates equal opportunity to the women employees to be one the members of the committees associated

with the college.

This women Grievances and equal opportunity cell Presiding officer Ms.S.Swetha Radha Assoc.Professor lead the cell. Under this cell every year many programmes are conducted on sexual harassment, Awareness programs and international women's day etc.

- Equal access to education: Ensuring that all individuals have equal opportunities to receive quality education about 29.1% girl children are present in the campus. This includes eliminating barriers that prevent girls and women from accessing education, as well as addressing gender stereotypes and biases in educational settings.
- Economic empowerment: Promoting equal pay for equal work, eliminating gender-based discrimination in employment and career advancement, and addressing the gender wage gap. ACOE pays equal attention in all the categories It also involves encouraging women's entrepreneurship and supporting their access to financial resources and economic opportunities.
- Health and healthcare: Ensuring equal access to healthcare services and addressing gender-based health disparities. This includes addressing reproductive health needs, addressing gender-based violence, and promoting gender-sensitive healthcare policies and services.

File Description	Document
Upload Additional information	View Document
Provide Link for 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.	View Document
Circulars and report of activities for the implementation of the initiatives document	View Document
Bills for the purchase of equipment's for the facilities created under this metric	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.3

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

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

Response: A. All of the above

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

The institute is successfully diversified since its inception and has been at the forefront of inclusivity efforts. It brings together the student body as well as the faculty and staff, who belong to different walks of life. Inclusivity efforts are best shown through versatile religious and cultural events which the institute celebrates with pride.

The events are not only created to fit the co-curricular aspects but also focus on bringing cultural, regional, and communal harmony through Saraswathi Puja, Onam Day, Mother Language Day, Janmashtami, and so on. In terms of sociological inclusivity efforts, the institute has been a proud receiver and patron of several financial assists meant to help students with strained financial conditions.

Tolerance and harmony towards cultural, regional, and linguistic diversity are crucial aspects of building inclusive and cohesive societies. Promoting tolerance involves cultivating respect, understanding, and acceptance of different cultures, regions, and languages while fostering harmony entails creating a peaceful and cooperative environment where diverse groups can coexist and collaborate. Here are some key approaches to foster tolerance and harmony in these areas:

1. Education and Awareness: Incorporate cultural, regional, and linguistic diversity into educational curricula, textbooks, and teaching materials. Teach students about different cultures, traditions, languages, and histories to foster understanding and appreciation. Organize cultural exchange programs, language clubs, and celebrations to encourage dialogue and interaction among diverse groups.
2. Language and Communication: Recognize and value linguistic diversity by promoting multilingualism. The college conducted various activities like:

Ganesh Festival on 10-09-2021 with various activities like Reciting mantras and performing Puja to deity lord Ganesha.

Dussehra on 15-10-2021 with traditional Floral celebrations.

Communal Harmony on 22-12-2021 on Ramanujan day.

Encourage the learning of different languages within educational institutions and provide opportunities for language practice and exchange. Promote effective communication and active listening to enhance understanding and reduce misunderstandings between linguistic and cultural groups.

1. Cultural Exchange and Events: Organize cultural festivals, exhibitions, and performances that showcase the richness and diversity of various cultures, regions, and languages. Encourage participation from different communities, allowing them to share their traditions, music, art, dance, and cuisine. Such events facilitate cross-cultural interactions, promote mutual respect, and build bridges of understanding.

Onam Celebrations on 21-09-2021 conducted activities like Traditional and cultural events.

Encouraging all the students to participate in Music and art and dance in every festival conducted on the campus.

1. Student Council and Leadership Opportunities: Provide opportunities for students to participate in student government or leadership roles within the school. This allows them to experience democratic processes, make decisions, and understand the importance of upholding constitutional principles in their roles as student representatives.

The college has built its inclusivity efforts around the principles of Equality. The institute also hosts several international students from different countries and faculty from different states of the country, apart from the medley of regional people. The student and faculty fraternity, despite its rich diversity, stands strong in unity. This is possibly the best way that the institute displays its regional inclusiveness.

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

7.2 Best Practices

7.2.1

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

Response:

Objectives of the practice:

- To foster the technical skills of students by imparting special training on various technologies
- To build confidence in the students by developing communication skills
- To make the students aware of the interview process by conducting mock interviews
- To aim for the overall development of students with specific focus on academics, research, social service and management

Context:

Owl Coder is an Innovative Training Program of 60 days that enhances trainees' on Coding skills like Data Structures and Algorithms, Problem-solving skills. Today's global industrial scenario requires professionals with a wide range of knowledge and skill sets, including the ability to lead team-centered projects, contextualized problem formulation, proficiency in communicating across disciplines, and hands-on experience. As there is growing demand for skilled professionals in various sectors, the institute aims to produce skilled professionals to fill the demand.

The Practice:

The Institute provides training along with certification to students based on industry requirements in different domains from programming to automation like Data Science, Software development, Android development, Cyber Security, Robotics, and Mechatronics etc., Special focus is also given on communication and soft skills so that they can be ready for the industry by enhancing their knowledge as well as skills.

Accordingly, the Institute has focused its efforts on educating future professionals in high-demand fields including

Software Certifications/Training:

- AWS Certified Cloud Practitioner & Architect Associate
- Microsoft Azure Fundamentals, Administrator & AI Fundamentals Certification
- CISCO Certified Network Associate, Cyber Security Operations Associate
- CompTIA Certified Cyber Security Analyst, Security+
- Google Cloud Certified Associate Cloud Engineer
- Automation Anywhere Certified Essential and Advanced RPA Professional
- Salesforce Certified Administrator
- Red Hat Certified System Administrator & Engineer
- Juniper Networks Certified JUNOS Associate
- Oracle Cloud Infrastructure Certified Foundations Associate
- Google Certified Associate Android Developer,
- Microsoft IT Specialist Python and Java Certification
- VMware Certified VSphere6 Administrator,
- HubSpot Academy Digital Marketing Certification
- Microsoft Technology Associate in Web Design, Software Development, Database Fundamentals, Network Fundamentals, Security Fundamentals, and Javascript
- Unity Certified Programmer & Artist
- Arduino Fundamentals Certification
- Autodesk Certified User - AutoCAD, and Revit
- Competitive Coding
- Red Hat- System Administration RH124, RH 134, RH 254
- Oracle Academy SQL and Database
- DevOps Associate
- MEAN and MERN Stack
- Artificial Intelligence & Machine Learning
- Internet of Things
- Automation Testing
- Augmented Reality / Virtual Reality
- DELL EMA Academic Alliance - Cloud Infrastructure & Services (CIS)V2, Data Science & Big Data Analytics, Information Storage and Management V3 (ISMV3), Data Production & Management (DPM)
- Siemens Solid Edge
- Dassault CATIA, Delmia , Simulia
- Robot Cprog
- Hardware Certifications:

- Applied Robot Control- Robots, Mechatronics & PLC Automation
- Automotive 2 & 4-Wheeler
- Computer Numeric Control (CNC)
- Refrigeration and Air Conditioning
- Industrial Welding
- Electrical Home & Industrial Appliances
- Soft Skills/Life Skills/Career Guidance

Campus offers a platform both virtually and physically for the students to improve their language proficiency in a way that exposes them to global English and help them get rid of mother tongue influence. The learner centric approach provides students a free hand in learning

Evidence of Success:

- Separate built-up area of 50,000 sq. feet is dedicated to training and certification along with Incubation centre
- A special team of technical trainers are available at Technical-hub to train the students
- In addition to regular academic requirement, Training centres are established in association with APSSDC
- Further, students who participated in various trainings and mock interviews enhanced their technical skills and communication skills

Best Practice -2

Title of the Practice : Global Readiness in Ensuring Ecological Neutrality

- To achieve environmental sustainability through energy conservation, reducing carbon footprint, and waste management
- To sensitize all students and staff towards environment conservation.

The Context:

The increase in environmental pollution and depletion of natural resources throughout the globe calls for immediate attention towards controlling pollution, conservation of natural resources, and protecting the planet for future generations.

The Practice:

ADITYA COLLEGE OF ENGINEERING is an expansive, verdant, and eco-friendly campus. Carbon neutrality, renewable energy production and its utilization, energy conservation, waste management, and plastic ban are just a few of the ongoing initiatives taken on the campus to protect and preserve our planet. The seriousness of the issue must be emphasized to the students. Students are sensitized about various problems related to environmental pollution, depletion of natural resources, and energy conservation.

The following measures have been initiated in the institute to donate to the great cause of environmental consciousness and sustainability.

Carbon Balance

ACOE has a 21,054 m² open space and garden area. Flowering plants, particularly trees, operate as a sound barrier and heat regulator in the garden based on their therapeutic value and relationship to Vedic philosophy. The horticulturist supervises the gardens. Organic pesticides and fertilizers are used on plants. Efforts are being taken to decrease the carbon footprint by adding plants and trees and minimizing vehicle usage.

Renewable Energy:

In 2018, a Solar power production facility with a capacity of 500 kW was erected to cater to the needs of the institute. Solar hot water systems with 12000 LPD capacity were built for the hostel buildings.

Waste Management:

The Institute effectively manages solid waste, liquid waste, and e-waste thus contributing to environmental protection.

Ban of Plastic:

Efforts are in place to minimize the use of plastic bottles, straws, and food packaging. The college imposed a ban on single-use plastic-ware

Evidence of Success:

1. 37% of ACOE is covered with open space and plantation area
2. 8 tonnes of vermicompost and 4000 Litres of Jeevamrutham generated from college biomass in 40 days and used as organic plantation feed
3. Ponds handle the 95000 KLD campus liquid wastes. Treated water irrigates all campus flora and agricultural land.
4. 11 harvesting pits, were strategically placed on campus
5. Open ponds with Aerators capture and store rainfall on campus
6. FRP Digested Food waste operated 4 m³/day biogas plant was made accessible for biogas generating
7. The institute is recognized as the “Cleanest Higher Educational Institute” in the country by MHRD under Swachh Campus Rankings 2019
8. The institute is involved in the “One Student One Tree” initiative of ACOE

File Description	Document
Best practices as hosted on the Institutional website	View Document

7.3 Institutional Distinctiveness

7.3.1

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

Response:

Aditya College of Engineering has made its flag high with its record placements in the last five years. At Aditya, we believe employability is more than a skill; it is an attitude, it is a practice. So, we instill this attitude through continuous training in learning skills, behavioral skills, and life skills in addition to aptitude and communication skills. And this training starts in the first year of engineering itself.

1. Platform for Placements

Specific Campus Recruitment Training programs are conducted in the third year, with an emphasis on problem-solving, critical thinking, communication skills, and teamwork. It stands as the leading edge in empowering its student to be an employee during the completion of the course.

The sculpting of the students starts from the first year of their course with well-designed training through various offline and online programs to keep the learners on track and cater to the needs for employment in the training process besides academics. Much emphasis is laid on the skills development that nurtures the students to improve Technical, Logical, Analytical, and Verbal skills.

Above all, it grooms the personality of an individual to be confident and proficient to bag the opportunity. Industry institute collaboration cell is established with 10 training platforms for learners to mould the students to be effective employees. Well-trained and experienced faculty prune the learners in required aptitude and soft skills. Vigorous training such as mock interviews helps the learner experience and understand the prerequisites of employment. A proud number of 290 leading software and core companies visited the campus and a total of 1714 students were placed in different companies.

File Description	Document
Appropriate web in the Institutional website	View Document

5. CONCLUSION

Additional Information :

The Governing body is constituted as per the guidelines prescribed by AICTE/State Government/UGC. The Governing Body meets once in six months and interacts with industry experts, faculty members, students to understand the improvement areas and raise the level of knowledge delivery at Aditya College of Engineering with the assistance of faculty members and administrators of the Institute. The Chairman, Vice-Chairman and Secretary are the chief functionaries who take the responsibility of implementing the policy decisions of the governing body through the Principal.

ACOE is committed to create and sustain and improve the learning process through Total Quality Management and make itself a seat for scientific and Technological learning with continual improvement and team work as its strength for achieving the set objectives. The distinct recognitions speak volumes of the institute's objective to promote engineering excellence. Recognitions and ranks of ACOE are furnished below:

Agency/Magazine	Rank of Aditya College of Engineering
ARIIA (Atal Ranking of Institutions on Innovation Achievement)-2021	Recognized in the Band "PERFORMER" under the category colleges/Institutes (Private & Technical)
THE WEEK	85 in South India; 145 All India rank
Careers 360 in 2023	AAA+ grade
Silicon India	29 (Among Top 100 Engineering Colleges in India)
Data Quest - CMR	85 (Among Top 100 Engineering Colleges in India)
Times Engineering	145 (Among Top 175 Engineering Colleges in India)
The Academic Insights	44 (Among Top 50 Engineering Colleges in India)

Concluding Remarks :

ACOE is committed to create and sustain and improve the learning process through Total Quality Management and secure permanent place for scientific and technological learning platform with continuous improvement. ACOE has got the Strategic Planning spanning from 2021 through 2025 with the following points set as objectives:

- NBA accreditation by the year 2022.
- NAAC accreditation with A++ grade by the year 2023.
- Autonomous status by 2023-2024.
- NIRF ranking - To be Top 150 Engineering Institutes by 2023 and to be Top 100 Engineering Institutes by 2025.
- Collaboration and networking with IITs, NITs and other premier institutes.
- External funding for research activities.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																				
1.2.1	<p>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)</p> <p>Answer before DVV Verification :</p> <p>Answer After DVV Verification :82</p> <p>Remark : Input edited after excluding repeat count from Certificate/Value added courses offered and online courses</p>																				
3.3.1	<p>Number of research papers published per teacher in the Journals notified on UGC care list during the last five years</p> <p>3.3.1.1. Number of research papers in the Journals notified on UGC CARE list year wise during the last five years</p> <p>Answer before DVV Verification:</p> <table><tr><td>2021-22</td><td>2020-21</td><td>2019-20</td><td>2018-19</td><td>2017-18</td></tr><tr><td>92</td><td>53</td><td>17</td><td>30</td><td>31</td></tr></table> <p>Answer After DVV Verification :</p> <table><tr><td>2021-22</td><td>2020-21</td><td>2019-20</td><td>2018-19</td><td>2017-18</td></tr><tr><td>0</td><td>2</td><td>1</td><td>10</td><td>11</td></tr></table> <p>Remark : Input edited as per the supporting documents</p>	2021-22	2020-21	2019-20	2018-19	2017-18	92	53	17	30	31	2021-22	2020-21	2019-20	2018-19	2017-18	0	2	1	10	11
2021-22	2020-21	2019-20	2018-19	2017-18																	
92	53	17	30	31																	
2021-22	2020-21	2019-20	2018-19	2017-18																	
0	2	1	10	11																	
5.3.1	<p>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</p> <p>5.3.1.1. Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year wise during the last five years</p> <p>Answer before DVV Verification:</p> <table><tr><td>2021-22</td><td>2020-21</td><td>2019-20</td><td>2018-19</td><td>2017-18</td></tr><tr><td>7</td><td>1</td><td>7</td><td>7</td><td>14</td></tr></table> <p>Answer After DVV Verification :</p> <table><tr><td>2021-22</td><td>2020-21</td><td>2019-20</td><td>2018-19</td><td>2017-18</td></tr><tr><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr></table>	2021-22	2020-21	2019-20	2018-19	2017-18	7	1	7	7	14	2021-22	2020-21	2019-20	2018-19	2017-18	1	1	1	1	1
2021-22	2020-21	2019-20	2018-19	2017-18																	
7	1	7	7	14																	
2021-22	2020-21	2019-20	2018-19	2017-18																	
1	1	1	1	1																	

Remark : Input edited as per the provided certificate.

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)

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
25	5	39	54	55

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
24	5	39	54	55

Remark : Input edited as per the supporting documents

2.Extended Profile Deviations

ID	Extended Questions																								
1.1	Number of students year wise during the last five years Answer before DVV Verification: <table><tr><td>2021-22</td><td>2020-21</td><td>2019-20</td><td>2018-19</td><td>2017-18</td></tr><tr><td>2591</td><td>2136</td><td>2062</td><td>2259</td><td>2294</td></tr></table> Answer After DVV Verification: <table><tr><td>2021-22</td><td>2020-21</td><td>2019-20</td><td>2018-19</td><td>2017-18</td></tr><tr><td>2591</td><td>2136</td><td>2062</td><td>2259</td><td>2294</td></tr></table>					2021-22	2020-21	2019-20	2018-19	2017-18	2591	2136	2062	2259	2294	2021-22	2020-21	2019-20	2018-19	2017-18	2591	2136	2062	2259	2294
2021-22	2020-21	2019-20	2018-19	2017-18																					
2591	2136	2062	2259	2294																					
2021-22	2020-21	2019-20	2018-19	2017-18																					
2591	2136	2062	2259	2294																					
2.1	Number of teaching staff / full time teachers during the last five years (Without repeat count): Answer before DVV Verification : 269 Answer after DVV Verification : 269																								
3.1	Expenditure excluding salary component year wise during the last five years (INR in lakhs) Answer before DVV Verification: <table><tr><td>2021-22</td><td>2020-21</td><td>2019-20</td><td>2018-19</td><td>2017-18</td></tr><tr><td>260.57</td><td>190.37</td><td>351.98</td><td>343.49</td><td>443.36</td></tr></table> Answer After DVV Verification: <table><tr><td>2021-22</td><td>2020-21</td><td>2019-20</td><td>2018-19</td><td>2017-18</td></tr></table>					2021-22	2020-21	2019-20	2018-19	2017-18	260.57	190.37	351.98	343.49	443.36	2021-22	2020-21	2019-20	2018-19	2017-18					
2021-22	2020-21	2019-20	2018-19	2017-18																					
260.57	190.37	351.98	343.49	443.36																					
2021-22	2020-21	2019-20	2018-19	2017-18																					

228.89	189.47	333.62	340.07	430.72
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